2014

Simulated Patients' Experiences with Verbal Feedback for First Year Medical Students and Residents: A Grounded Theory Study

Carol Fleishman
Lesley University

SIMULATED PATIENTS' EXPERIENCES WITH VERBAL FEEDBACK FOR FIRST-YEAR MEDICAL STUDENTS AND RESIDENTS: A GROUNDED THEORY STUDY

A DISSERTATION

submitted by

CAROL FLEISHMAN

In partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

LESLEY UNIVERSITY
November 25, 2014

DISSERTATION APPROVAL FORM

Student Name: Carol Fleishman

Dissertation Title: Simulated patients' experiences with verbal feedback for first-year medical students and residents: A grounded theory study

School: Lesley University, **Graduate School of Education**
Degree for which Dissertation is submitted: **Ph.D. Educational Studies**

Approvals
In the judgment of the following signatories, this Dissertation meets the academic standards that have been established for the Doctor of Philosophy degree.

Dissertation Committee Chair:
Signature: Audrey M. Dentith 9-23-14
Print Name: Dr. Audrey M. Dentith Date

Dissertation Committee Member:
Signature: Branca Telles Ribeiro 9/15/2014
Print Name: Dr. Branca Telles Ribeiro Date

Dissertation Committee Member:
Signature: Debra Rothenberg 9/18/2014
Print Name: Dr. Debra Rothenberg Date

Director, Adult Learning and Development Specialization:
Signature: 10/10/14
Print Name: Dr. Amy Rutstein-Riley Date

Director, Ph.D. Educational Studies:
Signature: Paul A. Naso 11/10/14
Print Name: Dr. Paul A. Naso Date

Dean, School of Education:
Signature: 11/13/14
Print Name: Dr. Jonathon H. Gillette Date

Abstract

The purpose of this study was to explore the experiences of simulated patients (SPs) with the process of providing verbal feedback for first-year medical students and residents during formative simulation activities. Feedback to medical trainees provides a valuable learning context, effecting communication and interpersonal skills which impact healthcare outcomes and patient safety. This qualitative research study used a grounded theory approach based on data from semi-structured interviews with 17 SPs who were casual employees of a standardized patient program for a large academic medical center in the mid-Atlantic region of the USA. The study analyzed what participants said about their motivations for working as an SP; how they gained feedback skills; transitioning from the patient role to providing feedback; preparing and delivering feedback; and similarities and differences of providing feedback for first-year medical students and residents. The researcher constructed an interpretive substantive theory grounded in the data: Preparing and delivering verbal feedback for formative simulated patient medical education activities are complex processes: (a) in which the SPs take on the roles of patient, evaluator, and educator; (b) that are influenced by a dynamic interplay of the activity, the SP, and the trainee; (c) which require SPs to have a range of skills, learned informally via work and life experiences and/or formally via training; and (d) which SPs perform, contributing to medical education. Two theoretical models describing the feedback process are presented. One illustrates the influencing conditions, stages of SP feedback, organizational context, SP strategies for feedback, actions and interactions, and consequences of the process. The second model presents the stages of the feedback preparation and delivery process, the tasks the SPs are engaged in at each stage, and the conditional factors associated with the activities, SPs, and trainees. Recommendations for medical education SP activity design include: (a) integrating the

clinical goals with the dynamic interactions of SPs and trainees; and (b) incorporating learner-centered feedback training modules for SPs.

Keywords: simulated patient, verbal feedback, communication, first-year medical students, residents, grounded theory

Acknowledgments

I have many people to thank for their contribution, directly or indirectly, to this body of work. My parents, Ruth and Lee, instilled a love of learning and supported me in finding my own path in life. Sticks gave me ongoing encouragement and had lengthy conversations with me about my research and every possible related topic. Frank, Alex, and Ethel visited me in Baltimore during my hiatus from traveling to Maine.

Ginny Goren directed me to the Sanford Community Adult Education program when I left my engineering job to be at home with my two young children. That is where I found my niche as an instructor and coordinator of adult learning programs. Marilyn Wentworth taught the first education course I took, the Firefox approach to experiential education. Will Calendar presented a sound foundation in the field of adult learning and asked, "If that is the answer, what is the question?" Rorie Lee discussed research design ideas and gifted me with a copy of her hard bound dissertation; her study had 17 participants, too. Ross Goldberg listened to me and asked me timely questions, expanding my understanding of myself. Sherrie Gammage welcomed me with a big smile at the residency dormitory and listened to me hash through my uncertainties about my research for many long hours.

My advisors, Amy Rutstein-Riley, Judith Cohen, and Audrey Dentith, assisted me with the research design and dissertation writing process. My committee members: Branca Telles Ribeiro challenged me to delve deeper into concepts; and Debra Rothenberg allowed me to stay connected with my first SP program and grounded me in the medical education context. Brigit McCallum was a consultant for me about the grounded theory methodology.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

Introduction to the Research

This qualitative research study explores the experiences of simulated patients (SPs) with preparing and delivering verbal feedback for first-year medical students and residents. The study examines what the participants said regarding: (a) their motivations for working as an SP; (b) how they acquire feedback skills; (c) what it is like to transition from the patient role to providing feedback; (d) their experiences with preparing and delivering feedback; and (e) their comparison between feedback for first-year medical students and residents. This study uses a grounded theory approach based on data from semi-structured interviews with 17 SPs for the construction of substantive theory about the process of SP verbal feedback in medical education.

This chapter begins with an overview of the adult learning context and background of the research, including medical education simulations with SPs and the role SPs play in providing verbal feedback to first-year medical students and residents. I then describe the complexities of the teaching and learning processes inherent in the context of SP activities. Since SP methodology is a relatively new field, I include details of SPs' responsibilities and what occurs during SP activities as a foundation for understanding the context of the study. The chapter continues with the statement of the research problem, the statement of purpose and research questions, and the research approach. This is followed by researcher assumptions, information about the researcher, and the rationale and significance of the research. Chapter 1 concludes with a list of key terminology and the associated definitions.

A wide range of attendees—from medical students during their first few weeks of medical school, to practicing physicians—take part in formative SP activities which include feedback. The majority of these activities are designed for first- and second-year medical

students, residents, and fellows. To maximize what I could learn about SPs' experiences with feedback, I wanted to know what it is like for them to provide feedback to a range of medical trainees. I expected there would be noteworthy differences in how SPs approach feedback with individuals who are just beginning their medical education and more advanced trainees. I chose to interview SPs about their experiences with first-year medical students and residents since these two groups represent a significant portion of the range of individuals with whom the SPs work and they are separated by four years of training. The majority of the studies' participants have engaged in formative clinical learning activities with both of these groups of medical trainees, and all of them have provided feedback regarding communication and interpersonal skills.

Learner is the term typically used in the education literature for adult learners, including the adults mentioned in this study: SPs, medical students, and residents. To differentiate between these groups of learners, I use the term *adult learner* when referring to the SPs when the focus is on them as learners. They are the primary subject of this study which is based in the field of adult learning and development. As is common practice for medical schools and teaching hospitals, I use the term *trainee* to refer to either first-year medical students or residents, when a specific level of education is not indicated. When differentiating between trainees of the different levels, I use *medical student* or *resident*. I frequently shorten my reference to a first-year medical student to *student*.

Context and Background

Undergraduate Medical Education and the Work of SPs

The Context and Background section begins with information about medical students, general information about SPs, and SP activities as they apply to first-year medical students. I

follow this with similar information regarding residents. I next describe the similarities and differences between the SP activities for these two groups of trainees, as is relevant to SP feedback.

There are 160 Doctor of Medicine and Doctor of Osteopathic Medicine degree-granting medical school programs in the United States and Canada, and for the 2012-2013 academic year 83,500 medical students were enrolled in the United States, alone. SP methodology is well established as an effective technique for medical students to get instructions in, and be assessed for their clinical skills competencies (Bokken, Rethans, et al., 2010; Kurtz et al., 2005, pp. 88-100). Most medical students in the USA, as well as many trainees at international medical schools take part in activities with SPs (Nestel et al., 2011, pp. 329-330; Passiment, Sacks, & Huang, 2011, p. 32).

SPs are individuals trained to portray the emotional and physical aspects of real patients and/or family members for simulations of healthcare scenarios. A clinical interaction for which a medical student is in the role of a clinician and an SP is in the role of a patient is called an *encounter*. During an encounter with medical students, SPs evaluate students' skills in four of the domains taught by the medical school faculty which students are required to demonstrate competency: history taking, physical examination, communication, and interpersonal skills. History taking consists of two parts: medical and social. When a clinician asks a patient a series of basic and follow-up questions to elicit an accounting of their symptoms and about other topics related to their past and present health, they are taking a medical history; social history relates to a patient's work and personal life. SPs evaluate students on how thoroughly they address these topics, as specified by their faculty. For physical examination skills, the students are evaluated

on the selection and performance of the exams they carry out with the SP to detect physical signs of illness and to explore the underlying causes of the patient's symptoms.

The communication skills that are evaluated include agenda setting, clarity of questions, thoroughness of explanations of the diagnosis and treatment, and summarization. When the SPs assess the students on their interpersonal skills, they consider how the students' communications and physical examination affected them emotionally; specifically they evaluate how well the student built a relationship, including their demonstration of empathy and respect. Effective communication and interpersonal skills are important for the medical students to develop since they have been shown to improve healthcare outcomes when used in real medical situations (Dong, Butow, Costa, Dhillon, & Shields, 2014; Trummer, Mueller, Nowak, Stidl, & Pelikan, 2006).

SP activities. SP activities are generally designed for one of two purposes, teaching or testing. Even though on some occasions an activity will serve both purposes, usually the design has one of these two purposes as primary. This study included formative activities which: (a) are designed primarily for teaching, (b) include SP verbal feedback, and (c) take place towards the beginning of a course. This is in contrast with summative activities which (a) focus on assessing students, (b) usually do not include this type of feedback, and (c) take place at the end of a course. Even though the students may also demonstrate their physical examination skills, formative encounters have an emphasis on the SPs evaluating the students' communication and interpersonal skills, and providing feedback to them specifically on these items. Feedback for the students after they complete an encounter has been shown to provide a valuable learning opportunity (Bienstock et al., 2007; Bokken, Rethans, et al., 2010; Howley & Martindale, 2004; Westberg & Jason, 2001). Based on their study of preclinical students, Perera, Lee, Win, Perera,

and Wijesuriya (2008) stated simply, "formative assessments and other learning tools are ineffective in the absence of formative feedback (p. 359)." The students in their study expected feedback to be a part of all of their formative activities.

With assistance from SP program staff, medical school faculty design and develop formative simulation activities to fulfill some of the learning objectives of their courses. SP activities include the following elements: (a) logistics—timing of the activity steps and trainee schedule; (b) SP case training materials with the history of the illness or situation, the patient's social history, responses to trainee questions, and other scripted items for the SPs to learn; (c) orientation presentation for trainees; (d) doorway instructions—information provided to the trainee immediately before meeting with the SP regarding the patient and what is expected of the trainee during the encounter; (e) checklists to be completed by the SPs based on the performance criteria; (f) instructions for the SPs regarding feedback; (g) questions about the patient or a self-reflection about the encounter for trainees to complete at the end of the encounter; (h) instructions for the event manager and proctor; and (i) trainee evaluation of the activity.

Activity segments. The details of SP activities vary considerably from one activity to the next; however, the following two examples are representative of activities for first-year medical students. Early in their first year, medical students meet in groups of four with a faculty member. In this situation the encounter is divided into four parts, each about 10 minutes long, with students taking turns as the clinician as they progress through the encounter. The faculty provides the students with instructions and guidance, and confirms which part of the encounter each student will do. When the first student is ready to start the encounter, the SP enters the room. At the conclusion of each part, the SP leaves the room and has about five minutes to note salient items about the interaction with the student, in preparation for providing feedback to the

group of students at the end of the encounter. Meanwhile, the faculty leads a brief feedback session from a clinician's point of view among the students and provides instructions for the next part. The SP rejoins the group for each succeeding part, going in and out of the patient role each time. The activity ends with the SP rejoining the group one last time to provide the students with the singular opportunity to obtain an informed patient's perspective of the interaction that just transpired.

Later in their first year, the students are more proficient in their interviewing and physical examination skills and they meet alone with the SP. When there is an individual student, the SP starts in the room and the student is in the hallway. The 20- to 30- minute encounter starts with the student reading doorway instructions which contain background information about the patient, the tasks to be completed, and the time limit. Next the student knocks on the exam room door and enters the room to interview the SP about the reason for the patient visit. As applicable, the student questions the patient about their medical and social history, does a physical exam, and concludes with sharing their diagnosis and medical plan with the patient. At the end of the encounter, the student leaves the room and the SP has five to 10 minutes to complete a checklist of performance criteria and prepare their verbal feedback based on the student's performance, as compared with the criteria. The student reenters the room and the SP has five to 10 minutes to deliver their feedback from the patient's point of view.

Even though medical students frequently start working with patients while being supervised by an attending physician halfway through the first year of medical school, the point of view the SP provides with their feedback is usually not available from those patients. The reasons for this may be due to time constraints, patients' lack of familiarity with what is expected of the students by the medical school, and patients' likely to not be trained in feedback

techniques. With this having been said, research indicated there are advantages for students to work with volunteer outpatients for practicing their communication skills due to the inherent authenticity they bring to the encounter (Clever et al., 2011).

Examples of some typical patient cases for the medical students are a routine physical, back pain, and a smoking cessation discussion. These cases are relatively straight forward and low key, requiring only a moderate amount of improvisation for the SPs. Sometimes the SPs assume the role of either the patient or a family member, and the students meet with either an individual SP or a pair of SPs, in some combination of these two roles. For example, the SPs might be the patient and an adult child accompanying the patient, or the parents or grandparents of the patient. Some of the encounters and feedback sessions are videotaped for trainees and faculty to review the interactions or for staff to use for evaluating and training SPs.

As can be seen by the two examples with different number of students presented above, each activity has a unique set of logistics. When the students meet with SPs alone, a typical activity consists of an SP meeting with three to five different students consecutively. As with the example for the groups of students, the SPs go in and out of the patient role—in this situation it is to provide feedback to the students. The time constraints of an activity dictate the amount of time available for preparing and delivering feedback. If an entire class of over 100 medical students are scheduled to participate in an activity over a period of a couple days, the SPs may have just five minutes to prepare their feedback and as little as five minutes to meet with the student to share it with them. Ideally the amount of time for each of these steps is at least 10 minutes.

During the case training session with the staff, SPs receive training materials which include an indication of the amount of improvisation that is appropriate—the extent to which the

dialogue is proscribed, how much they can deviate from the scripted responses, and to what extent they can integrate their own reactions—is described. For example, a case may have a patient role described as a person with very low medical literacy, who is in poor health and is anxious. The faculty may want the SPs to respond exactly as they have scripted the case. In this situation, as the SP is responding to the student they need to consider how they would feel as this patient, and not as themselves, for the feedback. They likely do not fit the description of this patient and may never have experienced such circumstances. Even if all of the patient's responses are scripted, there is a certain amount of improvisation required for all cases because there are variations in the way in which each trainee interacts and asks questions. They are asked to respond as they expect this patient would respond. For other cases, the SP is encouraged to react more as themselves and to use their own experiences similar to the patient or family member they are portraying.

There are times when an extra SP is available to monitor the encounter live, using a headset and camera images on a computer, and take notes about the interaction to share with the SP who is doing the encounter with the trainee. This allows the SP in the room to put more attention to their portrayal as they can get information from the monitoring SP for preparing the feedback. This is also an opportunity to get another person's opinion about the trainee's interactions. The monitoring SP can assist with selecting and reviewing the feedback wording. This having been said, being in the room face-to-face with the trainee is very different than listening to the encounter on a headset and observing it via camera images or looking into the room through a one way glass. The difference in the perceptions of the active SP and the observing SP needs to be acknowledged between the two individuals.

Whether in groups of four students with an instructor or alone, students early in their education benefit from the opportunities to interview SPs. Throughout their education, timely and high quality feedback plays a critical role in the education and professional development of medical personnel, with feedback presented by SPs being a key instructional feature of this type of medical simulation (Boehler et al., 2006; Bokken, Linssen, Scherpbier, van der Vleuten, & Rethans, 2009; Cushing, Abbott, Lothian, Hall, & Westwood, 2011; Irons, 2008; Lockyer et al., 2011). I explore this further in the next section as a part of a discussion of SP activities for more advanced medical trainees, the residents.

Graduate Medical Education

Upon the successful completion of four years of medical school and passing the national board examinations, an individual becomes a doctor. Doctors are next required to complete a three to five year residency in the medical specialty of their choosing prior to practicing medicine on their own. For the academic year 2012-2013, there were 4,000 graduate medical education specialty programs, as well as 5,000 subspecialty programs, accredited by the Accreditation Council for Graduate Medical Education, with 97,000 residents and 20,500 fellows, respectively ("ACGME data resource book, Academic year 2012-2013," p. 1). An increasing number of residency review committees are requiring residents to demonstrate their competency in communication and interpersonal skills ("ACGME, Common program requirements," 2013, p. 10). The use of simulation activities with SPs is a recognized protocol for assessing these skills (Boulet & Errichetti, 2008). In conjunction with fulfilling the residency requirement, programs use SP activities for their faculty to evaluate the residents' skills and to provide a structured and supportive learning opportunity for the residents.

Similar to activities with students, SP verbal feedback is incorporated after the encounter to enable the residents to gain access to the patients' point of view (Leeper-Majors, Veale, Westbrook, & Reed, 2003). As with students, most residents in the USA take part in activities with SPs (Passiment et al., 2011, p. 32), as well as many trainees at international teaching hospitals (Nestel et al., 2011, pp. 329-330). SP program staff assist residency program directors to develop SP activities, as they do for student activities.

Since residents routinely interact with patients, the encounters designed for them are more complicated from a medical standpoint, and more emotionally intense than the ones for students. Some examples are (a) communicating with a patient with multiple chronic illnesses and a poor understanding of medical terminology about the need to complete a medical consent form just prior to a high risk surgery; and (b) explaining to parents medical procedures being performed in an attempt to save their baby's life. Individual residents meet with SPs unless they are participating in an activity including communicating as a team. Some activities are designed such that a resident participates in only one encounter; another activity may have a set of three residents participating at the same time rotating through three different encounters, each with their own patient case and SP, and with feedback after each encounter. With this latter example, the residents have the opportunity to carry over what they learn from the first and second encounters to the subsequent encounters.

Another example is an activity which consists of a four-part encounter of a patient progressing through terminal cancer. This activity can take two hours and includes the SP leaving the room after each doctor's appointment to take notes and to change clothes and makeup for the next part. The different parts of the encounter and the changes in patient appearance simulate the passage of months, including significant deteriorations in the patient's

health. For the last encounter, consisting of the concluding discussion about her care at the end of her life, the patient is barely able to enter the exam room, even with the use of a cane. For each part of the encounter, the resident reads instructions which include an update on the patient's health and the tasks they are to carry out. These encounters have a high amount improvisation and may result in the SPs experiencing intense emotions. The SPs' improvisation is based on a structure provided by the faculty and their suggestions of what to say and how to react depending on what the resident says and does. The instructions from the faculty indicate how the SPs are to vary the amount of their portrayal strictly based on the patient versus the amount based on their own reactions. This idea is discussed in more detail in later chapters.

The time constraints for preparing and delivering feedback mentioned above for students usually do not hold true for residents. Since residency programs have a significantly lower enrollment, there is frequently more flexibility with the timing of activities with the residents, as they may participate in the activity in sets of three to ten, and there can be as much as 25 minutes available for the feedback preparation and delivery. All of the encounters and feedback sessions with residents are videotaped for them and their faculty to view at a later date. The viewing of the encounters is sometimes done with small groups for peer input on individuals' skills.

Since there are significant differences between the two groups of trainees, I summarized the characteristics of first-year medical students and residents, and their respective activities in Table 1.

Table 1

Characteristics of First-year Medical Students and Residents, and their Activities

Item	First-year medical student	Resident
Trainee characteristics	younger, new to clinical encounters, some nervousness and anxiety	older, experienced with clinical encounters, more confident
Type of case	basic	complex
Emotional demand	low	high
Skills to be demonstrated	physical exam, history taking, communication, and interpersonal	communication, and interpersonal
Number of trainees in encounter	one to four	one
Faculty present in room	sometimes	no
Encounter and feedback videotaped	sometimes	always
Encounter parts per trainee	one	one or multiple

Complexities of the Adult Learning Context

A first-year medical student has a minimal amount of experience interacting with patients and therefore almost any information an SP shares with them about what they did well and what areas need improvement is of value to them. As the students advance in their medical education training, there is a considerable change in their clinical skills, attitudes, and self-concept (Montgomery, 2006, pp. 103-156, 165; Neumann et al., 2011, pp. 996-999); therefore, what they find helpful with feedback evolves. By the time they have graduated from medical school and

become residents, they have demonstrated competency in the skills mentioned previously: history taking, physical examination, communication, and interpersonal, and in their knowledge of medical science; and they have demonstrated a basic understanding of the core medical specialties such as women's health, pediatrics, surgery, and neurology. Being further advanced, residents have had many opportunities to interact with patients and are looking to fine-tune their skills in more challenging scenarios, such as end of life discussions.

As presented in Chapter 3, SPs come to this work with a variety of educational backgrounds and work experiences, and particularly important to this research, they have a wide range of experiences with, and levels of skill in providing feedback. Bokken et al.'s (2009) review of the medical education literature of studies about the use of SPs to provide feedback for medical students focused on SP feedback training, the process of delivering feedback, and the domains in which feedback is given. They found there is much written about the elements which contribute to good verbal feedback, such as: (a) a safe learning environment, (b) the expectations of the medical students are clear, (c) confidentiality is emphasized, and (d) feedback starts with the student's self-evaluation (p. 205). These guidelines have been adapted as good practices for feedback following encounters with SPs. Even though entire books are dedicated to the techniques for encouraging reflection and providing feedback in medical education (Westberg & Jason, 2001), there is a dearth of information about SPs' experiences with preparing and delivering feedback. And specifically, there is nothing addressing what it is like for them to prepare and deliver feedback to trainees at different educational levels and for different types of encounters.

The two essential processes I explored are (a) the clinical encounter that takes place during the simulation, and (b) the feedback session that follows the encounter. In both

circumstances, complex human dynamics are set up that engender situations where adult learning thrives. The encounter consists of the interactions of (a) the SP, outwardly portraying the role of the patient, while simultaneously being the evaluator, and (b) the trainee, in the role of the clinician. The SP responds to the trainee's questions about their health, while they are mentally noting the trainee's performance and preparing their evaluation of the trainee that they will later share with them.

Between the encounter and the feedback, while preparing the feedback, the SP transitions from the role of the patient to the educator role. The transition may be easy if they had been doing a case with a low level of emotion, and hard if doing a case with a high emotional demand. During the feedback portion of the session, (a) the SP figuratively introduces him or herself as an educator, while representing the patient they portrayed during the clinical encounter, and (b) the trainee is now him or herself, reflecting on their recent performance as a clinician. As the SP takes on the role of an educator during feedback, there are additional dynamics that can occur during these complex interactions. If the trainee has performed poorly it can be challenging for the SP to find the right approach to share their feelings honestly in a way that can be received by the trainee. If the trainee has performed well the SP may be at a loss for pertinent information to share. In either case, SPs facilitate the feedback session with the goal of the trainee being receptive to their feedback so that an educationally effective dialogue can ensue between the two of them.

A part of the complexity is the role that emotions play in the encounters and feedback. For many cases, the SPs are instructed to take into account their real emotions as they consider their response to the students during the encounter. If their emotional needs, such as receiving empathetic statements and being validated, have been met they are more cooperative. If their

needs have not been met, they are more agitated and obstruct the progress of the encounter. Also, during feedback the trainees' emotions may impact the communication as they hear the SPs' evaluation of their performance. If the trainee thought they performed well it may be hard for them to hear that someone did not agree with them. In addition to the complexity of changing roles, there is often a disparity in educational levels and experience between the SPs and the students which may impact the credibility of the SP feedback from the trainee's point of reference. The effectiveness of the two-way communication can be decreased if either or both parties are not aware of how they perceive and react to their emotions (Goleman, 1995, p. 55), both during the clinical encounter and during the feedback session. The nature of preparing and delivering verbal feedback and the complex dynamics of the multiple roles the individuals assume in the encounter and the feedback sessions, and the transitions between these roles, are the focus of inquiry for this study.

Abe, Roter, Erby, and Ban (2011), in a summary of a nationwide survey of standardized patients, stated that many SPs reported difficulty in giving feedback, especially when trainee performance is poor (p. 55). SP feedback training manuals and workshop instructions have been published by researchers who have recognized this need (Dayer Berenson, Goodill, & Wenger, 2012; Fisher, 2006; Howley, 2007; May, 2006). I advocate exploring the process of preparing and delivering feedback from the SPs' point of view to gain information that may lead to improving the effectiveness of the feedback.

Improving feedback is currently a topic of discussion in the field of SP educators as shown by it being the focus of a significant number of workshops at the Association of Standardized Patient Educator's annual international conferences. It is a topic for which there is a considerable range of opinions about the proper protocols. The techniques considered best

practices by some practitioners in the field, are deemed ineffective by others (Errichetti, 2010). I queried professionals who have worked in the SP field since it became an established methodology 20 years ago to garner their thoughts regarding the value of exploring feedback from the SPs' point of view and received a resounding confirmation of its importance (e.g., C. Pfeiffer, personal conversation, June 6, 2011; C. Nicholas, personal conversation, January 24, 2014). In consideration of these complexities and the recognition of the need for increasing the consistency of effective feedback, I undertook this research to gain a deeper understanding of the feedback process from the SPs' point of view.

Problem Statement

During the six years I have been an SP educator and program manager, I have observed directly, and received informal reports from SPs, medical students, residents, fellows, and faculty, instances of effective and ineffective SP verbal feedback. Despite deliberate recruitment, expertly designed activities, comprehensive training, and the use of prescribed feedback techniques, there are significant instances where the feedback does not meet expectations. In addition, there is not a good understanding of the conditions which facilitate effective feedback.

Statement of Purpose and Research Questions

The purpose of this grounded theory study was to explore what it is like for SPs to prepare and deliver verbal feedback to first-year medical students and residents. I anticipated that with a better understanding of the SPs' process of meeting the challenges of preparing and delivering feedback, more informed activity design, SP training, and feedback methods can be implemented by faculty and staff, and ultimately by the SPs, themselves. To investigate the

process of feedback preparation and delivery, I addressed this research question: How do SPs describe their experiences with providing verbal feedback to medical students and residents?

I further expanded this all inclusive question to five more detailed questions:

1. What do SPs say about their motivations for working as an SP?
2. What do SPs say about how they learned to do verbal feedback?
3. What do SPs say about transitioning from the patient role to the educator role?
4. What do SPs say about preparing and delivering their feedback?
5. What do SPs say about the similarities and differences of feedback for first-year medical students and residents?

Research Approach

Selection of Qualitative Approach

I selected to use a qualitative approach for this research in order to study the lived realities and everyday experiences of adults who were learning new skills and to hear the voices of these participants (Cocklin, 1996, p. 88). I chose to interview individuals to obtain direct quotations from them about their experiences, opinions, feelings, and knowledge (Patton, 2002, p. 4).

Selection of Grounded Theory Method

I chose to use Grounded Theory Method to explore the phenomenon of SPs providing feedback to medical students and residents based on the experiences of SPs. Researchers who follow this method are encouraged to not have preconceived notions of what is happening with the participants and to ground the theory in the data collected. It is a method that uses a systematic, yet flexible, set of procedures to construct an inductively derived grounded theory about a phenomenon (Bryant & Charmaz, 2007, p. 1; Charmaz, 2006, p. 2; Strauss & Corbin,

1990, p. 24). More information about my use of the grounded theory approach is in Chapter 3, Methodology.

With approval of the institutional review boards of the medical institution in which the program employing the SPs was based and Lesley University, I studied the description of 17 SPs' experiences, as reported by the SPs themselves. The participants all had experience with providing feedback to students during formative activities and were relatively demographically representative of the diversity of the 160 SPs employed by the program. Fourteen of the 17 had also provided feedback to residents.

The data were collected during individual semi-structured face-to-face interviews, which included clarifying and exploratory follow up questions. Each interviewee was identified with a participant number, and all but one interview was digitally recorded and transcribed verbatim. I analyzed the texts of the transcribed interviews using a grounded theory method, consisting of the constant comparison approach and simultaneous data collection and analysis, to construct an interpretive substantive theory.

Assumptions

Assumptions Regarding Feedback

Grounded theory approach calls for researchers to examine and acknowledge our assumptions about the processes we are about to study. This is encouraged so that we do not allow our assumptions to influence our interview questions and we do not inadvertently reproduce them as our findings, instead of grounded the results in the data (Birks & Mills, 2011, p.19; Charmaz, 2006, pp. 15, 19, 32). Based on my background, the pilot study results, my work experience as an SP educator and program manager, and the limited experience I have had in the role of an SP and prior to starting the research, I documented four primary assumptions regarding

feedback in connection with this study. My first assumption was that the SPs who gained skills for providing feedback outside of their SP work, from their other work or personal life experiences are frustrated with being confined by being required to use the verbal feedback protocols that have been the standard practice in the SP field. A corollary to this is that the SPs for whom their only experience with feedback is with SP work, find this set of methods to be satisfactory. This assumption is based on my observations of SPs providing feedback, prior discussions with SPs about the methods they have been instructed to use, and my own attempts to use the standard methods.

Secondly, I assumed that SPs find it challenging to perform a complex set of roles, portraying the patient while simultaneously collecting the information they need to prepare the feedback. I think this is especially true when the encounter has a highly emotional component. I assumed that it is advantageous to have another person taking notes during the encounter, about the trainee's behavior and assisting the SP with preparing the feedback. This assumption is based on working closely with one SP for a period of about six months on a biweekly basis and prior communications with SPs after they have had an assistant notetaker.

My third assumption was that SPs are sensitive to trainees' behavior that appears as if the trainees are resistant to hearing the feedback, inhibiting the SPs from fully expressing themselves. Any resistance, if it occurs, may originate from the perceived disparity in educational levels impacting the credibility of SP feedback or be triggered by the physical and emotional condition of the trainee, such as being tired or anxious. This assumption is based on my own experiences providing feedback, prior discussions with SPs, and that the trainees are generally part of an elite group of people who have excelled in academically challenging programs.

And the last assumption regarding feedback I made was that SPs describe feedback delivery as (a) being dynamic, with the SP making adjustments as the feedback session progresses; and (b) involving the engagement of trainees in a dialogue with a focus on their learning objectives for the activity. This last assumption is based on my experience with teaching adults, my knowledge of adult learning theory, and prior discussions with SPs.

Data Collection and Analysis Assumptions

I next discuss the assumptions I made related to the data collection and analysis. As the researcher, I assumed the selection of SPs was sufficiently representative of the population of SPs in the program and the data to be an appropriate accounting of what the SPs think about their experiences. This assumption includes the belief that the SPs would speak honestly with me, even though I am their supervisor. Additionally, I assumed the SPs would remember their experiences well enough to appropriately describe them. I further assumed the data can reliably be used with the grounded theory method to construct theory that subsequently can inform SP program practices.

The Researcher

I have Bachelor of Science and Master of Science degrees in Chemical Engineering, and a Post-Master's Certificate of Advanced Study in Adult Learning. I am a licensed professional engineer and a certified healthcare simulation educator. In addition, I have worked in the field of adult learning—developing, designing, and providing workplace education programs—for more than twenty-five years. Based on my education and my work experience, I bring to the exploration process practical experience in the field of adult learning, with a special focus on the application of the SP methodology in medical education and the training of SPs.

At the time of conducting this study, I was the Academic Program Manager of the SP and Teaching Associate Programs at a large academic medical center in the mid-Atlantic region of the USA which includes a medical school and a teaching hospital. The program I ran has two major components: (a) the SP portion of the work as has been described previously; and (b) the teaching associate portion which consists of people trained to instruct first-year medical students how to perform physical examinations; and to instruct medical trainees of various levels how to perform genitourinary examinations, which are gender specific exams of the reproductive organs and the urinary system.

I am responsible for recruiting and hiring SPs, and for developing and delivering training modules for SPs to learn how to provide effective formative and summative activities for medical students, residents, fellows, and physicians—including verbal and written feedback. I also develop and provide similar activities for interprofessional clinical education, during which medical, nursing, and pharmacy students participate in activities together. The quality assurance and improvement aspects of the SP program also come under my purview. I recognize the experiences I have had that lead to my having insights to the study may also inhibit me from seeing additional perspectives and may bias me to new or unexpected interpretations.

I am generally curious about people and the conditions that influence their behaviors. I believe the more I know about a process and the people involved with it, the more able I am to understand it, and I have the expectation that this knowledge will lead me to making improvements. I have an interest in assisting medical trainees in improving their communication and interpersonal skills, contributing to good healthcare experiences for patients and their families.

I grew up in a household in which emotions and feelings were not discussed. I started on the path of exploring my feelings and emotions 35 years ago. When I was introduced to empathic communication by a coworker about 20 years ago, I began applying the concepts, resulting in a better understanding of myself and others. My spouse and I value our mutual interest and practice of sharing feedback about our behaviors. I think feedback works best with an ongoing, respectful relationship, and I wanted to know what it was like for the SPs to be giving feedback to trainees that they see for a short period of time and with whom they do not have an ongoing relationship. A rare exception to this is when an SP happens to see the same trainee multiple times during their four years of medical school, and additional times if the trainee advances to a residency program at the same institution.

Rationale and Significance

Since feedback plays such an important pedagogical role in medical education and so little is known about what it is like for SPs to provide verbal feedback to medical trainees, I carried out this research to gain a better understanding of the experiences of the participants and the dynamics of the processes. As mentioned above, people who have worked in the field of this study fully agreed that there is a need for research with a focus on SPs talking about their experiences since SPs place such a vital role in the formative activities for medical trainees. My long range goal is to take the resulting theories constructed through this study and use them to inform SP recruitment, selection, and training, and to inform activity design, with the intention of improving the feedback process. I expect that this knowledge can be applied in the continuous improvement of medical education, affecting the quality of healthcare and patient safety.

Summary

This grounded theory-based, qualitative research explores SPs' experiences with the feedback process, based on data from semi-structured face-to-face individual interviews of 17 SPs, who provide verbal feedback to trainees, specifically first-year medical students and residents at a large academic medical center. The purpose of the research is to construct a substantive grounded theory, relevant models of the feedback process, and the associated factors which impact the process. The lessons learned from this study might provide direction for changes in SP selection, the approach to and content of SP training, and the design of formative SP simulation activities. The next chapter contains a review of the literature regarding the voices of SPs; motivation for being an SP; SP feedback training; transitioning from patient to educator; and preparing and delivering feedback.

Definitions of Key Terminology

Activity – A set of simulation exercises held on one day or over many days, either in a row or spread out periodically over the course of an academic year. A trainee usually participates in only one of a set of exercises.

Case – A scripted scenario of a clinical interaction that is designed by medical school faculty and is used as the basis of an activity. A case is a component of the SP training materials.

