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Try To See It My Way: Patient Perspective Video Capture Debriefing in Simulation

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Try To See It My Way: Patient Perspective Video Capture Debriefing in Simulation

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Abstract

Video capture of simulation provides observation from a wide-angle view. This study introduced a new technique, “patient-perspective” video capture, using a camera mounted into eyeglasses allowing learners to view their nonverbal and verbal communication through the patient’s eyes and to compare this to the wide-angle view. The participants ($n = 29$) were Nurse Practitioner students. The majority were female (93.2%), with a mean age of 36.8, $SD = 12.31$. The sample consisted of Millennials (65.6%), Generation Xers (13.8%), and Baby Boomers (20.7%). The average number of years of nursing practice was 9.89. Instruments measured demographics, five domains of patient-centered care (PCC), and participant’s comparison of wide-angle and patient-perspective video capture. Analysis revealed significant differences between age groups in post-video perceptions of PCC domains, Interest in Patient Agenda $\chi^2(2) = 7.183, p = 0.028$, and Patient Involvement in Care $\chi^2(2) = 8.084, p = 0.018$. Post hoc analysis for both domains indicated the significance was between Baby Boomers and Millennials ($U = 16.500, z = -2.597, p = 0.009$; $U = 15.500, z = -2.653, p = 0.008$, respectively). A significant difference was found between post-video perception of Patient Involvement in Care based on Years of Nursing Practice, $\chi^2(2) = 8.874, p = 0.012$. Post hoc test indicated the significant difference was between nurses with 1 to 5 years and 6 to 10 years ($U = 17.500, z = -2.441, p = 0.015$), and nurses with 1 to 5 years of practice and 11 or more years ($U = 15.500, z = -2.593, p = 0.010$). Participants identified benefits of both video capture techniques but found patient-perspective video more insightful for provider communication. Patient-perspective video capture enhances the debriefing experience and the reflective process regarding patient-provider communication.

Keywords: video capture, head-mounted video, debriefing, simulation, communication, reflection

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Chapter 1

Background of the Problem

In 2001 the Institute of Medicine (IOM) declared that a chasm existed in the United States between the current level of quality in healthcare and the potential for what should be available. Subsequently, the IOM's Committee on the Quality of Healthcare in America developed an action plan with six aims, one of which included implementation of patient-centered care (PCC). Distinguishing characteristics of PCC include responding to patients based on their individual preferences, and clinical decisions which are guided by patient values (Institute of Medicine, 2001). Discovery of patient values and preferences necessitates a high level of communication between the healthcare provider and patient and can result in positive patient outcomes. Classroom content focused on communication skills is a part of the standard curriculum in nursing and medical school programs. Incorporating an assessment of communication skills into simulation may positively impact students' ability to provide PCC. Recent acknowledgement of the impact of simulation as a feasible addition to the clinical education experience has generated new research about the topic. Debriefing has been identified as the point in simulation where the bulk of learning takes place and remains a topic of research interest (Nystrom, Palsson, Hofsten, & Haggstom, 2014; Reed, Andrews, & Ravert, 2013). Use of video-assisted debriefing can provide learners an opportunity to view their patient care performance in a safe environment and reinforce critical thinking skills.

Statement of the Problem

There is evidence to support that patient compliance with a recommended

regimen, self-management of a chronic condition, or adoption of preventive health care behavior is impacted by the quality of communication that takes place between a patient and healthcare provider (O'Hagan et al., 2014; Institute for Health Communications, 2011; Schoenthaler, Allegrante, Chaplin, & Ogedegbe, 2012). Development of proficient communication skills necessitates an understanding of what it means to communicate effectively, thus a part of the standard curriculum in schools of nursing and medicine is dedicated to principles of communication and communication strategies. Nuances of more subtle, nonverbal communication techniques such as a comforting touch versus touch used for examination, the amount of eye contact to use during a patient encounter, or the length of time spent engaging with a patient are more challenging techniques to impart. Likewise, verbal communication which demonstrates an interest in a patient's concerns, insensitive choice of language, or verbal dominance by the provider are also difficult skills to teach, and yet these types of nonverbal and verbal communication are found to be associated with patient satisfaction and outcomes. (Jagosh, Boudreau, Steinert, MacDonald, & Ingram, 2011; Montague et al., 2011; Henry, Fuhrel-Forbis, Rogers, & Eggly, 2012; Montague, Chen, Xu, Chewing, & Barrett, 2013).

The use of low, medium, and high-fidelity simulation as an effective educational tool for healthcare providers has been demonstrated in the literature (Kron et al. 2016; Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). Fidelity, in the vernacular of the simulation experience, refers to the ability to present a patient care situation with as much realism as possible. According to Lioce et al. (2015), achievement of a high-fidelity simulation experience includes the dimensions of conceptual fidelity, physical and environmental fidelity, and psychological fidelity; as the level of fidelity increases, so does the realism of the experience. An effective technique for achieving high fidelity in simulation that is supported in the literature is

the use of a Standardized Patient (SP), notably as a way to provide the patient's perspective to learners (MacLean, Kelly, Geddes, & Della, 2017; Nestel & Bearman, 2015). The role of an SP is played by a trained professional who consistently portrays the role of a patient in the simulated patient care scenario (INACSL Standards Committee, 2016), and contributes substantive feedback to the learner during debriefing. Identified as the key component of the simulation experience, debriefing is a time for the learner to self-reflect regarding feedback provided, with the goal of assimilating new knowledge for future practice (INACSL Standards Committee, 2016). Although not a critical component of the debriefing process, Reed, Andrews, & Ravert (2013) found that the use of video capture and playback, used as an adjunct to verbal debriefing, helped learners draw conclusions that link theory with real life circumstances. According to Nystrom, Palsson, Hofsten, and Haggstrom (2014) an advantage of video capture during simulation is the capability to recall events, and to play them back for evaluation during debriefing; furthermore, video assisted debriefing facilitates the learner in reconciling their perception about their performance with what actually happened, ultimately providing a bridge between content learned during a training session and the reality of the clinical environment.

Traditional video capture, which provides a wide-angle view of simulated patient care encounters, has been employed and evaluated in the literature for a number of years. A recent technique that provides video capture from the first-person point of view has been discussed in the literature; however, more research is needed to determine the degree to which this approach will impact learner outcome (O'Meara et al, 2015; Schneidereith, 2015; Forbes, Bucknall, & Hutchinson, 2016). A method not found in the

literature, and the focus of this research project, is video capture of simulated patient care encounters from the patient's perspective.

Purpose of the Study

The purpose of this research project was to introduce a new and innovative technique called patient-perspective video capture for use during debriefing after a patient encounter with an SP. It was proposed that being able to visualize the simulated patient encounter from the patient's perspective would enhance the student learner's sensitivity to specific areas of communication such as verbal demonstration of interest in patient's concerns, eye contact, closed body language, comforting touch, and choice of language, and lead the student learner to reflect on how this can impact the patient-provider relationship. It was also anticipated that increasing the student learners' awareness would lead to improved patient-provider communication and patient outcomes. The study sought to answer the following questions:

Research Question 1

Are there student learner characteristics that are correlated with the student learner's self-assessment of their verbal and nonverbal communication with an SP?

Research Question 2

Will video capture during debriefing change the student learner's self-assessment of their verbal and nonverbal communication with an SP?

Research Question 3

Are there differences between the student learner's self-assessment of their verbal and nonverbal communication versus the SP's assessment of the student learner?

Research Question 4

What is the student learner's perception of the debriefing experience using patient-

perspective video technique versus traditional wide-angle video capture?

Significance of the Study

The use of simulation in healthcare education has become status quo for most nursing schools, medical schools, and hospital-based education programs in the United States. Simulation has emerged as a discipline with well documented, evidence-based research, and is recognized as a viable option to augment clinical practice experiences in nursing education (NCSBN, 2014). Use of video capture and playback to enhance reflective thinking during the debriefing process can add dimension to a learner's experience.

The conventional method for video capture of a simulated experience has been wall-mounted cameras, however, this method often provides limited opportunity to inform feedback since the camera operator determines what will be recorded. Additionally, the view from wall-mounted cameras can be somewhat restricted, often limiting capture of the learner's decision-making processes, and nonverbal or verbal communication, during patient care. Recognizing the limitations of traditional wall-mounted cameras, some investigators have begun to examine the use of head-mounted cameras, worn by learners as they participate as providers in simulated patient care scenarios (Forbes, Bucknall, & Hutchinson, 2016; O'Meara et al., 2015; Schneidereith, 2015). This relatively new approach to capturing video allows viewing the simulation experience through the learner's eye during debriefing and results of some studies have been promising. A gap has been identified in the literature regarding video capture from the patient's perspective. While there appears to be no precedent in the literature for this technique, it is the PI's opinion that using video capture from the patient's perspective

during debriefing will inform practice regarding patient-provider communication, and lead to positive patient outcomes.

Feasibility

The TELOS (Envato, 2014) model was used to evaluate feasibility for this project in the following areas:

- Technology for the project was a considerable factor since simulation was the key instrument by which to accomplish the study. Course faculty for the student learners and the Coordinator of a simulation center at a private medical university in the southeastern United States generously agreed to partner with the PI at no cost. The simulation center is a well-established entity, and the Coordinator is well seasoned in use of the video capture platform, implementing simulation in healthcare education, and training and management of SPs. A major-out-of-pocket cost for the PI was the glasses with an embedded camera to provide the patient-perspective recording. Cost range was assessed at \$200 - \$2000, depending on the quality of video and ease of use to view the video for debriefing.
- Economic considerations for implementation of the project were manageable. As stated previously, use of the simulation center and SPs were at no cost to the investigator. The price of the glasses with an embedded camera were covered by acquisition of an award from the Kaiser Permanente fund at the PI's place of employment. The award amount was \$2500 and covered the cost of four pairs of video glasses, micro SD cards, \$5 compensation gift cards for participants, and other incidentals.
- Legality of the project implementation was met in two ways. First, the project was approved by the Internal Review Boards (IRB) at the University where the participants were enrolled in a Family Nurse Practitioner (FNP) program. This ensured that the simulation center participants

were required to provide informed consent. Second, the simulation center required informed consent from all participants who were part of the learning environment. A Letter of Permission to conduct the study at the simulation center can be found in Appendix A.