Communication skills – The specific tasks and observable behaviors related to speaking with patients, including interviewing to obtain a medical history, explaining a diagnosis and prognosis, giving therapeutic instructions and information needed for informed consent to undergo diagnostic and therapeutic procedures, and providing counseling to motivate participation in therapy or to relieve symptoms (Duffy, Gordon, Whelan, Cole-Kelly, & Frankel, 2004, p. 497).

Debriefing – A discussion following an exercise carried out by a group of trainees and a faculty member to review the learning objectives and lessons learned. The debriefing is particularly effective when a team of students have participated in an encounter together.

Encounter – The part of an activity during which the SP is in the role of the patient or patient family member, and the trainee is in the role of a clinician. Together they simulate a clinical interaction. Encounters are typically 15 to 30 minutes long.

Exercise – A multi-part clinical learning module designed by medical program faculty typically consisting of the trainee reading instructions, the encounter, the post-encounter documentation, and the feedback. Exercises are typically 30 to 45 minutes long.

Feedback – The part of an exercise during which the SP and trainee discuss the behaviors of the trainee and the SP's reactions as the patient. Feedback topics are usually specified by the

learning objectives of the activity, as developed by the faculty. Feedback is typically 5-10 minutes long.

Feedback delivery – The communication of the feedback by the SP with the trainee.

Feedback preparation – The planning of the feedback which is typically done in a written format using a topics guide based on the learning objectives of the activity, as developed by the faculty. Some programs specify formats and terminology to be used for feedback. The SP prepares their feedback while the trainee separately completes their post-encounter documentation.

Fellow – A physician who enters a training program in a medical subspecialty after completing their residency program, usually in an academic hospital setting.

Formative activity – An educational learning module that is specifically intended to provide feedback on performance to improve and accelerate learning. Typically these activities are not graded.

Interpersonal skills – Elements of these skills include (a) respect; (b) paying attention to the patient with open verbal, nonverbal, and intuitive communication channels; (c) being personally present in the moment with the patient, mindful of the importance of the relationship; (d) having a caring intent, not only to relieve suffering, but also to be curious and interested in the patient's ideas, values, and concerns; and (e) being able to monitor the relationship in real time and adjust interpersonal skills as necessary (Duffy et al., 2004, pp. 497-498).

Medical student – A person who has completed a bachelor's program and is enrolled in a four-year medical school. Referred to here as *student* or *trainee.*

Preceptor – A physician who provides practical experience and training to trainees.

Resident – A physician who has finished medical school and is receiving training in a specialized area, such as surgery, internal medicine, pathology, or radiology. Board certification in all medical and surgical specialties requires the satisfactory completion of a residency program and successful completion of a specialty board examination.

Simulation – A portrayal of a real clinical event.

SP – Abbreviation for standardized or simulated patient.

Simulated patient – A term used for the patient role for formative activities, instead of standardized patient which is the term used with summative activities. Formative activities require less standardization than the summative activities. This term is more commonly used in Canada and Europe.

Standardized patient – A person who is trained to portray the physical and emotional characteristics of a patient during a simulation for a summative activity. This is the term used more broadly for formative and summative activities with many programs in the USA. The British English spelling is *standardised*.

Student – As is used in this document, a first-year medical student. .

Summative activity – A module that is specifically intended to provide faculty the opportunity to access the performance of a trainee. Even though these activities typically are graded, they usually have an educational aspect.

Trainee – A general reference to a medical student or resident.

Chapter 2: Literature Review

Overview and Background

The literature review focuses on three of the five central topics of the study: motivation for being an SP, how SPs learn verbal feedback skills, and transitioning from patient to educator. These topics are followed by a mention of the gaps in the literature and the remaining two central topics: preparing and delivering feedback; and similarities and differences of providing feedback for first-year medical students and residents.

As I prepared to write this chapter, I thought about how, as I reviewed the literature while preparing for and carrying out this research, I had found myself being faced with the quandary described by Dunne (2011). According to Dunne, researchers using the Grounded Theory approach are confronted with the issue of how and when to review literature. Charmaz (2006) calls it the *disputed* literature review (p. 164). The traditional grounded theory approach calls for avoiding being influenced by existing theories (Charmaz, 2006, p. 164; Glaser, 1978, pp. 31-33; Glaser & Strauss, 1967, pp. 49-50; Strauss & Corbin, 1990) and most certainly to not be testing hypotheses based on existing theoretical frameworks one might find in the literature (Dunne, 2011, p. 111). However, it was necessary for me to review the literature to have a basis for designing the study and to prepare the research prospectus.

I examined many studies based on the grounded theory approach to investigate how they were designed, and in particular I sought out such dissertations to explore their content. This approach has been used for studies on a wide variety of topics related to the field of medicine and medical education including: pre-hospital trauma care for road traffic injury victims in Iran (Haghparast-Bidgoli, Hasselberg, Khankeh, Khorasani-Zavareh, & Johansson, 2010); male education leaders' views on gender in medicine (Risberg, Johansson, & Hamberg, 2011);

components of nurse caring in the Chinese cultural context (Meng, Xiuwei, & Anli, 2011), and pre-assessment learning effects of summative assessment in medical education (Cilliers, Schuwirth, Herman, Adendorff, & van der Vleuten, 2011). From these studies and other grounded theory studies, I gathered information about the number of participants and the types of theories reported. Even though it is recommended to include literature that used the methodological approach as I used (Oliver, 2012, p. 66), I was not able to find any studies in the literature, based on my approach on the topic of standardized or simulated patients.

I carried out an extensive literature search about the field of SPs and have documented in the literature review the portion that relates to the findings. All but one of the references originated in peer reviewed journals or peer reviewed online publication venues; that one other reference is a published text. Since it is important to have up-to-date materials (Oliver, 2012, p. 43), the majority of the items I included here were published within the last six years, unless they are unique items representing the time period in which they were published or are the only articles I found with a particular application to my study.

Twenty years ago the predominant focus of research had been the investigation of SPs as a resource for medical education and focused on "the validity, reliability, consistency, feasibility, and cost of the use of standardized patients" (Barrows, 1993, p. 451). Even though there has been some evolution in the focus of research regarding SPs, the majority of the studies about feedback in medical education have been about the impact of faculty and SP feedback on the medical students (Aper, Reniers, Koole, Valcke, & Derese, 2012; Bramstedt, Moolla, & Rehfield, 2012; Park, Son, Kim, & May, 2011; Swiggart, Ghulyan, & Dewey, 2012). Very little has been published about the SPs themselves and even less containing information from the SPs' point of view. Much of the material developed by the individuals who work in this relatively

new field has not been published. Instead the written resources are (a) circulated among the community of practitioners through personal and professional connections, (b) shared via a field-specific electronic mailing list (sp-trainer@u.washington.edu), (c) distributed at workshops, such as ones held at the annual conference for the Association of Standardized Patient Educators, and (d) posted on websites, such as aspeducators.org, www.vspn.edu.au, and www.spp.utoronto.ca.

Article Databases

I was fortunate to have online access to journals published world-wide via my workplaces. I carried out online library searches using two primary database categories: "Education and Health Sciences" and "Medicine Nursing and Allied Health." These search categories utilized a variety of core databases including: Academic Search Complete, CINAHL Plus, EMBASE, General Science, MedLine Plus, PubMed, SCOPUS, Web of Science, and EBSCO host. The keywords I used included: (standardized or simulated) patients, medical education, (oral, face-to-face, or verbal) feedback, formative, patient simulation, patient instructors, debrief, and clinical skills. And as a member of the Society for Simulation in Healthcare, I had access to paper and electronic versions of their journal. I accessed MedEdPORTAL Publications which is a free online publication service provided by the Association of American Medical Colleges of peer reviewed publications. I also found additional relevant articles with titles containing the word "feedback" by using a database of SP related articles published from 1964 to 2012 compiled by Szauter (2013) and available online.

Literature Reviews

I found it notable that many of the items that were published were themselves literature reviews and critiques of the current state of published items. The two literature reviews I describe here provided me with extensive lists of potentially relevant articles. The first is a

review of the literature about SP feedback training published in a ten year period between1996 to 2006 (Hatchett, Haun, & Goldenhar, 2006). Like myself, the authors found very few peer reviewed items, and even including the non-peer reviewed items, there was a dearth of SP training data available. Hatchett, Haun, and Goldenhar (2006) found very little literature on reproducible SP training methodologies. They indicated that at that time the field was young and still developing ways of organizing the resources to make them available to the larger SP program community. In order to facilitate the organization of these resources, they designed and distributed a survey about feedback training to SP trainers to improve the pool of information. I discuss the information that has been published about SP feedback training in the section of the literature review about feedback training.

In a published literature review of SP feedback in undergraduate medical education, Bokken, Linssen, Scherpbier, van der Vleuten, and Rethans (2009) noted that there is a scarcity of knowledge of the most effective ways in which SPs can provide feedback. Their study of all articles published until July 2007, aimed to provide a systematic overview of the ways in which SPs provide feedback to undergraduate medical students, the domains in which SPs provide feedback, and the ways in which SPs are trained to provide feedback. Of the 49 studies that were included, 22 used experimental designs and 27 were descriptive in nature. Only 13 studies provided information on training SPs in giving feedback, most of which had limited information.

Bokken et al. (2009) found that feedback training was a small portion of the SP training, which was predominated by role-playing and the skills the SPs were to teach to the students. The ways in which SPs were trained to give feedback and the processes by which feedback was provided by SPs varied widely. They found that only a few studies described using feedback processes that followed the general recommendations for the delivery of effective feedback. SPs

provided feedback on clinical skills and communication skills. The authors concluded that further research into the most effective ways for SPs to provide feedback and the most effective ways of training SPs to do so is needed. They substantiated that this is a fairly young field and that documentation of research and methods used is inconsistent and insufficient. The authors found that there are a lot of different ways SP programs are training SPs to do feedback and feedback is being provided in a variety of different domains, including clinical, communication, and interpersonal skills.

Voices of the SPs

As I am specifically interested in hearing from SPs what it is like for them to give feedback to the medical students, I searched for articles containing such information. The studies that fit this requirement contained general statements that the SPs indicated giving feedback was challenging or difficult (Abe et al., 2011, pp. 261-264; Bokken, van Dalen, & Rethans, 2010, p. 318). A total of four articles, including the one just mentioned, had information from the SPs' perspective about the effects on them of working as an SP. The 37 SPs who participated in focus groups as part of an early study by Woodward and Gliva-McConvey (1995) reported they found improvements in their communication skills, more participatory relationships with their physicians, and greater personal open-mindedness. The only mention of feedback was that they said their role was a complex one that requires them to improvise, while monitoring the trainee's performance to provide detailed feedback later on. There was no indication of the ages or genders of these participants.

Based on the responses to attitudinal questions on a survey completed by 164 SPs from five medical schools in the USA, Wallach et al. (2001) made a similar statement: the SPs indicated since they had started working as SPs they had a better understanding about history

taking and physical examinations, communicated more effectively with their healthcare provider, and were more comfortable with both healthcare visits and physical examinations. The participants ranged in age from 9 to 82 years old, had a median age of 50, and with 1% not indicating their gender, 34% were men, and 65% were women.

In a more recent study, Boerjan, Boone, Anthierens, van Weel-Baumgarten, and Deveugele (2008) explored the effect of simulating medical conditions on SPs and found there were positive and negative ramifications. The study consisted of semi-structured interviews of eight experienced SPs involved with the communication training at the medical facility of Ghent University, Belgium. The participants thought their medical knowledge had improved and they gained an appreciation of the challenges of being a doctor, which resulted in changes with their visits, such as being more prepared before entering the medical office. They stated they enjoy their work and some even find it therapeutic. The negative effects they spoke of were stress, performance anxiety, exhaustion, dissatisfaction, and sleeping problems. Even though this study did not specifically mention SPs' feedback, these effects would likely play a part in SPs' well-being and may be significant influences on their feedback preparation and delivery.

Bokken, van Dalen, et al.'s (2010) study of nine adolescent women, aged 16 to 18 years old, working in the Netherlands as SPs for a formative activity with medical students, focused primarily on the quality of their performance and feedback. These younger SPs experienced nothing that made them regret the experience and they would be willing to act as an SP again.

Nestel et al. (2010) described a study they conducted in England based on data provided by 59 SPs, 11 students, 10 tutors, and eight administrators via a questionnaire; and data collected from six focus groups: three groups of six SPs each—two with five students each, and one group of five tutors. The purpose of the study was to explore the participants' thoughts about SPs'

responsibilities in teaching medical students. The results highlighted the complexity of planning and carrying out SP-based teaching activities. All of the participants had strong views on feedback and wanted ways to make the process more learner-centered. Based on the data collected, the program established guidelines for SP and tutor feedback, giving the students control of the focus, sequence, and amount of feedback.

Abe, Roter, Erby, and Ban (2011) studied who the SPs are, what they do, and how they experience their work by analyzing the data collected from a survey completed in 2005 by 255 individuals working as SPs at 57 different teaching hospitals and medical schools across the continental USA and Hawaii. The authors wanted to learn about the workforce and to gain insight into the routine tasks, challenges, and rewards associated with the work. They stated that SPs are difficult to characterize as the great majority of them work limited hours and on a part time or project-specific basis. The majority (66%) of participants reported working less than five hours per week, 17% at six to 10 hours, 10% at 11 to15 hours, 7% at 16 to 30 hours, and only one reported working full time.

The SPs in this study represented a diverse group of people in regard to geographic region (northeast, southeast, mid-west, northwest, southwest continental USA and Hawaii); gender (61% women); age (19 to over 80 years old, with an average of 60); and work experience as an SP (one to 31 years, with an average of 5 years). The participants listed their backgrounds as including acting (59%), education (37%), the health-care professions (33%), and business (12%). They indicated that they enjoy their work and feel that their simulation experience has empowered them in their own medical consultations.

In this study most (85%) of the SPs indicated that giving feedback to trainees was a routine aspect of their work. The survey asked the SPs to indicate with which of the following feedback tasks they had difficulty:

1. To remember what I felt while acting as a patient
2. To avoid making general comments that do not apply to a specific trainee
3. To select appropriate words that express my feelings
4. To indicate well-balanced positive and negative points
5. To give feedback when there were no positive points to highlight
6. To adjust my feedback to trainee's level of training
7. Remaining objective in my feedback
8. To distinguish between characteristics of sequential interviews with different trainees (p. 263).

All of the SPs that had provided feedback had discomfort with at least one of the tasks associated with feedback, especially when trainee performance is weak and the SP has difficulty identifying positive points to mention. The SPs also found it difficult to distinguish behavior across multiple trainee interviews and to appropriately express in feedback the feelings they had experienced during the simulation. Half of the SPs expressed some difficulty with four or more of the eight feedback task elements listed above (pp. 262-264). The authors also found female SPs tended to report significantly less difficulty with role mastery and to self-rate themselves as better at performing feedback tasks than male SPs did.

The participant demographics of this study are comparable to the participants and SP population of the program I studied. As with this study, I found via my research that the participants spoke of having challenges with aspects of feedback, particularly with finding the

right words when a student performed poorly and appropriately expressing feelings experienced during the encounter. Even though I asked about motivation, and not satisfaction as was done in this study, I consider that this study concurred with the findings of my study in that the participants were motivated to do the work and found satisfaction in contributing to medical education.

Motivation for Being an SP

As just mentioned, one topic I explored was SPs' motivation for work in this field. Nestel et al. (2010) completed a study of data collected from focus groups and questionnaires. They stated that the SPs reported feeling valued in the process of supporting trainee learning and wanting to contribute to medical education (Nestel et al., 2010, pp. 165, 167). The data collected by Abe et al. via survey responses (2011, p. 262) indicated SPs' satisfaction with the work and that they had the benefit of better communication with their doctors. In a study by Bokken et al. (2004), SPs completed surveys about stress symptoms related to performing patient roles and the variables that influenced their symptoms. As part of the survey the SPs were asked to state their motivation for being an SP. A summary of their responses are listed in Table 2. I removed one line from the table which indicated eight SPs noted more than one motivation, without specifying which motivations. I did this since the motivations were of interest to me, and the line added minimal information to my study, except that there was agreement with my results that some SPs have more than one motivation.

Table 2

Motivation for being an SP, Maastricht University Skillslab data

Motivation	**Number of SPs** (n = 59)
Feeling useful	22 (37.3%)
Educational aspect	14 (23.7%)
Contact with others	7 (11.9%)
Money	3 (5.1%)
Miscellaneous	3 (5.1%)
Feeling valued	1 (1.6%)
Acting	1 (1.6%)

Note. Adapted from "Performance-related stress symptoms in simulated patients," by L. Bokken, J. van Dalen, and J.-J. Rethans, 2004, Medical Education, 38, p. 1092. Copyright 2004 by Blackwell Publishing Ltd.

The only other study I found that reported SPs' motivations to this level of detail was a study by McNaughton, Tiberius, and Hodges (1999). Their study consisted of data collected via surveys completed by 16 SPs and focus groups with nine SPs each. SPs in all four focus groups made statements which were categorized into six types of motivations, listed here in descending order of the number of comments recorded: money, acting, social value, learning, feeling valued, having fun, and socializing (p. 137). When I compared these two studies, I saw that money and acting appear on opposite ends of their lists. The finding for my study listed all of the types of motivations that the participants mentioned, most of whom had more than one motivation. As presented in more detail in Chapter 4, contributing to medical education was the most frequently expressed motivation, which was followed by community service, personal enjoyment, lifelong learning, money, acting, and variety.

How SPs Learn Verbal Feedback Skills

There was a gap in the literature regarding studies from the point of view of SPs about how they learn to do feedback; studies from the point of view of the SPs were about the difficulties associated with giving feedback (Abe et al., 2011, p. 264). Due to this gap, I use this section to document the references I found that were closely associated with how SPs learn to give feedback. The references regarding SP programs with feedback training, how to carry out SP feedback training, and recommendations for how to do feedback are explored in individual sections below.

Programs with SP Feedback Training

Some programs have SPs start working with trainees after an orientation and other programs have extensive formalized training programs. An example of the latter is a 40-hour certificate course offered to SPs at University of South Florida, Center for Advanced Clinical Learning (Schocken, Lakis, Zimmerman, & Charles, June, 2011). Since there is such a wide range of training that occurs, I selected three sample articles about programs that carry out SP feedback training to review. The first integrates actors into an SP program for nursing students (Pascucci, Weinstock, O'Connor, Fancy, & Meyer, 2014). The authors mention the guidelines they give to the SPs on how to provide feedback; however, there is no mention of how they train the SPs to provide feedback besides coaching them (p. 121). Based on the information they provide, their SP feedback guidelines can just as well be applied to medical school programs. In another article previously mentioned describing a study about the effectiveness of working with adolescent SPs, Bokken, van Dalen, et al. (2010) mention that the adolescent SPs were trained to give feedback (p. 316); however, few details were provided.

Nestel et al. (2011) published an article describing their study of four diverse SP programs located in Australia, Canada, Switzerland, and the United Kingdom for which they used a multiple case study method with cross-case synthesis. They focused on (a) the challenges with SP methodology, (b) faculty, (c) organizational structure, and (d) quality assurance. Their data reinforces the reoccurring perception of the complexity of the work SP programs do and the unique challenges the work presents to program staff, such as the recruitment process; the many different capacities in which SPs work; and SP performance and training. All four of the programs stated that teaching SPs their preferred feedback format is a portion of their SP training, with each having their own way of carrying it out (pp. 3, 5-6).

As is true for my study, they found that feedback varies according to the session goals and may include the use of structured protocols and rating forms. Feedback might be in-person and immediately after the role-play, or videotaped for later review by the trainee. There was neither mention of SPs learning feedback in any way other than the training they offer, nor barriers to SPs learning how to give feedback. The responses regarding the key challenges of these four SP programs is an indication that each program adapts procedures that work for them, that there is no one right way that works for all programs, and it is a dynamic and evolving field of practice.

SP Feedback Training Protocols

All of the references regarding SP feedback training were about how to carry out the training in formal pre-arranged settings. With the absence of the SPs' perspective about how they learn to do the feedback, I included examples of published references about feedback training protocols. When Bokken et al. (2009) reviewed the SP feedback literature they found that SPs were being trained in many different ways of providing feedback. There were only four

published feedback training manual references in the literature, three published in the same time period (Fisher, 2006; Howley, 2007; May, 2006) and one more recently (Dayer Berenson et al., 2012). May (2006) and Fisher (2006) developed the WinDix feedback training protocol and the materials mentioned below to support it, because they found SPs (a) had difficulty in providing specifics of trainee's performance, (b) were uncomfortable giving constructive (negative) feedback, and (c) lacked exemplars of effective feedback (May, 2006, p. 2).

These two authors (Fisher, 2006; May, 2006) published an interactive training based on this protocol that includes a presentation, videos, quizzes, a feedback assessment instrument for trainers, and the associated training manual for SPs. The SP training manual provides tips on how to do feedback and contains a recommended set of steps; however, it does not address the emotional aspects of what SPs face or information about how to assess the students' communication and interpersonal skills. Even though the authors state the SP manual is for SPs to give more effective feedback to medical students, residents, physicians, or other health professional trainees, there is no mention of a need to vary the feedback for the different types of feedback recipients, contexts of the simulations, or types of encounters. There is nothing about combining what an SP may have known about feedback from other parts of their lives with feedback for this setting and no mention in the manual for trainers about how to adapt the training for SPs with different skill levels. It appears to me that the authors' intention was to design a model applicable to all feedback and to standardize the processes.

Many of the comments just stated apply to the extensive feedback training manual for SP trainers published by Howley (2007). The manual is designed for a workshop setting and includes an agenda, a schedule, materials for trainers and SPs, checklists for delivering constructive feedback, pre- and post-tests, and training evaluation tools. The workshop is

designed for SPs to (a) reflect on their ability to provide quality, constructive feedback; (b) refine their knowledge of the interpersonal skills essential to a therapeutic relationship; (c) further develop their observation skills in the area of interpersonal skills; and (d) practice giving constructive feedback in a supportive, instructional environment (p. 7). Even though the materials associated with these two training protocols were published a year apart, they were both written in 2005 and nothing similar appeared in the literature prior to that time, which indicated to me that there was a significant recognition of the need for this type of training at that time. It was many years before the next document about feedback training was published, possibly indicating the two protocols met the needs of many programs.

Seven years later Dayer Berenson, et al. (2012) conducted a study of the effectiveness of the 2-3 hour SP feedback training workshop they require of all SPs working at their college. They start the workshop with a lecture-style introduction on the content and structure of the feedback session they expect the SPs to carry out. This is followed by SPs role playing and participating in small group discussions. These are the only authors to mention that the length of the workshop will vary depending on the SPs' familiarity with feedback; they appear to have taken into consideration that SPs will come to the workshop with varying degrees of skill. They also mention that the feedback itself will vary depending on whether it is brief, formal, or major (Branch & Paranjape, 2002; Dayer Berenson et al., 2012, p. e29). They believe that the principles of feedback they suggest apply across healthcare disciplines because the focus is on the interpersonal dimension and that it is important for SPs to have effective training no matter with which discipline they are working.

A unique aspect of the article by Dayer Berenson et al. (2012) is the information about verbal and nonverbal communication, with an emphasis on observing the trainees' nonverbal

communication and the use of nonverbal communication during the feedback session. The authors include explanations of verbal/nonverbal congruence, shared behaviors, and interpersonal space. They discuss overcoming barriers to giving effective feedback: time limitations and the discomfort associated with giving and receiving feedback. The authors discussed in depth about the nonverbal aspects of trainees' behavior during the encounter and SPs' communication as they are delivering the feedback. The significance of nonverbal behaviors they describe supports my reflection about the parallels between the encounter and the feedback session, and the complexity of the dynamics between the trainee and the SP during those processes. I found that some participants spoke of altering their feedback based on observations they made of trainees' verbal and nonverbal communications while they were delivering feedback.

Dayer Berenson et al. (2012) evaluated the effectiveness of the workshop by comparing the SPs' confidence with their ability to provide useful feedback to trainees and comfort with providing feedback, before and after the workshop. The results were inconclusive since one third of the participants rated themselves 10 out of 10 on the pretest; however, they rated the overall quality of the workshop with a mean of 9 out of 10 indicating they found the workshop to be beneficial. In the only text published about training SPs, Wallace's (2007) focus is on SP exercises for testing students including written feedback, with a relatively small amount about verbal feedback. However, many of the principles of written feedback she describes apply to verbal feedback (pp. 215-225).

All of the training items mentioned above include techniques for wording feedback. What steps an SP takes to become sensitive to and aware of their reactions during an encounter

and to learn how to associate them with specific trainee behaviors, or with their own idiosyncratic responses, was missing from the literature.

Effectiveness of Training

Souder (2009) studied the effectiveness of implementing the WinDix feedback training mentioned previously that was designed to improve the effectiveness of SPs' feedback to medical students. She noted that even though feedback is acknowledged as important for medical student development, actual interventions to improve effective feedback are scarce in the literature (p. 2). Prior to the 2005-2006 academic year, Souder's SP program had used a training protocol consisting of a three-hour session for reading through the case as a group, a one-hour feedback instruction didactic, and two hours of case and feedback practice in small groups. During the next two years the program implemented the new WinDix training protocol mentioned above, which included replacing the second session with a three hour interactive feedback workshop session, during which time the SPs reviewed handouts and practiced a seven step feedback process using a Quality of Standardized Feedback form with video examples; and an additional three-hour small group practice using the form.

Souder (2009) studied the effectiveness of the training protocol by having faculty review 25 videos of feedback randomly selected from the 240 available videos and evaluate the feedback. Even though she reported there was an indication the SPs provided quality feedback, she said it was inconclusive if the improved feedback was a result of the feedback intervention used in the revised training protocol. Souder suggested that further research with psychometrically sound instruments is needed to delineate variables contributing to the knowledge and skills of SPs as they learn to provide quality verbal feedback. The tool Souder used to evaluate the SPs' feedback consisted of a list of 20 items the SPs were expected to do

during the feedback (pp. 49-50). I contend that there is no one set list of steps SPs must take that will work for all circumstances, trainees, and SPs; and creating such a list will prove to be an elusive task. I had originally intended to study the quality of feedback based on trainee outcomes after they had participated in a formative activity as my dissertation research and thought that there were so many uncontrollable variables that I would not be able to determine the true effectiveness of the SPs feedback. I have since undertaken smaller research projects to explore trainees' experiences with SP verbal feedback.

Feedback Recommendations

There is a plethora of recommendations of how to carry out feedback (Archer, 2010, pp. 105-106; Bienstock et al., 2007, p. 510; Bokken et al., 2009, p. 205; Bokken, van Dalen, et al., 2010, p. 316; Dayer Berenson et al., 2012, p. e30; Fisher, 2006; Howley, 2007, pp. 40-41; May, 2006; Nestel et al., 2010, p. 166). Common feedback recommendations include:

1. provide feedback shortly after the encounter,
2. check with the trainees to see what they want to discuss,
3. give feedback based on their experience as the patient,
4. use "I" statements,
5. give feedback on observable and changeable behaviors, and
6. limit the feedback to two or three key points.

Archer (2010) is unique in his mention of the complexity of the task and the need to take the context and the recipient of the feedback into account (pp. 103-105). Archer and Dayer Berenson et al. (2012) were the only ones who specifically mention that sufficient time is needed to do it well. Even though there is a lack of studies that support or contradict the above recommendations, there are many studies indicating that participation in formative exercises

positively affect medical trainees' communication skills (Bokken, Rethans, et al., 2010; Kurtz et al., 2005, pp. 88-100).

Transitioning from Patient to Educator

In 2012, I attended a newly established forum designed to encourage SPs to do presentations about their work. Some SPs did presentations that were representative of the multiple roles and transitions required of SPs. One of the presenters did a theatrical presentation of the various roles SPs take on. She made multiple changes of her outer garments, frequently repositioned her chair, and spoke the thoughts that silently flow through an SP's head. Another presentation, "Let Me Debrief You" (Eaton & Truong, 2012), was a humorous rap music video from the point of view of the SP as the patient and as the one preparing and delivering feedback. The term *debrief* in the title is an alternate expression for the feedback session. There is a lack of studies specifically about the process of transitioning from the patient to the educator. The majority of the related articles were about the challenges of taking on the role of the patient or the impact of the work on the SPs, which I review in the next section.

De-Roling and Mental Stress

Bosek, Li, and Hicks (2007) wrote about their experience with recruiting and training SPs for exercises with nursing students. Even though these authors did not ask the SPs to evaluate the students nor provide verbal feedback, they wrote about the process of *de-roling*. They explain this involves detaching from the patient role and that it is especially applicable to a situation in which the SP had experienced a similar real clinical interaction. De-roling takes place at the conclusion of an event and consists of the SP discussing the real interaction they had experienced and how they felt about the simulated interaction with the students (p. 8). In an editorial about meeting the needs of SPs, Spencer and Dales (2006) state that successful de-

roling promotes the SPs' ability to cope with the day's events and maintain realistic expectations for future healthcare (p. 4). I did not come across any studies supporting these findings.

One of the few articles about the SPs themselves, was a qualitative study exploring the effects on SPs of portraying psychologically and emotionally complex SP roles. Even though this study is about effects on SPs of portraying psychiatric cases, I have observed that there are similarities with the psychological and emotional challenges for SPs when they are portraying end of life cases which require a high level of emotional affect and can be emotionally draining. In this study, McNaughton et al. (1999) asked 16 SPs who worked for the University of Toronto program to complete a survey with open-ended questions about their preparation and experiences. They explored the topics further by holding four focus groups, consisting of nine SPs each. Transcripts of the focus groups were prepared and coded.

The authors found that the impact of the SPs' role enactment tended to be more mental than physical, with the mental effects mentioned almost twice as frequently as physical ones (p. 137). Transitioning from the challenging roles during the encounters to providing feedback to the trainees was also considered by the SPs to be stressful. One SP mentioned the difficulty in quickly shedding a very sad role to be able to give feedback in a normal, composed manner (p. 138). The comments from participants of my study concurred with these results. If SPs are experiencing mental challenges they will not adequately observe, critique, and remember the specifics of how the trainees did or did not meet the performance standards, unless the criteria are oriented towards broad categories of satisfaction with the interaction.

Cognitive Demands of Observing Interviewers

Following up on the previous idea, the effects of being in the role of the patient directly impact SPs' transition from the encounter to the feedback; therefore, I also explored references

about the demands on the SPs during the encounter. Newlin-Canzone (2011) studied the effect of improvisations and multiple task performance on the ability to observe another's nonverbal behaviors and rate their communication skills, by gathering participants' subjective reports of mental workload and stress. The author carried out two studies. One involved 36 university undergraduates carrying out or observing a simulation of a job interview. The participants' ages ranged from 19 to 58 years old with an average of 27, and 83% were women. Within the groups of participants, Newlin-Canzone varied the type of interviews: rote or improvisational; and the type of observation: passive or active. She found the ability to observe and assess the interviewer was negatively affected for active observations and during improvisations. This means that since the interviewee needed to pay close attention to the interviewer to make decisions about how to proceed with their responses, they were less able to observe the interviewer's behaviors. The mental workload for these undergraduates was high for active improvisational observations and their reported stress levels were high after all active observations (pp. i-iii).

In a follow up study, Newlin-Canzone, Scerbo, Gliva-McConvey, and Wallace (2013) studied SPs for which they utilized a design similar to the one described above, with the addition of accounting for the SP's level of experience, differentiated as either novice or experienced. Active observations and improvisations negatively influenced the SPs' ability to observe the trainee. The results showed the same pattern found in the first study for the mental workload and stress data. SPs missed over 75% of nonverbal behaviors during active improvisational encounters. SPs had difficulty observing the trainee and found it more mentally demanding when simultaneously assessing the trainee and portraying the patient, particularly during periods of improvisation (Newlin-Canzone, 2011, pp. i-iii; Newlin-Canzone, Scerbo, Gliva-McConvey,

& Wallace, 2011, p. 1193; Newlin-Canzone et al., 2013). The results of this study substantiate my finding that it is challenging for SPs to carry out the simultaneous tasks of portraying the patient, and observing and assessing the trainee.

Gaps in Literature

The only items I found in the literature about feedback from the SP's point of view were about the difficulties they face, as described above. There was a lack of studies specifically about SPs' process of preparing and delivering feedback or how they learn their feedback skills. Another gap in the literature was in reference to comparisons of providing feedback to trainees at different points in their education. As I have said, I think this is a significant area to explore since SPs work with trainees representing a wide range of educational levels and the activities in which they participate vary considerably. The only reference to the similarities and differences of providing feedback for first-year medical students and residents was Archer (2010) who generally referred the fact that the recipient had an effect on feedback and that the goals of the feedback should be meaningful to the trainee.

Summary

Generalizations from the Literature

I formulated generalizations from the literature about the topics I researched. I found the studies consistently indicated SPs are motivated by feeling valued, contributing to medical education, earning money, using their acting abilities, and socializing. There is documentation of SP programs carrying out SP feedback training, during which SPs are encouraged to follow a set of recommended techniques designated by the individual program. Predominantly SPs are expected to give feedback on interpersonal skills from the patient's perspective.

In regards to the SPs' perspective about what it is like to transition from the role of the patient to the role of an educator, the literature is sparse. Roles with difficult emotions are mentally challenging and transitioning out of those roles can be difficult for SPs. There is little information from the SPs' perspective about what it is like to prepare and deliver feedback, nor the methods they use. Most SPs find difficulty with some aspect of providing feedback, particularly if the trainee did poorly during the encounter. There is a lack of studies about the similarities and differences of SPs' approaches to providing feedback to first-year medical students and residents. This study will be able to make a significant contribution to that focus. The literature alerts experts to the range of variations in training and performance, as well as the nature and presence of improvisation. Overall the literature attests to recent developments in a new field of research and to the relevance of the SP training and the complexity of their roles.

State of the Research

Very little research has been done about what it is like for the SPs to prepare and deliver verbal feedback for clinical simulations. The only thorough SP demographic details were in the article about a survey of SPs about their work (Abe et al., 2011). Abe et al.'s study reported data about the participants, including: gender; average and range of age; average and range of years of experience; pay rates; and work background. The survey did not ask for the participants' racial or ethnic background. The voices of the SPs—the people who are doing the work—need to be heard and listened to, if the staff of the SP programs and faculty are to understand the successes with, and barriers to effective feedback for medical trainees of all educational levels. I have taken one step towards this end with my research exploring the experiences of SPs with providing verbal feedback to medical students and residents.

Since I began this research in 2010, I have seen a significant increase in the number of studies and articles regarding the issues of SP feedback training and SPs providing feedback. I expect this is partially due to the support of the international professional organizations for their members to carry out research and to the increased legitimatization of the fields of simulation and the SP methodology. I was supported and encouraged in my research efforts by members of the professional organizations and fellow attendees at international conferences.

The study of the use of simulation in medical education has been increasing as the roles and techniques of health practitioners continue to become more complex. In addition, the increased use of simulation as a qualifying credential for medical students and residents motivates medical school programs to build their curriculum and qualifying procedures on reliable and verifiable information. All of this will assure a demand for quantitative and qualitative research about formative and summative SP activities. I discuss the research methodology used for this qualitative study in Chapter 3.