- Operational aspects of the project did not require any major changes in existing procedures. As part of the FNP student learner's routine educational experience, an SP simulation day was part of the standard curriculum. For the study, there were three additions made to the current operation: (a) one additional patient care scenario, (b) an additional video capture technique, and (c) three additional questionnaires, the Patient-Provider Relationship Questionnaire (PPRQ), three qualitative questions, and a demographic survey. A trial run to test the glasses for video recording, viewing the video for debriefing, the additional scenario, and administering the instruments was executed two weeks prior to implementation for troubleshooting purposes using volunteer participants who were not associated with the project.
- Scheduling implementation of the project was ongoing since summer 2016 when the idea was conceived. The investigator's Project Team met on a routine basis for discussion about planning, scheduling, and drafting of the IRP proposal. All critical members agreed for the target date of summer 2017 to begin implementation.

Definitions of Terms

The major concepts and definitions for the research project are as follows:

- Patient-perspective video is defined as a video recording captured by the SP wearing glasses with a camera mounted in the frame intended to provide video from the SP's point-of-view.
- Traditional wide-angle video is defined as video recording of a simulation experience captured from wall-mounted cameras intended to provide video from a wide-angle point of view.

- Standardized Patient (SP) is defined as a person trained to portray a patient in realistic and repeatable ways (Lewis et al., 2017) in a healthcare simulation experience.
- Patient-provider communication is defined as the exchange between a healthcare provider and a patient regarding the patient's health care status or plan of care.
- Debriefing is defined as, "A learner-centered reflective conversation. It is intended to assist learners in examining the meaning and implications of actions taken during a simulated experience" (Decker et al., 2013).
- Simulation is defined as, "An educational strategy in which a particular set of conditions are created or replicated to resemble authentic situations that are possible in real life. Simulation can incorporate one or more modalities to promote, improve, or validate a participant's performance" (INACSL Standards Committee, 2016, pp. 43).
- Patient-centered care is defined as, "Care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions" (Institute of Medicine, 2001, pp. 3).
- Effective communication (EC) is defined as, "Communication behaviors such as giving clear information, paying attention to the patient when he or she talks, dealing with the patient in a calm and quiet tone, and showing respect" (Gremigni, Casu, & Sommaruga, 2016, pp. 28).
- Interest in patient's agenda (IPA) is defined as, "Measures how much the provider is interested in knowledge, feelings, desires and expectations of the patient about the disease and care" (Gremigni et al., 2016, pp. 29).
- Empathy (E) is defined as, "Self-assesses the provider's ability to understand the patient's emotions, to get into his or her shoes, and to convey confidence when touching or being close to him or her" (Gremigni et al., 2016, pp. 29).

- Patient involvement in care (PIC) is defined as, “Measures behaviors such as offering the patient the opportunity and the time to talk, to express his or her point of view, to discuss and decide together what should be done, and encouraging him or her by infusing optimism” (Gremigni et al., 2016, pp. 29).
- Rapport Building (RB) is defined as an interpersonal relationship of connection, empathy, and understanding that helps establish a foundation for trust, confidence, and collaboration (Bejciy-Spring, 2008).

Assumptions, Limitations, Delimitations

To present a convincing representation of the potential impact of a study, it is necessary to clarify assumptions, limitations, and delimitations of an investigation. Reporting deficits in processes and resources, or reporting necessary adjustments based on shortcomings provides a realistic representation of a study’s importance (Simon & Goes, 2011). The following are assumptions, limitations, and delimitations identified for the Translational Research Project.

It is an assumption that participants in the study were honest in their answers to both the PPRQ and the three open-ended questions. To encourage honest responses, participants were informed that the study results would be deidentified and confidential. Participants were also notified that they were taking part on a voluntary basis, and that they were free to withdraw at any time with no consequences. Given that the study was linked with the participant’s academic coursework, it was noted that no faculty who were responsible for course feedback would have access to the study. To assure the study protocol would not interfere with routine course simulation procedures, a trial run of the study was performed two weeks prior to data collection. The sample population for the

study was not normally distributed, therefore, non-parametric tests were used to analyze the data. All assumptions for the non-parametric testing were met. The PPRQ instrument, used to evaluate participants' self-assessment of patient-centered care showed evidence of reliability and test-retest stability (Gremigni, Casu, & Sommaruga, 2016).

Given that the current study was the final requirement for the PI's Doctor of Nursing Practice degree, the timetable for completion of the project had to fit within a narrow margin. Therefore, concessions were made that resulted in limitations to the study. Data was collected from a small convenience sample of volunteers at a single location. All volunteers were accepted for the study and data was collected over a two-day period. The sample population was not representative of the larger geographic or demographic population. While the study results are not generalizable, the study does provide some statistically significant and clinically relevant information to suggest further study.

There were delimitations used to define the parameters for this study. One objective of the study was to compare participants' debriefing experiences using a new video capture technique versus traditional video capture used in simulation. While fidelity, scenario development, and other criteria of simulation were addressed during preparation for the study, the focus of the study was on the debriefing component of the simulation experience. A second objective of the study was to enhance the experienced healthcare provider's sensitivity to certain types of verbal and nonverbal communication within the patient-provider relationship. Although communication is important for all healthcare providers, this study included only participants in graduate level healthcare programs. Benner (1984) states that a new nurse requires two-to-three years to become competent, three-to-five years to become proficient, and five or more years of practice to become an expert practitioner; therefore, the current study excluded students at the

entry level in healthcare.

Conclusion

The current state of healthcare in the United States is not at its maximum potential. One of its most significant shortcomings is a lack of focus on patient-centered care which reflects respect for individual patients by keeping their preferences, needs, and values at the forefront of clinical decisions (Institute of Medicine, 2001). Basic communication strategies are a part of most healthcare education programs; however, often those courses are not proficient at helping providers develop high level communication skills sufficient to assess patient needs and incorporate them into clinical decisions. Simulation in healthcare education has proven hopeful to reinforce content learned in the classroom, with the debriefing component being where the most significant learning happens. While video-assisted debriefing has been used and is cited in the literature as an option to augment verbal debriefing, there are limitations to the traditional wide-angle video capture technique.

This Translational Research Project introduced an alternative to the wide-angle view and introduced a new type of video capture technique called Patient-Perspective Video Capture. Student learners participating in a simulation encounter with an SP were asked to provide a self-assessment of their patient-centered care after viewing videos of the encounter. The design of the self-assessment questions is supported by the framework of the Gibbs Reflective Cycle (Gibbs, 1988). The following chapters will provide an overview of the conceptual framework and review of literature to support the study, the methodology and data collection details, and data analysis. Finally, a discussion of the study's implications to inform current practice and future recommendations will be

provided.

Chapter 2

Search Description

A search of relevant literature was conducted for studies between 2011 and 2017 and was limited to English language publications. The Galileo library system was used to search PubMed, ScienceDirect, EBSCOHost, CINAHL, and ProQuest data bases for peer reviewed, quantitative, and qualitative studies. The search was directed toward two themes: (a) debriefing in simulation; and (b) relationship between the patient and provider. Key terms were (a) video capture, (b) debriefing in simulation, (c) patient outcome, (d) patient-provider relationship, (e) patient care experience, (f) patient-centered care, and (g) self- assessment.

The initial search for theme one, debriefing in simulation, resulted in 448 articles. After duplicates were removed, and articles evaluated for applicability to the study, a total of 29 articles remained. A search for theme two, relationship between the patient and provider, yielded 611 articles. Duplicate articles were removed, along with articles that did not fit the study objectives. A total of 31 articles remained and were used to provide support for the Translational Research Project. Finally, a search for an appropriate conceptual framework using the key terms “reflection” and “simulation” and “debriefing” ultimately resulted in 6 articles to guide the study.

Conceptual Framework

A conceptual framework can be used to link research and practice within healthcare, thereby establishing a scientific basis to guide care or predict patient outcomes (Lopez & Epsnes, 2017). Carrington (2012) points out the importance of identifying an appropriate framework to guide the development of a study so that

translation of results can be applied in the practice setting. Champions of simulation in healthcare education recommend using a framework to support programs; however, in a national study which sought to describe simulation practices in U.S. nursing programs, Fey and Jenkins (2015) reported that, while there is increasing use of simulation as a teaching methodology, only 31% of the programs reported using a theory or model to guide debriefing. Thoughtful consideration was made to determine a proper framework for development and implementation of the Translational Research Project.

Guided reflective thinking, leading one to identify learning achievements within a current situation based on evaluation of previous knowledge, can empower a learner to make higher level decisions in the future (Helyer, 2015; INACSL Standards Committee, 2016; Wain, 2017). According to Wain (2017), so called work-based programs such as nursing have historically taught reflective thinking skills using journals, logs, and portfolios to encourage continual reflection, planning, and development for improved processes. To guide the current study participants in reflective thinking, Gibbs Reflective Cycle ([GRC], Gibbs, 1988) was used to provide a framework for the project. The model provides a circular format, guiding the learner to systematically think through (reflect) an activity or a learned experience, leading them to consider how to build on what has been learned. Consisting of six stages or questions, as shown in Figure 1, this framework can be used to guide reflection during a simulation debriefing session. The GRC includes questions, based on the six stages, which learners work through as they reflect on an experience. The reflective cycle involves feelings, thoughts, and recommendation actions for the future (Husebø, O'Regan, & Nestel, 2015). According to Gibbs, each step of the cycle should be completed before moving to the next, with each individual's self-assessment guiding their direct experience to inform future practice. It was anticipated that

questions which were structured to guide study participants through the reflective cycle, coupled with viewing the patient encounter videos during debriefing, would lead the participants to consider the impact of nonverbal and verbal language on the patient-provider relationship. It was expected that seeing themselves from the patient's viewpoint would lead the participants to consider how their verbal and nonverbal communication affected the patient, and consider improvements, if needed.

According to Gremigni, Casu, & Sommaruga (2016), a significant component of high-quality care includes a patient-centered approach. That is, provider care which responds to a patient's individual needs and preferences, facilitating the patient in making healthcare choices that best fit their circumstances (Gremigni, Casu, & Sommaruga, 2016; Brand, & Stigglebout, 2013). The Patient-Provider Relationship Questionnaire ([PPRQ], Gremigni, Casu, & Sommaruga, 2016) is used to evaluate a provider's self-assessment of their patient-centered care. The 20-item questionnaire, used in the current study, fits well with the GRC by asking the participant to reflect on questions represented in five domains of patient-centered care. The authors' belief is that the PPRQ supports a "reflection-in-practice perspective" (Gremigni, Casu, & Sommaruga, 2016, p. 15). An additional questionnaire consisting of three open ended questions was designed to guide the participant through reflective thinking, guided by the six steps of the GRC.

Review of Literature

A review of literature provided support and logical sequence for development of the current study. Relevant literature from the science of simulation in healthcare education, focusing on the debriefing process and the use of video capture to enhance learning was explored. Literature focused on the dynamic of provider communication

within the patient-provider dyad, and the relationship to patient perception. Finally, self-reflection was explored in the literature.

Simulation in Healthcare Education

In 2014, a report by the National Council of State Boards of Nursing (NCSBN) sparked an increase in implementation of simulation by recommending that up to 50% of clinical experience for entry level nursing students could be substituted with high quality simulation (NCSBN, 2014). Innovative methods used to teach concepts, develop critical thinking, and to reinforce skills using high fidelity manikins or SPs have been implemented as an effective part of simulation programs in nursing schools, medical schools, and most healthcare disciplines. In an integrative review of interprofessional communication, Foronda, MacWilliams, and McArthur (2016) noted that differences in the way nurses and physicians are trained results in varied styles of communication. This lack of continuity in communication techniques can result in miscommunication between members of the healthcare team, poor communication with patients, and ultimately in poor patient outcomes (Foronda, MacWilliams, and McArthur, 2016). The use of patient care simulation to provide a common, interprofessional, clinical experience has been demonstrated in the literature to improve communication skills in both healthcare professionals and students in healthcare programs (Roberts et al, 2014; Sargeant, MacLeod, & Murray, 2011). Used as an innovative approach to teach real life experience, simulation can be used to underscore the crucial role of a provider's communication skills in the patient-provider relationship, and as a means to develop an inventory of effective communication skills (Kelly, Forber, Conlon, Roche, & Stasa, 2014; Brown, 2015).

Simulation experiences implementing the use of SPs have demonstrated a positive effect on communication skills, including cultural sensitivity, for practicing providers and students in

healthcare programs (Bays et al., 2014; Brock et al., 2013; Bolstad, Xu, Shen, Covelli, & Torpey, 2012; Bahreman and Swoboda, 2016). Another advantage of using the SP clinical instruction methodology includes the ability to provide an interactive and dynamic experience for the learner. According to Bolstad et al. (2012) SP methodology allows real, human interaction which provides even the subtlest nonverbal body language, or voice inflection, thus providing a richer patient care experience without compromising the safety of an actual patient. Additionally, and apropos to the current study, Nestel and Bearman (2015) state that, regardless of the context of a simulation session, the trained SP is in an invaluable role for providing feedback to the learner from the patient's perspective. An added advantage noted in the literature for the use of SPs in healthcare education is the ability to create standardized patient characteristics. Controlling for various patient behaviors allows the researcher to gain insight into the nature of interpersonal communication, while the use of audio and video recordings facilitates collection of data to measure research outcomes of the simulation experience (Weaver & Erby, 2012; MacLean, Kelly, Geddes, & Della, P, 2017).

Debriefing. Debriefing is the most essential building block in the simulation process (INACSL, 2011). If executed effectively, debriefing is where outcomes of the simulation experience are developed, and assimilation of knowledge takes place. (Doolen et al., 2016; Reed et al., 2013; Shinnick, Woo, Horwich, & Sreadman, 2011). It is much like a synthesis of literature where a meshing of pertinent information contributes to the larger body of knowledge. The International Nurses Association for Clinical Simulation and Learning (INACSL) is one of the strongest advocates of simulation and has advanced research in the field by developing the INACSL Standards of Best Practice: Simulationsm

(INACSL Standards Committee, 2016). These standards identify evidence-based guidelines and share best practice for the implementation of simulation. The organization encourages compliance with these guidelines and has methodically developed a set of nine standards. Standard VI: The Debriefing Process (Decker et al., 2013) identifies reflection as a necessary process that should take place during planned debriefing at the end of all simulation learning experiences. This is a time when learners and facilitators revisit performance of simulated patient care and discuss performance decisions regarding skills or application of critical thinking. Learners' integration of knowledge through reflective thinking, and planning for future practice is the goal for debriefing (Chronister & Brown, 2012; Decker et al., 2013; Ha, 2014).

Various approaches to debriefing in simulation are discussed in the literature (Chronister & Brown, 2012; Reed et al., 2013; Shinnick et al., 2011) which demonstrates the measure of importance placed on this step of the simulation process. Studies comparing the effects of verbal-debriefing to video-assisted/verbal-debriefing (Chronister & Brown, 2012; Reed et al., 2013) indicate that there is no statistically significant difference in overall outcome. Reed et al., (2013) compared debriefing alone (DA) to debriefing with video (DWV) and found that of 20 items assessing student experience, statistically significant differences indicated DWV over DA existed with only two items: (a) debriefing helped make connections between theory and real-life situations, and (b) having time for thorough debriefing. Students' perceptions of debriefing methods, and the outcome from student's perspectives, have traditionally been the method used to assess the impact of debriefing in nursing simulation (Reed et al., 2013). An alternative to measuring student's perceptions of debriefing modalities is found in the literature which

quantitatively measures student's clinical knowledge attainment and retention, quality of skills, and skills response times (Chronister & Brown, 2012; Shinnick, 2011). Shinnick et al. (2011) found that student's clinical knowledge decreased if a hands-on simulation experience is not followed with some mode of debriefing, while Chronister and Brown (2012) discovered that greater clinical knowledge retention occurs with verbal-debriefing only. Chronister and Brown (2012), also found that the quality of student's assessment and psychomotor skills is not affected by debriefing methods, although skills response times are significantly higher with video-assisted/verbal-debriefing. Continued research is needed to identify effective debriefing techniques.

Recommendations in the literature regarding simulation in nursing education identify the debriefing component as critical for attaining a successful learning experience. Various methods for debriefing continue to be evaluated as experts attempt to identify evidential support for the most effective techniques. As inpatient clinical experience opportunities continue to decrease for schools of nursing, the need for learning through simulation increases, therefore, evidence-based recommendations for debriefing should be sought. The current Translational Research Project attempts to contribute to the overall body of scientific knowledge by identifying a gap related to video assisted debriefing from the patient's point of view.

Video capture technique. Video capture and playback is a technique that has become beneficial for facilitating debriefing in many simulation labs (Chronister & Brown, 2012; Reed et al., 2013), and although best practice does not necessarily recommend its use, the capability to recall events and play them back for evaluation during debriefing has been identified as advantageous (Grant, Moss, Epps, & Watts,

2010; Nystrom, Palsson, Hofsten, and Haggstom, 2014). Additionally, learners who can observe their performance during the patient care scenario and evaluate their own skills, have the opportunity to determine if they have achieved the objectives. Often this process aides in reconciling what a learner believes about their performance and what actually happened, ultimately providing a bridge between prior knowledge and the reality of their actions.

Simulation facilitators can observe and evaluate students during simulation using a one-way mirror from an adjacent room; however, the addition of video cameras to capture the simulation experience changes the possibilities of what can occur during the debriefing process. Student's self-reflection is not limited to their recollection of their performance but can be enriched by allowing the student to make their own observation and evaluation of their performance. Both high-resolution cameras and camera placement are critical for capturing the learner's performance during patient care scenarios if it is to be used as part of the debriefing process. Sukhtej and Kerns (2012) suggest a minimum of three cameras strategically placed to capture the activity of all learners.

In simulation labs using traditional video capture technique, a wide-angle view of patient care is provided by fixed cameras or pan, tilt, zoom (PTZ) cameras, the latter of which provides greater opportunity to record the learner's performance due to tracking capability. The typical placement of video cameras has been wall and/or ceiling mounted, or handheld cameras. Limiting factors with these arrangements include wall and ceiling mounted cameras that often do not provide an adequate vantage point to capture the learner's performance, cameras operators controlling or limiting the visual field, and camera distance or lack of focus preventing the ability to visualize the learner's performance (Forbes, Bucknall, & Hutchinson, 2016; Schneidereith, 2015). A different technique for video capture, other than handheld or wall and ceiling mounted

cameras, is a head-mounted, hands-free digital camera used to capture the learner's performance during patient care simulation. This first person/learner point of view is a relatively new approach for debriefing of simulation in healthcare education; therefore, there is limited availability of literature describing the "wearable technology" and how it has made its way into healthcare and higher education (Forbes, Bucknall, & Hutchinson, 2016; Skiba, 2014). Duke University School of Nursing (2016) and Indiana State University (Indiana Statesman, 2016) are early adopters of this innovative use of technology and have tested its use in simulation with nursing students; however, no current research has been published to reflect outcomes. A method not found in the literature, and the focus of this project, is video capture of patient care during simulation from the patient's perspective achieved by having an SP wear a pair of standard eyeglasses with a camera embedded into the frame. It is the researcher's belief that provider's observation of their nonverbal and verbal language, seen from the patient's point of view, will impact the patient-provider relationship.

Provider Communication

The patient-provider relationship has evolved from a provider dominated interaction to that of a partnership, with patient satisfaction and outcomes determining successful provider performance. According to current literature, the relationship between patients and healthcare providers is relevant to patient outcome and compliance and is affected by the provider's nonverbal and verbal communication (Henry, Fuhrel-Forbis, Rogers, & Eggly, 2012; Lawton, Gardner, & Plachcinski, 2011). Patients identify providers who spend time listening, and who appear empathetic as being more trusted to provide good care, and often the impression a provider makes on a patient predicts the

outcome of care (Jagosh, Boudreau, Steinert, MacDonald, & Ingram, 2011; Mackenzie, Farah, & Savage, n.d.). While research supports that providers are aware of the connection between communication and quality of relationships to patient satisfaction and outcome, they are often frustrated in the current healthcare environment by the high demand to become proficient at using electronic health records, meeting regulatory requirements, and other tasks which often pull them away from developing a strong patient-provider relationship (Chan, Jones, Fung, & Wu, 2011; Nantz & Hines, 2015). Pearcey (2010) reported results from a survey of providers in which they admitted feeling as though they were losing their ability to care due to distractions from one-on-one time with patients. The potential result of this loss of time invested in the patient-provider relationship could manifest in insensitive verbal or nonverbal language directed toward patients. The current project attempts to address patient's perception of provider nonverbal and verbal language during a simulated patient encounter.