Chapter 3: Research Methodology

Introduction

This chapter opens with an overview of Grounded Theory Methodology, which is followed by a description of the steps adhered to by researchers conducting grounded theory studies. The next section contains the study design for this research, including a summary of the pilot study and information about the interviews I conducted to collect the data. I next describe the participants and the larger pool of people from which they were selected. To situate the study, I include a description of the social culture context within which the participants work. The research design and the steps used to carry out the research are then presented. Next the data analysis and synthesis methods are described in detail, along with examples from the study. The chapter concludes with the ethical considerations, issues of trustworthiness, and a summary.

Overview of Grounded Theory Methodology

Grounded Theory Methodology is used by researchers to learn about the specific processes they are studying and particularly the research participants' experiences with these processes (Charmaz, 2006, p. 2). As summarized by Marshall and Rossman (2006, p. 3), Grounded Theory Methodology shares the following characteristics with other qualitative methods:

- takes place in the natural world,
- uses methods that are interactive and humanistic,
- focuses on context,
- is emergent rather than tightly prefigured, and
- is fundamentally interpretive.

A unique aspect of Grounded Theory Method is its application of constant comparative analysis which is the process of concurrent data collection and analysis. This process of continuously comparing newly collected data with previously collected data, incidents with other incidents, incidents with codes, codes with codes, codes with categories, and categories with categories, continues until a theory grounded in the data is fully developed (Birks & Mills, 2011, p. 10). Explanations of these terms are later in this section and examples of the steps followed for this study are in the data analysis section of this chapter.

Grounded theory strategies for qualitative research were established by Glaser and Strauss (1967) in the 1960s as a response to the existing state of social science research which predominantly was based on quantitative research methods. In their seminal text, *The Discovery of Grounded Theory*, they described the process which they identified as being a grounded theory approach that they discovered during their collaborative study of the experience of dying as a non-scheduled status passage. In contrast with the common methods of that time, the basis of their work was to develop theories from the data rather than starting with a hypothesis and proving or disproving its existence; or using established theories and evaluating if they apply to the situation being studied. Glaser and Strauss (1967) demonstrated how qualitative research could be a credible, rigorous methodological approach and could stand alone rather than only being used in the design of quantitative instruments (Charmaz, 2006, p. 6). Additionally, they challenged the beliefs that qualitative methods were impressionistic and unsystematic; that the data collection and analysis phases of research must be separate; and that qualitative research could not generate theory (Glaser and Strauss, 1967; Charmaz, 2006, p. 6).

Even though the specific methods researchers use may vary, grounded theory methodology consists of systematic, yet flexible guidelines for collecting and analyzing

qualitative data to construct theories grounded in the data. The guidelines offer a set of general principles and heuristic devices rather than formulaic rules (Charmaz, 2006, p. 2). Researchers following grounded theory methodology are encouraged to examine the data with minimal preconceptions and to create novel categories and concepts (p. 23). Even though Strauss and Glaser diverged from each other in their practices and some researchers strictly follow one or the other's procedures, Birks and Mills (2011) suggest that there are many variations in the methods which can still be Grounded Theory Method (p. 3).

Data Generation, Collection, and Analysis in Grounded Theory

As I alluded to above, an essential foundation of grounded theory that leads to its uniqueness is a comparative interactive analytic strategy of coding, memo-writing, theoretical sampling, sorting, and integrating that is called the constant comparative method (Birks & Mills, 2011, p. 10; Charmaz, 2006, 2008, p. 163; Glaser & Strauss, 1967, pp. 21-116). Figure 1 shows an overview of the steps. For simplicity I have the memo-writing step shown in one position; in practice it takes place throughout the entire process. I explain these steps in the sections immediately following, and I provide examples of how the methodology was used in this study in later sections.

Initial Coding

As is common for qualitative research, data for a grounded theory study may be collected via a variety of different types of sources, such as interviews, documents, and observations. Once some data are collected, an initial coding process consisting of studying fragments of the data word by word, line by line, incident by incident, or some other segment size, and selecting a word or words to represent the data, is carried out while the researcher stays open to all possible theoretical directions (Charmaz, 2006, pp. 42, 46). An incident is a general term for

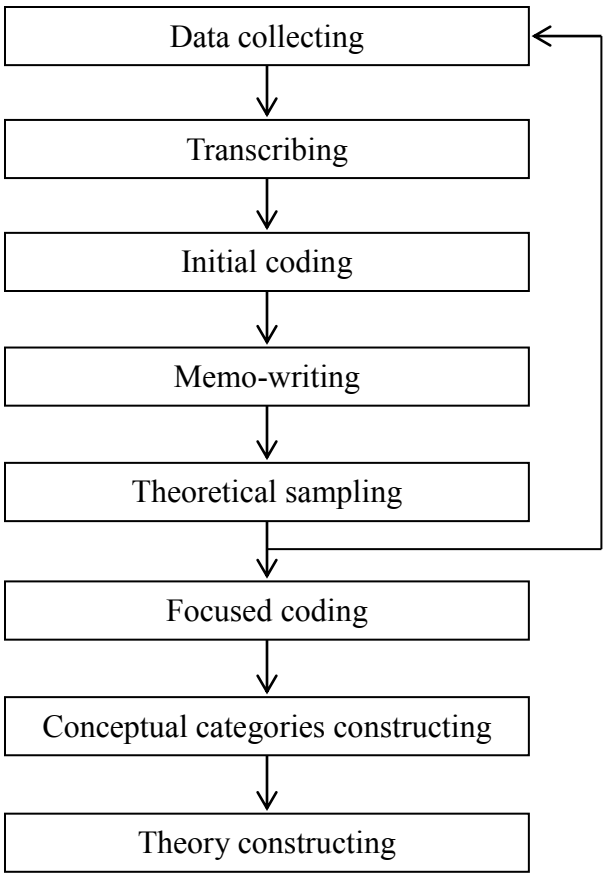


Figure 1. Grounded theory methodology steps.

recurring actions, experiences, phrases, and/or explanations. Initial coding allows the researcher to begin to conceptualize ideas that underlie the data, at times using in vivo codes based on the original terms found in the data (Charmaz, 2006, p. 47-48; Glaser & Strauss, 1967, p. 107). To identify the significant processes the researcher is encouraged to ask herself questions about the data, such as:

- What process is at issue here? How can I define it?
- How does this process develop?
- How does the research participant(s) act while involved in this process?

- What does the research participant(s) profess to think and feel while involved in this process? What might his or her observed behavior indicate?
- When, why, and how does the process change?
- What are the consequences of the process? (Charmaz, 2006, p. 52)

Consistent with Glaser's (1978) guidelines, Charmaz (2006) suggests using gerunds when coding and writing memos as they prompt thinking about active aspects of processes rather than static topics (pp. 49, 136, 149).

As the coding progresses, the researcher begins a process of categorizing, which is the analytic step in grounded theory of selecting certain codes as having overriding significance or abstracting common themes and patterns in several codes into an analytic concept. As the researcher categorizes, they advance the conceptual level of the analysis from description to a more abstract theoretical level. The researcher then defines the properties of the category, the conditions under which it operates, the conditions under which it changes, and its relation to other categories. Grounded theorists make their most significant theoretical categories into the concepts of their theory (Charmaz, 2006, p. 186).

Memo-writing

Memo-writing takes place throughout the data analysis process as a way to stimulate thinking about concepts and connections between the coded data. Writing memos is a crucial aspect of the grounded theory approach as it prompts researchers to analyze their data and codes early in their data analysis process. Memos capture thoughts about the data and can trigger awareness of comparisons of, and connections between the codes.

Theoretical Sampling and Theoretical Saturation

When using the grounded theory approach, researchers start with an initial set of participants and as they begin the data analysis process, they may select additional participants in an attempt to gain insight into a particular aspect of a process to further their data analysis. This is called theoretical sampling. In addition to the selection of participants, theoretical sampling relates to the data collection process. Through coding the data, the researcher gains insights about the underlying concepts, prepares memos with ideas, and then decides on what other questions to ask to gain a better understanding of the processes or experiences (Charmaz, 2006, p. 52-53).

During the process of analyzing the data, when no new codes are identified relating to a particular category or the codes do not provide any new theoretical insights, theoretical saturation has been achieved; the categories are clearly specified with precisely defined properties and dimensions (Birks & Mills, 2011, p. 176; Charmaz, 2006, p. 189).

Constant Comparative Method

The steps described so far make up the constant comparative method—the concurrent collection of data and analysis using codes and categories during each stage of the analysis as the researcher develops the theory—are what differentiate Grounded Theory Method from other interpretive research methods (Birks & Mills, 2011, p. 94, Charmaz, 2006, pp. 5, 104). The constant comparative method extends through the literature review (Charmaz, 2006, p. 165) and is used to generate successively more abstract concepts and theories through inductive processes of comparing data with data, data with category, category with category, and category with concept. Comparisons constitute each stage of analytic development (p. 187).

Focused Coding

Focused coding is the second major phase in coding. In this phase the researcher selects codes that are more directed, selective, and conceptual than the codes used in the initial coding (Charmaz, 2006, pp. 57-58; Glaser, 1978, pp. 75-77). After some strong analytic directions have been established through the initial line by line coding, focused coding is used to synthesize and explain larger segments of data. The process of focused coding uses the most significant initial codes to organize large amounts of data. As the researcher does focused coding, they decide which initial codes make the most analytic sense to categorize the data incisively and completely. It is an opportunity to take fractured codes and find a home for them. Just as with other steps of grounded theory data analysis, focused coding is cyclical process with multiple iterations. It can take place at various times and be revisited as the analysis progresses.

Theoretical Coding

Depending on the emerging analysis, theoretical coding can be used as one of the last coding steps. It is used to find relationships between the categories developed during the focused coding step, moving the researcher to a more theoretical level. Glaser (1978) developed core conceptual categories, including his "Six Cs: Causes, Contexts, Contingencies, Consequences, Covariances, and Conditions," as coding families to assist analysts with the process of categorizing (p. 74).

Theoretical Sorting, Diagramming, and Integrating Grounded Theories

The objective of a grounded theory study is the development of a theory grounded in the data. Even though Charmaz (2006) contends the term theory remains 'slippery' in discourse about grounded theory (p. 123), Birks and Mills (2011) define a theory as an explanatory scheme comprised of a set of concepts related to each other through logical patterns of

connectivity (p.176). The theories constructed utilizing Grounded Theory Methodology are interpretive in nature. They are situated in the particular position, perspectives, and experiences of the participants and of the researcher. Charmaz (2006) states that interpretive theory aims to:

- Conceptualize the studied phenomenon to understand it in abstract terms;
- Articulate theoretical claims pertaining to scope, depth, power, and relevance;
- Acknowledge subjectivity in theorizing and hence the role of negotiation, dialogue, understanding; and
- Offer an imaginative interpretation (p.127).

When researchers create diagrams of the categories, subcategories, and their relationships they further explore the data for improved conceptualization of the ideas associated with the data (p. 61).

Substantive vs. Formal Theory

Glaser and Strauss (1967) differentiate between substantive vs. formal theory, the two types of theory that can be generated using the comparative analysis methods of grounded theory. They define substantive theory as that developed for a specific substantive, or empirical, area of social inquiry, such as the one studied here, SP methodology in medical education; in contrast with a formal theory that is developed for an area of social inquiry, such as feedback (pp. 32-35). For this study I constructed substantive theory from the data collected from the interviews with the implication that the theory may not be generalized to a wider social arena. Charmaz (2006) states that it is common for most grounded theories to be substantive since they address specific areas of observation or experience, though they can carry across multiple substantive areas and be recognized as a formal theory (p. 8).

Theoretical Sensitivity

When one comes to a grounded theory research process without having preconceived concepts in mind, the data is more likely to be authentically represented (Charmaz, 2006, p. 47; Glaser, 1992). Theoretical sensitivity, which is a term coined by Glaser and Strauss, is the ability to conceptualize and formulate a theory from the data (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Researchers using the grounded theory approach are encouraged to improve their theoretical sensitivity as characterized by one's ability to understand and interpret the data, and to have insight to its meaning. A researcher can develop this ability by becoming familiar with the literature on one's research topic, by experiencing professional work, by experiencing personal life, and by being involved in the analytic process itself (Strauss & Corbin, 1990, pp. 41-47).

Glaser (1978) devoted an entire book to the process of carrying out a theoretically sensitive grounded theory study, starting with theoretical coding and going all of the way to theoretical writing. In the chapter specifically about theoretical sensitivity, he points out that grounded theory takes time and that coding, analyzing, and collecting should be done in little increments to allow the researcher to think about the data as they go about their daily activities, augmenting the creative process. My research took place over a period of almost three years, giving me the opportunity to cycle through the data and the analysis, and to consider many different aspects and conceptual interpretations. One way to gain greater theoretical sensitivity suggested by Charmaz (2006) is the use of gerunds when doing the coding, as their use pushes the analyst to think in terms of enacted processes rather than static topics, as previously mentioned (pp. 49, 121, 136). I followed this suggestion by using coding such as "preparing feedback" and "delivering feedback." More examples of the codes I used are in a later section.

Rationale for Using the Grounded Theory Approach

I chose to use a grounded theory approach to have a systematic procedure for generating a broad conceptual level, substantive theory to describe SPs' experiences with verbal feedback to first-year medical students and residents (Creswell, 2008, pp. 431-471; Mertens, 2010, pp. 236-237; Strauss & Corbin, 1990, p. 24). As previously described, Grounded Theory is a process by which one develops theory grounded in the data (Charmaz, 2006; Glaser & Strauss, 1967; Strauss & Corbin, 1990), as was my intent. It is usual for individuals trained in quantitative research, as I am, to use grounded theory when taking on qualitative research in order to have a disciplined and methodical approach. I selected to predominantly follow the constructivist design supported by Charmaz (2008) over the other grounded theory designs, emerging and systematic, which were developed by Glaser (1992), and Strauss and Corbin (1990), respectively (Creswell, 2008, p. 433).

When I used aspects of these other methods, I did so to explore where they would take me in my analysis. Even though the more structured approach is common for new researchers (Creswell, 2008, pp. 439-440), as is true for me, the constructivist approach is more in line with my orientation to research. In accordance with my constructivist orientation, I wanted to see what the participants would say about their experiences providing me with information to better understand the process of feedback from their point of view. My objective was to collect and analyze a rich set of data consisting of the language expressed by the participants to learn about their empirical world, and to develop a substantive theory.

Grounded Theory has been used with a broad range of topics, including Snook (2000) who used it for analyzing unexpected deaths in gun battles and Ekins (1997) who studied cross dressers. Four studies in the field of medicine and medical education are listed at the beginning

of the literature review, with topics such as pre-hospital trauma care (Haghparast-Bidgoli, et al., 2010) and components of nurse caring (Meng et al., 2011). Two examples of dissertations in the field of medicine concerned medical leadership adapting to change (Daiker, 2011) and patient medication noncompliance in men diagnosed with hypertension (Edwards, 2011).

Brief Overview of Study

This study consisted of semi-structured face-to-face interviews of 17 standardized patients. The transcribed interviews were the primary source of the data that were used for analysis, resulting in the construction of a substantive theory and related models of the details of the verbal feedback processes the participants' experience, and the conditions and situations affecting those processes.

Overview of Research Design

To carry out the study I completed a pilot study, did an initial review of the literature, prepared a prospectus, obtained internal review board approvals, interviewed the participants, and carried out the data analysis on an ongoing basis. A more in-depth discussion of each of these steps follows.

Pilot Study

Prior to the design of this study I completed a pilot study based on the grounded theory approach using data I collected via an online survey exploring SPs' experiences with the feedback process. The survey link was distributed through emails sent directly to 47 SPs with whom I had worked and I posted it on a Facebook SP social networking page, consisting of 89 members. During the two weeks the survey was open, 17 SPs, primarily from the mid-Atlantic and New England regions of the United States, completed the survey. Based on the data analysis

of the data collected from the survey, the following six categories representing aspects the SPs found affected them in their preparation and delivery of feedback were constructed:

- SP preparedness prior to event,
- SP mental and physical state,
- event conditions,
- trainee conditions,
- SP feedback techniques, and
- SP and trainee relationship during feedback.

The following is the grounded theory I developed from the pilot study. The quality of SP verbal feedback is impacted by SPs'

- physical and emotional state,
- skills in delivering feedback,
- comfort with the patient case they are portraying,
- knowledge of the learning objectives for the trainees, and
- level of certainty of how to assess the trainees' performance;

and, by other situational aspects, such as

- the amount of time they have to prepare their feedback,
- the technique they use for feedback,
- the relationship they have with the trainee, and
- trainee receptivity to the feedback.

The categories and theory constructed from the pilot study informed and provided a focus for the research questions for this study.

Literature Review

As covered in detail in Chapter 2, I conducted an ongoing and selective review of literature to ascertain what other researchers had documented in regards to the role of SPs in medical education and specifically their experiences with providing verbal feedback to first-year medical students and residents. I carried out additional reviews of the literature as new topics arose during the data analysis. Five of the topics I explored in more depth were:

(a) motivation for being an SP,

(b) how SPs learn to give feedback,

(c) transitioning from patient to educator,

(d) preparing and delivering feedback, and

(e) feedback for medical students and residents: similarities and differences.

Prospectus and IRB Approvals

Following the preliminary literature review, I prepared a research prospectus, including the background, context, problem statement, purpose statement, and research questions similar to the comparable items included in Chapter 1; a preliminary version of the literature review included in Chapter 2, with a representative bibliography including the prospectus references; and a preliminary version of the proposed methodological approach as outlined in this chapter. The final version of the prospectus, including revisions suggested by the dissertation committee members, was approved and submitted to the department administrative office.

The applications submitted to the internal review boards at the medical institution site for the study and Lesley University were designated as expedited reviews and contained information similar to that incorporated in the prospectus, including: the study background information; the details of the recruitment process; the texts of the recruitment, participant notice, and interview

meeting confirmation emails; the original set of interview questions; the procedures for safely handling and storing the data; the research participant informed consent and privacy authorization form; and information about the participant pool. The IRB approval process ensured the adherence of my design to standards put forth for the study of human subjects so that I could proceed with the research.

Methodology

Data Collection

Interviews. The underlying basis of all empirical research is the data associated with the study. As previously mentioned I used semi-structured interviews for the formal data collection. Interviews allow researchers to learn how participants describe their experiences and can provide an opportunity to gain an in-depth understanding of people's viewpoints in a way that cannot be observed. The semi-structured format I used started with a list of predetermined questions and allowed for variations with the follow up questions to gain clarification of the particpants' answers and obtain more in depth information. Meeting with the participants individually allowed me to customize the follow up questions to the individual's responses and for the participant to be unencumbered by the presence of other participants. The structured aspect of the interview promoted a more focused and directed interview, efficient use of time, and more relatively uniform data for the analysis portion of the study (Patton, 2002, p. 346).

While developing the interview questions I thought of the critical incidents questions Brookfield (2011) recommends for teachers to ask of their students to gain insight into how the students experienced a class session (pp. 54-55). Abbreviated forms of two of the reflection questions he suggests are "When were you most engaged?" and "When were you most distant?"

I changed these questions to ones of the following types: “What goes well?” and “What challenges do you find?”

The interview consisted of open ended questions and, as mentioned, the use of follow up questions to clarify and explore the participants’ responses. The majority of the questions focused on how the participants learned how to prepare and deliver oral feedback, and the challenges and successes they have had with feedback. In accordance with fundamental aspects of grounded theory approach of simultaneous data collection, coding, analysis, and theoretical sampling (Glaser & Strauss, 1967), I made modifications to the interview questions based upon the data collected in the first set of interviews. I was frequently asking the same clarifying and spontaneous questions, such as delving into how the participants adjust their feedback for individual trainees, and so I added these questions to the list. I also reworded some questions that resulted in puzzled looks from the participants in the early interviews. The final list of interview questions is in Appendix A, with the added questions indicated by asterisks.

The interviews were scheduled for 90-minute periods and all but one of them took place at the worksite, in the privacy of my office. One interview took place at the participant’s home as that was more convenient for him within the timeframe I had targeted for the interviews. The initial portion of the interview was set aside for reviewing the consent form and getting written consent prior to starting the interview. The audio portion of the interviews was digitally recorded. The details of the interview protocol are in Appendix B, and a version of the informed consent form modified for the anonymity of the institution, is in Appendix C. After each interview I compiled notes about my impressions of the interview including the participant’s behavior and particularly notable participant responses. These notes became my first set of memos.

Mishler (1986) cautions researchers about the limitations of the standard practice of interviews being structured like surveys, with each question being asked in an identical fashion, indicating that the respondent is likely to be disempowered (pp. 9-34, 117-135). I heeded this warning by generally encouraging the participants to talk about what was on their minds before starting the questions and by allowing the conversations to develop based on the interviewee's lead after I asked the initial questions. I redirected the participants if they wandered too far off topic and I asked additional questions until all of the topics were covered.

With a few of the participants the semi-structured format shifted to a more collaborative interviewing process, with them also asking me questions. The interviewees ranged from appearing to be reluctant to talk to being verbose. Some of the participants did not say anything unless I asked them a question, to which they made a brief reply; and for others, once I prompted them with a few questions, they began talking in a flowing manner going from one point to the next, while I listened. One participant came to the interview ready to share his thoughts about his experiences with verbal feedback and engaged me in a lively conversation covering the interview topics ,with my barely having the opportunity to ask any questions. At the conclusion of another interview, the participant presented me with many pages of her hand-written notes about her experiences with verbal feedback. These variations in how the interviews proceeded are good examples of Charmaz's (2006) statement:

> Relative differences in power and status may be acted on and played out during an interview. Powerful people may take charge, turn the interview questions to address topics on their own terms, and control the timing, pacing and length of the interview. (p. 27)

Field observations. In addition to the data I collected during the interviews, I informally gathered data based on direct observations of, and conversations with SPs during my routine workday, that likely influenced the data analysis. As I work with this population on a daily basis and observe many feedback sessions live, it was difficult for me to keep these two sets of data separate during the creative process of thinking about the dynamics of the feedback. These observations did not lead directly to any findings per se; they added to my thinking about the findings and theories. When I was exploring a theory, I was able to observe or question SPs and see how well it held.

An example of this is when I overheard an SP who had just finished an encounter converse with the SP who was monitoring about how she did not know how to approach the feedback since the trainee had performed so poorly. I explored with them what they had experienced and what they were considering for the feedback. I assisted them in deciding what they would say and how to say it in a supportive way. I then listened to the feedback session and discovered they had formulated incorrect assumptions about the trainee and the choices he had made during the encounter. If they had inquired about his choices before listed all of the things he had done poorly, he would have explained to them that he had not said the things he thought he should have since he chose instead to follow instructions provided to him by his faculty. It turns out he had misunderstood the instructions. By not using adult learning inquiry, these SPs missed a teaching and learning opportunity. This incident reinforced for me the importance of SPs knowing and following adult learning principles.

Sampling Strategies and Criteria

Theoretical sampling. The participant selection process took place in three increments. It was initially based on a purposive sampling strategy, with a combination of typical sampling,

since I selected the participants to satisfy the criteria I specified for the desired characteristics. I also used maximal variation sampling, in that I selected a diverse set of participants (Creswell, 2008, pp. 214-215; Miles & Huberman, 1994, p. 27; Patton, 2002, pp. 234-235). I based the second and third increments of participant selection on theoretical sampling, the details of which are explained below. There was one instance of snow ball sampling when a participant identified another SP that met the theoretical sampling criteria for the third increment (Creswell, 2008, pp. 155, 217).

In total, 17 SPs participated in the study. The first 10 interviews were with participants I purposely selected based on the following criteria:

(a) they impressed me as being relatively proficient with feedback;

(b) they were experienced with providing verbal feedback to first-year medical students and residents to the extent that I thought they would be able to discuss their experiences with each and compare them;

(c) I thought they would be conversant about their experiences with preparing and delivering feedback;

(d) I had at least one video recording of their encounter and feedback sessions; and

(e) they were representative of the diversity of the SP pool in regards to their age, gender, educational background, amount of experience as an SP, other occupations, and racial background.

To consider someone relatively proficient in their verbal feedback, I look for attributes including: communicating in an organized fashion, connecting their reactions as the patient with specific behaviors, engaging the trainees in dialogue, and being encouraging. Even though I have not formally documented my observations on an ongoing basis, I make notes as I observe SP

feedback sessions. I next gave consideration to selecting people who would be minimally inconvenienced by coming to my office for the interview, in that they lived relatively close to the campus or would be onsite for another reason. At the time of selecting participants I did not consciously consider income or economic status, nor did I ask participants any such questions. Even though many SPs share that type of information with me, I did not think it is appropriate for me, as their supervisor, to directly collect that data.

The first three interviews included the participant viewing videos of themselves providing feedback to medical trainees. These were videos that are routinely recorded during SP exercises that SPs and trainees consent to allow to be viewed for educational purposes. My intention was to ask a set of questions about the participants' experiences with feedback in general, have the participants view the video, and ask questions regarding what they observed about their videotaped interaction with the trainees. Previously I had reviewed videos with individual SPs upon their request and they had found it insightful to observe themselves giving feedback. I had gained new understandings from hearing their reflections and thought this would be a good source of data for this study. To the contrary, including viewing the videos during the interview turned out to be ineffective as it interfered with the primary purpose of the interview, gathering data about their experiences with verbal feedback more generally. When we switched to the videos there was an awkward interruption of the interactive discussion, as the participants began to critique their session instead of talking about their experiences. I conducted the remaining interviews without the videos and found the participants appeared to have remarkably clear memories of their feedback sessions.

After the first set of 10 participants, I had not completed a thorough analysis and I was uncertain if I had reached saturation. To add to the data to see if I would hear about different

experiences, I selected four additional participants, continuing with my plan of interviewing individuals representative of the demographic diversity of the SP population. When I was in the process of recruiting Cathy, the twelfth participant, she said, "You shouldn't interview me. I don't do it well." I thought that was all the more reason to interview her; I wanted to know what she had to say about her experiences.

These four interviews took place a couple of weeks after the first set. During the interview, Cathy mentioned that she found giving feedback anxiety provoking and I realized I wanted to know what she and other people who found feedback challenging had to say about their experiences. Putting theoretical sampling into practice, I expected I would expand my understanding of SPs' experiences by selecting people who I considered to be less proficient with providing feedback or who had admitted they found it to be difficult. Following this realization and a two-month period of data analysis, I expanded the sample by recruiting three additional participants and carried out the interviews. I selected people who had seemed to me to be awkward and nervous or who gave relatively brief or very general verbal feedback to the medical trainees. As an example of snow ball sampling, one of these individuals had been suggested by Cathy.

I did the open coding of each interview as each transcription was available; some of this process overlapped with when the last set of interviews took place. After completing the open coding on the data collected from all 17 participants, I was satisfied the data I had collected was saturated. I was not finding any new concepts in the codes and decided to not interview any additional participants. I proceeded to the next steps in the data analysis as described below. Details about the participants are in participant descriptions section.

Transcription

Transcription, the procedure of changing oral conversation into text, is an interpretative process in itself (Kvale, 1996, p. 160). The text provides a format that is more amenable to analysis than the audio recording (p. 168). I transcribed the first two interviews to experience being integrally involved with the participants' words and expressions. In addition, I transcribed another interview in the first set since there had been a lot of interruptions during the interview. The remaining interviews were transcribed by a professional transcription service. When I received the transcriptions, I comprehensively reviewed and made corrections to the texts while listening to the audio files. The process of transcribing interviews is problematic due to the loss of the details of the speech such as pauses, nonlexical expressions, speaker interruptions, and overlaps that usually do not appear in either the transcriptions, nor in the reports of the interview studies (Kvale, 1996, pp.166-168; Mishler, 1986, p. 47). To preserve some aspects of the speech in the text, I added ellipses for long pauses, made the text bold if I thought the participant had placed a special emphasis, added "[softly]" if someone lowered their voice significantly, and added "[laughter]" if the person laughed a significant amount.

Transcribing speech into written text is a complex process with the text selection impacting the meaning the researcher draws (Kvale, 1996, pp. 160-173; Mishler, 1986, pp. 47-51). When I was transcribing or verifying the transcription completed by the service, there were occasions when it was challenging for me to definitively know what a participant had said and the selection of the wording made a significant difference in meaning. For example, during a discussion about the quality of feedback for a group of trainees, a participant said, "Especially if this is for people [trainees] who are *trying to really learn* about something. If everyone is on the same page … then things will flow a lot easier" (Cora). The first time I listened to the audio I

heard "*really trying to learn*." To decipher the accurate order of the words I needed to stop looking at what was written on the transcription and just listen to the audio multiple times. I thought the word order made a difference in the emphasis, and hence the meaning, since I interpreted "really trying to learn" as being about motivation, while "trying to really learn" as being about skill building.

I was also especially aware of the considerable difference between sitting with the participant live, seeing their body language including their hand gestures and facial expressions, and experiencing the energy of their voice and their presence in front of me; and listening to the audio recordings during which I could not see them—I was only hearing. Then I experienced another disquieting shift when I went from listening to the audio recordings, hearing their voices with all of the nuances of their speech patterns, including personalized pauses between words and sentences and an occasional burst of laughter—to just reading the still text of the transcriptions. The vivacious conversations full of each person's personality had been transformed into words on a computer screen. That having been said, I was still aware of my voice being juxtaposed with the interviewees' voices in text of the transcription.

The third shift came when I was parsing the text of the participants' responses, examining pieces of the conversation, and assigning them a code. I had deconstructed dynamic interactive live interviews and obtained representative conceptual words and phrases. To help me hold onto the image and feel of each interview, I referred to the notes I had taken after each interview and listened to the audio files to get a taste of the original interviews, refreshing my memory of the individual participants. Each medium provided me with an opportunity to uncover different meanings. They all come together to give me a more comprehensive understanding of the participants' experiences.

Participants

Research Setting

The participants work for the SP program at a large academic medical center in the mid-Atlantic region of the USA which includes a medical school and a teaching hospital. The program provides activities for the medical degree program with 570 students; 10 of the 88 medical residency and fellowship programs, consisting of 1150 residents and clinical fellows; and the nursing program with 400 undergraduate students. In addition, the program provides SP and teaching associate services for regional clinical education programs, community physicians, high school career exploration programs, and physicians attending local conferences.

Socio-Cultural Context

In general, SPs are well respected by the faculty, trainees, and staff since the role they play is considered to be essential in fulfilling a portion of the institution's mission to prepare clinicians to practice patient-centered medicine. Even though the work SPs do is considered important, adequate funding to pay them can be an issue. The funding for their pay comes from the departments that request the activities, which are predominantly a part of the school of medicine, and less frequently the hospital. Some departments want to hold activities even though they do not have sufficient funding, which can lead to skimping on scheduling enough SPs or in adequately training them. Currently the funding for training the SPs is incorporated into the budget of individual projects, as there is not a separate fund for their training in general. Even though the SPs are trained to carry out the responsibilities they have for each activity for which they are engaged, there is not a formalized thorough training program for them to learn the educational theories associated with their work.

In addition to the possible funding issues, there are multiple administrative tasks to be carried out for recruiting, hiring, scheduling, accounting for work times, and processing payroll. This work load can lead the program staff to act as if working with the SPs is a burden. At times the expression of appreciation for the extraordinarily important and challenging work the SPs do is forgotten when the staff faces the challenges of accurately and effectively carrying out all of the tasks needed to run the program.

Trainees. In regards to the interaction between the SPs and the trainees, I have experienced a range of receptivity on the part of the students and residents to participating in SP activities and to receiving verbal feedback from SPs. The trainees can vary from being fully engaged and appreciative, to being defensive and dismissive. They have been selected from a large pool of applicants to participate in an elite medical school or residency program and are in an environment that expects high performance. The SPs are in a position of critiquing the trainees, people who have consistently been successful in academically challenging programs. The trainees are used to getting instructions and critiques primarily from their highly trained medical professional faculty. At times the trainees resist processing feedback from the SPs, people who are not trained in medicine, except for items for which they want feedback.

SP educational level. While the SPs are required to have a high school diploma, 84% of them have attended college. The average amount of formal education beyond high school is four years and the breakdown of the highest levels of formal education reported is as follows: 10% completed a two-year degree; 48% completed a four-year degree; 5% attended graduate school without completing the program; 18% completed a master's degree; and 3% have a more advanced degree.

Actors. As there is a need for acting skills to portray many of the cases, actors are frequently recruited for the position. Even though my documentation is not complete, I estimate two thirds are professional actors or have some other fine arts background. At the conclusion of an activity with an emotionally demanding case, trainees routinely express their appreciation of having experienced an engaging educational opportunity, facilitated by the well developed acting skills of the SPs.

Employment status. The SPs are casual employees, meaning they work on an as-needed basis. The amount of work they have is dependent on the needs of the courses held by the clinical programs and is legally limited to 18 hours per week. Individuals' scheduled work is sporadic, with some SPs working as little as a few half days a year, while the most experienced, active SPs may work as much as a few days in a week, for a total of 500 hours per year. Due to the low amount of work available through this program, many of the SPs work at more than one of the nine SP programs in the region and frequently have other part time jobs. People are hired to work either as SPs, as teaching associates, or in both capacities. Teaching associates teach physical examination skills to the students giving them additional experiences directly instructing the students as compared to people who solely work as SPs. They have completed training courses provided by the SP program assisting them in gaining additional medical knowledge and have demonstrated an extra dedication to the work of educating clinicians.

SP Population Demographics. The SPs range in age from 22 to 93 years old, with an average age of 51. As previously mentioned, their income levels are unknown except through personal conversations during which some have disclosed they are struggling financially and living from paycheck to paycheck, while others are retired and financially secure. The former

request more work opportunities and most of the latter take on the work primarily for personal fulfillment.

In addition to the demographic data of the participants, I thought it was important to have information about the population with which they interact, and so I included the data available for the trainees here for comparison. Sixty percent of the SPs are women and 40% are men. The gender ratios of the trainees are similar, in that there are approximately equal numbers of female and male students, and the residents are 54% women and 46% men.

Even though there were more categories available for the students to report their racial background data than the SPs and residents, comparisons between the groups can still be made in that regard. The data used for the students represents the entire medical school enrollment from 2010, the year during which the interviews took place (American Association of Medical Colleges, 2010). Overall the students have the greatest amount of diversity. Specifically, the racial backgrounds of these groups differ in that three fourths of the SPs and residents, and only half of the students, are Caucasian. The SPs have a greater relative amount of African Americans as compared with the residents and students, with 16%, 6%, and 8%, respectively; however, this under represents the population of the immediate area of the medical institution, which is 60% African American. All three groups have a relatively similar representation of people of Hispanic origin, at 4-6%. With thirty percent of the students being Asian, they have a significantly higher level than the SPs and the residents, with 3% and 13%, respectively. The details of the racial background of the students, residents, and SPs, are represented by the data in Appendix D.