Type of communication. The type of communication that takes place between a patient and provider is essential to the quality of patient care. It can influence a patient's level of stress, dignity, sense of self, and can be expressed both verbally and nonverbally (Karlsen, Gabrielsen, Falch, & Stubberud, 2017). While verbal and nonverbal communication typically occur simultaneously during a patient-provider encounter (D'Agostino & Bylund, 2011) each has its own specific characteristics and can influence a patient in a distinctly separate way.

Stickley (2011) believes that by actively listening and incorporating nonverbal communication into patient interaction, the provider can develop a therapeutic environment, leading to positive patient outcomes. Strickley's SURETY model provides six nonverbal behaviors useful for patient-provider communication: (a) sit at an angle to the patient, (b) uncross the legs and arms, (c) relax, (d) eye contact, (e) touch, and (f) use your intuition. The

goal of the SURETY model is to facilitate nonverbal communication between the patient and provider by helping the provider become aware of how interpersonal space is used between the two (Strickley, 2011).

In the R-E-S-P-E-C-T model, Bejciy-Spring (2008) describes seven categories of communication providers should consider when caring for a particularly vulnerable population, the clinically obese. Bejciy-Spring identifies expressions of both nonverbal and verbal communication that influence a patient's perceptions of how healthcare providers demonstrate a caring and accepting attitude: (a) rapport- getting to know the individual, and not identifying them as their disease, (b) environment- awareness of accommodations for patient needs, (c) safety- current training in the use of assistive equipment for staff and patients, (d) privacy- respect for disclosure of patient information, (e) encouragement- provider's choice of positive language and attitude, (f) caring and compassion- demonstration of concern for both the body and mind, and (g) tact- diplomatic interaction which considers the patient's values and point of view. According to Bejciy-Spring, concepts of the R-E-S-P-E-C-T model are used to communicate a culture of sensitivity toward the patient, and although developed for a specific group, the R-E-S-P-E-C-T model has applicability to a broad range of patients as everyone deserves to be treated with respect.

There is limited evidence showing a connection between specific nonverbal provider behavior and patient outcomes; however, research to look for links between the two may provide important relationships between clinical encounters and provider behaviors (Finset & Piccolo, 2011; Gudzone, Beach, Roter, & Cooper, 2013; Montague, Chen, Xu, Chewning, & Barrett, 2013). Knapp and Hall (2013) describe facial

expressions as the most demonstrative nonverbal way we communicate; used for both self-expression and communication with others, the face portrays character and intentions. Finset and Piccolo (2011) identified facial expression, as well as, gesture, touch, posture, eye contact, clothing, and hairstyle as cues displayed as nonverbal aspects of communication. Montague et al. (2013) found that length of time spent with a patient and eye contact significantly increased patient ratings of provider empathy, they were more liked by patients, and patients felt more of a connection with the provider; consequently, during shorter visits, a higher percentage of eye contact led to increased provider empathy ratings. Procedural touch, used to conduct a clinical task, and expressive touch, meant to be comforting or social in nature, are identified in the literature as important nonverbal communication techniques that can impact the patient-provider relationship; however, studies found that culture, gender, and individual patient history should be considered regarding touch (Cocksedge, George, Renwich, & Chew-Graham, 2013; Khan, Hanif, Tabassum, Qidwai, & Nanji, 2014).

Verbal communication that has been noted to influence the patient-provider relationship includes spoken words and paralanguage (vocal communication such as tone of voice and volume). Studies demonstrate that patient's perceptions of nurses' competency are closely related to the interpersonal communication including courteous and sensitive language, while family members identify providers who take time to verbally connect with patients as being more caring (Berg, Spaeth, Sook, Burdsal, & Lippoldt, 2012; Nantz & Hines, 2015). Jagosh et al. (2011) evaluated provider verbal dominance and listening skills during a patient encounter, and found that while patients respect provider's expertise, they perceive provider's listening to fulfill three critical needs: (a) necessary data collection needed to diagnosis and treat, (b) having the provider listen decreased stress and offered relief, and (c) provider's listening strengthened the

partnership.

Self-Reflection

Koshy, Limb, Gundogan, Whitehurst, and Jafree (2017) believe that while self-reflection is a concept formally learned in higher education, at a more rudimentary level most people have practiced it their entire lives when using past experience to inform future decisions. Self-reflection is a technique which can be used in healthcare as providers think back on previous patient care experiences or actions, and based on assumptions, frameworks, and patterns of thoughts and behaviors, can improve decision making (Institute of Development Studies, 2017). It is a process whereby the learner gains self-awareness into stressful or anxiety producing situations by introspectively exploring an area of concern resulting from an experience, then through introspective evaluation and assessment of newly acquired information a new decision is made. Improvement in problem-solving and patient care are potential outcomes of the self-reflective process (Ganzer, & Zauderer, 2013; Paternotte, 2016). As previously mentioned, the Gibbs Reflective Cycle (1988) was used to guide participants in the current study to use reflective thinking, and to consider how seeing from the patient's perspective could change their verbal and nonverbal communication.

Chapter 3

Research Design

The descriptive, mixed-methods study compared two video capture techniques designed to be used during simulation debriefing. Participants were video recorded during all simulated patient care encounters using the current video capture method (wall mounted wide-angle cameras from the observer point of view) utilized by the simulation center. An additional patient-perspective video capture technique took place concurrently during one of the patient care encounters. The student learners were blinded to the use of the patient-perspective video capture technique. All student learners viewed both the current wide-angle video capture and the patient-perspective video capture recordings when completing their self-assessment debriefing. For this study, an approach the PI named “patient-perspective” video capture was achieved by having an SP, in the role of the patient, wear a pair of eye-glasses with a camera mounted inconspicuously into the frame. The student learner’s performance was captured from the patient’s point of view during a simulated, routine office visit, and used during debriefing to provide the student learners an opportunity to assess their performance through the patient’s eyes.

Research Questions

Recognizing that debriefing is where the real learning takes place in the simulation process, and seeking an innovative use for technology, patient-perspective video capture emerged as a viable topic for this Doctor of Nursing Practice (DNP) Translational Research Project (TRP). The research questions for the TRP were as follows.

Research Question 1

Are there student learner characteristics that are correlated with the student learner’s self-assessment of their verbal and nonverbal communication with an SP?

Research Question 2

Will watching video capture during debriefing change the student learner's self-assessment of their verbal and nonverbal communication with an SP?

Research Question 3

Are there differences between the student learner's self-assessment of their verbal and nonverbal communication versus the SP's assessment of the student learner?

Research Question 4

What is the student learner's perception of the debriefing experience using patient-perspective video technique versus traditional wide-angle video capture?

Setting

The setting for this study was a simulation center located on the campus of a private university in the southeastern United States. In addition to the onsite campus, the center also provides simulation and clinical assessment experiences to other healthcare programs for a fee. The participants in the study were students attending a Family Nurse Practitioner program at a nearby university. The center's coordinator and staff are experienced at designing and facilitating simulation experiences, as well as training SPs to educate students at all levels of healthcare education.

Population and Sample

The study population was graduate nursing students who were assigned to clinical rotations during summer semester 2017. These students were participating in SP simulations at the simulation center as part of their routine learning experiences. After approval of the study was granted by the University IRB (see Appendix B), all eligible students were approached to participate in the study. Traditionally during this semester,

the Family Nurse Practitioner (FNP) students were enrolled in clinical courses. Routine learning experiences for these students included participating in two or three SP care encounter scenarios at the simulation center. The participants in this study were a convenience sample from this population. The sample size was twenty-nine FNP students.

Recruitment of participants was accomplished in the following ways: (a) an informational flyer, (b) word of mouth, and (c) personal invitation by the researcher. The DNP FNP flyer (see Appendix C) informed potential participants about the purpose of the study, provided brief details about how and when it would take place, and included contact information for the PI. The PI requested permission from course faculty to announce the study after a scheduled class. During this meeting, the PI provided a detailed explanation of the study and answer questions. For students who were willing to participate, the PI obtained written informed consent (see Appendix D), and a brief demographic survey was completed by volunteer participants.

Data Collection

Prior to the SP encounter learning experiences, the simulation center Coordinator sent the student participants an email which provided a personal username and password for use at the simulation center to access the video recorded patient encounter sessions, the faculty and SP feedback, and the self-assessment questionnaires. All students were emailed a scheduled time to arrive for the SP encounter learning experience. This was the standard procedure for the existing SP encounter learning experiences that students completed in their course work. All participants were oriented to the facility by the simulation center's Coordinator and questions were answered. Participants then participated in three 15-minute patient care encounter scenarios with an SP. Immediately following the patient care encounter, a debriefing session took place.

All participants were assigned to watch the traditional, wide-angle view video capture and the patient-perspective video capture recordings of their patient care encounters. In addition to the standard data collected at the simulation center, the Provider-Patient Relationship Questionnaire (PPRQ) was used to assess the student participant's perception of their nonverbal and verbal language during the pilot patient care encounter. Participants answered the modified pre-video, 20-item questionnaire (see Appendix E) immediately after the simulated patient care encounter, and the modified post-video, 20-item questionnaire (see Appendix F) immediately after viewing the video recordings. Additionally, students were asked to respond to three qualitative questions (see Appendix G) after viewing the video recordings. The questionnaires took approximately 15 minutes to complete.

Prior to the implementation of this study, students assuming the role of a healthcare provider (HP) participated in a simulation experience which included an SP care encounter that was audio and video (AV) recorded for purposes of student observation and reflection of their performance. Students were also provided feedback from faculty and the SP regarding their performance. Additionally, students provided a self-assessment of their performance after watching the video recording. AV recording was captured by cameras mounted on the wall of the exam rooms which provided a wide-angle view of the room from an observer point of view of the student-patient encounter. For this study, the existing simulation experience was used, plus one patient scenario developed for this study to be used for instructional purposes, one additional approach for AV capture, an additional self-assessment questionnaire, an additional three item qualitative questionnaire, and a demographic questionnaire. Implementation of the

additional AV capture technique required the SP to wear a pair of standard eyeglasses with a video camera mounted inconspicuously into the frame. Student participants were video recorded from the “patient’s perspective” during the simulated patient encounter for the purposes of capturing the student-provider’s nonverbal and verbal language from the patient’s point of view.

Students had password protected access only to their personal files. The student accounts were password protected with access limited to only the student, PI, participating faculty, and simulation center Coordinator. The system used by the simulation center for video/audio recording and debriefing, performance assessment, and center management is LearningSpace™ One by CAE. This web-based software integrates with both human patient simulators and SPs for management of all aspects of healthcare education. The glasses, worn by the SP, were a self-contained unit with a camera mounted into the frame to capture a video recording of the student’s performance. Participants’ videos were captured on individual micro SD cards, and viewed directly from the micro SD card via a USB reader at individual desk top computers located at the simulation center. Video recordings were used for training purposes only, and participants were de-identified. Video recordings and questionnaire materials are owned by the simulation center.

Instrumentation

The Provider Patient Relationship Questionnaire (PPRQ, [Gremigni, Casu, & Sommaruga, 2016]) was used to collect data from student participants. The PPRQ is a 16-item questionnaire used to promote self-evaluation of healthcare providers’ encounters with patients in day-to-day practice. Respondents were asked to think about their encounter with the SP and rate how they behaved in accordance with the 16-items using a 5-point scale where 1 = not at all to 5 = very much. Patient encounters are scored in four domains related to Patient-centered care

(PCC): (a) effective communication (EC), (b) interest in the patient's agenda (IPA), (c) empathy (E), and (d) patient involvement in care (PIC). Internal consistency of the PPRQ is good with a Cronbach's alpha level of 0.90 for global PPRQ, and Cohen's *d* of 0.72 indicating a moderate to large effect size. According to Gremigni et al., (2016), although the PPRQ was originally intended to be used in daily patient-provider practice, it is also an appropriate instrument to be used in simulation and continuing education. Four additional questions were added to the PPRQ, items 17 to 20, with permission from the author for purposes of this study. These additional four questions represented the domain of rapport building (RB).

To gain insight into the SP's experience with the participants the PPRQ was modified, with permission from the author, using the same scoring items as the original instrument, but stated from the patient's perspective (see Appendix H). The Standardized Patient-Patient Perspective Relationship Questionnaire (SP-PPRQ) was used to compare the SP's perceptions of how the participants communicated PCC versus the participants self-assessment. Reliability of the instrument will be discussed in the findings section of the paper.

A Qualitative Questionnaire, with three open-ended questions, was used to assess the impact of each of the video capture techniques on the student learner's awareness of interpersonal dynamics and communication with the patient (see Appendix G). The questions were developed using the Gibbs Reflective Cycle and asked the participants to provide feedback about the two types of video capture techniques. Themes were identified and are discussed in the findings.

A brief demographic questionnaire (see Appendix I) was administered at the time of consent for participation in the study. The instrument was used to gather basic information about

the study participants. Results of the participant characteristics are reported in the findings.

Data Analysis

Data for this study were analyzed using IBM Statistical Package for the Social Sciences (SPSS) for Windows version 23. Of the original 30 consenting adults, one participant was not present on the day of simulation and was not included in the study (n = 29). Descriptive statistics were used to report demographic results, and non-parametric tests were used for comparisons. Open ended questions were used to assess participants feedback regarding the two video capture techniques. Details of the data analysis are provided in the following sections.

Conclusion

This mixed methods, descriptive study compared two video capture techniques used to assist with debriefing after a simulated patient care scenario. Participants were recruited after IRB approval, and the study was implemented in conjunction with routine course requirements after obtaining consent. Research questions were designed to compare participant' self-assessment of patient-centered care, and to evaluate participant's feedback about the video capture techniques.

Chapter 4

Organization of Data Analysis

Data were analyzed using SPSS version 23. Of the original 30 consenting participants, 29 completed both the pre-test and post-test, with one participant being absent on the day of data collection. Participants were grouped into generational timelines based on the American Hospital Association (2014) definition of Millennial ages 22 to 36, Generation X ages 37 to 52, and Baby Boomer ages 52 to 71. Years of nursing practice were grouped based on Benner's Stages of Clinical Competence (Benner, 1984). A Shapiro Wilk test revealed the sample was not normally distributed. An alpha level of $p = 0.05$ was used for this study. Descriptive statistics were used to report demographic data using means and standard deviations, while non-parametric testing was used for comparison of groups and differences between groups. The Kruskal Wallis test was used to assess if participant characteristics affected their perceptions of how they communicated patient-centered care before and after viewing the video-capture patient encounters. The Wilcoxon Signed Rank test was used to compare participants' perceptions of their patient-centered care before and after viewing the video-capture patient encounters. A Wilcoxon Signed Rank test was used to compare the participant's perceptions with the SP's perceptions of participant's patient-centered care. The assumptions for the non-parametric tests were met.

Findings

Sample Characteristics

The participants ($n = 29$) were Nurse Practitioner students enrolled in a clinical course with various demographic characteristics. The majority of participants were

female (93.2%), and the mean age was 36.8, $SD = 12.31$. The sample consisted of Millennials (65.6%), Generation Xers (13.8%), and Baby Boomers (20.7%). The average number of years practiced as a nurse was 9.89, with 82.8% practicing in an acute care setting. The majority of participants (86.2%) reported no past experience with an SP, and the majority (58.6%) reported they had not taken a communication course. Refer to Table 1 for detailed demographic information of participants.

Research Question 1

Are there student characteristics that influence the student learner's self-assessment of their verbal and nonverbal communication with an SP?

A Kruskal Wallis H test indicated that there was a statistically significant difference in the learners' post-video perception of Interest in Patient Agenda between age groups, $\chi^2(2) = 7.183, p = 0.028$, with a mean rank Interest in Patient Agenda score of 22.00 for Baby Boomers, 18.63 for Generation Xers, and 12.03 for Millennials. Post hoc analysis with a Mann Whitney test indicated the significance was only between Baby Boomers and Millennials ($U = 16.500, z = -2.597, p = 0.009$). The Kruskal Wallis H test also indicated a statistically significant difference in learners' post-video perception of Patient Involvement in Care between age groups, $\chi^2(2) = 8.084, p = 0.018$. The mean rank Patient Involvement in Care score was 22.83 for Baby Boomers, 17.88 for Generation Xers, and 11.92 for Millennials. Based on a post analysis Mann Whitney test the significant difference was only between Baby Boomers and Millennials ($U = 15.500, z = -2.653, p = 0.008$).

Based on the Kruskal Wallis H test, there was a statistically significant difference in the learners' post-video perception of Patient Involvement in Care based on Years of Nursing Practice, $\chi^2(2) = 8.874, p = 0.012$, with a mean rank Patient Involvement in Care score of 18.75

for nurses with 6 to 10 years of practice, 18.56 for nurses with 11 or more years of practice, and 9.00 for nurses with 1 to 5 years of practice. Post analysis with a Mann Whitney test indicated the significant difference was between nurses with 1 to 5 years and 6 to 10 years ($U = 17.500$, $z = -2.441$, $p = 0.015$), and between nurses with 1 to 5 years of practice and 11 or more years ($U = 15.500$, $z = -2.593$, $p = 0.010$).

To reduce the probability of type one error, a Bonferroni adjustment was performed with an adjusted significance level of $p = 0.0167$ for the Mann Whitney tests reported for research question one.

Research Question 2

Will watching video capture during debriefing change the student learner's self-assessment of their verbal and nonverbal communication with an SP?

Participants' perceptions of how they communicated Interest in Patient's Agenda were significantly higher before viewing the video capture ($Mdn = 15.00$) than after viewing the video ($Mdn = 14.00$), $z = -2.447$, $p = 0.041$. Likewise, participant's perceptions of how they communicated Empathy were significantly higher before viewing the video capture ($Mdn = 15.00$) than after viewing the video ($Mdn = 13.00$), $z = -2.206$, $p = 0.027$. See Table 2 for detailed data results in all the patient care domains.

Research Question 3

Are there differences between the student learner's self-assessment of their verbal and nonverbal communication versus the SP's assessment of the student learner?

A Wilcoxon signed-ran test showed that the student learners' perceptions of their communication regarding Effective Communication were significantly higher before viewing the video capture ($Mdn = 17.00$) than the SP's perceptions of the student learner's communication

regarding Effective Communication ($Mdn = 12.00$), $z = -4.289$, $p = .000$. Moreover, the Wilcoxon signed-rank test supports that the student learners' perceptions of their communication regarding Effective Communication remained significantly higher after viewing the video capture ($Mdn = 17.00$) when compared to the SP's perception of the student learners' communication of Effective Communication ($Mdn = 12.00$), $z = -4.272$, $p = .000$.

A Wilcoxon signed-rank test revealed that the student learners' perceptions of their communication regarding Patient Involvement in Care were significantly lower before viewing the video capture ($Mdn = 14.00$) than the SP's perceptions of the student learners' communication of Patient Involvement in Care ($Mdn = 17.00$), $z = -2.302$, $p = .021$. These results remained consistent with student learners' perceptions of their communication regarding Patient Involvement in Care being significantly lower after viewing the video capture ($Mdn = 13.00$) when compared to SP's perceptions ($Mdn = 17.00$), $z = -2.832$, $p = .005$. See Table 3 for a detailed report.

Research Question 4

What is the student learner's perception of the debriefing experience using patient perspective video technique versus traditional wide-angle video capture?

Three open ended questions were used to compare the student learners' perceptions of video assisted debriefing using traditional wide-angle video capture and the new patient-perspective video capture technique. Responses to the questions were compiled and themes were identified. Major themes included: (a) body language, (b) patient agenda versus provider agenda, and (c) self-awareness. See Table 4 for details. The student learners' overall feedback indicated that the use of patient-perspective video capture used in debriefing changed how they perceived their communication with the SP and provided a better indication of the patient's experience than

did the wide-angle video capture.

Instrument Reliability

Internal consistency for the modified student learner PPRQ was high with a global Cronbach's alpha of 0.96 and a range of 0.79 – 0.91. The global Cronbach's alpha for the modified SP-PPRQ used by the SP's was 0.95 and a range of 0.70 – 0.90. Table 5 provides details of the instrument's domains and scoring.

Conclusion

Based on analysis of the participants' responses, assumptions of the study were supported across the research questions. It was assumed that video capture used in debriefing would change how student participants perceived their communication with the SP. It was further assumed that patient-perspective video capture would provide insight into the provider's nonverbal and verbal communication.

Chapter 5

Summary of the Study

This mixed methods, descriptive study was performed to compare two video capture techniques used to facilitate debriefing after a simulated patient-provider encounter. The study also sought to increase the participant's discernment regarding communication of patient-centered care through evaluation of their verbal and nonverbal behavior in the patient-provider encounter. This study explores a gap in the current literature regarding video capture of the patient-provider encounter from the patient's perspective. Findings and conclusions regarding the impact of the video capture techniques, and the influence of study participant characteristics are discussed in this chapter. Strengths, limitations, implications for practice, and future research are presented.