The participants were selected from a pool of the 155 SPs and teaching associates employed by the SP program. To gain an understanding of the breadth of experiences of SPs and

to discover the commonalities, I chose to interview a diverse group of people representative of the larger group of SPs, rather than a narrow homogenous group that is an alternate sampling strategy (Patton, 2002, pp. 234-236). Demographic data for the SP population at the time of the research and the participants of the study are in Table 3. The age and gender demographics of this population are comparable to other programs reported at four international locations (Nestel et al., 2011, p. 5).

Table 3

Demographics of SP Population and Participants

Descriptor	SP population (N=155)	Participants (N=17)
Race or Culture		
Caucasian	116 (75%)	11 (65%)
African American	23 (15%)	3 (18%)
Hispanic American	9 (6%)	0 (0%)
Asian American	4 (3%)	0 (0%)
Asian	1 (1%)	1 (6%)
Caribbean/African	1 (1%)	1 (6%)
African/Hispanic American	1 (1%)	1 (6%)
Gender		
Female	92 (59%)	11 (65%)
Male	63 (41%)	6 (35%)
Age		
Average	51	51
Youngest	22	25
Oldest	93	71
Years past HS		
Average	4	4
Least	0	1
Most	8	8

Note. Percentages are rounded to the nearest whole number.

Worksite. The majority of the exercises take place at the simulation center in simulation examination rooms. These rooms are set up to look like a clinical examination room, outfitted with sinks, examination tables, medical instruments, and medical supplies. Each room is also equipped with two cameras and a microphone for videotaping, and a computer for documenting the SPs' assessment of the trainees. There are twelve such rooms surrounding a central area that is used for observing the exercises through one way glass walls and via headsets connected to the individual examination room audio. Faculty, staff, and SPs are also able to observe the exercises taking place in the examination rooms via computers in the observation area by viewing the live video and audio feed from any of the rooms. A proctor controls the camera angles and the timing of the videotaping. Outside each examination room there is a desk with a computer for individual trainees to log in and read the doorway instructions referred to in Chapter 1. The doorway instructions contain background information about the patient, the tasks to be completed, and the time limit.

Participant Descriptions

A description of each participant with a focus on their age, gender, level of experience as an SP, years of education beyond high school, concentration of their formal education, experiences with the medical field, and their other occupations is included here, using pseudonyms to protect their anonymity. The level of experience was based on a combination of the hours and years they had worked as an SP, the number of medical school programs for which they have worked, and if they have given feedback with only students or with both students and residents. Many of the participants work for similar SP programs at other medical schools in the region, and in general the more programs with which someone works, the more experience they gain. The numbers of years for the participants working as an SP at the research location is one

to 16 years, with an average of seven years. In addition to being SPs, six of the participants work as teaching associates, individuals who instruct trainees in physical and genitourinary examinations, as previously referenced. If a participant mentioned having lived outside of the USA, the locations are indicated. All of the participants had provided verbal feedback to students; however, three participants, 4-Ruth, 6-Allen, and 13-Michelle, had not worked with residents.

The participants are primarily listed in order from least to most experienced, and secondarily by age, from the youngest to the oldest, with the ordinal number preceding their name. I used the same listing order for the findings tables in Chapter 4. I chose to order the participants in this way to facilitate exploring and illustrating trends related to the level of SP work experience, one of the significant factors of providing feedback. A summary of these demographical data regarding the participants can be found in Table 4. The participants' personal experiences with the medical field mentioned during the interview are included in their descriptions and are not in the table.

Table 4

Participants

Participant	Race	Gender	Age	Prac-tice level	Years beyond high school	Education	Places lived	Actor	Other occupations, if applicable
1-Cora	Caucasian	Female	25	1	2.5	Theatre, communication	USA	Yes	
2-Miyuki	Asian	Female	34	1	4	Theatre, paralegal	Japan, USA	Yes	
3-Atif	Caribbean/ African	Male	37	1	6	Anthropology and African studies; film	Guadeloupe, Cameroon, England, USA	Yes	Teacher
4-Ruth	Caucasian	Female	64	1	6	Speech and drama, English	USA	Yes	Mortgage underwriter, financial planner
5-Chris	Caucasian	Male	71	1	8	Business, with a behavioral psychology focus	USA, Holland, England, Italy, Kenya, Nigeria, Japan, and visited over 100 countries	No	Industrial sales/business development manager, private sailor
6-Allen	Caucasian	Male	32	2	2	Psychology	USA	No	
7-Lisa	African American	Female	42	2	2	Theatre	USA	Yes	Writer
8-Barbara	Caucasian	Female	43	2	4	Acting	USA	Yes	Waitress

Participant	Race	Gender	Age	Prac-tice level	Years beyond high school	Education	Places lived	Actor	Other occupations, if applicable
9-Tim	Caucasian	Male	51	2	6	Marketing and public relations, college student personnel	USA	Yes	
10-Valerie	African American	Female	59	2	4	Medical secretarial and paralegal studies	USA	Yes	Corrections intake clerk
11-Henry	African American/ Filipino	Male	59	2	1		USA	Yes	Telephone company worker, radio and TV broadcaster, real estate agent
12-Cathy	African American	Female	63	2	4	Dramatic arts	USA	Yes	Voting records clerk
13-Michelle	Caucasian	Female	64	2	6	K-12 education, social work	USA	No	Teacher
14-Sandra	Caucasian	Female	45	3	4	Environmental and social sciences	Wales, USA	Yes	Model
15-Ted	Caucasian	Male	52	3	4	Acting	USA	Yes	Director
16-Denise	Caucasian	Female	53	3	6	Social work	USA	Yes	
17-Lynn	Caucasian	Female	66	3	4	Theatre	USA	Yes	Sales and marketing person

Note. Practice Level refers to the amount of experience a participant has with being an SP, taking into consideration number of years worked and number of programs.

Cora. Cora is a 25 year old Caucasian woman and actress who has been an SP for four years working for two local medical schools, for which she has primarily provided feedback to students and only occasionally provided feedback to residents. She has a variety of part time jobs, including acting, and is a junior in college with a major in Theatre and a minor in Communication. Cora replied to the interview questions with a significant amount of animation and enthusiasm.

Miyuki. Miyuki is a 34 year old woman who grew up on a farm in rural Japan and then moved to the USA 15 years ago. Even though she is practically fluent in English and speaks with a minimal accent, she did not understand some of the terminology I used during the interview. She was concerned about how well the students understand her and wondered if her level of English proficiency was a barrier to her providing adequate feedback to the students. She has worked with only this SP program and has done so for one year. She is attending school to become a paralegal, while working as an actress. She refers to examples of poor interactions she has had with her doctors when speaking with the trainees. After the interview ended, she thought of additional comments about her experiences with feedback and continued talking, which enticed me to turn the recorder back on twice.

Atif. Atif is a 37 year old man of Caribbean and African ancestry. He is fluent in French and English, having been raised in Guadeloupe and Cameroon and having attended private boarding school in England. He has lived in the USA for five years. At the time of the interview he was working with only this SP program which he joined three and a half years ago. He had additional experience working for another SP program previously for one and a half years. He also works with the program as a physical exam teaching associate and a genitourinary teaching

associate. He completed a graduate program in film in Holland, has worked as a teacher, and is an actor.

At the start of our meeting time for the interview, Atif began talking before I had asked any questions and during the interview he talked extensively about his childhood experiences. He was animated during the interview, readily sharing his ideas with me, laughing frequently. When I had completed asking all of the interview questions and three times attempted to close the interview, he had more to say and it appeared to me that he did not want the interview to end. His memory of the feedback he had given was so clear that he remembered the two instances that he said when it did not go well. He did not want any compensation for his participation in the study since he was happy to contribute by sharing his experiences with me. His interview was considerably longer than the average.

Ruth. Ruth is a 64 year old Caucasian woman. She has worked with the SP program for a year, during which time she had only given feedback to first-year students, resulting in having had little experience with providing feedback as an SP. At the time of the interview, Ruth was working with two other local medical school programs and previously had done another short stint as an SP in another region of the country. As an undergraduate she majored in speech and drama, and minored in English; and as a graduate student she earned a degree in Education. She started acting at age 13 and as an adult worked primarily as a mortgage underwriter and a financial planner. Ruth referred to the extent of her experience as an SP in terms of how much money she had made. She gave short answers and left as soon as the interview was over. She had an appointment to attend and had inconvenienced herself by scheduling the interview just prior to the other appointment. She explained that if I was asking her to come in for the interview, it must be very important and she made sure she came at the first opportunity.

Chris. Chris is a 71 year old Caucasian man. He had been a manager for an international business, and had worked and lived in six countries and traveled to over 100 countries throughout the world, gaining the ability to speak several languages. He donates money to the hospital roughly approximating his earnings from his work with the program. He was businesslike and friendly, in addition to being thoughtful and offering me advice. In framing his comments, he referenced a book that compared 'fast' thinking based on emotions and 'slow' thinking that requires more cognitive processing (Kahneman, 2011). He said he was aware that during the exercises with the trainees he would at first do automatic thinking and then in order to give effective feedback, he would shift to the thinking that takes more effort. Even though he is one of three non-actor participants, he brings other experience to his work as an SP and a physical examination teaching associate.

Allen. Allen is a 32 year old Caucasian man and another of the three non-actor participants. Even though he has been an SP for 12 years and has worked with three different medical school programs, he has given feedback only to students. As a graduate of a two year associate degree in Psychology, he referenced items he had learned via his courses and his life experiences with communication and psychology during the interview. Even though he had gotten the same information about the research and the interviews as the other participants, he thought our meeting was for corrective action for his poor performance. He had independently made the assumption that he was not doing the feedback well, as I had made no indication of such. He turned down the compensation, saying doing the interview was his way of giving back to the program. The interview with Allen was considerably longer than the average length since in addition to answering the questions I posed, he volunteered his opinions about feedback and people's qualifications for providing it.

Lisa. Lisa is a 42 year old African American woman, writer, actor, and graduate of a two-year program in theatre. She has worked as an SP for six years for three SP programs, providing feedback to students and residents. She was brief and concise with her answers to the interview questions, responding quickly and straight to the point, which resulted in one of two interviews that were half the average length.

Barbara. Barbara is a 43 year old Caucasian woman, actress, and waitress, and has a Bachelor of Arts degree in Theatre. She has worked for the program for four and a half years as an SP and a physical examination teaching associate, and has worked with five different SP programs. During the interview Barbara spoke readily and freely about her passion for working as an SP, contrasting it with the financial challenges she has with the work. She also lamented not having the insurance benefits afforded to people who work full time. She thought there was a lack of recognition on the part of the administration of the medical schools for the value of the work done by SPs.

Tim. Tim is a 51 year old Caucasian man and actor, with a Bachelors degree in Marketing and Public Relations, and a graduate degree in College Student Personnel. He has worked with the program for four years and has worked with six SP programs. Before working as an SP, he worked in the field of higher education in a support staff position. Tim appeared to be thoughtful about his answers as he took more time than others did before answering the questions. He seemed confident about his answers and he spoke at length, including comments about his desire for the program to improve. The interview lasted considerably longer than the average.

Valerie. Valerie is a 59 year old African American woman and actor who works as an administrator for the local police force. She has worked as an SP for four years and only for this

program. She has two associate degrees, one as a medical secretary and the other as a paralegal. She was born prematurely and was put into an 18-month experimental treatment program at the hospital for which she now works, visiting her family for only brief periods of time. Through this experience she formed a close affinity with hospital personnel and is grateful for the care she got, leading to her appreciation of the opportunity to give back to the medical field through her work as an SP. She arrived 30 minutes early for the interview and readily answered the questions, frequently adding additional thoughts after her initial answers.

Henry. Henry is a 59 year old African American and Filipino man. He has held many different types of jobs from pay telephone money collector as a young man, radio and TV personality for the majority of his working life, to real estate agent upon his official retirement. He has worked as an SP for four years with five different medical school programs. He is also a physical examination teaching associate with this program. He has been an SP for cases he found challenging, such as receiving serious health news and in another case, being an extremely obnoxious patient. Even though, due to his busy schedule, he had not given the interview topic much thought before we met, he readily answered the questions and responded with extensive comments. Of all of the participants, he has the least amount of formal education—one year beyond high school.

Cathy. Cathy is a 63 year old African American woman and actress, with a Bachelor's of Art degree in Dramatic Arts. She has had a variety of other jobs including polling place record keeper. Cathy has been an SP off and on over a period of 11 years, working as an SP for a total of seven years for three different programs, and taking breaks to work full time. She spoke about some negative experiences she has had with doctors who she thought were "cold and apathetic." Even though she finds providing feedback challenging, Cathy acknowledged the

importance of it, never shying away from work assignments with feedback. In spite of the anxiety she expressed about our meeting and about delivering feedback, she had a lot to say and the interview was considerably longer than the average.

Michelle. Michelle is a 64 year old Caucasian woman, retired social worker, dog walker, personal care provider, and the third of the three non-actor participants. She has a Master's degree in Social Work and has worked as a second-grade teacher and a social worker for most of her adult life. Even though she has worked as an SP for five years for two programs, Michelle did not have experience with feedback with residents. She answered each question very briefly and as soon as I had completed asking the interview questions, she switched the conversation to topics about her own activities, resulting in an interview considerably shorter than the average.

Sandra. Sandra is a 45 year old Caucasian woman, actress, and model, with a degree in Environmental and Social Sciences. Having been born in Wales and still having family living there, she has strong connections with the Welsh culture. She has worked with the program as an SP for 13 years and has worked with six SP programs. She is a genitourinary teaching associate and has been a trainer of other teaching associates for most of the time she has been with the program. Even though Sandra readily expressed herself and had a lot to say about each questions, the interview was shorter than the average length.

Ted. Ted is a 52 year old Caucasian man, theater director, and actor with a Bachelor of Arts degree in Theatre. He is one of the more experienced SPs as he has worked with the program for 16 years and an additional five SP programs; however, at the time of the interview he primarily worked for only two programs. He finds this work to be a good fit because it combines his preference for teaching in higher education and acting, and it leaves him time to pursue his other interests. In his theatre work he frequently uses feedback in giving directions to

actors and receives feedback as an actor. Ted's parents had illnesses at the end of their lives, during which time they experienced two very different types of doctor communications, each of which greatly impacted his and his parents' experiences, one positively and the other negatively. The experiences informed the basis of Ted's assessment of trainee's communications and Ted's feedback to trainees. During the interview, Ted either readily answered questions or took a significant amount of time reflecting before answering.

Denise. Denise is a 53 year old Caucasian woman, retired social worker, and actress, with a Master's degree in Social Work. She is one of the more experienced SPs; she has worked with the program for 16 years and with six SP programs. She is passionate about the need for doctors to relate to their patients and referenced what she had observed to be challenges her father had faced at the end of his life due to the poor communication on the part of his doctors. Denise brought with her to the interview several pages of writing containing her thoughts about feedback. Throughout the interview she reiterated with great animation the importance of doctors having effective interpersonal skills.

Lynn. Lynn is a 66 year old Caucasian woman, with a Bachelor of Arts degree in Theatre, who is a retired sales and marketing agent, and an actress, specializing in one-woman acts. She has worked as an SP for 12 years and having worked with nine different programs, Lynn is one of the more experienced SPs. Lynn said she has had good interactions with healthcare providers. She gave thorough answers to the interview questions, readily providing her thoughts about her experiences with feedback.

Data Analysis and Synthesis

As mentioned above, the data analysis I carried out primarily followed guidelines proposed by Charmaz (2006) which includes a constant comparative method of initial coding

and focused coding to determine what the data represent, and is based on the foundational work of Glaser and Strauss (1967). Utilizing the constant comparative method, the steps I followed for the analysis included cycling between data collection, coding, comparisons with previously coded data, theoretical sampling, and the development of conceptual categories, until theoretical saturation was reached. Next I did focused coding using the conceptual categories, in preparation for constructing the grounded theory. A diagram demonstrating the iterative and cyclical nature of the process I followed is shown in Figure 2. As I mentioned earlier in this chapter, the memo-writing occurred throughout the process. For simplicity I located in one part of the diagram. Hutchinson, Johnston, and Breckon (2010) published a diagram of this type of process in the form of a corkscrew, representing the iterative aspect of the process (p. 286).

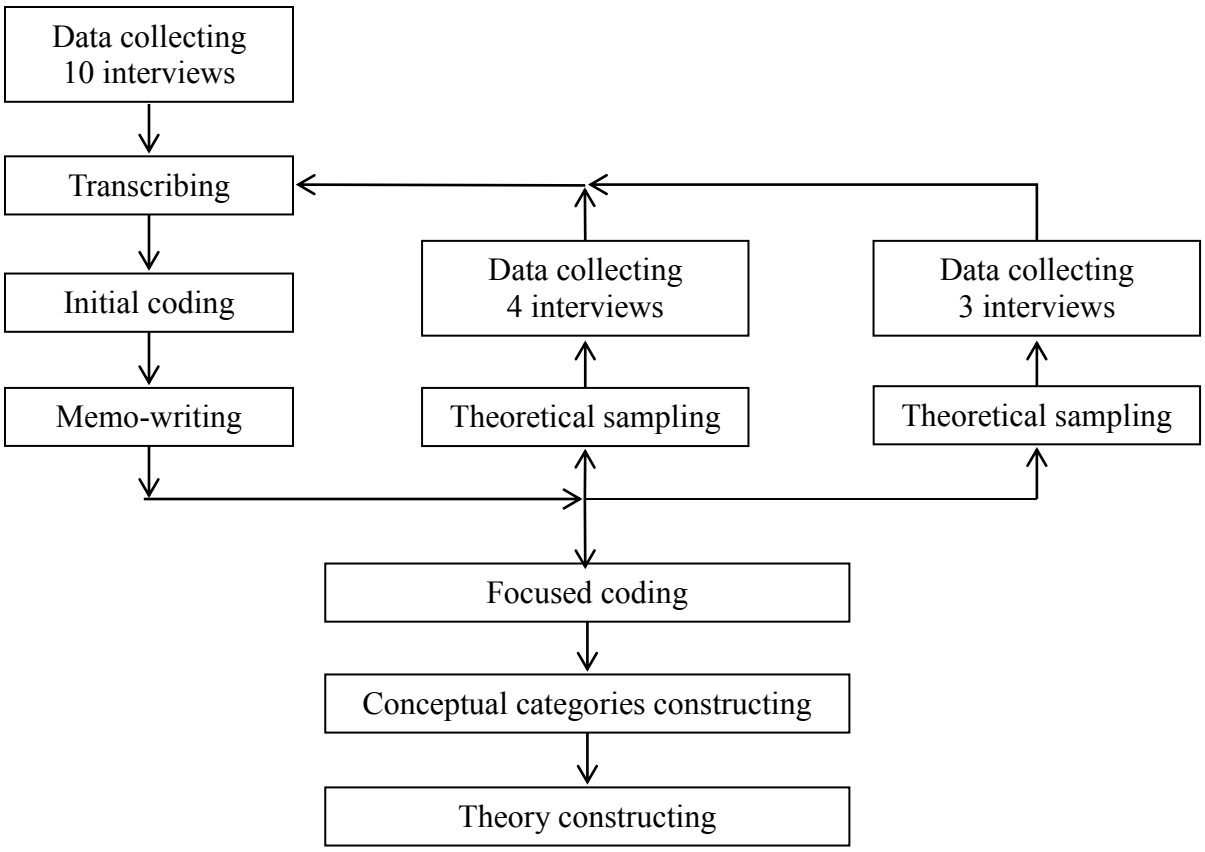


Figure 2. Study data analysis steps.

Initial Coding. I started the data analysis process with the initial coding by setting up a database of the interview texts and codes as a Microsoft Excel spreadsheet. I quickly had a long list of codes and found it hard to maneuver within the ever expanding spreadsheet; therefore I changed to using a computer-assisted qualitative data analysis software (CAQDAS) program, NVivo 9, published by QSR International. I transferred all of the existing coding to this software to keep track of the coding, conceptual categories, memos, and the original data with which they were associated (Hutchison et al., 2010). The program works well for grounded theory researchers since there are flexible and easy ways of viewing and searching codes. Bazeley (2007) and Richards (1999) provide detailed instructions for using NVivo for all types of

qualitative research and for all aspects of the study, from starting the project, to data management, to theory building. I followed tips found in these texts and in articles by Hutchison et al. (2010) and Bringer, Johnston, & Brackenridge (2006) that describe using NVivo specifically for grounded theory research. In particular, I followed Bazely's (2007) suggestion to organize concepts into coding hierarchies, or trees, creating a catalogue or taxonomy of my concepts of the data (p. 99). This organizational strategy helped me clarify what my study was about. An example of when I used this strategy was when participants listed the challenges they face I made a separate node for each: trainee resistance, finding the right words, and having anxiety. Even though I never became proficient with using the program for the intricate data manipulation available to researchers, the instructions in these resources provided me with the basics of how to use the program.

Table 5 contains examples of the initial coding I did for a segment of the transcription of 3-Atif's interview. A screen shot of initial coding using the CAQDAS program is in Appendix E. The term used by the NVivo software for codes is nodes, which is the term visible in the screen shot.

Table 5

Initial Coding Examples

Transcription text	Initial coding
Carol: When you give feedback to first-year medical students, what are your goals? What's your purpose?	
Atif: I want them to feel confident. I think confidence goes a long way, so I always give a lot of positive feedback [laughter] because I want them to feel comfortable. Nobody is... I mean, like the first few times, it's nerve-wracking to anyone, so... But I also want them to take it seriously. So yeah, I'll try to stay positive, what they did really great and just encourage them to keep going that direction and just a few things they can work on along with that. And that's.... I'm just more like a cheerleader, I guess, you know? [laughter] Just try to encourage them like, "Yeah, you're doing great. You're doing great." Just... just "But here's something you can work on, but you're doing great."	providing positive feedback wording of feedback providing positive feedback providing a learning experience for the med students
Carol: What do you think that you need to do or what are the dynamics in order for feedback to be effective?	
Atif: Being specific and just read how they react because sometimes they don't take it... they really take it personally or they take it really offensively. So if that's something they're... Well, there was the one incident. I said something and she... Well, this one student was... took it kind of personally, offensively. So I have to step back and "These are really good things you did, and I understand how you wanted to do this way, but I felt like this... you know, I felt like this when you did this, so you probably want to do it the other way. Just an idea. So it's [laughter] something to think about." I wouldn't impose it and say, "Oh, you need to do this way." But just giving them... giving them an option is a good way to give them an idea of "Oh, maybe we could go this way instead of this way, what you... what you just did." So just give them the option is the best way to go, I think, because some people are too proud to accept, you know, feedbacks or just new ideas or... So I always just be soft. And if they are willing to take it, then I will go a little bit further so that, you know, they learn more from one encounter.	providing specific feedback observing student's reaction to feedback and adjusting providing positive feedback wording of feedback encouraging reflection being light with the students when providing feedback observing student's reaction to feedback and adjusting

Memos. As mentioned above, memo-writing is an integral part of the Grounded Theory Method and the data analysis software is set up for storing memos. In addition to saving memos in the program, I saved others as text documents and I made copious hand-written notes as I brainstormed different ideas. The endeavor of writing memos was well worth the effort as I ended up incorporating many of these memos in this dissertation. Here are two examples of my memos:

1. Carol note: I am inferring from Cathy's statement that there is a parallel between the SP/student relationship and the Patient/doctor relationship and that we are all interdependent, can learn from each other, can assist each other.
2. When Cathy says "Right. [laughter] I don't know. How can you improve something that comes from how you feel? I don't know. I mean... I don't know," I think she is saying that she cannot learn a better way of expressing her feelings. Her feelings are her feelings.

Focused Coding. Upon completing the detailed initial coding for eight of the interviews, I experimented by combining some of the codes. It was a momentous day for me, as I had I finally shifted to focused coding and I had in mind possible conceptual categories. In my research journal, I noted I had begun focused coding followed by writing,

> "[I] feel incompetent, not knowing what I am doing, stabbing in the dark, afraid to mess stuff up and have to back up, redo, …. saved a copy of what I had, however it is hard to go back, keep stuff separate, do I read Hutchinson and follow what that group did???? Do I have too many nodes, have I done this right???"

I was able to move along with the process and continued the data analysis. I narrowed the list of about 60 codes into the following set of eight focused codes that emerged from the data,

- Being motivated to provide feedback
- Portraying the patient
- Observing the trainees
- Adjusting for complexity of case
- Changing roles from patient to educator
- Preparing feedback
- Delivering feedback
- Adjusting feedback for individual trainee

Axial Coding. Axial coding can follow focused coding or be integrated with it. It is a process presented by Strauss and Corbin (1990) as a way of relating categories to subcategories, specifying the properties and dimensions of the categories (pp. 96-115). An example of this was with the focused code "delivering feedback," and the associated axial dimensions I constructed from the data,

- Being excited, "a kind of thrill"
- Being nervous and excited
- Challenging
- Changing from nervous to okay
- Comfortable, confident
- Comparing doing it with first-year medical students to residents
- Easier since relates as a new SP
- Enjoyable
- Frustration
- "Human to human"

- Love doing it
- Mix
- Satisfaction

Five of these dimensions are shown in Table 6 with a sample text for each. I also indicate the quantity of participants whose comments were coded with this dimension and the total number of such references. The last coding in Table 6, "human to human," is an example of in vivo coding, where the wording is taken directly from the words used by the participant.

Table 6

Axial Coding for Delivering Feedback

Dimension	Quantity of participants, total references	Text sample
Being excited, "a kind of thrill"	2, 3	"It was more like happy nervousness, like you are back stage in the wings, and about to go in. There is that, not anxiety, it is a kind of thrill." (3-Atif)
Challenging	15, 59	"Now if you run into a student that is either completely inattentive because they don't want to be there or is very defensive ... for whatever reason, then the feedback session can be a bit more difficult or stressful." (5-Chris)
Comfortable, confident	7, 8	"I feel much more confident now in giving feedbacks [as compared to] four or five months [ago]." (2-Miyuki)
Enjoyable	4, 5	"In general, particularly for first-year students, I think it's enjoyable because for the most part. You are focused on being helpful and encouraging and congratulatory because for the most part you're trying to deliver helpful feedback that builds them up at an early stage." (8-Barbara)
"Human to human"	1, 1	"I think they **like** when we talk to them as human to human." (17-Lynn)

The categorizing process became complicated and it was helpful to have been using the CAQDAS program since I frequently coded a section of text with different codes, resulting in the possibility of those sections being classified with multiple categories. Two examples of this are in Table 7. When I coded the first text in this table I used the code "delivering feedback," with the dimension "challenging." I had also coded it "student receptivity" and "observing student

behavior during feedback." As convoluted as this may seem, it resulted in my selection of the process of SP observing student and adjusting feedback as a category.

Table 7

Multiple Codings of Text

Dimension or category	Text sample
Challenging Student receptivity Observing the student	"Now if you run into a student that is either completely inattentive because they don't want to be there or is very defensive ... for whatever reason, then the feedback session can be a bit more difficult or stressful." (5-Chris)
Challenging Skills for providing effective feedback Finding the right words, communicating Contributing to medical education	"What I find challenging is communicating, communicating clearly how I felt, and their understanding … what I wanted them to get out of it…. So that's what I try to work on to make sure that it's clear and precise, … to let them know how I really felt." (10-Valerie)

When a dimension had a large number of responses associated with it, such as the dimension "challenging," I sorted the responses into "sub" dimensions, as shown in Table 8 in alphabetical order. This was a frequently occurring dimension since I directly asked about the participants' challenges. I included in the table the quantity of participants who had made comments that were associated with the subdimension and the total number of references among all of the participants. The subdimensions using in vivo terms are marked "~in vivo."

Table 8

Subdimensions of the Dimension "Challenging"

Subdimension	Number of participants, total references
Anxiety	1, 1
Being recorded	1, 1
Being succinct	2, 3
Determining if student behavior is based on ethnicity of SP	1, 1
Due to desire to do it well	1, 1
Finding the right words, communicating	6, 7
Giving fb to students when they have high levels of nervous energy	1, 1
Giving feedback about poor performance	4, 4
Giving serious fb to a student, when previously gave fb as a nice SP	1, 1
It being burdensome ~ in vivo	1, 1
Trainee resistance	4, 6
Not being overly critical	1, 1
Not having enough time to deliver	5, 13
Overcoming first impulse to blast the student ~ in vivo	1, 2
Overcoming past image as being nice and nice people don't give difficult fb	1, 1
Overcoming SP bias about student	2, 2
Overlapping roles - patient, evaluator	1, 1
Patient being portrayed is too flat	1, 1
Providing fb to residents or fellows who are very good	1, 1
Providing specifics of behavior and why SP felt that way in highly emotional cases or long encounters	3, 4
Remembering examples	2, 2
Students over reacting to fb - take a little fact and make it into a mountain	1, 1
To couch fb in terms of fixable items ~ in vivo	1, 1
To work with all different types of egos	2, 2
Uncomfortable and scary not knowing student's reaction	1, 1

Note. fb = feedback.

Next I noted the categories, dimensions, and subdimensions that occurred frequently and additional ones I thought were significant, to be considered as I began to construct the grounded theories described in Chapter 5. The idea of communicating about feelings to provide an educational experience tied all of these together. What I found in the data were the circumstances and situations that influenced the process of communicating these feelings.

I reviewed the coding I had assigned to the texts and rearranged them to fit within these focused codes and I examined them to see what had been left out. There were many different directions in which I could have gone with the concepts. An example of this was that I had originally planned on just examining the difference between how the participants described their feedback to first-year medical students and for residents. In alignment with grounded theory methods I broadened the idea of adjusting for the level of trainee into a more general concept of adjusting for each individual trainee.

Theoretical coding. The final step of the data analysis was the theoretical coding. I used the idea of theoretical coding as recommended Glaser (1978) by applying his "Six Cs: Causes, Contexts, Contingencies, Consequences, Covariances, and Conditions," (p. 74) to explore the data further and to develop core conceptual categories. For example, I found the participants had mentioned conditions, such as time constrictions and trainee receptivity. These are explored further in Chapter 4, Interpretation of Findings.

Ethical Considerations

Researchers are expected to behave ethically, which includes protecting the study participants and producing research that provides a benefit to society (Israel & Hay, 2006, p. 2). Concerning the first expectation, the major ethical consideration of this research was in regards to protecting the participants as employees of the program I manage. Regarding benefiting

society, the improved understanding of what it is like for SPs to do their work is likely to contribute to the field of medical education. With my undertaking a study such as this in the workplace, there is the potential for the participants, and the community of SPs to which they belong, to be disturbed by any poor practice or insensitivity on my part, and to not participate in future related research (p. 4).

The most significant issue regarding protecting the participants, as referred to above, is that I am their direct supervisor. Potential participants might have been in a predicament when faced with the decision about participating. They may have thought their position in the program could be compromised if they chose to not participate and they did not know what the implications might be if they did participate. The individuals who chose to participate might have been hesitant to say anything during the interview that might be considered a criticism of the program or me. They might have been hesitant to expose what could have been considered as their own deficiency to do the work. Even though the list of participants was kept confidential, since most of the interviews took place at my office where people could be seen coming and going, participants may have also had a concern about what their co-workers would think about them participating. And from another angle, the SPs who were not asked may have had some concerns about why they were not chosen.

To minimize these problems I took what I considered to be reasonable and responsible steps, as described here. I completed training in protecting human subjects and the study proposal was reviewed by the IRBs at both the study site and my educational institution. For the recruitment process, the administrative assistant contacted the individuals via email placing some distance between them and me. The initial email and the informed consent form contained statements to the effect that the SP's decision about their participation would not have any effect

on their employment at the university or in the SP Program. They were informed that each participant would be given a $25 gift card to a nearby café in appreciation for their participation and for compensation for their time and expense of meeting for the interview. The participants' parking costs were also covered.

To decrease the likelihood of being seen by co-workers, the interviews were scheduled for times when there were few other people at the center. To further protect and inform the participants, they were told in the informed consent form and verbally that the information was being used for the dissertation and might be used for other presentations. Their names were removed from the data and replaced with a code that was established for each participant and used for naming the audio files and transcripts. All of the data were kept in a secure location to which only the researcher had access. Even though the data were de-identified, there is one participant who is a unique individual in the program due to his heritage. The researcher discussed with him the likelihood that he would be identifiable. He stated that he was okay with proceeding and being included in the study.

Issues of Trustworthiness

In order to lend greater trustworthiness to the data analysis, I consulted with a method expert. In addition, an experienced adult learning professional independently reviewed the categories and subcategories. These two individuals substantiated that my process and the analysis seemed reasonable to them.

Summary

The methodology chapter covered general information about qualitative research and details about my study design. I started with an overview of grounded theory methodology, describing data collection, constant comparative method, coding, and constructing theory. I

continued with information gained from my pilot study. Next, I described the interview process I followed. The reader was introduced to the participants and the socio-cultural aspects of the study. I provided specifics steps of my data analysis, including samples of my memos and coding. I reviewed ethical consideration which focused on my being the direct supervisor to the participants. I concluded the chapter with a brief accounting of how I satisfied issues of trustworthiness of the data. In the next chapter, I present the findings that were based on the data analysis.

Chapter 4: Presentation of Findings

Introduction

This study explores what standardized patients (SPs) say about (a) their motivations for working as an SP; (b) their work and life experiences related to learning how to give verbal feedback and improving their feedback skills; and (c) their lived experiences preparing and providing verbal feedback to first-year medical students and residents. I carried out this inquiry to gain a better understanding of their perspectives regarding the task of providing verbal feedback, as well as the individual and contextual conditions which can affect their preparation and delivery of the feedback. I expected this understanding would allow SP program staff to proceed from a more informed perspective when recruiting and selecting SPs for their program; choosing SPs for specific exercises; designing feedback training; and collaborating with faculty in the development and improvement of SP exercises for medical students and residents.

Findings

In this chapter I present the key findings obtained from the analysis of the 17 semi-structured interviews I conducted; the interpretation and discussion of the findings follow in Chapter 5. The audio recorded interviews were transcribed into text documents which were then imported for analysis purposes into the CAQDAS program, NVivo 9. Each interview was coded line by line and these codes were grouped into 25 categories. From these categories, five major categories emerged which formed the basis for the findings listed below. These five major categories are (a) motivation for working as an SP, (b) learning how to give verbal feedback, (c) transitioning from patient to educator, (d) preparing and delivering verbal feedback, and (e) similarities and differences of feedback for first-year medical students and residents. These five categories are the findings I present in this chapter.

The participants' comments from each category were further delineated into subcategories. The data were analyzed for trends correlating with age, years of experience, gender, and race; I documented the few trends I found. Typically the responses did not fall neatly into one category or another, nor one subcategory or another, and were not simple "yes" and "no" answers that could easily be counted. In view of this and since the responses say much more than the subcategories, I provide examples from the participants' experiences as expressed during the interviews. Within the quotations of participant's comments, items in bold indicate when participants spoke with a strong emphasis.

A summary of the findings appears at the end of the chapter. Based on these findings, I developed a substantive grounded theory regarding the processes and the conditions related to SPs' preparation and delivery of feedback to first-year medical students and residents, as discussed in Chapter 5.

Finding 1: Motivation for Working as an SP

Motivation is the driving force that influences a person to act in certain ways. Motivations can be conscious and unconscious, and can be based on biological, social, or psychological needs. In considering the motivations of the participants, they were all conscious and based on either social or psychological needs. In addition, motivation can be conceptualized as either intrinsic or extrinsic. Intrinsic motivation occurs when people are internally motivated to do something because it either brings them pleasure or they think it is important. Extrinsic motivation comes into play when someone is compelled to do something or act a certain way because of factors external to themselves, such as earning money. Internal motivators that help adults solve problems, such as increased job satisfaction, self-esteem, quality of life, and the

opportunity to self-actualize, tend to be more powerful motivators than external motivators (Knowles, Holton & Swanson, 2005, p. 68, 294-295).

All of the participants spoke of being motivated to work as SPs, with their responses fitting into six subcategories: (a) education of medical trainees, (b) community service, (c) personal enjoyment or satisfaction, (d) lifelong learning, (e) money, and (f) other. Contributing to the education of medical students and residents was the most common reason given. Even though some participants mentioned only one motivation, most of the participants' had motivations in multiple different subcategories, as shown in Table 9. Being an SP is work the participants find fulfilling because they are serving others, either by contributing to the education of future and current doctors, or by improving the larger community; and at the same time they are either able to fulfill one or more of their own needs, such as earning money; continuing their own lifelong learning; enjoying the work or their coworkers; and for those individuals with a connection with theater, having an outlet for, and sometimes improving their acting skills.

Table 9

Motivation for Working as an SP

Participant	Education of medical trainees	Com-munity service	Personal enjoyment/ satisfaction	Lifelong learning	Money	Other
1-Cora	x	x	–	x	–	–
2-Miyuki	x	–	–	x	x	–
3-Atif	x	x	x	x	x	x
4-Ruth	–	–	–	x	–	x
5-Chris	x	–	x	x	–	–
6-Allen	x	–	–	–	–	–
7-Lisa	–	–	–	–	x	–
8-Barbara	x	–	x	–	x	x
9-Tim	–	x	x	x	x	x
10-Valerie	x	x	x	x	–	–
11-Henry	x	x	x	x	x	–
12-Cathy	x	x	–	–	–	–
13-Michelle	–	–	–	–	x	–
14-Sandra	x	–	–	–	–	x
15-Ted	x	–	x	x	–	x
16-Denise	x	x	x	–	x	–
17-Lynn	–	x	x	–	–	x
Total (%)	12 (71%)	9 (53%)	9 (53%)	9 (53%)	8 (47%)	7 (41%)

Service to Others

I thought of the first two subcategories as being motivated by providing a service to others, which is an intrinsic motivation. The participants spoke about contributing specifically to medical education and in general to community service—examples of each follow.

Contributing to medical education. The most frequently stated reason for being an SP, made by 12 participants, was for their contribution to the education of medical students or to improving the skills of practicing doctors. Chris represented the sentiments of these 12 participants when he said,

> I'm doing this as a way to contribute to the medical community, if I can in a small way. There are times when some light bulb goes off [for a trainee] and as an SP that makes you feel good, because you then can speculate that perhaps for the rest of their career, for the next 30, 40 years, that they may have learned something that will help them. And that's what we're here for.

Six participants mentioned that by representing the patients with the feedback they provide, they were educating the trainees in the skills of interpersonal communication. An example of these responses was made by Miyuki who said, "It's a learning experience for them to become a better doctor and be more understanding of patients' needs or the situations [in which patients find themselves]." Even though ten participants relayed personal experiences with medical care providers that influenced their work as SPs, only two spoke about the connection of these experiences with their motivation to work as an SP. Denise referenced how poor physician communication with her father was detrimental to his health:

> [The work I do is] a gift to the student and the future patients of that student…. I believe that specifically, the process, the role that SPs play in teaching medical students and residents good interpersonal skills … saves people's lives because … there are more people than anyone knows who die because they couldn't find a physician with [these] skills.

Ted was explicit in his statement about his motivations when referring to encounters he does that are similar to what he experienced with his parents towards the end of their lives; he makes sure he gets certain points across to the trainees during feedback. He said,

> Because of very personal and very different experiences with both my mother and my father, their illnesses and deaths, and the way doctors did or didn't treat them with respect, did or didn't help them, did or didn't make their lives better while they were here, … I want to always make sure that [the residents are] not just giving a rote answer in a situation like that when you're discussing death or possible death to the patient, to the patient's loved one, to the patient's parents, … that they're willing to discuss possibilities and to honor the respects and wishes of the patient or the caregivers.

Ted has experienced physicians communicating well and poorly; therefore, he knows that physicians can have effective conversations, meeting the needs of patients and their families. He wants to contribute to trainees gaining those skills, leading to better experiences for all involved.

Community service. Even though the concept of serving others is closely related to contributing to medical education, I differentiated between the two sets of responses since nine participants emphasized a broader sense of service to which they were contributing. A representative comment was made by Cathy: "It's a way for me to serve a purpose.... I think we're all put on this earth to serve, and this is my way of doing it." She is satisfying an intrinsic motivation by doing this work.

Fulfilling Personal Needs

I considered the remaining subcategories to represent motivations that meet the participants' personal needs or desires as compared with the previous ones that were oriented to service to others. These are characterized by a blend of intrinsic and extrinsic motivations.

Representative of the nine participants who mentioned personal enjoyment or satisfaction, Chris said, “I enjoy very much interfacing with the students. They’re a bright and encouraging bunch of young people. I also really enjoy the fact that they’re international in nature. Plus the people I work with are enjoyable.” As a retired manager who had worked internationally, Chris is appreciative of being able to reconnect to his past experiences of interacting with people from a variety of cultures and to find pleasure in interacting with his current set of coworkers.

Nine participants indicated they were motivated by the opportunities for lifelong learning. An example of this is “[I do the work because of] the intellectual challenges that it presents,” stated by Henry, who had retired from a career in broadcasting and had found this work at a time he was looking for ways to keep his mind active. The financial incentives were mentioned by eight participants, an example of which is Tim’s simple statement: “I need money … [and] it does pay.” He earns his living by working as a director, an actor, and an SP. The seven additional responses that did not fit these subcategories were placed under the heading of “Other” and were related to the use of acting skills and the variety of activities the work offers. As evident from the examples provided for the different motivations, every participant had at least one reason for working as an SP.

Finding 2: Learning How to Provide Verbal Feedback

Participants learned how to provide verbal feedback through the formal training programs offered by SP programs and from their life and work experiences. They improved their feedback skills by observing other SPs and through reflection on the feedback they gave during exercises with trainees. Including duplications, 11 of the 17 participants said they learned how to provide feedback by participating in training provided by SP programs; 11 said they learned how to give feedback from other work and life experiences; six participants reported their skills improved

through the experience of giving feedback to trainees; and six indicated they improved their skills from observing other SPs. These data are summarized in Table 10 and described in detail below.

Table 10

Learning How to Provide Feedback

Participant	SP program training	Work/ life	Other SPs	Practice
1-Cora	x	x	x	–
2-Miyuki	x	–	x	x
3-Atif	x	x	–	–
4-Ruth	x	x	–	–
5-Chris	–	x	–	–
6-Allen	–	x	x	–
7-Lisa	–	–	x	–
8-Barbara	x	x	x	–
9-Tim	x	x	–	x
10-Valerie	x	x	–	x
11-Henry	x	–	x	x
12-Cathy	–	–	–	–
13-Michelle	x	x	–	–
14-Sandra	–	–	–	–
15-Ted	x	–	–	x
16-Denise	–	x	–	–
17-Lynn	x	x	–	x
Total (%)	11 (65%)	11 (65%)	6 (35%)	6 (35%)

Feedback Training

Eleven of the 17 participants said they learned how to provide feedback during the training sessions given by the SP programs for which they work. Four of the 11 specifically said the training was helpful or was a good start. Beyond learning the skills for feedback, Valerie mentioned the self-assurance for giving feedback that she gained via the SP feedback training:

> The training we have here has changed me. I've always been a person that can … communicate, but … I don't like to do too much telling you how I feel. It's very important to be confident when you're doing this type of work. The training has helped me … build confidence in myself so that I can relay this to the students. They can tell when you're not quite sure of yourself.

Three of the participants said the training was not valuable to them. One was Denise, who was educated in the field of psychology and has retired from the field of social work. She indicated that she learned how to give feedback via her work and life experiences.

Other Work or Life Experiences

Including Denise, mentioned above, 11 of the 17 participants said the communication skills which added to their ability to give feedback had been gained from (a) non-SP work, (b) their personal lives, or (c) formal education. The work experiences included a wide range of occupations: acting, teaching, management, coaching, directing, financial advising, social work, and broadcasting. Barbara said,

> [Giving feedback] is about standing your ground, telling the truth, and trying not to let them intimidate you. And it is realizing that you have different areas of expertise than they have and [are] reporting what you experienced and how you felt experiencing it. I've gotten better at it.… It's not only the feedback training, but also my acting training that has helped with that.

Ruth said, "As a teacher, [I was] always giving feedback to children, parents, superiors, or [my] department head…. As a mortgage underwriter and a financial advisor, I was always giving feedback to loan officers, accountants, or attorneys."

Valerie described her experience during a previous job giving feedback to athletes:

> "[I worked] with youngsters who … needed a push up [or] some guidance. When they wouldn't do well, I had to talk to them and tell them, "You did this, and look at [it] this way." I never realized that that was still a part of my life until I came here.

In addition to her experience giving feedback as a coach, Valerie mentioned having honed her skills for providing feedback to the trainees by practicing her feedback with her siblings and a close friend. Even though Atif, who was primarily raised in a Caribbean culture, mentioned the training was helpful, he was adamant that his ability to do it well is a gift he has been given. He indicated his self-awareness and communication skills came from the time he spent with his grandfather and his grandfather's male friends, and having grown up in a family of 17 children.

Observing Other SPs

During training sessions and at times when there are extra SPs working on an exercise, SPs observe, and might comment on each other's feedback. The extra SPs can watch and listen to the encounters as they are occurring, either by using the monitoring computer stations equipped with a view of the rooms and a headset or by standing by a one-way window and listening with a headset connected to the audio of the room. Six participants, including five of whom said they had learned via the formal training, mentioned learning by observing other SPs, particularly people who they thought did it well. Miyuki said, "If I'm working on the same case and there's one time period I'm not working, I watch other SPs' feedback sessions and I learn from that." These six individuals tended to be the younger participants. Only one participant, Lisa, mentioned that she did not find it useful to get feedback from other SPs about her own feedback.

Practice and Reflection

Six of the participants said their skills improved through the experience of giving feedback to trainees or practicing it elsewhere. Ted made a representative statement when he said he improves his feedback "just through experience and through seeing what's effective and what isn't." Atif writes notes about the trainees and how he thought the feedback was received. He mentioned reviewing his notes before an activity and reflecting on his experiences in case he worked with a trainee that was similar to one to whom he had previously provided feedback that had not been well received. During the interview he readily recalled the few times he thought the feedback session had gone poorly. Through practice and reflection, Atif and other participants strive to improve their feedback skills.

Other Comments about Learning Feedback

Chris, the retired international manager, was the only one to mention giving feedback to people from different cultures. He mentioned some general caveats about teaching feedback skills and qualities SPs need to be able to do it well, including comments about SPs needing to be aware of the uniqueness of each trainee and their culture of origin:

> I'm sure you can teach techniques for feedback, and there must be some very good programs and ways to do that. But I also think that even before you try teaching it, … the key step would be in selecting [people] who [have an awareness of and are able to express their feelings]. And while I'm sure that can be developed, improved, and taught, if it's there already, you're ahead of the game…. [Each trainee] is different, and if you're sensitive to that and … tailor your presentation … to what will work for them, you're likely to be much more effective than if you [stick with one way of talking with trainees].

Allen, a psychology major, added to the sentiment that it is helpful if people come to the work with some underlying characteristics that lends to their being able to give feedback, when he said, "The training is a good starting point. I think maybe you should more carefully analyze the personalities of the people that are giving feedback, because it really rests on an intuitive factor people either have or they don't." He was indicating that some people may not be able to learn how to effectively provide feedback.

Finding 3: Transitioning from Patient to Educator

The participants spoke of a range of experiences with the transition from portraying the patient during the encounter, to being the educator while delivering the feedback, with some finding it easy and others finding it challenging. The trainees also experience a transition, from being in the role of the clinician meeting with a patient during the encounter to being the trainee discussing how well they met the learning objectives during the feedback. When the SPs consistently utilize an opening statement declaring they are representing the patient as they provide feedback, they find the transition is less jarring for them, and from what they observe, it appears to make the transition easier for trainees, too.

Ten of the 17 participants said the transition from patient to educator was easy for them. Six participants, including three of the ten participants who said it was easy, said the transition was hard when they were doing an emotionally challenging case. Separating from the role of the patient was mentioned by four participants. Three mentioned the transition can be difficult for the trainees, too. Eight participants said they have learned ways to assist themselves and the trainees with the transition, and three said their ability to do the transition well has increased with experience. The summary of the subcategories in which the responses were coded is in Table 11 and described below.

Table 11

Transitioning from Patient to Educator

Participant	Easy transition if routine case	Hard transition if emotional case	Role separate from the patient	Transition can be hard for the trainees	Techniques for easing the transition	Experience improves ability
1-Cora	–	x	–	–	x	–
2-Miyuki	x	–	–	–	x	–
3-Atif	x	–	–	x	–	–
4-Ruth	x	–	–	–	–	–
5-Chris	–	–	x	–	–	–
6-Allen	x	–	–	–	–	–
7-Lisa	x	x	–	–	x	x
8-Barbara	–	x	–	x	–	–
9-Tim	x	–	x	–	x	–
10-Valerie	–	x	–	x	x	x
11-Henry	–	–	–	–	–	–
12-Cathy	–	–	–	–	–	–
13-Michelle	x	–	–	–	–	–
14-Sandra	x	x	–	–	x	–
15-Ted	–	–	x	–	–	–
16-Denise	x	–	–	–	x	–
17-Lynn	x	x	x	–	x	x
Total (%)	10 (59%)	6 (35%)	4 (24%)	3 (18%)	8 (47%)	3 (18%)

Level of Difficulty

The participants' responses were separated into two dimensions: easy and hard. Ten of the 17 participants said the transition from patient to educator was easy for them; they were comfortable with it, especially if they were doing a fairly routine case. Of this group of 10, five said there were parallels with what they experience in their work in theatre, entertainment, or industry. They are well practiced in taking on different roles, as expressed by Ted, who has 16 years of experience as an SP, in addition to being an actor and a theatre director:

> I think for me, I'm in a unique position because they are two sides of my other jobs. I'm an actor in the room, and I'm a director during feedback. I do them both. I've done them both for years. I'm comfortable in both roles, so I enjoy both. I actually enjoy the fact that I get to flip-flop back and forth. It makes the day interesting.

Lynn, an experienced actress, said the transition is similar to doing improvisational theatre which has as its fundamental practice the act of listening to and watching the other actors, and responding spontaneously in accordance with their dialogue and actions. Her response was, "I don't think it was ever jarring for me because I am a practicing actor, and that's part of what it is, it's improv. Here's the circumstance, [clap of hands] 'Go.' You've just got to jump into it." She is trained to respond quickly to dynamic scenarios and to be flexible.

After stating the transition was easy, three of the nine participants spoke about the circumstances for which they found it to be hard; another three only mentioned it was hard. As mentioned by these six participants, the most difficult transition occurs with the highly emotional cases. SPs are emotionally involved as the patient who has just found out some devastating news; nevertheless, they have to quickly transition to thinking about what to say to the trainee, and just as important, how to say it. Barbara, an experienced actress and an SP with a medium amount of experience, said,

> Often, there's a transition in which you're crying into a Kleenex after they leave the room and trying to collect yourself to deliver feedback in a perky, upbeat, and helpful manner.… It's very taxing. It's very, very draining.…

In addition to the challenges just mentioned, three participants mentioned being required to make the transition from patient to educator multiple times during the session due to the schedule,

repeating the encounter with each new rotation of trainees. Making the transition repeatedly can be easy for some SPs and difficult for others.

Role Separate from the Patient

An integral part of transitioning to the role of the educator is leaving the role of the patient, as specifically mentioned by four of the 17 participants. Lynn put it simply when she said, "I'm not ... the patient that they just interviewed;" even though while providing feedback she will be referring to what it was like for her to have been the patient. As repeated below, the SPs need a way to establish themselves as the ones providing feedback so that the trainees see them as being separate from the patient with whom they just met and are ready to hear about how well they met the performance criteria.

Trainees' Transition

Three of the 17 participants referred to the transition the trainees experience and that they think it can be jarring for the trainees to have left the individual in the room portraying the physical and emotional characteristics of the patient and then come back to interact with a person with a very different presentation. Even though the trainees are well aware that they are taking part in a simulation, they can get caught up in the realism of the encounter. Barbara mentioned the fun of surprising the trainee when she transitions from a depressed patient to a lively and engaged person, who is discussing the learning experience she and the trainee just shared.

Techniques Used

Eight of the 17 participants described the techniques they use to ease the transition from patient to educator. For the particularly challenging cases, such as ones with extreme emotions, Lisa will "breathe, take a break, [and] get a drink of water." Five of these eight participants referred to what they routinely do at the opening of the feedback to make for a smoother

transition; three of whom spoke of needing to establish with the trainee their current role giving feedback as being separate from that of being the patient. Another one of the five said she starts the feedback with acknowledging the challenges the trainees face with breaking bad news, as noted in her response:

> [I suggest] to the students … it is [not just] tough for them. That it is just a tough case in general. It's tough for us to portray. It kind of like relaxes them that they feel like we're being human with them, too. And it makes it easier to talk.

The fifth of the five participants who described their opening techniques to ease the transition mentioned she is purposefully relaxed and cheerful, and uses a little humor at the beginning of her meeting with the trainees.

To assist with the transition beyond the opening, Lynn, one of the more experienced SPs, stated she uses good interpersonal skills to communicate with the trainees during the feedback:

> I use eye contact, body language. I make sure … I'm looking at them. I smile because I want them to see me now as a relaxed, detached person. I'm not ... the patient that they just interviewed. I'm someone that they can kind of be themselves with.

By taking these deliberate steps Lynn is consciously positioning herself as a credible person to be providing feedback to the trainee.

Experience Improves Ability

Comments coded with the last of the subcategories regarding the transition from patient to educator were made by three of the 17 participants; they each mentioned their ability to make the transition has improved with experience. This type of transition is not something people usually experience in other parts of their lives and it takes skill to be able to handle it well. Individuals find what works for themselves and the trainees for each different situation, taking

into account the education level of the trainee, the trainee's performance, the type of encounter, and the number of times during an activity that the transition takes place.

Finding 4: Preparing and Delivering Verbal Feedback

The fourth major category in which the coded interview segments were placed was preparing and delivering verbal feedback. Even though some of the participants' comments could be designated as applying to both of the tasks, preparing and delivering, I designated their comments as one or the other for the purposes of presenting their comments. I start with the task which occurs first and was mentioned by fifteen of the 17 participants: preparing feedback. The comments that were coded as preparing feedback were further divided into two subcategories: challenges and mechanics. The comments made by all 17 participants about delivering feedback were divided into two primary subcategories: feedback delivery approaches and adjusting feedback for individual trainees, both of which are divided further into other subcategories as described in each relevant section, below.

Preparing Feedback

There was an extensive range of comments about the process of preparing feedback. I selected the two most commonly mentioned, the challenges and mechanics of preparing feedback, described in detail here, starting with the challenges.

Challenges. In general, participants made comments about the degree of difficulty of giving feedback, with the focus being on the challenges, as mentioned by 12 of 17 participants. The challenges of preparing feedback the participants said they face are indicative of three core issues: associating their reactions to trainees' behaviors, deciding which reactions to address, and deciding what to say. Specifically the participants struggle with (a) objectively examining their reactions and determining which reactions are representative of the patient they are portraying;

and (b) how to be honest and accurate, while not insulting the trainees or inhibiting their desire to improve.

Four different times during the interview Chris referred to the challenge of discerning what trainees did that brought about his emotional reactions. In the following quote he is referring to a scenario where he portrays a patient with low medical literacy, having a preoperative discussion with an anesthesiologist about the risks of a surgery for which the patient believes that he is likely to die. Chris' statement is representative of what he and two other participants said:

> I come away with a general feeling that the person did well in these areas, and they maybe weren't quite as adept in those, and maybe they were off base on something or scared me.... But then to … back those [feelings] up with very specifics is probably the most challenging part of preparing good feedback.

Valerie mentioned the challenge figuring out if a behavior that irritated her would also bother other people. She had to decide if she would indicate in her feedback that she was representing just herself or generally representing the type of patient she was portraying. She wants to be standardized and have what she says be representative of patients and other SPs. She said,

> I find it really challenging because I'm not sure if the feedback that I'm giving them is personal or if it's something that is general…. If it's something that really bothered me personally and I don't want it to be [done that way by doctors. What do I do?]…. I'll give you an example, and this might be ethnic or not. I don't like to be called "honey" and "sweetie." It goes down my spine and all.… I want to be general that there may be many people that feel this way.

Valerie is an African American woman and an underlying question for her is determining if a trainee is treating her in a particular manner primarily because of her race, and secondarily because of her gender. She wants to discuss these issues with trainees and is hesitant to raise them.

The overriding challenge specifically mentioned by five participants was figuring out how to say the feedback in a way that it would be "heard" by the medical students. Lisa summarized this well when referring to the exercise where she portrays a homeless woman with an infected toe that requires amputation:

> Sometimes it's easy.… Sometimes … it's a little challenging, trying to think of how am I going to give this student this feedback and do it in such a way that it's caring and they really learn something instead of insulting them. Sometimes students will say things to you that are insulting and you have to separate your personal feelings, but also tell them, "You said this and this is how it made me feel … as the patient. It's something you … need to think about when you get out there in the real world and [are] dealing with people."

Ted also brought up the issue of selecting what behaviors to talk about and added the challenges of being tired and having met with multiple trainees with behavior he found to be displeasing. He said,

> It's so interesting because what we're here to give is our personal opinion, but there are times when there are parts of our personal opinion that actually **must not** be part of the feedback, and that's a tricky line to figure out where that is, especially when you're tired…. Or how late in the day [it is], or literally if you slept well or not the night before,

> or if you've had a rough slew of students. This is the fifth challenging student in a row. Whew...

Barbara spoke of the challenge she had of finding the right words for a particular trainee who seemed to be in a vulnerable state and who had made comments related to the patient's sexual history during the encounter that seemed awkward to Barbara. She said,

> In that particular instance, the only thing I delivered in feedback was positive feedback because I just felt that that particular student was so fragile, and so terrified, and so overwhelmed that that was the way I could be most helpful.

She was referring to the intricacy of providing feedback to someone who seemed to have found the encounter difficult and who might not have been ready to hear about their performance.

Challenges with preparing feedback for residents. Two of the 17 participants talked about items specifically regarding preparing feedback for residents. One point that was made was that for the most part the residents are involved with exercises consisting of highly emotional cases, resulting in more challenging transitions for SPs in the preparation and delivery of their feedback. Whether providing feedback to residents involved with the encounters requiring a higher level of clinical skills or with students performing more basic encounters, SPs face notable tests of their ability to prepare feedback. I next discuss what the participants said about how they do it.

Mechanics of Preparing Feedback. This subcategory regards the strategies the participants spoke about using in preparing their feedback. Eight of 17 participants mentioned the mechanics of how they go about preparing their feedback for trainees, with seven of them referring to how they take notes. They described a range of techniques from (a) not taking any notes at all; (b) to jotting down one or a few words for each feedback topic they wanted to talk

about; (c) to writing it all out and making edits before meeting with the trainee, as elaborated by one participant, Cathy. Tim, one of the more experienced SPs, has a unique way for preparing his feedback he described as follows:

> [While preparing the feedback] I replay pieces of the encounter in my mind. During the encounter itself, if something pops up, I'll try to give myself a physical reminder. For example, I might grab my thumb in one hand and just kind of squeeze it and I'll put a word to it. Or I'll do something physical and try to toss a word quietly with that in order to remember that point. That often works. Then when I'm sitting at the computer or sitting with the papers in front of me, I generally won't write complete sentences. I just throw words down, and then I trust myself enough that during the actual feedback session, I'll know what I mean by those words.

The participants who mentioned strategies tended to be ones with more experience and are individuals I consider to be more skilled in providing feedback. They have found a way that works for them and is aware of it enough to think of discussing it.

Feedback Delivery Approaches

After preparing the feedback, the SPs facilitate the feedback session with either one or a group of students, or a resident. All of the participants spoke about the manner in which they deliver feedback, with the most frequently mentioned approaches being the use of dialogue, proscribed protocols, and humor, as summarized in Table 12. I provide explanations and examples of these approaches in the next sections.

Table 12

Feedback Delivery Approach

Participant	Dialogue	Protocols	Using humor
1-Cora	x	–	–
2-Miyuki	–	–	–
3-Atif	x	x	x
4-Ruth	x	x	–
5-Chris	–	x	–
6-Allen	x	–	–
7-Lisa	x	x	–
8-Barbara	x	x	–
9-Tim	x	–	–
10-Valerie	x	–	–
11-Henry	–	x	x
12-Cathy	–	x	x
13-Michelle	x	–	–
14-Sandra	x	x	–
15-Ted	x	x	–
16-Denise	–	x	–
17-Lynn	x	x	–
Total (%)	12 (71%)	11 (65%)	3 (18%)

Dialogue. When participants mentioned some aspect of a two-way conversation between themselves and the trainee, I considered that to be a dialogue. The use of dialogue for engaging the trainees was referred to by 12 of the 17 participants. For example, Tim said, "In effective feedback, there's a conversation that happens.… That's active learning that's taking place." Three of the 12 participants mentioned starting the feedback session with asking the trainees questions about their performance during the encounter or giving them the opportunity to talk. Ted included his reason for initiating a dialogue at the beginning of the feedback session:

> I always start asking them first ... [for] their opinion and their perspective … because it helps me understand how self-aware they are or are not; or how their perception of how it went agrees or disagrees with mine. That helps me understand where I need to focus.

This is a demonstration of an SP being learner-centered in his approach to feedback and possibly being sensitive to the time limitations.

Feedback protocols. SPs are trained to use feedback protocols for providing effective feedback. The two referred to here are (a) using the phrasing "When you ___, I felt ____;" and (b) sandwiching critical feedback between two positive comments (Archer, 2010, p. 105). Nine of 17 participants made comments referring to the use of the phrasing, "When you *fill in trainee behavior*, I felt *fill in SP's emotion*." An example mentioned by Denise was, "When you made good eye contact, I felt heard." Five of the nine participants who mentioned this protocol spoke of it favorably, saying it is generally a useful way of providing effective feedback. Barbara had the most to say about the positive aspects of using the protocol:

> [This format] gives the student the information that they need, and it also protects me as a person. It equalizes the power structure in some way, and it lessens a possible confrontation or difference of opinion…. It puts the SP in a position where they can be specific about specific things that happened and how they felt about it.

To the contrary, the other four participants had negative views of the use of this phrasing saying, (a) if it is used all of the time feedback may appear to be trite, leading the trainees to ignore it; (b) it was not an effective way to word feedback; (c) if the trainees treated them in a way they found offensive, SPs are not able to tell trainees what they were thinking; and (d) SPs forget to use it. About one half of the participants who referred to this protocol for wording feedback said it works well; the other half were critical of its use.

The protocol mentioned above which starts with a positive comment about the trainee's behavior, followed by a constructive or negative comment, and ends with a positive comment is referred to as a psychological sandwich. This approach was mentioned by four of the 17 participants, three of whom commented that they find this approach has some merit. Chris covered that sentiment and added a caveat when he said,

> This sort of psychological sandwich technique [consisting] of make them feel good, and then give them a critique, and then make them feel good again, … if it's done naturally … it's probably fine. I'm not sure that I'd be a proponent of ... requiring it to be constructed that way because that makes it kind of artificial sometimes, and … that's something you have to guard against.

To the contrary, the fourth one to comment on the approach, Denise, simply said using the psychological sandwich approach devalues the feedback. As mentioned for the other protocol, this protocol works well for some participants and not for others. If used, it needs to be done in a natural way.

Using humor. Three of the 17 participants said they use humor. Atif described how he uses humor and is "childlike" when he is giving feedback. When asked what works well with feedback, Cathy responded,

> Levity. If I can make them laugh, I think that breaks the ice. That helps them be a little less nervous, and I think they can hear what I'm telling them. If we've laughed, shared a laugh together, I think they can hear, because then I'm not the enemy and I think they can hear better what I'm trying to tell them.

In saying "I'm not the enemy," Cathy was referring to the defensiveness that trainees can demonstrate by disagreeing with the SP or justifying their behavior by saying that they would never behave that way with a real patient.

Adjusting Feedback for Individual Trainees

Sixteen of 17 participants talked about adjusting feedback for individual trainees based on (a) what they observed of them during the encounter, (b) the nature of the case, (c) the trainees' reactions during feedback, or (d) the cultural background of the trainee. Two of the 17 participants mentioned that experience with providing feedback improved their ability to make the adjustments for individual trainees. The summary of how the participants' comments were assigned to subcategories is in Table 13 and the details about each subcategory are given below.

Table 13

Adjusting Feedback for Individual Trainees

Participant	Adjusting feedback for individual trainees	Basis of adjustment			
		Trainee during encounter	Type of case	Trainee during feedback	Trainee's culture
1-Cora	x	x	–	x	–
2-Miyuki	x	–	–	x	–
3-Atif	x	–	–	x	–
4-Ruth	x	–	–	–	–
5-Chris	x	x	–	x	x
6-Allen	x	x	–	–	–
7-Lisa	–	–	–	–	–
8-Barbara	x	–	–	x	–
9-Tim	x	–	x	x	–
10-Valerie	x	–	–	x	–
11-Henry	x	–	–	–	–
12-Cathy	x	–	–	–	–
13-Michelle	x	–	–	–	–
14-Sandra	x	–	–	x	–
15-Ted	x	–	x	x	–
16-Denise	x	–	–	–	–
17-Lynn	x	–	–	–	–
Total (%)	16 (94%)	3 (18%)	2 (12%)	9 (53%)	1 (6%)

Beyond the consideration of whether they were providing feedback to first-year students or residents, which is discussed in detail in the section for the fifth finding, 16 of the participants referred to adjusting their feedback for individual trainees. In general they referred to finding it challenging to prepare feedback appropriate for each trainee, and they mentioned the multiple step observation and thought processes they use for preparing and delivering feedback that is customized for individual trainees. A representative example of such a comment was made by Denise:

> I have to take how [their interpersonal communications impacted] how I felt being their patient, how well I thought they understood me, how well I trusted them, … and look at that student's psychology or make-up, and then figure out which of these things … they need [feedback on] the most, right now in their career.

Denise had worked as a social worker and looks at the psychological aspects of each trainee as a foundation for her feedback.

I list the source of the adjustments participants said they make in chronological order of when SPs collect the information that they use in making decisions about the content of their feedback and their manner of delivering it, starting with their observation of the trainee during the encounter—including the trainee's performance; and then follow with their observations of the trainees while giving feedback.

Based on trainee during encounter. Three of 17 participants mentioned basing their feedback on what they observed of the trainee during the encounter. Cora, who bases how she starts feedback upon the impression she gets of the trainee during the encounter, said, "It's trial and error, but I do try to stay mindful with each personality, and you can pick that up throughout the encounter, like … which students have an agenda [and] which students are nervous."

Based on type of case. Another consideration for adjusting feedback, which was the nature of the case, was specifically mentioned by two of the 17 participants. Ted, who had come across what he considered to be two very different—one positive and one negative—sets of interactions with doctors during his parents' illnesses and deaths, said,

> It's very important to me to make sure that the doctor is thinking about the patient's full perspective, not just the politically correct perspective.... I want to always make sure that they're not just giving a rote answer in a situation … when you're discussing death or

> possible death to the patient, to the patient's loved one, to the patient's parents, that ... they're willing to discuss possibilities and to honor the respects and wishes of the patient or the caregivers….

When he was giving feedback for cases involving the discussion of a serious illness or death, Ted adjusted what he said to cover the communication skills he considered critical for such cases.

Based on trainee's reactions. Nine of the 17 participants mentioned being aware of the trainee's reactions while they are giving feedback and making adjustments based on those reactions. Chris said he starts with the impression he has of the trainee from the encounter and reevaluates once he starts the feedback. His reply to my question of what he does if he finds the trainee is not receptive to his initial approach to the feedback was,

> During the case, because it is artificial in a way, you get a lot of impressions about the student and what will work and how they are. But then when you start the feedback, immediately you either get confirmation that you're on the right track or you get some signals that say, "You know, maybe I need to adjust a bit." And you need to be flexible and kind of quick on your feet at that point in time.

Chris' comment indicates he is aware that during the session he might misjudge a trainee and the selection of feedback and reevaluates early in the feedback session.

Sandra says she switches her feedback to be only positive items if she finds the trainee's reaction to her constructive criticism is not well received. She looks for "physical signs of discomfort" and evaluates the level of the importance of providing feedback on a particular item. Miyuki's response provided a good summary of the comments:

> I give them the first piece, watch how they react, and then decide what to do after that.… And if they are willing to take it, then I will go a little bit further so that they learn more from one encounter.

Barbara said she always starts the feedback the same way each time; that is how she was trained to do it and having that consistency helps her focus on adjusting the content for each individual. She does shorten her feedback to protect herself from additional negative responses when she perceives a trainee is not being receptive. Barbara said, "I have to protect myself as a person, as an actor…. If I feel a lot of pushback from a student or non-receptiveness, then I protect myself by pulling back and perhaps shortening what I say."

Ted says he partly relies on intuition as he delivers the feedback. He talked about how we are each unique and he stated he is sensitive to providing the feedback in a way that will be received by the trainee:

> We all hear so differently. We all listen so differently.... The beginning of a slightly negative comment will make some students turn off even if it's [not a significant negative comment]. And you don't know 'til you're in the room [giving feedback, what the student's response will be].

Ted summarizes the reason for SPs making the adjustments based on trainee's reactions—each person hears things differently and SPs do not know what will be seen as a negative comment by a trainee until they have said it. They observe the trainee's reaction and make adjustments.

Cultural aspect. Only one of the 17 participants, Chris, mentioned being aware of adjusting feedback based on the cultural background of the trainee. He said,

> In my life experience, working in a lot of different cultures and with a lot of different types of people, I've found that there is no universal way things work. You have to be

> very adept and adaptable at adjusting how you relate to somebody, depending upon what their expectations are.

Even though three other participants have lived outside of the USA, Chris was the only one who mentioned the cultural aspect of the trainees. As a retired international manager, he continues to think about and discuss an element of his successful career—his sensitivity to the cultural backgrounds of the people with whom he interacted and the adjustments he made to his communications with them.

Experience Improves Ability to Make Adjustments

Connected with the idea covered in the second finding, learning how to provide feedback, two of the 17 participants mentioned that experience with providing feedback improved their ability to make the adjustments for individual trainees. Cora said,

> I learn every time I give feedback what works and what doesn't.… I have to be very mindful what I say because a lot of times, either … the students will come off defensive or they will sort of fall into … a shrugging [of their] shoulders or [looking] very like sad or … disappointed and you can tell they're beating themselves up inside. [The challenge is] finding out how they're ticking and how they're not….