Discussion

Research Question 1: Characteristics Associated with Self-Assessment of Communication

Attitudes, priorities, and communication styles are influenced by generational timelines (American Hospital Association, 2014); therefore, participants were grouped into their respective generations of Baby Boomers, Generation Xers, and Millennials for data analysis. None of the age groups' PPRQ self-assessments were statistically significant immediately after the simulation; however, the Millennial group showed a statistically lower self-assessment rating in the PPRQ domains of Interest in Patient Agenda and Patient Involvement in Care after viewing their patient scenarios. Interest in Patient Agenda refers to how well the provider communicates an interest in the patient's knowledge of their disease or seems to care about the patient's feelings and desires about the course of their care. Patient Involvement in Care is demonstrated when the provider encourages the patient to talk and express their perspective, and when decisions are made together with the patient contributing substantially, while the provider

provides an optimistic viewpoint. Characteristic behaviors of Millennials include the need for instant gratification, a fast-paced work environment, and self-confidence (American Hospital Association, 2014; Diesing, 2016); therefore, it is understandable that this group would focus more on their own opinions and agenda during the patient encounter without realizing a lack of patient involvement. After viewing their simulated patient encounter, coupled with PPRQ self-reflection questions, the Millennial group responded with a lower self-assessment rating in the PPRQ domains, indicating that viewing the videos increased awareness of their verbal and nonverbal behavior in the simulation.

Years of practice as a nurse is a second student learner characteristic that influenced participant's perception of how they self-assessed communication of patient-centered care as measured by the PPRQ. Significant differences were, once again, only found in the post-video self-assessment. Based on Benner's (1984) Stages of Clinical Competence, the study participants were grouped into spans of one-to-five years, six-to-ten years, and over eleven years of nursing practice. Results showed that the participants with the least number of years practicing rated themselves lowest in the domain of Patient Involvement in Care. Additionally, there was a significant difference between the one-to-five years of practice groups' self-assessment ratings when compared to participants with both six to ten years of experience and those with more than eleven years of experience. There was not a significant difference between participants' self-assessment ratings in the six-to-ten and more than eleven years of nursing practice groups.

According to Benner, a minimum of five years of practice is necessary for a nurse to achieve an expert level of competence, and for some it takes longer. Clinical

competency from Benner's perspective refers to the ability to use experience as a guide to make judgements about patient care within the context of a situation. While communication skills can be taught in the classroom, competent application must be developed and mastered over time. Results from this study revealed that, after viewing their videos, the group of participants with one-to-five years of practice experience rated themselves significantly lower in the PPRQ domain, Patient Involvement in Care, than the other two groups who had six-to-ten years of practice and more than eleven years of practice. A possible explanation for this might be that the less experienced participants were focused on achieving the tasks associated with the patient care encounter, such as obtaining a health history, or making diagnostic decisions. The ability to observe their interaction with the SP might have helped them realize that they were more focused on completing tasks than communication and patient-centered care.

Research Question 2: Video Capture Debriefing and Self-Assessment of Communication

Student learner study participants, guided in reflective thinking by the PPRQ (Gremigni, Casu, & Sommaruga, 2016), were asked to self-assess their patient-centered care in the five domains immediately after a simulation encounter with a challenging SP. After viewing both wide-angle and patient-perspective videos of the encounter, participants completed the same questionnaire to determine if viewing their verbal and nonverbal communication would provide insight into how communication can impact the patient's experience. Comparison of the before and after self-assessment indicated a statistically significant difference in two of the PPRQ patient-centered care domains. Participants rated themselves higher in Interest in Patient Agenda (defined previously) before watching the videos of their encounter with the SP than after, indicating their perception of how well they communicated care in the domain decreased once they viewed the videos. Participants also rated themselves lower in the domain called Empathy

after viewing the videos of their patient encounter. This PPRQ domain is demonstrated when the provider seems to understand how the patient feels emotionally, and by using touch or proximity to the patient to convey confidence. Watching their verbal and nonverbal communication with the SP while being guided in self-reflection seemed to increase the student participants' awareness of how they communicated patient-centered care.

Research Question 3: Participant Versus SP Assessment of Communication

Differences in the SP's evaluation of the participants' communication of PCC was compared to that of the participants. A significant difference between the two groups was found in the domain called Effective Communication, which refers to the provider giving clear information, showing respect to the patient by using a calm and quiet tone, or paying attention when the patient speaks (Gremigni, Casu, & Sommaruga, 2016). Student learner participants rated themselves significantly higher both before and after watching the video feedback as compared to the SP's significantly low rating of the participant's patient-centered care in this domain. Conversely, in the domain called Patient Involvement in Care, participants rated themselves significantly lower on both the pre-and-post questionnaire as compared to the SP's significantly higher rating. While no explanation is apparent for these results, this does provide support for the use of the SP's role to provide valuable feedback from the patient's perspective (Nestel and Bearman, 2014) during debriefing. Addition of the patient-perspective video would provide support for the SP's feedback, potentially making the debriefing experience more meaningful for the student learner.

Research Question 4: Wide-Angle Versus Patient-Perspective Video Capture

Student learner participants were asked to reflect on the two video capture techniques, and to describe differences they saw regarding their interactions with the patient. Participants' feedback included that the wide-angle video allowed them to see the overall environment, and that they could get a sense of how they positioned themselves in proximity to the patient. The wide-angle view did not; however, provide as much intimacy as the patient-perspective view.

Reflections on the patient-perspective video indicated that seeing themselves through the patient's eyes, their facial expression, eye contact with the patient, nonverbal body language, tone of voice, and attentiveness to the patient helped them understand the patient's experience. Participants were also asked to describe how seeing the videos made them feel. Observations included that the patient-perspective video provided a better understanding of what the patient was experiencing. Stern or serious facial expressions, and lack of eye contact with the patient, were reoccurring comments that made the study participants see themselves as lacking empathy or interest in the patients. Participants repeatedly noted that their focus on accomplishing tasks, rather than paying attention to the patient, made them seem disinterested. Finally, when asked how seeing themselves from the patient's perspective was beneficial, the study participants expressed that it provided insight into their personal understanding about how verbal and nonverbal communication impacts a patient's experience.

Participant's comments about their video performance reflected findings identified by healthcare consumers in the literature as important verbal and nonverbal communication behaviors. According to Jagosh, Boudreau, Steinert, MacDonald, and Ingram, (2011) patients reported active listening, empathy, direct eye contact, spending time, friendliness, and

encouragement as important communication techniques that improve the patient-provider relationship, and lead to patient compliance with provider recommendations.

Strengths

Several strengths are noted with the development and implementation of this study. A gap in the current literature was identified regarding simulation video capture technique. While current video capture methods from a first-person learner point of view have been used to identify learner deficits in knowledge or ability to prioritize (Forbes, Bucknall, & Hutchinson, 2016; Skiba, 2014), video capture used to demonstrate the patient experience has not been reported. Patient-perspective video capture technique promotes provider self-assessment of the patient's experience by seeing through a patient's eyes.

In this study, the INACSL best practice standards were used to guide development of the simulation. Role fidelity (Paige, 2013) was achieved by experienced trainers who prepared the education professionals playing the roles of patients. To provide standardization to the study, all study participants were pre-briefed and oriented to the simulation environment by the same experienced co-investigator, and all participants were given the same information. Oversight of the study was coordinated by the PI to provide a consistent experience for each participant, and a practice run through with all team members was performed two weeks prior to implementation. The video glasses worn by the SP were easy to use, and participant recordings were stored on individual secure digital (SD) memory cards which were convenient for viewing. The Patient-Provider-Relationship Questionnaire used for participants self-assessment has

strong psychometric properties; therefore, results from this study can be used to support and build on previous findings.

Limitations

Limitations of this study include the small number of participants, a convenience sample, representation of only one university setting, and a single healthcare program; thus, generalization of results to other geographic locations or programs of study may not be appropriate. Although participants were provided an orientation to the setting, lack of experience with SPs, and anxiety related to beginning a new program might have impacted participants' self-assessment ratings. Discussion between groups might have occurred since the study took place over a two-day period of time. Finally, development of new procedures requires a learning curve. Although a rehearsal to include all steps of the study was performed, occasionally the SPs head movement led to momentary lapses in capturing the study participant's view.

Implications and Future Research

Results of this Translational Research Project have implications for healthcare programs where simulation is used for education, and for those involved in simulation research. Since viewing the simulation encounter video performance changed the participants' perception of how they communicated certain aspects of patient-centered care, it would be helpful to provide this technique as part of a course where simulation is used to teach communication techniques. More research is needed to determine how to best hone in on the specific communication behaviors that led participants to change their assessment. While separating verbal and nonverbal communication during an encounter is not possible, a focused debriefing session which delineates the two might be informative in development of communication course topics for healthcare professionals. Development of simulation scenarios with a focus on communication is

also recommended. Although verbal and nonverbal communication should always be considered as part of the patient-provider encounter, scenarios with the intent to assess communication will increase the learner's awareness and assessment of the patient's experience. Repeating the simulation after student learners gain experience in their courses and clinical experience is recommended to determine if self-assessment and performance of communication is impacted.

Although the current study included only graduate level nursing students, patient-centered communication, patient outcomes as a measure of provider performance, and simulation are incorporated into most healthcare programs for both students and practicing providers. It is recommended that patient-perspective video capture be included as an additional technique for debriefing in simulation programs. Use of this technique should also be incorporated as part of the SP training program at facilities where the use of SPs is utilized for simulation. Results from the study indicated that the participants found both the traditional wide-angle video and the patient-perspective video capture techniques to offer insightful information about verbal and nonverbal communication; therefore, both views are recommended.

Based on the results of this study, characteristics of a provider's generation should be a consideration regarding patient-provider communication. Members of an intergenerational workforce will communicate with patients and self-assess their communication within the patient-provider dyad based on certain predictable behaviors specific to their age group. Implications associated with this understanding include using patient-perspective video capture to raise provider's awareness of how their generational tendencies might influence communication with patients. Results of the study also

indicated that years of practice influence a provider's assessment of communication with the patient. Suggestions based on these study findings include preemptive support for novice practitioners to bolster confidence, and to proactively teach effective communication techniques. Implications for enhancement to communication courses, tailored to specific provider characteristics, designed to improve the patient-provider relationship, and ultimately patient outcomes is recommended based on this study.