Since the majority of the interview questions were related to this finding, it was the most extensive one, covering challenges, mechanics, approaches, and adjustments in regards to preparing and delivering feedback. Many of the comments throughout the presentation of the finding, and the quote in the final section are an indication that SPs' ability to make adjustments improve each time they provide feedback, leading to learner-centered feedback.

Finding 5: Comparison of Feedback for First-year Medical Students and Residents

The fifth major category of the coded interviews regarded what the participants said about the similarities and differences of providing verbal feedback for first-year medical students and for more advanced students, the residents. In the previous finding I introduced the idea discussed by the participants of adjusting feedback for the individual trainees without detailing the different levels of training. However, a significant trainee characteristic to be taken into account regarding feedback is their level of education within the medical education system. First-year students have different skills and knowledge than the residents who have three to five years of additional training. Participants mentioned many differences with their feedback for these two groups of trainees. The codes assigned to the participants' comments placed in this category were sorted into two subcategories: descriptors and goals. A summary of the distribution of the comments in these two subcategories is in Table 14 and the details are provided in the following sections. References to first-year medical students are abbreviated as "MS." As is noted in this table by the use of "n/a," three participants: 4-Ruth, 6-Allen, and 13-Michelle, have not provided verbal feedback to residents; therefore, they are not included in the totals in the sections below concerning comments specifically about residents.

Table 14

Comparing First-Year Medical Students and Residents: Descriptors and Goals

	Descriptors		Goals		
Participant	**MS**	**Residents**	**Encourage MS**	**MS to value the SP experience**	**Complex communication with residents**
1-Cora	–	x	x	x	x
2-Miyuki	x	–	x	x	–
3-Atif	x	x	x	–	x
4-Ruth	–	n/a	x	–	n/a
5-Chris	x	–	–	–	x
6-Allen	–	n/a	–	–	n/a
7-Lisa	x	x	x	–	x
8-Barbara	–	–	–	–	–
9-Tim	x	–	x	–	–
10-Valerie	x	–	x	–	–
11-Henry	x	–	x	–	–
12-Cathy	–	x	x	–	–
13-Michelle	x	n/a	–	–	n/a
14-Sandra	–	–	x	–	x
15-Ted	x	x	–	x	–
16-Denise	x	x	x	x	x
17-Lynn	–	–	x	–	x
Total (%)	10 (59%)	6 (43% of 14)	12 (71%)	4 (24%)	7 (50% of 14)

Note. "n/a" indicates participant has not provided feedback to residents. These participants are not included in the totals and percentages. MS = first-year medical student.

Descriptors of Trainees

The participants compared the two groups of trainees by describing the amount of knowledge and skill they have and the way they present themselves. Ten of the 17 participants used descriptive words when referring to the first-year medical students in regards to preparing and delivering feedback. Examples of the words they used are: nervous, pliable twigs, fragile egos, needing encouragement, like babies, new, fresh, more open, young, first graders, children, and less confident. Conversely, the residents are described as more resistant, more skilled, more

removed, more comfortable with themselves, pretending to listen, less interested in interpersonal skills, tired of learning all the facts, and more expressive. These descriptions are from comments made by 6 of the 14 participants. Atif referred to the different status residents hold in the social structure by comparing the residents coming to do an encounter at the simulation center with a famous actress visiting a small theater in Baltimore. In addition to the descriptions just presented which highlight the difference between the students and residents, four participants said there was a lot of variation within each level of trainees. They indicated that how they approached feedback depended on the individual to whom they were providing feedback.

Goals for Feedback for First-year Medical Students

The participants described the differences between what they thought was appropriate feedback for the first-year medical students and for the residents. Twelve of 17 participants said their goals for feedback for students were to be encouraging, have them feel confident, and for them to learn. An example of this was Lynn's statement: "I really look to see what they bring …, as far as their natural abilities, personality, and I try to point those things [out] to them so that they feel encouraged to move forward with their goals." Four of 17 participants said they wanted the feedback session to be a positive one so the students would take the feedback sessions seriously and value future SP exercises. Cathy said two of her goals were to have an honest communication and to convey information in a way that could be heard.

The participants spoke about the differences between the students and residents, and how they adjusted their feedback accordingly. This was explicitly stated by Lisa when she said,

> I absolutely keep in mind that they are first-years. They're not used to the encounters as much as … someone who's been doing it longer. When I give ... them my feedback … I wouldn't say it's that I'm not as hard on them, but my words and my phrasing … are a

little more caring towards them…. And I give them … a little more leeway, as far as … little quirks that they do. They're young and they are inexperienced. I … take that into consideration….

Another special factor for the students is that during encounters with SPs at the beginning of the year they are frequently in small groups of their peers with a faculty preceptor. Six of 17 participants mentioned being aware of this when doing feedback, for example, Denise said, "I'm very aware that their egos are quite fragile, especially in front of their peers." She is taking into consideration selecting feedback that can be absorbed by students in that particular setting.

Goals for Feedback for Residents

Even though the responses regarding the goals for feedback with the residents were more diverse, 7 of 14 the participants who have experience with providing feedback to residents, said something in regards to a more complex communication with the residents. Here are examples:

(a) Valerie said, "[I] want [the residents to be] thinking, 'Okay, let me think about what you said and evaluate it.'"

(b) Denise said she wanted to be able to communicate with them in a way that would overcome the resistance she sensed, by "using the kind of 'I had a friend' approach that we learn in therapy."

(c) Cathy spoke of sharing knowledge with the residents in two directions: "It's kind of like we, [the SP and resident], are on an equal plane because I'm giving them my knowledge; they're giving me their knowledge…. We're symbiotic in a sense because we're feeding off of each other."

Lynn provided a summary of how the goals of feedback shifts as the trainees gain experience by saying, "First-years probably need the encouragement end of what I do more than any other year, because as they grow in their skills we have to hone their skills more and more narrow[ly]." She also said the residents are more likely to express their own goals for the feedback than the students, which assists her in providing them with helpful information, even though they are more advanced in their learning.

Summary of Findings

The findings indicate that the process of preparing and delivering feedback is complex due to the challenges SPs face with simultaneously carrying out multiple tasks and making adjustments based on the specific activity, case, and trainee. In addition, each participant in this study is a unique individual and brings their own personal, work, education, and cultural background to the work as a whole, and especially to feedback. Even though the data in the findings tables indicating each participant's responses reveal the variety of responses of each participant and between the participants, there is significant enough commonality to lead to the development of theories. I conclude this chapter with a brief summary of each of the findings detailed above. The interpretations and discussions of the findings, and the associated grounded theories developed from them follow in Chapter 5.

Why People Work as SPs

Most of the participants work as SPs for multiple different reasons, which varied from earning money to enjoying the social aspects of the work. Other reasons given were providing a service, engaging in their own lifelong learning, and using their acting skills. The most frequently given reason was to contribute to medical education.

Learning Feedback Skills

In general, the participants learned how to give feedback to medical trainees by way of formal training provided by SP programs, their work experiences, and their personal lives. They improved their skills by practicing and by observing other SPs. The younger participants noted they had learned from observing other SPs. It was more common to have learned the skills from personal life and previous work experiences with the older participants than the younger ones. The occupations for which participants said they had previous experience with providing feedback were acting, teaching, management, coaching, directing, financial advising, social work, and broadcasting.

Transitioning from Patient to Educator

The participants said the degree of the challenge of transitioning from patient to educator is impacted primarily by the level of emotion of the encounter in that it is relatively easy for routine cases and hard for cases with high levels of emotions. Some participants indicated they need to establish with the trainee that they are in a role distinct from the patient they had just been portraying. Some participants have routines they follow to make the transition less jarring, and others have developed ways of easing particularly challenging transitions, by having an intermediate distraction or using a particular opening technique. Since trainees can also find the transition awkward, these opening techniques used by the participants can make the transition easier for them, too. Some of the participants indicated that the greater amount of experience an SP has in general, and with a particular case, the easier transitions are for the SP.

Preparing and Delivering Feedback

The participants prepare and deliver their feedback for individual trainees using a multistep process. The first step is observing the trainee during the encounter. Based on their

observation and considering the type of case, the next step is making a plan as to how they are going to approach feedback with that individual. When the participants start the feedback, they observe the trainee's reactions and adjust their technique and content. As the feedback progresses, the participants observe the trainee's body language and responses, and adjust the feedback accordingly. In addition, the participants directly inquire if the trainee understands their comments and if they have any questions.

The participants indicated they have challenges with preparing feedback related to four core processes: (a) recognizing their emotional reactions, (b) discerning what trainee behaviors are connected with their reactions, (c) deciding which of their reactions to address; and (d) deciding how to communicate their concerns in an honest and accurate way, without being insulting or inhibiting the trainee's desire to learn. Participants have a range of techniques they use and were varied in the extent of the notes they prepare for their feedback—from none at all, to writing their feedback out completely and editing it prior to delivering it.

The participants use dialogue, proscribed protocols, and humor with the trainees when delivering the feedback. Some of the participants actively engage trainees in a two-way communication by asking questions and giving them a chance to ask questions, and some participants assess their feedback and reflect on how to improve it for future trainees. The participants had a range of opinions of the protocols—from thinking they were useful, to judging them to be distracting or counterproductive. Some participants use humor to increase the likelihood that the trainees will be open to their feedback. The participants make adjustments to their feedback based on (a) the trainee during the encounter, (b) the case, (c) the trainee during feedback, and/or (d) the trainee's cultural background.

Comparison of Feedback for First-year Medical Students and Residents

The participants used adjectives that indicated the newness and possible greater vulnerability of the first-year medical students and mentioned they are more open to feedback, while their description of the residents was about their greater experience and knowledge, and the potential that they might be more resistant to feedback. The participants aim to provide feedback for the students that is encouraging and considerate, while their feedback to the residents is focused on the complexity of the doctor/patient communications, including the technical and emotional aspects.

Chapter 5: Discussion and Grounded Theory

Introduction

The findings presented in Chapter 4 and additional data from the interviews provided the foundation for the construction of a grounded theory based upon my interpretation of what the SP feedback process entails, the practical skills required to do it, and the contextual and individual conditions that play a role in the feedback process. I examined what the study participants said about their experiences with providing feedback to trainees to augment my understanding of the details of what it is like for them to prepare and deliver feedback. Previously, as part of my daily work routine, I had observed and thought about the process; however, I had not had the opportunity to have such extensive and focused conversations as I did during the interviews.

In the first section of this chapter, I expand upon the phenomenon of the feedback process by discussing the findings and presenting my interpretations and theories. Following this section, I present the statement of the substantive grounded theory I constructed. I next discuss the roles, tasks, conditions, and skills associated with the process of SPs providing verbal feedback to trainees, that are the basis for the grounded theory. This section includes the concepts that tie together many of the findings and details of the phenomenon of the process of SPs preparing and delivering verbal feedback. This explanation is followed by a discussion of the SPs as adult learners and reflective practitioners.

I then revisit the statement of the grounded theory, and follow it with two models that diagrammatically represent my interpretations of the findings and the grounded theory. Next I compare my findings, interpretations, and theories with published research studies of SP experiences with the feedback process and the work they do as SPs. I close the chapter with

implications of the study and recommendations for SP programs, suggestions for future research, strengths and limitations of the study, reflections, and a summary.

Interpretation of Findings

The findings I presented in the previous chapter are represented by these categories:

1. Motivation for working as an SP;
2. Learning how to provide verbal feedback;
3. Transitioning from patient to educator;
4. Preparing and delivering verbal feedback; and
5. Comparison of feedback for first-year medical students and residents.

Based on the data presented in the previous chapter, I present my interpretations and theories in the following discussions about the findings. The themes that reoccur in my interpretation of the findings are (a) the individuality of the SPs, (b) the complexity of preparing and delivering feedback due to the variations inherent in the activities and the trainees, and (c) the roles and the skills required to provide feedback.

Motivation for Working an SP

As summarized previously, all of the SPs had at least one reason and most of the participants stated they had three to six reasons for working as SPs, a compilation of which includes contributing to medical education, earning money, enjoying the social aspects of the work, providing a service, engaging in their own lifelong learning, and using their acting skills. The individuality of the participants is evident in the fact that each participant mentioned a different combination of motivations they have for working as an SP. The most frequently mentioned motivation was contributing to the education of medical trainees, indicating that the participants care about the trainees' learning and improved skills. Based on (a) the participants'

motivation to do this work as a community service and (b) on the stories they shared of their positive and negative personal experiences with health care, I interpret that they want to have a constructive impact on the trainees' skills, ultimately leading to high quality patient care. Since the participants have a desire to contribute to the skills of future and current doctors, and with verbal feedback being the way in which they can influence trainees, they find it important to do feedback well. Additionally, while they are in the role of the patient, SPs are intent on providing a realistic simulation of a patient encounter to authentically challenge the trainee, and they are committed to gathering the information they need for preparing and delivering the feedback. These simultaneously occurring objectives of portrayal and observation make the patient role portrayal a complex process.

Giving feedback to medical students and residents is a very direct and personal way to meet the participants' primary reason for working as an SP, which participants stated was contributing to medical education. SPs do this work to influence the practices of current and future clinicians and specifically are able to use their feedback to the trainees to encourage them to interact with patients and their families in the ways SPs believe work well and discourage the interactions they think are detrimental. SPs must be satisfied with the feedback sessions in order to choose to continue doing formative activities. They base their level of satisfaction on their own evaluation of the feedback they provide, their dialogues with the trainees, and their appraisal of the trainees' reactions. They want to be honest and share what it was like to be the patient in a way that is appreciated by, and useful to the trainees.

Since SPs have multiple motivations for doing this work, even if their motivations shift or evolve during the time they work as an SP, it is likely that at least one reason will keep them interested in the work. Even though there can be significant inherent challenges with the work,

SPs have the opportunity to learn, provide a service to others, earn money, and utilize their acting skills; and ultimately find it personally rewarding.

Learning How to Provide Verbal Feedback

The second finding showed that the participants learned how to give feedback by means of formal SP feedback training, work experiences, and/or personal life experiences. Every participant mentioned one to three ways of learning, and there was a variety of combinations that these ways were mentioned by individual participants. Even if someone is noted as having mentioned the feedback training—which is the data I recorded for the finding—they might not have said it was a useful way for them to learn. In regards to the participants who mentioned learning their feedback skills from work and personal life experiences, even though these experiences may have provided them with a good foundation in feedback skills for other settings, these experiences may not carry over to the context of working as an SP.

The finding showed that the participants who mentioned learning from other SPs tended to be the younger ones. In general, they have fewer life and work experiences and are seeking ways to improve their feedback skills. When they have the opportunity to observe other SPs they do so to get tips on how to improve their feedback.

Since there is such diversity among SPs regarding their ages, educational backgrounds, work and life experiences, cultures, and amount and type of experience working as an SP, there are many different ways in which SPs gain the skills for providing feedback. Due to these same factors, when they start working as an SP they have different skills in providing feedback and they will learn how to do feedback in different ways and at different rates.

Transitioning from Patient to Educator

The wide range of responses for the finding about transitioning from patient to educator indicates that not everyone experiences the transition the same way. Some of the participants who found transitions easy when the cases were routine, found them to be challenging when there was a higher level of emotional demand, indicating the context of the encounter makes a difference in how the participants experience the transition. The greater difficulty in transitioning is due to the SPs being more emotionally involved with the more demanding patient roles and attending less to the observation and evaluation of the trainee. The mention of the trainees' challenge with the transition by the participants indicates they are learner-centered and are concerned about the trainees being ready for receiving the feedback. The statement by some of the participants that experience improved their ability to make the transition indicates there is a skill involved with making the transition. Participants had different ways of dealing with the transition, with some having routines they follow and others improvising, showing the individuality of the participants and the skills they use.

Preparing and Delivering Verbal Feedback

As indicated by the various facets of the finding about the process of preparing and delivering verbal feedback, this is a complex process with many tasks for the SPs to carry out. Many of the tasks occur simultaneously and others occur sequentially through the different roles SPs take on. Each activity, encounter, and SP generate combinations of factors that influence these tasks. For example, such fundamental factors as the amount of time available to prepare the feedback, the emotional level of the case, and the SP's knowledge of the case, affect the SPs' feedback. I elaborate on the details of the tasks and the factors that influence the tasks later in this chapter. Here, I first address the preparation of feedback, and then the delivery.

Preparing feedback. The finding about preparing feedback indicated SPs start aspects of preparing their feedback during the encounter, including (a) assessing the trainee's temperament and deciding how to approach the feedback; (b) observing the trainee's behavior and comparing it with the performance criteria; (c) observing their own reactions to the interactions; and (d) considering how the patient they are portraying would react. A fundamental challenge some of the participants stated is determining the specific behavior that brought about their feelings, as mentioned by Chris:

> I come away with a general feeling that the person did well in these areas, and they weren't quite as adept in those.... To … back those [feelings] up with very specifics is … the most challenging part of preparing good feedback.

Regarding the finding about the mechanics of preparing feedback, the range of techniques described by the participants for preparing their feedback—from not writing any notes, to jotting down a few words for each topic, to writing and editing the full feedback—indicates that one technique does not work for everyone. It is also indicative that the context of the encounter will make a difference in how an SP prepares their feedback, since the participants are reporting on their experiences with having taken part in a variety of different types of activities.

A critical aspect of preparing feedback is to determine its content. In the context of formative activities with first-year medical students or residents, the primary purpose is to discuss the trainee's communication and interpersonal skills. SPs are aware of the trainee's behavior, specifically their verbal and nonverbal communications, and subsequently, evaluate and recall it. The feedback preparation process requires a considerable amount of skill since SPs are portraying the physical and emotional aspects of a patient; conversing with the trainee as

specified in the case training materials; observing the trainee; observing their own reactions; and remembering the pertinent points of the performance criteria—all while thinking about what to say for feedback and how to say it.

Delivering feedback. The participants mentioned a range of techniques for delivering feedback, from following specific wording protocols set by their program, to having more natural communications, to using humor; and they have a variety of preferences for the approaches they use. That there is a range of preferred delivery approaches is indicative of the individuality of the participants and the variety of encounters with which the participants have experience. The two program protocols mentioned by the participants were "When you ___, I felt ___" and psychological sandwiches. When SPs use these protocols, trainees are more likely to be protected from inappropriate techniques and feedback content that might otherwise upset them to hear. In addition, SPs can protect themselves from exposing more of their personal thoughts than they want to. As Barbara said, the use of the protocol "gives the student the information that they need, and it also protects me as a person. It equalizes the power structure in some way, and it lessens a possible confrontation or difference of opinion." On the other hand, using protocols may inhibit authentic communication and opportunities for sharing key learning points. Another reason for SPs to not use the same protocol each time is that trainees are not likely to listen to feedback if every occurrence is presented in the identical way, as the feedback may appear unauthentic.

Whether an SP is following a program specified protocol or their self-selected procedure, feedback can be stilted and unnatural, leading to trainees to ignore the comments made by SPs. The example in the finding was mentioned by Chris:

> [The] psychological sandwich technique [consisting] of make them feel good, and then give them a critique, and then make them feel good again, ... if it's done naturally … it's probably fine. I'm not sure that I'd be a proponent of ... requiring it to be constructed that way because that makes it kind of artificial sometimes, and … that's something you have to guard against.

Even if not following a program specified protocol, some participants find it helps to have a consistent approach so that they can think about other ways of making the feedback effective for the trainee. Barbara said she always starts the feedback the same way each time and having that consistency helps her focus on adjusting the content for each individual. This finding shows the variations of feedback approaches depends on the context of the activity and the case, and what the SP thinks is appropriate for each trainee.

Participants mentioned the use of dialogue in that they engage the trainee in a conversation about their performance. Even though this type of feedback can be more effective, it tends to take longer than if the SPs focus the feedback conversation on the topics they select. If the feedback becomes more of a conversation it is more likely to digress in unpredictable directions. Some participants brought up that the amount of time available for delivering their feedback as one of their challenges, which then can affect their choice of technique.

SPs can be viewed by trainees as individuals who do not have the credentials for evaluating them or even more extremely, as someone whose purposes conflict with the trainees'. Cathy referred to this when she stated that she uses humor to "break the ice." She said, "Then I'm not the enemy and I think they can hear better what I'm trying to tell them." Her use of the term "enemy," took the idea of not being a credible evaluator even further in that she interpreted

that trainees may view the SPs as individuals who have goals that are in conflict with the trainee's expectations.

The finding for feedback approaches included that some participants use humor and childlike behavior. When SPs use humor, it can lighten the atmosphere and open the trainee up to hearing comments about their behavior. However, the use of humor can also backfire since it can be misunderstood, especially if a trainee is from a culture significantly different from the SP's. Being childlike can diffuse tension, modify the power relationship between the SP and the trainee, and facilitate the feedback process; on the other hand, similar to the use of humor, the trainee might interpret this behavior to mean that the SP is not qualified to be giving feedback or that the feedback is being done inappropriately. Overall, the wide range of responses to the interview questions about the feedback preparation and delivery is an indication that the context of the encounter affects the feedback.

Even though there were a wide range of responses to the interview questions about preparing and delivering feedback, I noticed there were relatively few mentions of what it is like when trainees meet or exceed the performance criteria. This lack of focus on the trainees doing well indicates to me that the participants are more concerned with the challenges of providing critical or unfavorable feedback than complimentary feedback. Whether discussing aspects of the trainees' performance that they did or did not do well, delivering feedback requires significant communication skills. Specifically, skill is needed for making adjustments to the feedback based on the trainee reactions while it is happening, as is discussed in the next section.

Adjusting feedback. Adjusting feedback was mentioned by all but one participant. In addition to the fact that I had asked specific questions about adjusting feedback, prompting the participants to discuss it, they had a lot of comments about the topic. The type of adjustments

most frequently mentioned by participants were ones made during the delivery of feedback. SPs want the feedback to be received well and be used, so they are observing the trainees closely and making adjustments based on their observations of them.

The finding that the participants adjust their feedback based on the type of case, what they observe of the trainee during the encounter, and the interactive cues of the trainees during the feedback discussion indicates the SPs are flexible, agile, and highly skilled. If the case has a high emotional level, SPs make the transition less jarring by distracting themselves between the encounter and delivering the feedback so they can be ready for meeting with the trainee. If they think the trainee is anxious, they are gentler with their comments. An example of another type of adjustment was mentioned by Barbara, who said if she senses the trainee is not receptive to her feedback, she shortens her feedback to protect herself from additional negative reactions from the trainee.

The excerpts from the data that were the basis of this finding included one mention of trainees' cultural background. Chris referred to the trainees from different cultures and that there are a lot of different types of people. It seemed to me that he was suggesting SPs need to adapt their feedback depending on the trainees' expectations, including culturally based ones. Even though it would be ideal for the SPs to modify their feedback based on the expectations of individual trainees, the SPs meet many different trainees and do not have a chance to get to know them as individuals so they can only conjecture about what their preferences would be for feedback. The likelihood that their speculations may be incorrect, leads SPs to be conservative and follow the cultural context of the medical institution. Another consideration regarding adjusting feedback is that the trainees are currently working in the local culture and are expected to adapt to it. In addition to the idea of providing feedback that is culturally appropriate, it would

benefit the trainees to have feedback that meets their individual expectations and learning needs, no matter their cultural background. This is difficult to achieve as there is limited contact between the SPs and trainees, and thus there is a limited amount of information on which to base the potential adjustments.

The delivery of the feedback is a personal, dynamic, and multifaceted communication between the SP and the trainee. There is an inherent awkwardness with delivering feedback in the simulation setting since the SPs have such a short amount of time to interact with the trainees, and may be criticizing something the trainee thinks they do well. SPs base their feedback approach and content on what they ascertain about the trainee during the encounter. Their assessment could prove to be incorrect resulting in ineffective feedback, so SPs remain vigilant, weighing the pros and cons of their approach.

The situations in which SPs find themselves vary greatly; therefore, they are aware of the specific conditions of each activity so that they can adapt themselves to do what they need to do during and after the encounter to prepare their feedback. Examples of the variations are: the cases have varying degrees of emotional levels; the trainees' performances vary; there can be different numbers of trainees; and if there is a group, the trainees are accompanied by faculty. These variations make a difference to the SPs' feedback delivery, with the additional variation of the inherent diversity of the trainees who are the recipients of the feedback. The learning objectives for the activity and the performance criteria also impact the feedback, requiring the SPs to know the objectives and discern if a trainee is meeting the criteria.

It takes considerable amount of skill to communicate effectively when delivering the feedback since the SP is simultaneously engaging the trainee in conversation, being aware of how the feedback appears to be impacting the trainee, and making adjustments to the feedback. I

present more details about these processes in a later section concerning the complexity of the feedback process and the roles of the SPs.

Comparison of Feedback for First-year Medical Students and Residents

The final finding indicated that due to the differences between the formative simulations for the first-year medical students and for the residents—the trainee characteristics, types of cases, skills to be demonstrated, and number of trainees participating in an encounter—SPs conceptualize the feedback differently for these different groups of trainees. SPs are aware of these differences and make appropriate adjustments to their feedback to make it effective for each group.

The first-year students and the residents are at very different places in their training and have different learning objectives. The difference between the descriptors for these levels of trainees in the finding is an indication of the participants' view of them, which are based on their observations; therefore, they adjust their feedback based on these differences. As also mentioned in the finding, there are variations within each level of trainee, resulting in the SPs varying their feedback based on the individual trainee. Once again, this indicates SPs' versatility in their ability to prepare and delivery feedback.

There were some contrasts within the descriptors of the trainees, such as the residents "pretending to listen," and being "more expressive." These contrasting descriptions are due to basic differences between the residents with whom SPs work and the different encounters they do. One variation that can occur with the residents results from their physical state, particularly their level of tiredness; sometimes they attend SP activities right after working a long shift and they may not focus on the activity as well as is anticipated in the design.

I next discuss the finding about the goals stated by the participants for feedback for each group of trainees. The goals for first-year medical students are to be encouraging, have them feel confident, and for them to learn. Since students are newer to their training to be doctors, SPs find ways of being honest without being at odds with the learning goals, so the students will be receptive to the current and future SP feedback. If students have participated in the encounter as a group with a preceptor, SPs are aware of adjusting their feedback (a) to take into account that the preceptor and each peer provide feedback that does not need repeating, and (b) to be sensitive about exposing what might be seen as a student's deficits in front of their peers. When the preceptor and peers provide feedback, they cover some of the topics an SP would cover if the SP were the only one providing feedback.

The finding about goals for feedback for residents indicates there is the opportunity to have more complex and extended dialogues with them about their performance. This is a desirable dialogue for some SPs, who enjoy engaging the residents, and an unappealing one for other SPs, who prefer to keep feedback brief. Since there are differences between the abilities of first-year students and residents, and divergences in the types of encounters and learning objectives between these two groups—requiring different types of patient portrayals and types of feedback—there is a skill involved with understanding the differences and knowing how to adjust the portrayal and the feedback. SPs are aware of the level of the trainee and the learning objectives when they consider their feedback for individual trainees.

In this section I presented my discussion of the findings and my interpretations. In summary, the themes I found running through the findings were the individuality of the SP, the complexity of the tasks of preparing and delivering feedback, the impact of context of the

encounter on the feedback, and the skills needed for providing feedback. In the next section I present the grounded theory statement that ties the findings and my interpretations together.

Grounded Theory Statement

Based on the findings from the data I collected from the semi-structured interviews of 17 SPs, I constructed this interpretive substantive grounded theory statement: Preparing and delivering verbal feedback for formative simulated patient medical education activities are complex processes: (a) in which the SPs take on the roles of patient, evaluator, and educator; (b) that are influenced by factors associated with the activity, the SP, and the trainee; (c) which require the SPs to have a range of skills, learned informally via work and life experiences and/or formally via training; and (d) which SPs carry out, compelled by a desire to contribute to medical education. Examples of the factors referred to in the theory which influence the feedback processes are the emotional intensity of the case, the amount of experience of the SP, and the training level of the trainee. Later in this chapter I provide more examples of factors and details of the roles. I follow these examples with two graphical models representing the feedback process and aspects of the grounded theory.

Feedback Process Complexity, Roles of the SPs, and Skills Needed

As mentioned above, a primary concept that connects the findings together is the complexity of the process of preparing and delivering verbal feedback. The details of the steps involved with the formative activities for the medical trainees are described in Chapter 1, and are briefly summarized in this chapter. In this section, I expand upon the ground theory stated above by presenting the details of my theory of the SP roles and the tasks they carry out for each step of the feedback process. I then list factors connected with the SP, activity, and trainees that

influence the process. I end this section with the skills the SPs need to carry out the verbal feedback process.

When I began this study I thought of the tasks carried out by the SPs in regards to verbal feedback somewhat simplistically. I separated the feedback process into three major tasks: (a) portraying the patient, (b) observing the trainee, and (c) providing feedback to the trainees. Upon analyzing the data and reviewing the findings I was struck by the complexity of the process, the roles SPs take on, and the multiple tasks involved with each role. In addition, I became more aware of the variety of conditions that can occur and need to be considered since they significantly affect SPs as they carry out these tasks. I start by describing the different roles of the SPs and the trainees.

Roles

The general steps of the activity for the SP are (a) the encounter with the trainee, (b) feedback preparation usually separate from the trainee, and (c) feedback delivery with the trainee. As they proceed through the steps of the simulation, SPs take on three major roles: patient, evaluator, and educator. During the encounter SPs are visibly in the role of the patient, while simultaneously thinking as the evaluator. During this time the trainee is in the role of the clinician. When the encounter ends the SP transitions out of the patient role and becomes more actively the evaluator, keeping in mind their impressions of what it was like to have been the patient. While they are preparing the feedback for the trainee, the SP usually sits alone. During the delivery of the feedback with the trainee, the SPs are visibly in the role of the educator, speaking about what it was like to have been the patient; and the trainees are the learners, being coached with the intent of enhancing their skills. After the feedback session the SP goes back

into the role of the patient for the encounter with the next trainee. Figure 3 has a summary of these steps and the SP and the trainee roles associated with each step.

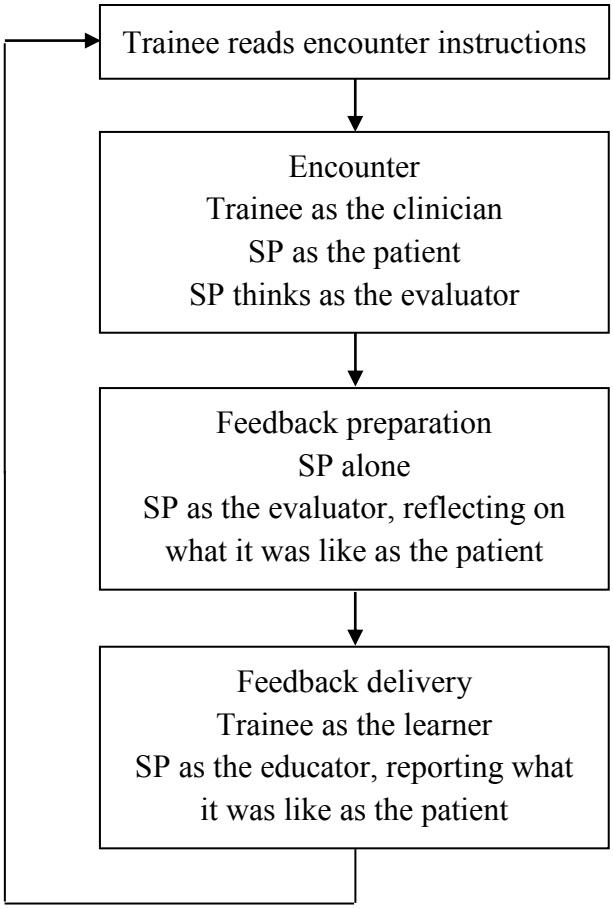


Figure 3. Formative activity steps and SP roles.

Patient Role. I now describe the details of the tasks for each role in which the SPs are involved, starting with the patient role the SP takes on during the encounter. In this role, the SP:

(a) portrays the physical and emotional aspects of the patient, and

(b) follows a proscribed combination of scripted information from memory and improvisation.

Evaluator Role. While the SP is in the role of the patient, they are concurrently evaluating the trainee in order to prepare their feedback. As the evaluator, the SP:

(a) observes the verbal and nonverbal actions of the trainee;

(b) observes their own emotional reactions both in their role as the patient and their personal response;

(c) discerns to what degree the reaction is personal or representative of the portrayed patient;

(d) ascertains to which trainee behaviors they are reacting so they can include this specific information in the feedback;

(e) compares their observations with the performance criteria established by the faculty; and

(f) remembers how well the trainee has successfully demonstrated the performance criteria and their specific behaviors associated with the criteria (since they are not able to take any notes during the encounter).

When the encounter ends, the SP and the trainee separate, and the SP continues in the role of the evaluator, keeping their reactions as the patient in mind, as they prepare feedback. The SP:

(a) reviews the learning objectives and the performance criteria;

(b) reflects on the trainee's performance during the encounter and chooses which items to include in the feedback;

(c) decides what to talk about, taking into account: their own comfort with delivering feedback, whether it is an individual or group of trainees, the trainees' educational level, their sense of the trainee as a learner, and the trainee's performance; and

(d) decides how to present the information to the trainee taking into account the information gathered during the encounter as mentioned above.

Educator Role. The next step is the face-to-face delivery of the feedback by the SP to the trainee. There are multiple tasks the SPs carry out while providing feedback to the trainee, some of which are carried out simultaneously. The SP:

(a) opens the feedback session;

(b) engages the trainee in the feedback;

(c) shares information about what it was like to be the patient, utilizing appropriate communication techniques to promote the trainee's adult learning;

(d) observes the trainee's verbal and nonverbal communications;

(e) reflects about the way to proceed with feedback;

(f) adjusts the feedback content and technique, if necessary; and

(g) brings the feedback session to a conclusion.

Even though I listed and described the roles of patient, evaluator, and educator as distinct roles with their associated tasks, there are aspects of each role that carry over into the other roles. In order to have a valuable learning situation for the trainees, SPs take on all three of these roles and do all of these tasks well and seamlessly, under many different conditions.

Contextual Conditions

Focusing on the SP as the agent carrying out a process, there are two types of contextual conditions that make a difference to the feedback process: one is the design of the activity and the other is the trainee. I list them separately to highlight the role the trainees play beyond being a consideration during the design of an activity. I called these two types contextual to differentiate them from the factors associated with the SPs themselves, which are discussed later.

Some of the factors itemized here were mentioned with the tasks listed above in the discussions about the different SP roles. In this section, I include these and additional ones that were mentioned by the participants to provide two complete lists of factors, starting with those relevant to the activities and following with factors about the trainees. The activity related factors include:

(a) appropriateness of the design to meet the learning objectives;

(b) degree of challenge of the learning objectives;

(c) clarity of the performance criteria;

(d) emotional level of the case;

(e) number of SPs participating in the encounter;

(f) number of parts to an encounter;

(g) amount of modification of SP appearance in general, and from one part of the encounter to another;

(h) preparation of feedback while alone or in presence of trainees;

(i) amount of time available to prepare the feedback; and

(j) amount of time available to deliver the feedback.

The trainee factors include:

(a) number of trainees participating in the encounter;

(b) educational level of the trainee;

(c) cultural background of trainee;

(d) how well trainees meet the performance criteria; and

(e) trainees' nonverbal and verbal reactions to feedback.

SP Conditions

The conditions of the SP which make a difference with the feedback process include:

(a) experiences with health, illness, and healthcare professionals;

(b) sufficiency of preparation for the encounter;

(c) understanding of the learning objectives and the performance criteria;

(d) sufficiency of preparation to provide feedback;

(e) physical and emotional state; and

(f) perception of the trainee's attitude.

Above, I itemized an extensive list of tasks the SPs take on for each role and the many factors that affect them while they are preparing and delivering the feedback. In order to carry out these tasks the SPs need a combination of many different skills, as described next.

Pertinent Skills

Interspersed in the interpretations of the findings earlier in this chapter, I mention the skills needed for SPs to prepare and deliver verbal feedback. In this section I draw upon these items and present the skills in connection with the different roles of the SPs. I start with the patient role, for which the SP portrays the physical and emotional aspects of the patient. If the patient they are portraying is significantly different than themselves they need at least rudimentary acting skills for low key cases, and possibly extensive dramatic abilities for the highly emotional cases. SPs need to learn and be able to recite the appropriate scripted answers to the questions posed by the trainees, and depending on the case, be able to improvise their answers. Understanding the objectives of the encounter allows the SP to know when to stay with the script, and when and how to improvise. Doing these tasks well requires concentration, awareness, improvisation, attention to detail, critical thinking, and stamina.

As the evaluator during the encounter, the SP assesses the trainee and therefore must understand the objectives and the performance criteria for the encounter. For performance criteria that do not involve an emotional aspect, such as the trainee explaining the diagnosis clearly, the SP observes the trainee's behavior and notes if the task was performed adequately as defined by the faculty. Tasks that have emotional components to them are more complicated. With such tasks, SPs need to observe their own reactions to the trainee's behavior, and be able to discern what behaviors trigger their reactions. They have to be able to separate their reactions based on their past personal experiences with medical personnel from the current situation. To do all of these tasks, the SP utilizes observation, memory, and recall skills.

In the educator role, the SP is communicating with the trainee: sharing what it was like for them to have been the patient, mentioning how the trainee did or did not meet the performance criteria, and exploring the trainee's thought processes. While engaging the trainee in the feedback, SPs are typically also observing the trainee's reactions and considering adjustments to the feedback. If there is time available during the feedback session, SPs can encourage the trainee to think about their communications with the patient, by asking the trainee questions that promote reflection. As the feedback session is coming to an end, and again, as time allows, the SPs can challenge the trainee's thinking by asking them to summarize what they learned from the feedback, providing the trainee with the opportunity to gain insight into their skills in interacting with patients. As the educator delivering the feedback, SPs need good observation and communication skills.

With all of the roles SPs take on, it is advantageous for them to have an understanding of basic adult learning models. The experiential learning opportunity they are providing for the trainees is based on the Lewinian Experiential Learning Model, made up of a cycle of (a)

concrete experience, (b) observations and reflections, (c) formation of abstract concepts and generalizations, and (d) testing implications of concepts in new situations (Kolb, 1984, p. 21). SPs are integral to the experience and reflection portions of the cycle. They should also be familiar with the assumptions upon which the andragogical model is based, which are applicable to this context: adults are self motivated, come to the activities with extensive experiences, are responsible for their own decisions, come ready to learn, learn best when the learning is task centered, and base their learning on a need to know (Knowles et al., 2005, p. 67).

Throughout the encounter and feedback SPs are carrying out tasks with the intention of promoting the trainees' learning. As the encounter unfolds, SPs frequently need to make decisions about their improvisational responses. Their choice of responses impact the direction the encounter goes, potentially making a difference in whether the learning opportunity comes to an end or continues to develop. The SPs' awareness and understanding of the learning objectives and adult learning models assist them in making those decisions.

In summary, while preparing the feedback, it takes a significant amount of skill to portray the physical and emotional aspects of a patient; carry out the conversation with the trainee as instructed; observe the trainee; observe one's own reactions; and remember the pertinent points—all while thinking about what to say for feedback and how to say it. For delivering the feedback it takes considerable amount of skill to communicate effectively; engage the trainee; be aware of how the feedback appears to be impacting the trainee; and make adjustments during the feedback session. Considering all of the roles just described, SPs use acting, concentration, awareness, attention to detail, observation, memorization, recollection, improvisation, critical thinking, communication, and teaching skills.

The SPs are adult learners who use previously acquired skills and learn new skills for this unique work. They each come to this work with a different skill sets. One way they have for improving their skills is by being reflective practitioners, as discussed next. SPs are in an unusual circumstance in that in addition to being adult learners themselves, they are taking on the role of instructor of adult learners without having the formal position of teacher, faculty, or instructor. They have quasi recognition as instructors.

The Reflective Practitioner

In addition to the SP providing an environment for the trainees to improve their professional skills via reflection during the feedback sessions, as I mentioned above the SPs themselves are adult learners and practitioners who hone their skills through reflection-in-action and reflection-on-action. These are terms used by Schön (1983, 1987) to refer to the reflection someone does while carrying out a process and after completing a process, respectively. He is a proponent of reflective practice and how it contributes to improving one's professional practices. Schön provides examples demonstrative of an instructor encouraging the reflection on the part of the trainee from the fields of architecture (1983, pp. 76-104) and psychotherapy (pp. 105-127).

The principals Schön describes are applicable to the field of SPs. Reflection-in-action is taking place when SPs are delivering the feedback since they are observing the trainee, seeing how well the feedback process is going, reflecting on it, and possibly making adjustments to what they say and how they say it. Some SPs reflect on their actions after each feedback session and after the activity has ended for the day. In addition, there are times when SPs' reflection is facilitated by SP program staff, such as when the staff checks with the SP to see how their feedback sessions went and what the SPs thought of the feedback they had given to trainees. Commonly there are in depth conversations between staff and SPs about particularly challenging

feedback conversations and ones that went particularly well. In this situation the SP is the adult learner and the staff is the mentoring faculty.

During the interviews, some of the participants told me about their reflective practices. One participant keeps a journal of his feedback experiences which he refers to periodically prior to a new work assignment. Even without the journal in front of him, he was able to recall these experiences with great clarity. Another participant wrote eight pages of notes about feedback and brought them with her to the interview. In addition, I had the opportunity to work with a third participant on an individual basis when I was managing the camera controls and announcements for an activity for which she was the only SP. I watched and listened to each encounter she did with residents biweekly for six months. I assisted her with preparing her feedback by taking notes of my observations, frequently jotting down verbatim portions of the resident's interview and significant nonverbal communications with the patient. After listening to her feedback sessions with the residents, we discussed how each one went. At another time, she and I watched videos of the encounters and feedback sessions and discussed her feedback. She was reflective about the feedback she had provided and gained new insights about herself and ways to make improvements.

Other evidence I have of the reflective practice that takes place is when I hear SPs talking with each other during and after an activity about their experiences with feedback. When given the opportunity to have someone assist them by watching and taking notes, many SPs are grateful to have the input of another person, and the opportunity for a discussion about the content and approach to take with their feedback.

Parallels between the SP/trainee and Doctor/patient Relationships

As I carried out this study, I became aware of the parallels between the expectations of how doctors are encouraged to communicate with their patients and SPs are encouraged to share their feedback with the trainees. When the trainee and the SP take part in the encounter and then do the feedback session, the relationships they have with each other are swapped or could be considered parallel roles. First the trainee carries out patient-centered care, for the purposes of meeting the healthcare needs of the patient as represented by the SP, and then the SP carries out learner-centered feedback for the purpose of the trainee's learning. During the encounter and during the feedback, trainee and SP, respectively, build rapport, agree on an agenda, customize their communication, encourage questions, empathize, are comprehensible, are informative, be supportive, summarize, and provide an appreciative closing. This list corresponds well with the essential elements of communication in medical encounters as established by 21 leaders and representatives from major medical education and professional organizations known as the Kalamazoo consensus statement and used as the basis of assessments at many medical schools (Makoul, 2001, pp. 393-393).

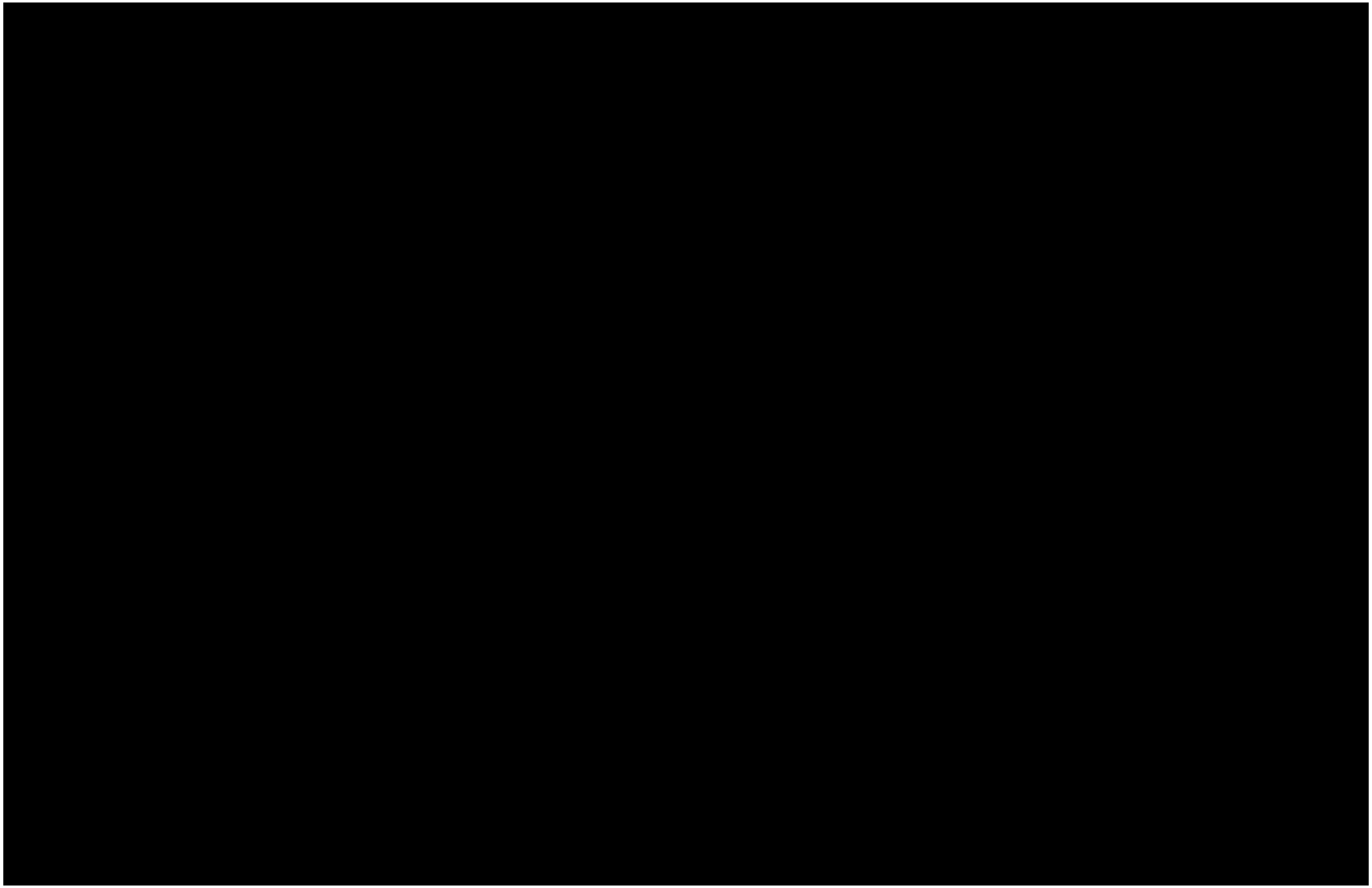
There is also a parallel with the power relationship that occurs between a patient and their doctor, and a trainee and their short term instructor, the SP. The SP is first in the role of the patient, typically with less status and power, and then shifts to being the instructor with the greater power. The trainee is making the opposite shift, from the knowledgeable and capable physician, to the learner whose performance is being evaluated. There is an inherent awkwardness in this shift of power relationships that the SPs and trainees need to finesse in order to create an environment that is conducive for learning. SPs proficient handling of the feedback is crucial to laying a good foundation for this environment.

Grounded Theory Summary

Earlier in the chapter I stated the substantive grounded theory. I repeat it below with a more extensive explanation, along with two theoretical models of the SP verbal feedback process: the first in a format incorporating elements of Glaser's (1978) "Six Cs: Causes, Contexts, Contingencies, Consequences, Covariances, and Conditions (p. 74)," and Strauss and Corbin's (2008) conditional matrix (pp. 87-95); and the second model with more of an emphasis on visualizing how the process unfolds for the SPs. Upon the conclusion of my data analysis and with consideration of my discussion of the findings, I constructed this interpretive substantive theory: Preparing and delivering verbal feedback for formative simulated patient medical education activities are complex processes: (a) in which the SPs take on the roles of patient, evaluator, and educator; (b) that are influenced by factors associated with the activity, the SP, and the trainee; (c) which require SPs to have a range of skills, learned informally via work and life experiences and/or formally via training; and (d) which SPs carry out, compelled by a desire to contribute to medical education.

Looking at the process of SPs preparing and delivering verbal feedback as a transactional system (Glaser, 1992, pp. 96-100; Strauss and Corbin, 1990, pp. 158-161), I developed two models. The first theoretical model is an overview of the feedback process and includes items associated with the influencing conditions, stages of SP feedback, the organizational context, SP strategies for feedback, actions and interactions, and the consequences of the process, as is shown in Figure 4. Due to space limitations, for the influencing conditions I selected the key factors that were previously listed in this chapter and summarized others.

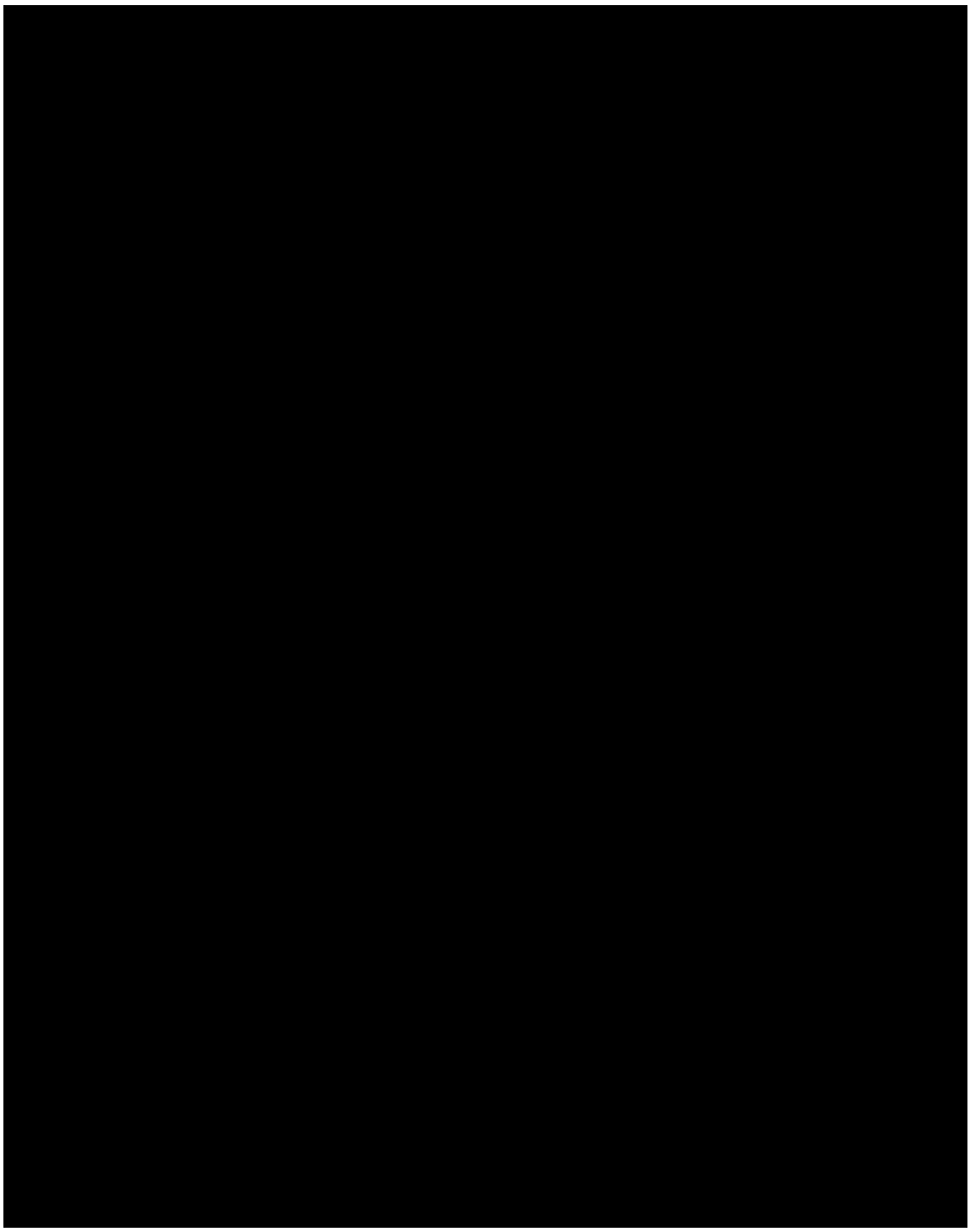
Figure 4. Grounded theory model of SP verbal feedback process overview



The second theoretical model I constructed is oriented to the perspective of the SP stepping through the different stages of the feedback preparation and delivery process. The stages—the encounter, preparation of the feedback, and delivery of the feedback—are shown in the rectangles. The tasks the SPs are engaged in during those stages, such as portraying the emotional and physical aspects of patients, are shown in the ovals. I intentionally overlapped the ovals to represent the simultaneity of these tasks. The conditional factors associated with the activity, SPs, and trainees are listed in their own set of directional boxes. The placement of these conditions is not specific as many of the conditions affect multiple stages. Even though SPs reflect throughout the process, I placed this stage after the feedback session for diagrammatic purposes. The SPs go through the verbal feedback process with one trainee or a group of trainees, and then frequently follow it with additional rounds as indicated by the arrows leading from the bottom of the diagram back to the top.

These two models are a diagrammatical way of representing the data and provide a summary of the data analysis results. I expect they will assist readers in understanding the ideas presented in this chapter.

Figure 5. Grounded theory model of SP verbal feedback process stages



Comparisons of Findings and Theories with the Literature

Since the first paper about the concept of SPs was published by Barrows and Abrahamson (1964) using the terminology "programmed patient," over 2600 papers have been published about working with SPs for providing instruction and assessment in the field of medical education. As mentioned in the literature review chapter, even though this extensive body of research and writing exists, there are few published studies about the SPs in general, and even fewer specifically about their experiences with preparing and delivering verbal feedback for medical trainees. In this section I refer to the studies and one text that relate to the findings and my interpretation of the findings.

My research indicated that SPs are motivated to do this work for many reasons, the most common of which is to contribute to medical education. The other reasons are providing a service, engaging in their own lifelong learning, using their acting skills, earning money, and enjoying the social aspects of the work. A study by Bokken et al. (2004) indicated feeling useful was the response provided by the greatest number of SP respondents (p. 38). This was in contrast with a study by McNaughton, Tiberius, and Hodges (1999) that found the most frequently mentioned motivation for working as an SP was for the money. Both of these motivations are ones included in my finding (p. 138).

I theorized that SPs want to do the feedback well as a direct way to contribute to medical education and improving healthcare for patients. This theory was supported by a study conducted by Nestel et al. (2010) which reported that SPs feel valued in their support of the trainees' learning and they would like to have more opportunities to provide feedback. The researchers stated that SPs had identified that precise and inspiring feedback was critical to their role as SPs (p. 165).

My findings showed that SPs learn how to do verbal feedback for medical trainees through formal training provided by SP programs, their work experiences, and their personal lives; and that they improve their skills by practicing and by observing other SPs. The only mention of SPs learning how to do feedback in the literature is via training provided by SP programs (Bokken et al., 2009; Bokken, van Dalen, et al., 2010; Dayer Berenson et al., 2012; Fisher, 2006; Howley, 2007; May, 2006; Nestel et al., 2010; Nestel et al., 2011; Souder, 2009). Studies neither concurred nor disagreed with my finding that SPs learned feedback skills from other occupations or life experiences since there were no discussions of this means of skill building for the SPs.

One of my findings was that SPs found the transition from being the patient to providing feedback was hard with emotionally challenging cases and easy with routine cases. Even though there was no specific mention of that transition in other studies, a study by McNaughton et al. (1999) referred to the challenges for SPs of portraying emotionally stressful psychiatric roles. These researchers found that the SPs who portrayed highly affective psychiatric patients had mostly negative effects, many of which continued beyond the day of the activity. Referencing back to the motivation mentioned in the previous section, in spite of these consequences the SPs were motivated to continue playing these roles by their sense of making a valuable contribution to medical education, and hence to society (pp. 139-140).

Similar data were collected by Bokken et al. (2004) and Bokken, van Dalen and Rethans (2004; 2006). With the first of these two studies, even though the SPs indicated they found the activities with the students to be instructive and enjoyable, they also experienced stress symptoms associated with the work. The stress was not always contributable to the emotionally and psychologically demanding roles since only a few of the participants who reported stress

symptoms had performed such roles. The SPs in this study worked on an ongoing basis, suggesting that the benefits of their sense of value outweighed the negative aspects of the work (Bokken et al., 2004, pp. 1089-1093). With the second study, the negative effects of performing—exhaustion, dissatisfaction with the performance, physical complaints due to the performance, and continuing to feel or act like the character in the patient role—did not decrease the SPs' enjoyment of their work (Bokken et al., 2006, p. 785).

In the interpretations of the findings section, I listed the multiple tasks SPs do for preparing feedback while they are in the role of the patient and as the evaluator, and the challenge of doing them well. While they are in the role of the patient, SPs provide a realistic simulation of a patient encounter and they gather the information they need for preparing and delivering the feedback. This set of complex process requires the SPs to be carrying out multiple simultaneous tasks. A study by Newlin-Canzone et al. (2013) of the cognitive demands on SPs, concurred that these tasks are required of the SPs and that it is challenging for them to accomplish these tasks. The researchers determined that SPs failed to detect at least half of the trainee's nonverbal behavior when they were only watching encounters, nearly 75% when they were in the role of the patient, and even more when they were in a role for which they were required to improvise their responses. Examples of the nonverbal behavior they missed were the subtle eye movements, such as the trainees' excessive eye blinking, raising eyebrows, and crossing their arms (pp. 210-212). Even though, as Newlin-Canzone et al. speculated, SPs may still gain an overall impression of the interaction and not need to have noticed these details (p. 213), it is helpful for the trainee to hear the specifics during feedback about their behaviors and the effect of these behaviors on the SPs (Archer, 2010, pp. 105-106; Bienstock et al., 2007, p.

510; Bokken et al., 2009, p. 205; Bokken, van Dalen, et al., 2010, p. 316; Dayer Berenson et al., 2012, p. e30; Fisher, 2006; Howley, 2007, pp. 40-41; May, 2006; Nestel et al., 2010, p. 166).

In comparing the results of this study of SPs with one they carried out with undergraduates observing nonverbal behaviors during job interviews, Newlin-Canzone et al. (2013) found that the amount of experience with a task makes a difference in one's ability to be aware of these behaviors while involved in a conversation including improvisation (p. 212). Even though the recognition of trainees behavior is just one part of the process of preparing feedback, this substantiates my statement that there is a skill involved with these observations that improves with experience.

Archer (2010) writes about the protocol I mentioned in the findings called the psychological sandwich, for which critical feedback is "sandwiched" between positive comments. He substantiates my theory that there is value in the use of the "feedback sandwich" since it provides personal preservation shielding both recipient and provider by balancing or avoiding perceived injustice. He suggests that this tool should be used selectively (p. 105).

The other protocol I had noted in the findings was mentioned by Pascucci et al. (2014) who suggest the use of ''When you said ...., *I* felt ....'' to emphasize that the SP should speak in the first person, rather than referring to how the patient felt (p. 124). They indicate that it grounds the conversation between the trainee and the patient; however, they did not indicate if this is to be used consistently with that exact wording or if variations are satisfactory, as indicated in my finding that participants suggested the varying feedback wording increases trainee engagement.

Even though Archer (2010) was not writing specifically about SP feedback, he is in agreement that feedback is complex and contextual, and the application of the good practice

frameworks found in the literature need to take into account the focus and format of the encounter (p. 105). The only variation I found mentioned regarding the trainee was by Archer who wrote that high-achieving recipients undertaking complex tasks may benefit from delayed feedback (p. 103). Other than this one author, I have not seen any documentation in the SP feedback recommendations or training instructions about adjusting the feedback techniques based on the trainee or the case (Dayer Berenson et al., 2012; Fisher, 2006; Howley, 2007; May, 2006). It appears to me the authors of the recommendations and instructions are indicating their feedback techniques should be followed for all activities and for all types of trainees. The feedback principles and instructions they provide seem to be thorough and learner-centered, and are general enough to cover a variety of situations.

There was a lack of any specific references to the difference between feedback to early medical students and more advanced clinicians. In general studies about feedback focused on one set of trainees (Bokken, Rethans et al., 2010; Bramstedt et al., 2012; Clever et al., 2011) or if there was a range of different levels, did not differentiate any of the parameters in relation to the level of the trainee (Bokken, van Dalen, et al., 2010, p. 316; Pascucci et al., 2014).

Based on the findings, I established that there are three roles the SPs perform: patient, evaluator, and educator. Even though they did not use the same terminology, Newlin-Canzone et al. (2013) and Wallace (2007, pp. 11-13) concur with the different roles and tasks I described. They referred to the three roles as portraying the patient and observing the trainee; assessing the trainee; and providing feedback (Newlin-Canzone et al., 2013, p. 207; Wallace, 2007, pp. 11-13).

The approach used by Pascucci et al. (2014) highlights the idea of the SP having a role as an educator (p. 124). They leverage Vygotsky's (1978) concept of the ''zone of proximal development" (pp. 179-180), encouraging learning by participation in active problem solving

followed by a discussion and reflection with peers and facilitators. In reference to the importance of SPs having an understanding of basic adult learning and adult development principles, I stated that the SPs' choice of responses during the encounter impacts the direction it will go, potentially making a difference in whether the learning opportunity comes to an end or continues to develop. Pascucci et al. (2014) concur with my statement, as shown by their declaration that SPs are coached to portray their characters with a degree of realism, complexity, and intensity that keeps participants on the edge of their learning curve (p. 124).

I listed conditions of the individual SPs that impact the feedback process collected from the data. Two of which were their physical and emotional state, and their perception of the trainee's attitude. Even though these studies were not specifically about the effects on the feedback portion of the exercise, the authors describe the physical and emotional challenges of being an SP, and mention the trainees' attitudes toward the patient as a condition that effects SPs (Boerjan et al., 2008; Bokken et al., 2006), substantiating these two conditions.

I next discuss the pertinent skills I determined were needed to carry out the feedback process with the SPs in the three different roles and the related references in the literature. I had noted portraying the patient requires concentration, awareness, improvisation, attention to detail, critical thinking, and stamina. Wallace (2007) essentially agrees and goes into more detail by specifying that SPs must learn the case facts and be able to give an accurate verbal history—knowing when to say items and how much information to reveal. She continues with specifying that the SP must realistically depict the patient's educational level, psychological state, emotional condition, and any abnormal physical findings (pp. 11-12).

I stated that to do the tasks of the evaluator, the SP utilizes observation, memory, and recall skills. Wallace (2007) concurs, noting that while the SP is performing the case and

interacting with the trainee, they need to precisely observe the trainee's performance. She cautions that the SP cannot get so involved with the role that they are not simultaneously observing the details of the trainee's performance. Wallace continues by detailing that the SPs need to be able to recall the encounter and complete the evaluation of the trainee (p. 12). As previously referenced, Newlin-Canzone et al. (2013) indicate that the cognitive demands of the various roles inhibit complete observation of the behavior of the trainee. One of their participants described using a task switching strategy, during which she routinely switches her mental focus between observing the trainee and portraying the case. She mentally notes the different points throughout the encounter that correlate with the performance criteria (p. 211).

Another reference to what is required of an SP in the evaluator role was found in a study which mentioned SPs needing to be conscious of assessing the trainee while they are in the role of the patient (Bokken et al., 2006, p. 784). In this study the SPs said they often thought on a dual level during encounters when they had to give feedback. While they were concentrating on the patient role, they also had to monitor the trainee's reactions in order to be able to give good feedback (p. 784).

I stated that in the educator role, SPs need good observation and communication skills to deliver the feedback. Wallace (2007) states that the SP needs to take what they have observed and be able to give thoughtful, beneficial, and effective feedback from the patient's point of view (p. 13). The studies that made global statements about the skills required, agreed with the ones I proposed. Newlin-Canzone et al. (2013) said that doing the tasks well requires concentration, awareness, attention to detail, and stamina. Nestel et al. (2010) reported that the SPs in their study acknowledged the skills for acting, observation, and teaching are necessary for the various roles they fulfill (p. 165).

I referred to the SPs as reflective practitioners. Howley et al. (2007) included in the design of their workshop reflection exercises for SPs during which they were asked to consider their ability to provide quality constructive feedback (pp. 7, 15). The workshop consists of a four step process: (a) reflect, (b) refine, (c) further develop, and (d) practice. This is similar to the Lewinian Experiential Learning Model, made up of a cycle of (a) concrete experience, (b) observations and reflections, (c) formation of abstract concepts and generalizations, and (d) testing implications of concepts in new situations (Kolb, 1984, p. 21), I mentioned previously in the section about adult learning models I suggested the SPs know. The learning model, and particularly the reflection step, applies to the learning that takes place for the SPs as they develop the skills needed to be an SP (Pascucci et al., 2014, p. 123). As a result of their study, Nestel et al (2010) developed a list of 26 expectations and responsibilities of SPs for teaching sessions, indicating that the work is challenging and requires skillful SPs (p. 165).

The significance of the individuality of the SPs that I discussed has not specifically been studied by others. The only reports about the SPs are from those studies that collected demographic data of the SPs, such the one published by Abe et al. (2011) which reported the average age, age range, gender, years of experience as an SP, and work background of the SPs in the programs that completed the research survey (p. 262). Similar to the lack of information about the individuality of SPs, I was not able to find published studies about other findings and interpretations, except for the topics I covered above. As I mentioned in the literature review, this is a fairly young field with a need for additional research studies about SP verbal feedback.

Implications and Recommendations

The individuality of the SPs, the complexity of the feedback process, and the uniqueness of each activity are the key aspects of the theories stated above that inform the implications and

recommendations I list in this section. I now focus on implications and recommendations impacting five essential elements of managing an SP program: (a) recruitment and retention; (b) selection of SPs for specific activities; (c) feedback protocols; (d) SP training; and (e) medical education simulation activity design.

Recruitment and Retention of SPs

I determined from this study that the process of providing verbal feedback to medical trainees is a set of complex tasks, leading me to exploring implications for recruitment for SP positions. First, I present a few issues concerning recruiting people of different ages, people with feedback experience, and people with SP experience. Regarding age, due to the nature of the work and the need to meet the demographic descriptions required for particular cases, SPs of a wide range of ages are required. Depending on their life experiences, younger people might have fewer experiences to ground their thought processes to base their feedback upon and they might have had less experience with giving feedback. On the other hand, older people may be more set on how they think feedback should be done.

Regarding having experience with feedback in general, or specifically as an SP, it can be advantageous for a program to hire individuals with work and life experiences with providing feedback, in that they are familiar with the concepts; however, they may come with their own preferences of how to provide feedback that may be in conflict with the program's preferences. If there are other local SP programs, then people already working as SPs can be a good source for recruitment, as long as they are amenable to following the procedures preferred by the hiring program.

Since program staff has to make decisions about hiring someone based on the limited information available—typically a resume and an audition interview—it is often difficult to

accurately access an applicant's abilities and how they will perform during an activity. It is helpful to know about their work experience and their communication skills, as these can indicate if they already have the skills needed for providing feedback or their potential for learning them.

Since people may have a wide range of motivations, it is important to verify that their motivations do not conflict with the objectives of the program. Good candidates are people who have a longstanding practice of self awareness, and are willing to hear constructive criticism and make adaptations to meet the needs of the program. Candidates with a strong sense of empathy will be able to focus on the trainees' learning and the learning objectives determined by the faculty. The kind of experiences candidates have had with healthcare providers is an important aspect of their history to explore. If they only focus on the difficult experiences or they want to fix doctors—that is an indication that they might not have the requisite flexibility. Pascucci et al. (2014) has a list of qualifications they check during their auditions to evaluate candidates, many of which coincide with the above mentioned qualifications and criteria.

When SPs portray cases for which they are to some degree representing themselves, a diverse pool of SPs brings a richness to the feedback for trainees of all educational levels, exposing them to a variety of perspectives; therefore, it is beneficial to trainees for programs to hire people from a wide range of backgrounds.

In regards to retention, since any individual SP may have a variety of different motivations and those motivations might evolve, staff should have ongoing communications with high contributing employees to discuss which work opportunities meet their preferences. If their motivations shift, then the activities the SP is asked to do should also shift to maintain their

interest. In summary, SPs' individuality should be considered to align their satisfaction and their contribution to the program.

Selection of SPs for Activities

Since each activity is unique, including the intensity of the emotional demands, the time available for preparing feedback, and the types of performance criteria, and since SPs have different skill levels with providing verbal feedback, it is important to select SPs for an activity that will work well for a particular activity. Due to the challenges associated with the more emotional cases, SPs who are more experienced and capable with providing feedback should be selected for such cases. Less experienced SPs can start with activities that are less demanding and be paired with a more experienced SP, if possible. When paired, the more experienced SP can assist the newer SP with preparing their feedback and, if necessary, can be the primary person delivering the feedback, providing a live demonstration. If SPs have not demonstrated they can effectively provide verbal feedback and there are not opportunities to pair them, they should not be selected for formative activities.

Feedback Protocols

Since SPs have different impressions of how well the feedback protocols work for them and the trainees and there are different ways to deliver feedback that are effective, programs should allow more experienced SPs some flexibility in how they handle their feedback, as long as the underlying principles of good practice are followed. I think of the feedback protocols as a set of tools, and SPs need to be familiar with the activity and their abilities, and select the right tool for the situation. Each program needs to determine which protocols work well for their activities. As there are trainees from various cultures, it is good to have protocols that take into

the account these cultures and to assist the trainees in adapting to the cultures they are expected to work within.