Conclusions

Results from this Translational Research Project indicate that patient-perspective video capture provides a new and innovative approach to debriefing in simulation, and that this technique increases awareness of verbal and nonverbal communication skills. Additionally, generational ages and years of practice influence how patient-centered care is self-assessed after viewing the interaction between the provider and patient through the patient's eyes. Comparison of the SP's and providers' assessment of how a provider communicates patient-centered care can contribute informative, and unapparent or subtle points of conversation leading to enhancement of communication techniques for providers. Patient-perspective video capture, used to enhance debriefing in healthcare simulation, can provide a new dimension to instruction of verbal and nonverbal communication.

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Table 1

Sample Characteristics

Variable	N	%
Age Group		
Millennial	19	65.5
Generation X	4	13.8
Baby Boomer	6	20.7
Gender		
Male	2	6.9
Female	27	93.1
Years Practiced as Nurse		
1-5 years	11	37.9
6-10 years	9	31.0
11+	9	31.0
Program of Study		
FNP	29	100
Past Experience SP		
Yes	4	13.8
No	25	86.2
Area of Practice		
Acute	24	82.9
Non-Acute	2	6.9
Communication Course		
Yes	12	41.4
No	17	58.6

Table 2

Participant Patient-Provider Relationship Questionnaire Pre/Post Video Item Results

Patient Care Domain	Participant Pre-Video Median	Participant Post-Video Median	<i>z</i>	<i>p</i>
Effective Communication	17	17	-.883 ^b	0.377
Interest in Patient Agenda	15	14	-2.447 ^b	0.014*
Empathy	15	13	-2.206 ^b	0.027*
Patient Involvement in Care	14	13	-1.454 ^b	0.146
Rapport Building	13	14	-.773 ^c	0.439

Note. b Based on positive ranks; c Based on negative ranks

* $p < 0.05$

Table 3

Participant Pre-Video/SP Patient-Provider Relationship Questionnaire Item Results

Patient Care Domain	Participant Pre-Video Median	Participant Post-Video Median	SP Post-Patient Encounter Median	<i>z</i>	<i>p</i>
Effective Communication	17		12	-4.289 ^b	.000*
		17	12	-4.272 ^b	.000*
Interest in Patient Agenda	15		16	-2.81 ^c	.779
		14	16	-1.928 ^c	.054
Empathy	15		16	-.434 ^c	.664
		13	16	-1.366 ^c	.172
Patient Involvement in Care	14		17	-2.302 ^c	.021*
		13	17	-2.832 ^c	.005*
Rapport Building	13		16	-1.434 ^c	.152
		14	16	-1.005 ^c	.315

Note. b Based on positive ranks; c Based on negative ranks

* $p > 0.05$

Table 4

Wide-Angle Video vs. Patient-Perspective Video Qualitative Questions with Themes

Qualitative Questions	
Do you feel that watching the patient perspective video changed how you saw your interaction with the patient?	
What are some differences in how the two videos made you feel?	
In what way do you feel like seeing a video from the patient perspective was a beneficial learning experience?	
Themes	Quotations
Body Language	“I didn’t realize how much my face portrays” “I look judgmental” “I saw my body language as closed” “My serious face looks angry”
Patient Agenda vs Provider Agenda	“I was more interested in the diagnosis and information collection and less interested in the patient” “I was more busy writing than listening to the patient” “I was more interested in my own agenda than the patients”
Self-Awareness	“Seeing the patient’s perspective puts you in their shoes” “Seeing from his eyes made me realize how important it is to put down the paper and look and touch the patient” “Through the glasses makes me want to be more aware of how I am portraying myself during an interview”

Table 5

Scoring instructions

Patient-Provider Relationship Questionnaire Domain	Sum Items
Effective Communication (EC) refers to communication behaviors such as giving clear information, paying attention to the patient when he or she talks, dealing with the patient in a calm and quiet tone, and showing respect.	1, 3, 6, 9
Interest in the Patient's Agenda (IPA) measures how much the provider is interested in knowledge, feelings, desires and expectations of the patient about the disease and care.	2, 5, 7, 14.
Empathy (E) self-assesses the provider's ability to understand the patient's emotions, to get into his or her shoes, and to convey confidence when touching or being close to him or her.	4, 8, 10, 12.
Patient Involvement in Care (PIC) measures behaviors such as offering the patient the opportunity and the time to talk, to express his or her point of view, to discuss and decide together what should be done, and encouraging him or her by infusing optimism.	11, 13, 15, 16.
Rapport Building (RB) A working relationship where there is mutual understanding of another's goals and needs with exchange based on respectful behavior	17, 18, 19, 20.

Figure 1. Gibbs Reflective Cycle

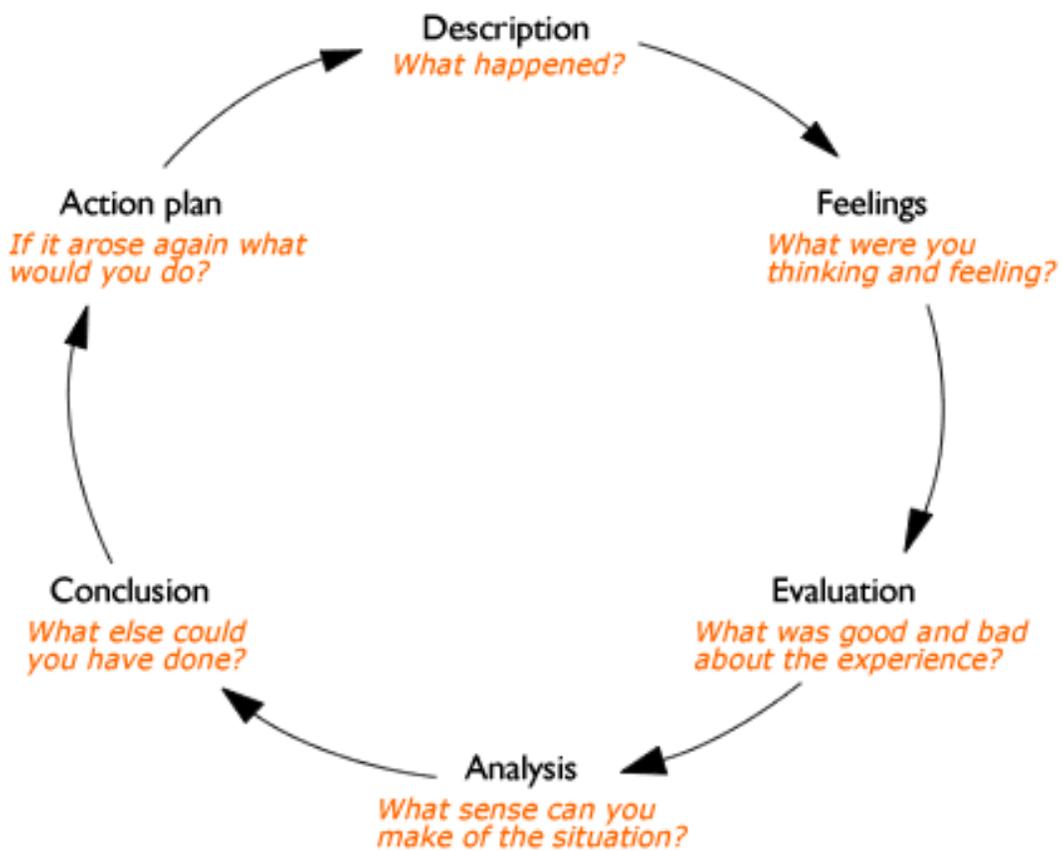


Figure 1. Gibbs Reflective Cycle. Reprinted from Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Retrieved from <https://www.brookes.ac.uk/students/upgrade/study-skills/reflective-writing-gibbs/>

Appendix A



Clinical Development & Assessment Center

(478) 301-5589 * (478) 301-4028 * (478) 301-4074

Mercer University School of Medicine
 Clinical Development and Assessment Center
 Ann O'Neal, Director
 Phone: 478-301-5589
 Email: oneal_a@mercer.edu

Date: April 24, 2017

Dear GC IRB,

Based on my review of the proposed research by Terri Morris Florman RN, MS, I give permission to conduct the study entitled: Try To See It My Way: Patient Perspective Video-Capture Debriefing in Simulation, within the Clinical Development and Assessment Center (CDAC) at the Mercer University School of Medicine. With the support of her GCSU advising faculty, student participants will be selected by Ms. Florman from the Georgia College and State University Family Nurse Practitioner Program to collect data via the Patient Provider Relationship Questionnaire and demographic questionnaire, and video recording of a simulation experience for the purpose of statistical analysis of data, and dissemination of results for the purpose of demonstrating a patient's perspective of provider non-verbal and verbal language and the potential impact on the patient-provider relationship using an innovative technique for debriefing in simulation. The individuals are under no obligation, participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include:

1. Collaboration to develop a standardized patient scenario that will evaluate the providers use of verbal and non-verbal communication;
2. Access to audio/video recordings of students who are participating in the study;
3. Access to the standardized patients' evaluations;
4. Access to student's self-evaluations of the standardized patient scenario related to study.

We reserve the right to withdraw the use of our center (CDAC) from the study at any time if our circumstances change.

This researcher will supply:

1. Eyeglasses with embedded camera to be worn for recording the standardized patient scenario related to study;
2. Secure Digital (SD) Memory Cards for capturing video of the standardized patient scenario related to study;
3. Dedicated laptop computer for downloading video of the standardized patient scenario related to study.

We understand that the research will include two types of video recordings of a simulation experience with a standardized patient, student access to the video recordings, and three post-patient encounter questionnaires.

This authorization covers the time period of June 8, 2017 to June 15, 2018.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Georgia College IRB.