SP Training

There is a diversity among SPs regarding their ages, educational backgrounds, work and life experiences, cultures, and amount and type of experience working as an SP and there are many different ways in which SPs gain the skills for providing feedback. SP programs need to provide feedback training that is appropriate for their SPs and take into account what they know about feedback. The staff should work with the SPs being trained to adjust their feedback to fit the context of working with medical trainees and the specific activity. Since SPs learn feedback in different ways, in addition to offering feedback training workshops, I recommend staff work with SPs on a one-to-one basis, and set up opportunities for SPs to observe other SPs, either by being partnered with them for an encounter, via monitoring stations, or by viewing videos. SPs' awareness of their emotions is an important component of providing feedback; therefore, emotional awareness should be included in SP feedback training. In addition, the basics of adult learning principles previously mentioned should be included in feedback training sessions or with training for specific activities.

I now address some activities that can be designed into trainings for specific activities that provide SPs with the information they need for providing feedback. First, SP training sessions for each activity should include the learning objectives and the performance criteria, with clear instructions about how to discern if the criteria are being met. Second, SPs need to be given information about the trainees and how to orient their feedback to that group of trainees. Third, details about the appropriate feedback and practice time should be provided.

In order to ease the transition from patient to educator, SPs need a method that works for them as an individual and for the specific encounter they are doing. I recommend instructing SPs to keep in mind their educator role when they are the patient, since it will inform how deeply they entrench themselves in the role of the patient. The more experience they have in general as an SP and the more familiar they are with the specific patient they are portraying, the easier the transition is for them because they can put less effort into the cognitive thought process of the portrayal and can be thinking more as the educator. No matter what, the SPs must carry out the patient portrayal since it is happening live with the trainees; however important it is, the educator role might be neglected or at least fall to a secondary focus.

As a final issue about this important and broad topic of training SPs to provide verbal feedback, I recommend that programs have tools for assessing and documenting SPs' level of skill with providing feedback just as they are evaluated for their portrayal, accuracy of following the script, and level of improvisation. In order to do this, programs need to have definable criteria for evaluating the way SPs communicate feedback. There should be a policy for how frequently to evaluate the SPs and to give them feedback about their feedback. As long as the process is well established and understood by all involved, SPs can observe, evaluate, and provide feedback for each other.

Medical Education Simulation Activity Design

The design of the activity is fundamental to how well every aspect runs—including the feedback. A critical aspect of the design is selecting the timing of the different segments: the trainee briefing, encounter, feedback preparation, and feedback delivery. Faculty usually provide information for briefing the trainees and determine the length of the encounter. I recommend that the learning objectives be expressed clearly so they straightforwardly inform the

content of, and amount of time for the feedback. I suggest that the SP instructions for each activity have a guide indicating the feedback topics to cover and the type of techniques preferred, and that this guide be made into a worksheet for the SPs to use in formulating their feedback. Decisions about the number of encounters one SP will do sequentially and for the day, need to be made keeping the quality of the portrayal and the feedback in mind. I recommend considering the demands of the activity on the SPs, including the level of emotion, when making this decision. When possible, schedule additional SPs to assist others, by taking notes and helping with the formulation of the feedback.

Sufficient time should be allowed for SPs to prepare their feedback and for the transitions between groups of trainees. When running an activity for the first time, I recommend building in extra time for making unexpected last minute adjustments to the schedule. Another I recommendation I have for initial runs of an activity is scheduling a debriefing for the SPs to discuss what went well and what interfered with meeting the learning objectives. In conclusion, the full list of recommendations presented here is quite extensive and each program needs to determine their own priorities as they consider each recommendation.

Suggestions for Future Research

I was readily drawn into exploring many aspects of the data and I was frequently attracted to exploring the multiple nuances that came to light. In order to move forward I refined the focus of the analysis and held forth the possibility of exploring these other ideas in the future. My ideas for future research are listed here.

1. Study how the conversations held during the interviews are indicative of how the SPs communicate during feedback.
2. Observe SPs preparing and giving feedback to learn more about the dynamics.

3. Investigate how people sense their emotions and connect them to behavioral triggers.
4. Explore what the trainees find effective with SP feedback. I started this exploration with a study documenting student post encounter reflections about their performance and what they wanted to discuss during feedback; followed by a second reflection about the feedback at the conclusion of the feedback session.
5. Explore what school of medicine faculty think about the SP feedback.
6. Study the impact of the SPs being actors on their feedback skills and on the design of feedback training.
7. Explore the impact of previous personal experiences with illness and healthcare providers on the SPs' feedback.
8. Explore the relationship of SPs' other roles within SP programs, such as being genitourinary teaching associates and physical examination teaching associates, with their skills in, and comfort with providing feedback.
9. In formal and informal settings, explore what SPs think about the specifics of verbal feedback training and how it could be improved.
10. Study what needs to be taken into consideration with feedback for interprofessional education activities, where groups of trainees from different disciplines—such as nursing, pharmacy, social work, and medicine—participate in encounters together.
11. Explore the brain functions required for, and the associated limitations of simultaneously portraying a patient, feeling emotions, observing trainees, discerning behavior triggers of the emotions, and preparing feedback.

Strengths and Limitations of the Study

A significant strength of this study was the diversity of the participants in regards to gender, racial and cultural background, age, experience as an SP, experience providing feedback, work and life experiences, educational levels, and the type of formative activities with trainees. Sixty-five percent of the participants are women; the participants are of Caucasian, African American, Asian, Caribbean/African, and African American/Filipino backgrounds; the participants' ages range from 25-71; they have worked as SPs at the research location for a range one to 16 years; they have experience in many other occupations including social work and radio broadcasting; and they have a range of one to eight years of formal education beyond high school. The participants are representative of the program's population of SPs at the time of the study. Another strength of this study was the breadth of the interview questions, and the use of semi-structured interviews, which allowed the participants to discuss items that were of importance to them about the central topic.

Both a strength and limitation of the study was that I am the participants' supervisor. As their supervisor, the SP could talk about very specific and technical topics, assured that I would understand the terminology and significance of their references. My supervisory role may have been a limitation in that the participants might have said things to increase my sense of their value and they may have minimized criticisms of the program. Another limitation relates to the procedural errors of a novice researcher. A few of the early interviews had more of a discussion format including my injecting thoughts and comments, likely influencing what the participants were saying. When I realized this interfered with the data collection, I adjusted my interview approach. Overall, the research had a strong foundation in the grounded theory approach.

Summary

I carried out this study to explore the experiences of simulated patients (SPs) with the process of providing verbal feedback for first-year medical students and residents during formative simulation activities. Using a grounded theory approach, I analyzed the data from semi-structured interviews with 17 SPs. I examined what participants said about their motivations for working as an SP; how they gained feedback skills; transitioning from the patient role to providing feedback; preparing and delivering feedback; and similarities and difference of feedback for first-year medical students and residents.

Based on the analysis of the data, I constructed a substantive theory: Preparing and delivering verbal feedback for formative simulated patient medical education activities are complex processes: (a) in which the SPs take on the roles of patient, evaluator, and educator; (b) that are influenced by factors associated with the activity, the SP, and the trainee; (c) which require SPs to have a range of skills, learned informally via work and life experiences and/or formally via training; and (d) which SPs carry out, compelled by a desire to contribute to medical education. The theoretical models I presented provide graphical representations of the feedback process. I stated implications and recommendations regarding hiring and training SPs, verbal feedback training, feedback protocols, and the design of formative medical education simulations with SPs.

It was valuable for me to carry out this study, as the SP point of view provided me with insights into the details of the processes of preparing and delivering verbal feedback. SPs take on the work to contribute to medical education and it is helpful to me to understand how to improve the activities, training, and selection of SPs so the trainees receive valuable feedback to improve their communication and interpersonal skills as medical practitioners.

References

Abe, K., Roter, D., Erby, L. H., & Ban, N. (2011). A nationwide survey of standardized patients: Who they are, what they do, and how they experience their work. *Patient Education and Counseling, 84*(2), 261-264. doi:10.1016/j.pec.2010.07.017

Accreditation Council for Graduate Medical Education. (2013). ACGME data resource book, Academic year 2012-2013.

Accreditation Council for Graduate Medical Education. (2013). ACGME, Common program requirements.

American Association of Medical Colleges. (2010). Table 31: Total enrollment by U.S. medical school and race and ethnicity, 2010.

Aper, L., Reniers, J., Koole, S., Valcke, M., & Derese, A. (2012). Impact of three alternative consultation training formats on self-efficacy and consultation skills of medical students. *Medical Teacher, 34*(7), e500-e507. doi:10.3109/0142159X.2012.668627

Archer, J. C. (2010). State of the science in health professional education: effective feedback. *Medical Education, 44*(1), 101-108. doi:10.1111/j.1365-2923.2009.03546.x

Barrows, H. S. (1993). An overview of the uses of standardized patients for teaching and evaluating clinical skills. *Academic Medicine, 68*(6), 443-451.

Barrows, H. S., & Abrahamson, S. (1964). The programmed patient: A technique for appraising student performance in clinical neurology. *Journal of Medical Education, 39*(8), 802-805.

Bazeley, P. (2007). *Qualitative data analysis with NVivo* (2nd ed.). Los Angeles CA: Sage.

Bienstock, J. L., Katz, N. T., Cox, S. M., Hueppchen, N., Erickson, S., & Puscheck, E. E. (2007). To the point: Medical education reviews—providing feedback. *American Journal of Obstetrics and Gynecology, 196*(6), 508-513. doi:10.1016/j.ajog.2006.08.021

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. Los Angeles, CA: Sage.

Boehler, M. L., Rogers, D. A., Schwind, C. J., Mayforth, R., Quin, J., Williams, R. G., & Dunnington, G. (2006). An investigation of medical student reactions to feedback: A randomised controlled trial. *Medical Education, 40*, 746–749. doi:10.1111/j.1365-2929.2006.02503.x

Boerjan, M., Boone, F., Anthierens, S., van Weel-Baumgarten, E., & Deveugele, M. (2008). The impact of repeated simulation on health and healthcare perceptions of SPs. *Patient Education and Counseling, 73*, 22–27. doi:10.1016/j.pec.2008.05.028

Bokken, L., Linssen, T., Scherpbier, A., van der Vleuten, C., & Rethans, J.-J. (2009). Feedback by simulated patients in undergraduate medical education: A systematic review of the literature. *Medical Education, 43*(3), 202-210.

Bokken, L., Rethans, J.-J., Jöbsis, Q., Duvivier, R., Scherpbier, A., & van Der Vleuten, C. (2010). Instructiveness of real patients and simulated patients in undergraduate medical education: A randomized experiment. *Academic Medicine, 85*(1), 148-154.

Bokken, L., van Dalen, J., & Rethans, J.-J. (2004). Performance-related stress symptoms in simulated patients. *Medical Education, 38*, 1089–1094. doi:10.1111/j.1365-2929.2004.01958.x

Bokken, L., Van Dalen, J., & Rethans, J.-J. (2006). The impact of simulation on people who act as simulated patients: A focus group study. *Medical Education, 40*(8), 781-786. doi:10.1111/j.1365-2929.2006.02529.x

Bokken, L., van Dalen, J., & Rethans, J.-J. (2010). The case of "Miss Jacobs": Adolescent simulated patients and the quality of their role playing, feedback, and personal impact. *Simulation in Healthcare, 5*(6), 315-319. doi:10.1097/SIH.0b013e3181ddcd71

Bosek, M. S., Li, S., & Hicks, F. D. (2007). Working with standardized patients: a primer. *International Journal of Nursing Education Scholarship, 4*(1), 13p.

Boulet, J. R., & Errichetti, A. (2008). Training and assessment with standardized patients. In R. H. Riley (Ed.), *Manual of simulation in healthcare* (pp. 181-197). Oxford, England: Oxford University Press.

Bramstedt, K. A., Moolla, A., & Rehfield, P. L. (2012). Use of standardized patients to teach medical students about living organ donation. *Progress in Transplantation, 22*(1), 86-90. doi:10.7182/pit2012172

Branch, W. T., Jr., & Paranjape, A. (2002). Feedback and reflection: Teaching methods for clinical settings. *Academic Medicine, 77*(12), 1185–1188.

Bringer, J. D., Johnston, L. H., & Brackenridge, C. H. (2006). Using computer-assisted qualitative data analysis software to develop a grounded theory project. *Field Methods, 18*(3), 245-266. doi:10.1177/1525822X06287602

Brookfield, S. D. (2011). *Teaching for critical thinking: Tools and techniques to help students question their assumptions*. San Francisco, CA: Jossey-Boss.

Bryant, A., & Charmaz, K. (2007). *The Sage handbook of grounded theory*. Los Angeles, CA: Sage.

Charmaz, K. (2006). *Constructing grounded theory: a practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.

Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 155-170). New York, NY: Guilford.

Cilliers, F. J., Schuwirth, L. W. T., Herman, N., Adendorff, H. J., & van der Vleuten, C. P. M. (2011). A model of the pre-assessment learning effects of summative assessment in

medical education. *Advances in Health Sciences Education, 17*(1), 39-53. doi:10.1007/s10459-011-9292-5

Clever, S., Dudas, R., Solomon, B., Yeh, H. C., Levine, D., Bertram, A., . . . Cofrancesco, J. (2011). Medical student and faculty perceptions of volunteer outpatients versus simulated patients in communication skills training. *Academic Medicine, 86*(11), 1437-1442. doi:10.1097/ACM.0b013e3182305bc0

Cocklin, B. (1996). Applying qualitative research to adult education: Reflections upon analytic processes. *Studies in the Education of Adults, 28*, 88-116.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education.

Cushing, A., Abbott, S., Lothian, D., Hall, A., & Westwood, O. (2011). Peer feedback as an aid to learning - What do we want? Feedback. When do we want it? Now! *Medical Teacher, 33*(2), e105-e112.

Daiker, B. L. (2011). *Adaptive challenges in medical practices: A grounded theory study of leadership* (PhD). Capella University, Ann Arbor, MI. (UMI No. 3443314)

Dayer Berenson, L., Goodill, S. W., & Wenger, S. (2012). Standardized patient feedback: Making it work across disciplines. *Journal of Allied Health, 41*(1), e27-e31.

Dong, S., Butow, P. N., Costa, D. S. J., Dhillon, H. M., & Shields, C. G. (2014). The influence of patient-centered communication during radiotherapy education sessions on post-consultation patient outcomes. *Patient Education and Counseling, 95*(3), 305-312. doi:10.1016/j.pec.2014.02.008

Duffy, F. D., Gordon, G. H., Whelan, G., Cole-Kelly, K., & Frankel, R. (2004). Assessing competence in communication and interpersonal skills: The Kalamazoo II report. *Academic Medicine, 79*(6), 495-507.

Dunne, C. (2011). The place of the literature review in grounded theory research. *International Journal of Social Research Methodology, 14*(2), 111-124. doi:10.1080/13645579.2010.494930

Eaton, I., & Truong, V. (2012). *Let me debrief you*. Video. A Simulation Studio Production.

Edwards, R. C. (2011). *A grounded theory of patient medication noncompliance in men diagnosed with hypertension* (PhD). Walden University

Ekins, R. (1997). *Male femaling: A grounded theory approach to cross-dressing and sex-changing*. London: Routledge.

Errichetti, A. (2010, January). *Learner initiated debriefing* [PowerPoint slides]. Paper presented at the annual conference of the International Meeting of Simulation in Healthcare, Phoenix, AZ. Acquired from the author.

Fisher, D. (2006). Windix training manual for standardized patients: How to give effective feedback: MedEdPORTAL. Retrieved from: www.mededportal.org/publication/172

Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs. forcing*. Mill Valley, CA: Sociology.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam.

Haghparast-Bidgoli, H., Hasselberg, M., Khankeh, H., Khorasani-Zavareh, D., & Johansson, E. (2010). Barriers and facilitators to provide effective pre-hospital trauma care for road traffic injury victims in Iran: A grounded theory approach. *BMC Emergency Medicine, 10*(20), 1-11. doi:10.1186/1471-227X-10-20

Hatchett, P., Haun, C., & Goldenhar, L. (2006). Training standardized patients to give feedback to medical trainees: The state of the art. *ASPE Project Awards 2004*.

Howley, L. D. (2007). Focusing feedback on interpersonal skills: A workshop for standardized patients: MedEdPORTAL. Retrieved from: www.mededportal.org/publication/339

Howley, L. D., & Martindale, J. (2004). The efficacy of standardized patient feedback in clinical teaching: A mixed methods analysis. *Medical Education Online, 9*(18), 1-10.

Hutchison, A. J., Johnston, L. H., & Breckon, J. D. (2010). Using QSR-NVivo to facilitate the development of a grounded theory project: An account of a worked example. *International Journal of Social Research Methodology, 13*(4), 283-302. doi:10.1080/13645570902996301

Irons, A. (2008). *Enhancing learning through formative assessment and feedback*. London, England: Routledge.

Israel, M., & Hay, I. (2006). *Research ethics for social scientists: Between ethical conduct and regulatory compliance*. Thousand Oaks, CA: Sage.

Kahneman, D. (2011). *Thinking, fast and slow* (1st ed.). New York, NY: Farrar, Straus and Giroux.

Knowles, M. S., Holton, E. F. III, & Swanson, R. A. (2005). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (6th ed.). Burlington, MA: Elsevlier

Kolb, D. A. (1984). *Experiential learning: Experience as a source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

Kurtz, S., Silverman, J., & Draper, J. (2005). *Teaching and learning communication skills in medicine* (2nd ed.). Oxford, UK: Radcliffe.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.

Leeper-Majors, K., Veale, J. R., Westbrook, T. S., & Reed, K. (2003). The effect of standardized patient feedback in teaching surgical residents informed consent: Results of a pilot study. *Current Surgery, 60*(6), 615-622. doi:10.1016/S0149-7944(03)00157-0

Lockyer, J., Armson, H., Chesluk, B., Dornan, T., Holmboe, E., Loney, E., . . . Sargeant, J. (2011). Feedback data sources that inform physician self-assessment. *Medical Teacher, 33*(2), e113-e120. doi:10.3109/0142159X.2011.542519

Makoul, G. (2001). Essential elements of communication in medical encounters: The Kalamazoo consensus statement. *Academic Medicine, 76*(4), 390–393.

Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.

May, W. (2006). WinDix training manual for standardized patient trainers: How to give effective feedback: MedEdPORTAL. Retrieved from: www.mededportal.org/publication/171

McNaughton, N., Tiberius, R., & Hodges, B. (1999). Effects of portraying psychologically and emotionally complex standardized patient roles. *Teaching & Learning in Medicine, 11*(3), 135–141. doi:10.1207/S15328015TL110303

Meng, M., Xiuwei, Z., & Anli, J. (2011). A theoretical framework of caring in the Chinese context: A grounded theory study. *Journal of Advanced Nursing, 67*(7), 1523-1536. doi:10.1111/j.1365-2648.2010.05573.x

Mertens, D. M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Thousand Oaks, CA: Sage.

Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.

Mishler, E. G. (1986). *Research interviewing: Context and narrative*. Cambridge, MA: Harvard University Press.

Montgomery, K. (2006). *How doctors think: Clinical judgment and the practice of medicine*. Oxford, England: Oxford University.

Nestel, D., Clark, S., Tabak, D., Ashwell, V., Muir, E., Paraskevas, P., & Higham, J. (2010). Defining Responsibilities of Simulated Patients in Medical Education. *Simulation in Healthcare, 5*(3), 161-168. doi: 110.1097/SIH.1090b1013e3181de1091cb1096.

Nestel, D., Tabak, D., Tierney, T., Layat-Burn, C., Robb, A., Clark, S., . . . Kneebone, R. (2011). Key challenges in simulated patient programs: An international comparative case study. *BMC Medical Education, 69*(11), 1-10. doi:10.1186/1472-6920-11-69

Neumann, M., Edelhäuser, F., Tauschel, D., Fischer, M. R., Wirtz, M., Woopen, C., . . . Scheffer, C. (2011). Empathy decline and its reasons: A systematic review of studies with medical

students and residents. *Academic Medicine, 86*(8), 996-1009. doi:10.1097/ACM.0b013e318221e615

Newlin-Canzone, E. T. (2011). *The effect of improvisations and observations on standardized patient encounters, subjective workload and stress* (PhD). Old Dominion University

Newlin-Canzone, E. T., Scerbo, M. W., Gliva-McConvey, G., & Wallace, A. (2011). *Attentional and mental workload demands in nonverbal communication.* Paper presented at the Human Factors and Ergonomics Society Annual Meeting.

Newlin-Canzone, E. T., Scerbo, M. W., Gliva-McConvey, G., & Wallace, A. M. (2013). The cognitive demands of standardized patients: Understanding limitations in attention and working memory with the decoding of nonverbal behavior during improvisations. *Simulation in Healthcare, 8*(4), 207-214. doi:10.1097/SIH.0b013e31828b419e

Oliver, P. (2012). *Succeeding with your literature review : A handbook for students*. Maidenhead: Open University Press.

Park, J. H., Son, J. Y., Kim, S., & May, W. (2011). Effect of feedback from standardized patients on medical students' performance and perceptions of the neurological examination. *Medical Teacher, 33*(12), 1005-1010. doi:10.3109/0142159X.2011.588735

Pascucci, R. C., Weinstock, P. H., O'Connor, B. E., Fancy, K. M., & Meyer, E. C. (2014). Integrating Actors Into a Simulation Program: A Primer. *Simulation in Healthcare, 9*(2). doi:10.1097/SIH.0b013e3182a3ded7

Passiment, M., Sacks, H., & Huang, G. (2011). Medical simulation in medical education: Results of an AAMC survey (pp. 1-48): Association of American Medical Colleges

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Perera, J., Lee, N., Win, K., Perera, J., & Wijesuriya, L. (2008). Formative feedback to students: The mismatch between faculty perceptions and student expectations. *Medical Teacher, 30*(4), 395-399. doi:10.1080/01421590801949966

Richards, L. (1999). *Using NVivo in qualitative research*. Bundoora Victoria, Australia: Qualitative Solutions and Research Pty. Ltd.

Risberg, G., Johansson, E. E., & Hamberg, K. (2011). 'Important... but of low status': Male education leaders' views on gender in medicine. *Medical Education, 45*(6), 613-624. doi:10.1111/j.1365-2923.2010.03920.x

Schocken, D. M., Lakis, M., Zimmerman, T., & Charles, S. (June, 2011). *An SP certificate course - One year later*. Panel discussion. ASPE conference.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.

Schön, D. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.

Snook, S. A. (2000). *Friendly fire: The accidental shootdown of U.S. Black Hawks over northern Iraq*. Princeton, New Jersey: Princeton University Press.

Souder, D. (2009). *Teaching interpersonal and communication feedback skills to standardized patients: Assessment of a cognitive model* (Ed.D. 3355472). University of Southern California, United States -- California.

Spencer, J., & Dales, J. (2006). Meeting the needs of simulated patients and caring for the person behind them? *Medical Education, 40*(1), 3-5.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Strauss, A., & Corbin, J. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.).Thousand Oaks, CA: Sage.

Swiggart, W. H., Ghulyan, M. V., & Dewey, C. M. (2012). Using standardized patients in continuing medical education courses on proper prescribing of controlled substances. *Substance Abuse, 33*, 182–185. doi:10.1080/08897077.2011.640217

Szauter, K. (2013). SP Bibliography. Retrieved April 29, 2013, from http://www.utmb.edu/ocs/sp-bibliography.asp

Trummer, U. F., Mueller, U. O., Nowak, P., Stidl, T., & Pelikan, J. M. (2006). Does physician–patient communication that aims at empowering patients improve clinical outcome?: A case study. *Patient Education and Counseling, 61*(2), 299-306. doi:10.1016/j.pec.2005.04.009

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University.

Wallace, P. (2007). *Coaching standardized patients for use in the assessment of clinical competence*. New York, NY: Springer.

Wallach, P. M., Elnick, M., Bognar, B., Kovach, R., Papadakis, M., Zucker, S., & Speer, A. (2001). Standardized patients' perceptions about their own health care. *Teaching and Learning in Medicine, 13*(4), 227-231. doi:10.1207/S15328015TLM1304_03

Westberg, J., & Jason, H. (2001). *Fostering reflection and providing feedback: Helping others learn from experience*. New York, NY: Springer.

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

Appendix A

Interview Opening Comments and Questions

Even though I have a set of prepared questions, please feel free to add other thoughts you have as we talk. I want this to be informal. Some of the questions are purposefully vague to give you a chance to tell me what comes to your mind. If you want more specifics about a question, let me know. Some of the questions come at a topic from two different angles to see if you think of other things to say from the new direction. Even if the questions seem similar to each other see if you have something new to say to answer the question. At times you may think you have already answered a question. If you don't have anything else to say, just let me know. All of the questions are optional.

I am exploring SPs experiences with providing oral feedback to first-year medical students and more advanced learners, residents or fellows. I am going to start with some questions about you and your work as an SP.

1. How long have you worked as an SP?

2. Approximately how many different programs have you worked with?

3. *What is your highest level of formal education?

4. What are your reasons for being an SP?

This first set of questions will be about working with first-year medical students.

5. Think about when you provide first-year medical students with oral feedback. What is it like for you?

6. What are your goals for the feedback with first-year medical students?

7. What does effective feedback look like? OR How would you describe effective feedback? What does it look like when it does not go well?

8. What do you think works well? What about it works well? Why do you think it works well? Can you give me an example?

9. What do you find challenging? What about it is challenging? Why do you think it is challenging? Can you give me an example?

10. What is it like for you to prepare the feedback?

11. What is it like for you to deliver the feedback?

12. What is it like for you to be in the role of the patient when you are doing the encounter and then change to the evaluator and coach roles during the feedback?

13. Do you have any other comments about feedback with the first-year students?

Now I am going to transition to asking about oral feedback with residents or fellows.

14. Think about when you provide residents or fellows with oral feedback. What is it like for you?

15. What do you think works well? What about it works well? Why do you think it works well? Can you give me an example?

16. What do you find challenging? What about it is challenging? Why do you think it is challenging? Can you give me an example?

17. How does it compare with doing it with the first-year medical students?

18. Do you adjust how you provide feedback for different learners? If so, which types of learners and how do you adjust?

19. How did you learn, formally and informally, to give feedback? What was the most difficult part of learning how to provide feedback? Why do you think that is?

20. Do you have any other comments about feedback with the residents or fellows?

21. What do you think medical students, residents, and fellows value from the feedback you provide?

22. *If there were no limits to what could happen, do you have ideas of how the program could improve the oral feedback we provide?

23. *Do you have ideas of how the program can assist you in improving your feedback?

24. *Do you have experiences in your own life interacting with the medical field that you think have impacted the content or delivery of your feedback? If so, what has the impact been?

25. *Were there things that you had thought about feedback before meeting with me that you want to tell me?

26. Are there other things that occur to you regarding SP feedback that you want to talk about?

27. Do you make adjustments to your feedback for individual students? If so how do you do it? What do you observe?

28. **How do you figure out what is right for each student?

29. **How do you adjust your feedback for each student?

30. **What do you think is the most important thing for an SP to know about feedback?

31. When you were planning to come to the interview and before you heard my questions, were there other things that you thought of having to do with feedback that you wanted to talk about?

32. What life experiences have you had that have added to your skills in providing feedback?

Notes:

1. The items marked with * are questions added after the first few interviews.
2. The items marked with ** are questions added for third set of interviews.

Appendix B

Interview Protocol

I set up the seating to maximize the quality of the recording and set up the audio recorder between the two of us. After welcoming the participant, I handed them a paper copy of the consent form and read out loud from a second copy. I repeated the key points of the consent form and asked if they had any questions. The participant and I each signed the two copies. I kept one for my records and offered them the other copy.

I then reviewed the protocol for the interview, in that I had scheduled 1.5 hours for us to meet with the interview portion likely to be for one hour during which time I would be asking them a series of questions. I informed them that some of the questions may appear redundant in that I would be asking about similar ideas and would phrase the questions slightly differently to spur their thinking. I said that if they did not have anything to say about a question that they should let me know and I would move on to the next question. I also encouraged them to say whatever came to their mind about the topic even if it was beyond what I was asking. I informed them that the recorder could be stopped at any time and that it could be restarted if they wanted to continue.

Before starting the interview, I checked to see if they wanted to get something to drink, if the lighting in the room was okay, and if they were comfortable. Just prior to starting, I reminded the participants that I would be recording the interview and asked them to be mindful to speak loudly enough to be clearly recorded and to otherwise be relaxed, and if possible, to forget about the recorder. I then announced I was turning on the recorder and we did a quick sound check during which time I thanked them again for participating in the study and began with the first question.

Appendix C

Modified Informed Consent Form

RESEARCH PARTICIPANT INFORMED CONSENT AND PRIVACY

AUTHORIZATION FORM

Protocol Title: Standardized Patients' Experiences with Oral Feedback Provided during Formative Simulations

Application No.: NA_00067874

Principal Investigator: Dr. Smith

1. What you should know about this study:

- You are being asked to join a research study.
- This consent form explains the research study and your part in the study.
- Please read it carefully and take as much time as you need.
- Please ask questions at any time about anything you do not understand.
- You are a volunteer. If you join the study, you can change your mind later. You can decide not to take part or you can quit at any time. There will be no penalty or loss of benefits if you decide to quit the study.
- During the study, we will tell you if we learn any new information that might affect whether you wish to continue to be in the study.
- Ask the study team to explain any words or information in this informed consent that you do not understand.

2. Why is this research being done?

The researcher is a candidate in the PhD Program in Educational Studies: Adult Learning Specialization, at Lesley University, Cambridge, MA. This research is being carried out as partial fulfillment of the requirements of completing her dissertation.

How many people will be in this study?

There will be up to twenty SPs in this study. All of the individuals will have prepared and delivered oral feedback during formative exercises at the Simulation Center with first-year medical students and more advanced clinicians, such as residents or fellows. The first six people in each group will be selected to maximize the diversity of the participants based on gender, age, and ethnic background. The remainder will be selected based on the likelihood of being able to provide additional information for the researcher to satisfy the data collection and data analysis objectives set by the research design.

3. What will happen if you join this study?

If you agree to be in this study, we will ask you to do the following things:

Participate in a 90 minute interview meeting to be held at the Simulation Center. The interview will include viewing one or two videos of oral feedback sessions that you provided during standardized patient exercises. The interview will be audio recorded and professionally transcribed. All identifying information will be removed. The information from the interview will be analyzed and may be used as a portion of the researcher's dissertation.

How long will you be in the study?

You will be in this study for the one day the interview is held.

4. What are the risks or discomforts of the study?

There are no known medical, physical, psychological, emotional, social, and financial risks or discomforts of any greater probability and magnitude of harm or discomfort than those ordinarily encountered in daily life.

Although every effort will be made to protect your confidentiality, there is still chance information about you may become known to people outside of this study.

5. Are there benefits to being in the study?

There is no direct benefit to you from taking part in this study.

Your participation may lead to improved educational programs for you and other students or residents.

6. What are your options if you do not want to be in the study?

You do not have to join this study.

7. Will it cost you anything to be in this study?

No.

8. Will you be paid if you join this study?

You will be compensated with a $25 gift card.

9. Can you leave the study early?

- You can agree to be in the study now and change your mind later.

- If you wish to stop, please tell us right away.
- Leaving this study early will not affect your student status.
- If you leave the study early, the institution may use or give out your information that it already has if the information is needed for this study or any follow-up activities**.**

10. What other things should you know about this research study?

a. What is the Institutional Review Board (IRB) and how does it protect you?
The Medicine IRB is made up of:

- Doctors
- Nurses
- Ethicists
- Non-scientists
- and people from the local community.

The IRB reviews human research studies. It protects the rights and welfare of the people taking part in those studies. You may contact the IRB if you have questions about your rights as a participant or if you think you have not been treated fairly.

b. What do you do if you have questions about the study?
Call the Institutions principal investigator or the Lesley University principal investigator, Dr. Rutstein-Riley.

c. What happens to Data that are collected in the study?
The data collected in this study consists of the digitally recorded audio of the interview. The interview will be transcribed, with all identifying information removed. The audio recording will be destroyed after the completion of the co-investigator's dissertation. The results may be used in publications and presentations. If this is the case, they will not include any identifying information.

Faculty and staff work to improve the quality of the education of medical clinicians. If you join this study:

- You will not own any product or idea created by the researchers working on this study.
- You will not receive any financial benefit from the creation, use or sale of such a product or idea.

11. What does your signature on this consent form mean?

Your signature on this form means that:

- you understand the information given to you in this form
- you accept the provisions in the form
- you agree to join the study

You will not give up any legal rights by signing this consent form.

WE WILL GIVE YOU A COPY OF THIS SIGNED AND DATED CONSENT FORM

_____

Signature of Participant Date

_____

Signature of Person Obtaining Consent Date

_____

Signature of Witness to Consent Procedures (optional unless IRB or Sponsor required) Date

NOTE: **A COPY OF THE SIGNED, DATED CONSENT FORM MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR; A COPY MUST BE GIVEN TO THE PARTICIPANT; AND, IF APPROPRIATE A COPY OF THE CONSENT FORM MUST BE PLACED IN THE PARTICIPANT'S MEDICAL RECORD**

ONLY CONSENT FORMS THAT INCLUDE THE INSTITUTION'S LOGO SHOULD BE USED TO CONSENT RESEARCH PARTICIPANTS. IF THIS CONSENT FORM DOES NOT HAVE A INSTITUTION'S LOGO, DO NOT USE IT TO CONSENT RESEARCH PARTICIPANTS.

Appendix D

Medical Student, Resident, and SP Race

Table D1

Medical School Enrollment 2010 - Race

Race	Number	Percent
Black or African American	49	8.3
American Indian and Alaska Native	2	0.3
Asian	179	30.4
Native Hawaiian and Other Pacific Islander	2	0.3
White	283	48.1
Other Non-Hispanic or Latino Race	0	0.0
Mexican American	8	1.4
Puerto Rican	6	1.0
Cuban	4	0.7
Other Hispanic or Latino Race	19	3.2
Foreign	23	3.9
No Race Response or Unknown Citizen	13	2.2
Unduplicated Total Enrollment	569	

Note. The table displays the self-identified Hispanic or Latino ethnic and non-Hispanic or Latino racial characteristics of students of U.S. medical schools. The category totals do not add to the unduplicated totals since a person could designate multiple categories. The percentages are based on a calculation as if each person designated in a category is a unique individual.

Table D2

Systems Based Practice Internship Residents - Race

Race	Number	Percent
Black or African American	3	6.4
American Indian and Alaska Native	0	0.0
Asian	6	12.8
Native Hawaiian and Other Pacific Islander	0	0.0
White	36	76.6
Hispanic or Latino origin	2	4.3
Total	47	

Note. The table displays data from one sample of 47 residents who participated in a formative communication skills activity with the SPs over a period of academic year 2009-2010, for the racial categories in the available data.

Table D3

Medical Institutes' Standardized Patients 2010 - Race

Race	Number	Percent
Black or African American	24	16
American Indian and Alaska Native	0	0
Asian	5	3
Native Hawaiian and Other Pacific Islander	0	0
White	116	75
Hispanic	9	6
Other	1	1
Total	191	

Note. The table displays data of the population of SPs for the racial categories in the available data. The individual who self identified as an African/Hispanic American, was included as Black or African American as that is the more apparent racial heritage for this individual. Percentages are rounded to the nearest whole number.

Appendix E

Initial Coding Using the CAQDAS Program Screen Shot