Sincerely,

Jean R. Sumner, MD
 Dean
 School of Medicine

Ann O'Neal
 CDAC Director
 School of Medicine

MERCER
 UNIVERSITY

School of Medicine

1550 College Street * Macon, Georgia 31207-1554

Appendix B

Institutional Review Board
Office of Academic Affairs
irb@gcsu.edu
<http://www.gcsu.edu/irb>
DATE: 2017-04-26
TO: Terri Morris Florman

FROM: Tsu-Ming Chiang, Ph.D. Chair of Georgia College Institution Review Board

RE: Your IRB protocol 7430 is Approved for 2017-04-26 - 2018-04-26

Dear Terri Morris Florman,

The proposal you submitted, "Try To See It My Way: Patient Perspective Video Capture Debriefing in Simulation," has been granted approval by the Georgia College Institutional Review Board. You may proceed but are responsible for complying with all stipulations described under the Code of Federal Relationship 45 CFR 46 (Protection of Human Subjects). This document can be obtained from the following address:

<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>

The approval period is for one year, starting from the date of approval. After that time, an extension may be requested. It is your responsibility to notify this committee of any changes to the study or any problems that occur. You are to provide the committee with a summary statement. Please use the IRB Portal (<https://irb-portal.gcsu.edu/>) to request an extension, report changes, or report the completion of your study.

Finally, on behalf of IRB, we would appreciate your time to fill out a short survey (click the link below) to provide us with feedback. Best wishes for your study.

https://docs.google.com/forms/d/1iWX9nbq2kyxlLaT8P6vLstQB1LriGl_GrqNSXXafT2k/viewform?c=0&w=1&usp=mail_form_link

Sincerely,

Tsu-Ming Chiang, Ph.D.

Appendix C

**You are invited to volunteer to participate in a
Research study
TRY TO SEE IT MY WAY:**

PATIENT PERSPECTIVE VIDEO-CAPTURE DEBRIEFING IN SIMULATION

PURPOSE: To examine student learner's nonverbal and verbal language during a simulated patient care scenario, and the potential impact on the student learner's sensitivity to specific areas of communication with patients using an innovative technique for video capture and debriefing.

Where: SIMULATION CENTER on the scheduled simulation day and time

How: An additional video capture technique will be used during simulation. All student learners will have access to the video, study participants will provide questionnaire feedback

Who: GCSU FNP students

When: Regularly scheduled clinical simulation day/time at simulation center, additional time commitment is approximately 30 minutes

Compensation: \$5 gift card

For any additional information please contact:

Terri Hendry

Phone/text: 305-915-4742

Email: terri.hendry@bobcats.gcsu.edu

Georgia College and State University

This research is conducted under the direction of Dr. Deborah MacMillan, Georgia College and State University School of Nursing; Milledgeville, Georgia, and has been reviewed and approved by the Georgia College and State University Internal Review Board.



Appendix D

INFORMED CONSENT

I, _____, agree to participate in the research Try To See It My Way: Patient Perspective Video Capture Debriefing in Simulation, which is being conducted by Terri Hendry RN, MS. who can be reached at terri.hendry@bobcats.gcsu.edu, phone: 305-915-4742. I understand that I am under no obligation to consent; I can withdraw my consent at any time. If I withdraw my consent, my data will not be used as part of the study and will be destroyed.

The following points have been explained to me:

1. The purpose of this study is to demonstrate and examine provider nonverbal and verbal language, and the potential impact on the patient-provider relationship using an innovative technique for video capture and debriefing.
2. If you consent, the procedures are as follows: As part of your routine clinical course requirements, you will be asked to participate in a simulated patient encounter with a Standardized Patient (SP). The routine simulation experience will include video capture of your performance which you will use to evaluate your performance, and for a formal debriefing session, plus a self-assessment questionnaire after completion of the patient encounter. For the current study, a new method of video capture that this researcher is piloting will also be included. Participants' videos will be captured on individual micro SD cards, and will be viewed directly from the micro SD card via a USB reader at individual desk top computers located at the simulation center.
3. If you consent, participation in the study will include your completing one brief questionnaire about your perception of your performance as a provider. This will be done immediately after your Standardized Patient care encounters, and after viewing the assigned video. A brief demographic survey will also be provided at the time of consent. The estimated time required to complete this will be approximately 30 minutes.
4. If you consent, only the primary researcher, faculty involved in the research, and the Director of the simulation center will have access to the video and data files that link your name and information. All log books, code books, and micro SD cards will be kept at the simulation center. All data will be reported in aggregate form. Therefore, the information gathered will be confidential. Your course faculty will not have access to the new video capture or the data, therefore your grade for the course will be based on the current existing procedures for the simulation center.
5. If you consent, you will be asked to sign two identical consent forms. You must return one form to the investigator before the study begins, and you may keep the other consent form for your records.
6. If you consent, you may find that some questions are invasive or personal. If you become uncomfortable answering any questions, you may cease participation at that time.
7. This research project is being conducted because of its potential benefits, either to individuals or to humans in general. The expected benefits of this study include:
 - (a) Benefits to participants will include informed practice for healthcare providers regarding the impact of nonverbal and verbal language on the patient-provider relationship, and patient care outcomes.
 - (b) Benefits to the general patient population include improved patient outcome as a result of healthcare providers who are more aware of nonverbal and verbal language use.
7. If you consent, you are not likely to experience physical, psychological, social, or legal risks beyond those ordinarily encountered in daily life or during the performance of routine examinations or tests by participating in this study.
8. If you consent, your individual responses will be confidential and will not be released in any individually identifiable form without your prior consent unless required by law.
9. If you consent, the investigator will answer any further questions about the research should you have them now or in the future (see above contact information).
10. If you consent, in addition to the above, further information, including a full explanation of the purpose of this research, will be provided at the completion of the research project on request.
11. If you consent, by signing and returning this form, you are acknowledging that you are 18 years of age or older.

Signature of Investigator Date

Signature of Participant Date



Research at Georgia College involving human participants is carried out under the oversight of the Institutional Review Board. Address questions or problems regarding these activities to Dr. Tsu-Ming Chiang, GC IRB Chair, CBX 090, GC, email: irb@gcsu.edu; phone: (478) 445-0863.

Appendix E

Provider-Patient- Relationship Questionnaire (PPRQ) Pre-Video

The PPRQ reports 20 common ways of dealing with patients in day-to-day practice. Please think about your encounter with the Standardized Patient, and rate how you behaved in accordance with each statement using a 5-point scale from 1 = "not at all" to 5 = "very much".

1. I provided clear information. _____
2. I was interested in what the patient feels about his/her current health status. _____
3. I turned to the patient in a calm and quiet tone. _____
4. I understood the emotions that the patient may have. _____
5. I was interested in what the patient knows about the disease/prognosis. _____
6. I respected the patient as a person. _____
7. I was interested in what the patient wants from care. _____
8. I was able to listen. _____
9. I was paying attention to what the patient said. _____
10. I was able to put myself in "his/her shoes". _____
11. I gave the patient time to ask and to talk about the disease. _____
12. I inspired confidence and security when touching the patient and being nearby. _____
13. I asked questions that allowed the patient to express his or her view. _____
14. I was interested in what the patient expects from care. _____
15. I gave the patient encouragement and transmitted optimism. _____
16. I offered the patient the opportunity to discuss and decide together the "things to do". _____
17. I was able to use comforting touch with the patient. _____
18. I used words that were not offensive to the patient. _____
19. I held the patient's gaze when they were talking. _____
20. I used open body language while interacting with the patient. _____

Thank you for your participation in this study. Your contribution to the improvement of the patient-provider relationship will make a difference in patient outcomes.

Appendix F

Provider-Patient- Relationship Questionnaire (PPRQ) Post-Video

The PPRQ reports 20 common ways of dealing with patients in day-to-day practice. Please think about your encounter with the Standardized Patient, and rate how you behaved in accordance with each statement using a 5-point scale from 1 = "not at all" to 5 = "very much".

1. I provided clear information. _____
2. I was interested in what the patient feels about his/her current health status. _____
3. I turned to the patient in a calm and quiet tone. _____
4. I understood the emotions that the patient may have. _____
5. I was interested in what the patient knows about the disease/prognosis. _____
6. I respected the patient as a person. _____
7. I was interested in what the patient wants from care. _____
8. I was able to listen. _____
9. I was paying attention to what the patient said. _____
10. I was able to put myself in "his/her shoes". _____
11. I gave the patient time to ask and to talk about the disease. _____
12. I inspired confidence and security when touching the patient and being nearby. _____
13. I asked questions that allowed the patient to express his or her view. _____
14. I was interested in what the patient expects from care. _____
15. I gave the patient encouragement and transmitted optimism. _____
16. I offered the patient the opportunity to discuss and decide together the "things to do". _____
17. I was able to use comforting touch with the patient. _____
18. I used words that were not offensive to the patient. _____
19. I held the patient's gaze when they were talking. _____
20. I used open body language while interacting with the patient. _____

Thank you for your participation in this study. Your contribution to the improvement of the patient-provider relationship will make a difference in patient outcomes.

Appendix H

Standardized Patient - Patient Provider Relationship Questionnaire (SP-PPRQ)

The SP-PPRQ reports 20 common ways of dealing with patients in day-to-day practice. Please think about your encounter as the Standardized Patient, and rate how the student behaved in accordance with each statement using a 5-point scale from 1 = “not at all” to 5 = “very much”.

1. The student provided clear information. _____
2. The student was interested in what I felt about my current health status. _____
3. The student turned to me in a calm and quiet tone. _____
4. The student understood the emotions that I may have. _____
5. The student was interested in what I know about the disease/prognosis. _____
6. The student respected me as a person. _____
7. The student was interested in what I want from care. _____
8. The student was able to listen. _____
9. The student was paying attention to what I said. _____
10. The student was able to put them self in “my shoes”. _____
11. The student gave me time to ask and to talk about the disease. _____
12. The student inspired confidence and security when touching me and being nearby. _____
13. The student asked questions that allowed me to express my view. _____
14. The student was interested in what I expect from care. _____
15. The student gave me encouragement and transmitted optimism. _____
16. The student offered me the opportunity to discuss and decide together the “things to do”. _____
17. The student was able to use comforting touch with me. _____
18. The student used words that were not offensive to me. _____
19. The student held my gaze when they were talking. _____
20. The student used open body language while interacting with me. _____

Thank you for your participation in this study. Your contribution to the improvement of the patient-provider relationship will make a difference in patient outcomes.

Appendix I

Participant Demographic Questionnaire

Directions: Please read each question carefully and only choose (1) answer.

1. Gender

Male

Female

2. Age _____

3. Have You Had Past Experience with a Standardized Patient?

Yes

No

4. Program of study: _____

5. For NP students: Years practiced as a nurse _____

 Area of Practice _____

6. Have you taken a course in communication?

Yes

No

If yes, please provide a brief overview of the course content: