Role-Play as an Effective Way to Teach Relationship Building with Telehealth

Lynn McIvor
D'Youville College, Buffalo, mcivorl@dyce.edu

Michele Karnes
Gannon University, karnes005@gannon.edu

Follow this and additional works at: https://scholarworks.wmich.edu/ojot

Part of the Occupational Therapy Commons

Recommended Citation

This document has been accepted for inclusion in The Open Journal of Occupational Therapy by the editors. Free, open access is provided by ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.
Role-Play as an Effective Way to Teach Relationship Building with Telehealth

Abstract
Telehealth has been described in the literature as an emerging niche for occupational therapists. The profession needs to move toward cost-effective and efficient ways to provide services while not adding to the increasing cost of health care, and one way of doing this is through telehealth. The research supports the importance of the therapeutic relationship, and that telehealth changes how we develop this bond; however, the literature does not provide educators with information on how to teach this to students. The purpose of this article is to highlight the potential of using role-play to educate students on how to develop a therapeutic relationship while using telehealth. This project included a course that was presented over three modules to teach the skills needed for developing relationships while using telehealth. A pre and postsurvey design was used to measure if there were changes in the students’ perceptions of their abilities to establish relationships while using telehealth. Sixteen students participated. After completing the three modules, the students improved their confidence in their abilities to develop a therapeutic relationship and felt that role-play was effective for teaching these skills. It is important to provide students with opportunities to role-play while using telehealth as a part of their coursework.

Comments
The authors report that they have no conflicts of interest to disclose.

Keywords
education, interprofessional, standard patients, videoconference

Cover Page Footnote
We would like to thank Donna Brzykcy, MS, OTR/L; Margaret Frye, MS, OTR/L; Leslie Krentz, EdD, MS, OTR/L; Clara Quadra, RD; April Rockwood, PhD, MS, OTR/L; Theresa Vallone, EdD, MS, OTR/L; and Devlynn Neu, OTS, for their contributions as standard patients. This project was support by a faculty research grant through D’Youville College.

Credentials Display
Lynn McIvor, OTD, MS, OTR/L
Michele Karnes, EdD, MS, OTR/L

Copyright transfer agreements are not obtained by The Open Journal of Occupational Therapy (OJOT). Reprint permission for this Topics in Education should be obtained from the corresponding author(s). Click here to view our open access statement regarding user rights and distribution of this Topics in Education. DOI: 10.15453/2168-6408.1527
Telehealth has the potential for expanding access to and increasing the efficient delivery of services while reducing costs; thereby, helping to meet the goals of the Patient Protection and Affordable Care Act (PPACA) (U.S. Department of Health and Human Services, 2010). Current legislation provides health care providers with the goals of the Triple Aim, which include improving the patient experience, improving the health of populations, and reducing the costs of health care (U.S. Department of Health and Human Services, 2010). Providers that offer services through telehealth are leaders, as they are moving health care in a direction to best meet these goals. However, telehealth requires interpersonal and communication skills that are different from those required for a face-to-face patient encounter. This study evaluated the effectiveness of education inclusive of role-play to prepare future therapists to use telehealth.

Telehealth is defined as a service delivery model that provides clinical care to individuals at a distance while imparting medical information (Cason, 2012). There are several ways of providing telehealth. Methods include live video stream, store and forward, and remote patient monitoring. In occupational therapy (OT), telehealth can be used for evaluation, treatment, education, and care management. Because it is so new to the profession of OT, there is little research published regarding the use of telehealth in the profession. However, its use will likely increase as health care organizations look to improve the quality of their patient care while decreasing costs.

An important concept in OT is developing and maintaining a therapeutic relationship, and this often translates to successful achievement of treatment goals. The therapeutic relationship is defined inconsistently in the literature; however, common themes that emerge when defining it include an exchange of emotion between therapists and patients working together including connection, interaction, empathy, mutual respect, and communication (Cole & McLean, 2003; Farrelly et al., 2014). This relationship is vital, as it is linked with better follow-up and adherence to treatment, improved outcomes, decreased litigation, and better satisfaction for both the patient and the therapist (Warnecke, 2014).

**Telehealth and the Therapeutic Relationship**

The potential for telehealth to change the patient-therapist relationship remains a factor that may lead some professionals to be cautious of telehealth as a method for delivering quality health care services. The relationship involves more than just delivery of care by the therapist, as it includes the patient’s perceptions of the interaction. Each patient has individualized needs and experiences that occupational therapists are uniquely qualified to consider when developing rapport with their patients. Early literature describes how patients perceive their interactions with their therapists during telehealth encounters and raises concerns about this delivery method. Urness, Wass, Gordon, Tian, and Bulger (2006) examined satisfaction in interactions with patients that received face-to-face encounters and those who were provided with telehealth during psychiatry services. Patients in the telehealth group felt that they had less ability to talk, or that they did not receive the support that they needed. Similar concerns regarding telehealth methods in a primary care setting were reported by patients in a study by Swinton, Robinson, and Bischoff (2009). In this study, patients reported that they felt that they did not have the same therapeutic relationship as they would in a face-to-face encounter and that telehealth was impersonal. However, Liu et al. (2007) examined patients’ satisfaction in telehealth compared to face-to-face interactions with physicians. This study revealed that there were no differences in patient satisfaction between the groups.

A more recent study found that patients reported satisfaction with interactions using telehealth that they received during physical therapy encounters (Kairy et al., 2013). Patients in this study reported...
that they felt they could develop a bond with their therapists and that the therapy was individualized, but some reported that they would have liked to have had some face-to-face interactions (Kairy et al., 2013). Agha, Schapira, Laud, McNutt, and Roter (2009) also reported that there was no difference in patient satisfaction with communication during telehealth encounters as opposed to face-to-face interactions with physicians. Overall, the research we reviewed demonstrated conflicting results on patients’ perceptions of satisfaction with telehealth use. This may have been the result of different settings or patient demographics.

There are, however, reports in the literature that support the position that health care providers have concerns about their abilities to develop a therapeutic relationship while providing telehealth. Regarding verbal and nonverbal communication, Liu et al. (2007) and Swinton et al. (2009) both found that physicians reported that they considered telehealth to be a barrier in developing a therapeutic relationship. Liu et al. (2007) found that physicians expressed that they were unable to connect well with patients and that they did not always understand what the patients were communicating. In the same study, it was determined that the telehealth visits had a significantly shorter length of interaction, less utterances for praise and empathy, more requests to repeat the information, and less conversational turn taking. In a study by Swinton et al. (2009), physicians using telehealth expressed that it was difficult to conduct an examination, that the interactions were impersonal, and that it was more difficult to pick up on emotions or non-verbal cues. A systematic review by Henry, Block, Ciesla, McGowan, and Vozenilek (2016) examined the literature to identify health care providers’ interpersonal skills during telehealth encounters. They found that the research supports a need across all professions and settings for education on interpersonal skills while using telehealth (Henry et al., 2016). The findings supported the need for the current study, as it indicates that increased knowledge and skills for building the relationship for positive telehealth encounters are needed.

Recent Role-Play Studies

There were several methods used to teach the students in this project, including role-play. Several studies demonstrated the effectiveness of role-play with a standardized patient to teach interpersonal and communication skills. In a study by Lewis, Bell, and Ashar (2008), students worked in pairs to interact with a standardized patient. Students reported less anxiety and improved ability to interact with patients following the interaction. Another study provided role-play with the use of trained faculty and students (Lewis et al., 2013). Students self-reported that they had improved their abilities to communicate and felt that the use of role-play was effective for learning. A study by Rutledge et al. (2013) used standardized patients to teach the use of telehealth with advanced practice nursing students. A portion of the coursework involved the use of standardized patients in two role-play interactions: during a face-to-face and a telehealth encounter. Students reported that they found the experience beneficial and that they were comfortable with their interactions while using telehealth (Rutledge et al., 2013).

Intentional Relationship Model

The Intentional Relationship Model can be beneficial in role-play scenarios by defining and articulating the therapeutic interaction between the occupational therapist and the patient. According to the model, there are four elements (patient, occupation, therapist, and the interpersonal event) that occur during the interaction. These elements influence each other to create the therapeutic relationship (Taylor, 2008). The patient enters the relationship with stable, enduring characteristics, as well as situational characteristics, which are a reaction to an event. The therapist brings six therapeutic modes to the
interaction: advocating, collaborating, empathizing, encouraging, instructing, and problem-solving, to facilitate the therapeutic relationship (Kielhofner, 2009). The goal of the educational modules used in this study was to improve the students’ abilities to develop the therapeutic relationship by emphasizing the use of the six therapeutic modes.

According to the Intentional Relationship Model, the therapeutic event must provide patients with opportunities for communication, trust, and feedback (Taylor, 2008). Developing a relationship relies on the therapeutic use of self, which involves the therapist identifying the patients’ interpersonal characteristics, conscious attention to the interpersonal event, and selection of the modes or a sequence of modes to meet the patient’s needs (Taylor, 2008).

Potential Model: Telehealth and the Therapeutic Relationship Education

Following full institutional review board approval from D’Youville College, the project commenced. The education and role-play consisted of three modules implemented over two sessions. Module 1 was provided via a lecture style format and included information on the forms of telehealth, as well as legal, ethical, and reimbursement considerations. Additional information was provided regarding the benefits and challenges of telehealth, and the module concluded with a video conference with an occupational therapist who demonstrated how to use telehealth for a home health evaluation.

Module 2 contained information on developing a therapeutic relationship while using the Intentional Relationship Model (Taylor, 2008). This was used as the foundational frame of reference. The students were given instructions on the six therapeutic modes, and then they were asked to identify their preferred modes and discuss how they could adjust their therapeutic mode to meet their patients’ needs. During Module 2, mindfulness strategies were also used to develop the skills of active listening and attentiveness to cues that a patient provides. Mindfulness includes deliberately paying attention to what is happening around you (Bays, 2011). Mindful interactions while using telehealth may help a therapist interpret a patient’s communication, which is difficult to do when visual information is diminished or absent during telehealth. This module provided the students with information regarding interactional differences that exist when using telehealth, and it taught them how to address barriers to the therapeutic relationship to improve patients’ and therapists’ satisfaction with telehealth encounters.

Module 3 required the students to participate in role-play. Groups of two to three students interacted with a standardized patient in three scenarios: telephone, face-to-face, and videoconference. The use of role-play, in addition to a lecture, allowed the students to practice the skills needed for building a therapeutic relationship appropriate for telehealth interactions. The students interacted with the standardized patients in small groups in order to decrease any level of discomfort, as many of them had little experience interacting with patients.

One graduate student and several OT department faculty members served as actors depicting standardized patients. Each actor was provided with information on the diagnosis, treatment strategies, and psychosocial needs of the case study patient that they were responsible for portraying during role-play sessions. Once the actors read through the information that was provided, each completed a competency quiz regarding the information. If an actor did not achieve a 75% on the competency quiz, a review of information would have been made available and the quiz would have been re-administered until the actor achieved a satisfactory score. Each actor met with the research coordinator to answer areas of the case study that were unclear. Home programs were also assigned to each of the case studies; therefore, the actors needed to understand how this might impact the case study patient’s occupations. The standardized patient training also included a practice role-play with the research coordinator. Upon
completion of the practice role-play, the actors needed to achieve 10 out of 12 points on a role-play checklist. This checklist included their abilities to articulate the diagnosis, their demonstration of the medical and psychosocial needs of the case study, and their capacity to anticipate various interaction skills that the participants may use.

At the role-play scenarios’ conclusion, the research coordinator facilitated a debriefing session. An important aspect of role-play for skill development is debriefing, or the opportunity for the students to reflect on the learning that occurred. Between each role-play interaction, the students were asked to discuss, in their small groups, how the interaction went and what could have been better. After all the scenarios were completed, the students reconvened for a final debriefing session. The research coordinator facilitated the debriefing session. Open-ended questions were used to help the students consider what went well and what skills still needed to be developed. The actors were also involved in the final debriefing session and they were asked to report on their perceptions regarding whether the needs of the case study were met. See Figure 1 for an overview of the modules.

**Figure 1.** Overview of course modules.

### Description of the Participants

Students from the School of Health Professions at D’Youville College were invited to participate in the study, including students from the OT, physical therapy, physician assistant, dietetics, and exercise sciences and sports programs. Students were excluded if they had fieldwork experience. Twenty-four students from three programs, OT (second year BSMS), physical therapy (second year DPT), and exercise and sports science (second and third year BS) chose to participate in the project and provided informed consent. At the final phase of the project, however, only 16 students completed the pre and post surveys and were included in data analysis.

The presurvey included questions regarding the participants’ demographic information. The students were asked to report in which program in the School of Health Professions they were enrolled, as well as their genders, age ranges, and years of experience working in health care. For those who were represented in data analysis, 37.50% (n = 6) were from the exercise and sports science program, 12.50% (n = 2) were from the OT program, and 50% (n = 8) were from the physical therapy program (see Figure 2). The OT students had taken interpersonal skills coursework, while the physical therapy and exercise and sports science students had not received coursework on this topic.
The participants were 56.25% female (n = 9) and 43.75% male (n = 7). For age, 87.50% (n = 14) were less than 25 years of age, and 12.50% (n = 2) were 25 to 35 years of age. When asked whether they currently work in a health care setting, or had done so in the past (including, but not limited to, hospitals, long-term care facilities, outpatient clinics, or medical offices), 12.50% (n = 2) reported that they were working part-time in a health care setting at the time of the study, and 12.50% (n = 2) reported they had worked in a health care setting but were not working in health care at the time of the study. The largest group, 75% (n = 12), reported they had never worked in health care.

**Project Outcomes**

The project used a pre and posttest design to determine if education and interactive role-play was effective at improving the students’ perceptions of their abilities to develop a therapeutic relationship while using telehealth. The presurvey used a Likert type scale with 1 (strongly agree) through 5 (strongly disagree) to gather information regarding the participants’ perceptions. The postsurvey contained eight quantitative and five qualitative items regarding the students’ impressions of the educational modules and how the education impacted their learning. Both the pre and postsurveys asked students to quantify their confidence in their abilities to maintain a therapeutic relationship while using telehealth.

On the pre and postsurvey analysis, the participants’ agreement to the statement “I feel confident in my abilities to maintain a therapeutic relationship while using telehealth” had changed significantly. Prior to the project, the participant ratings regarding their agreement was 18.75% (n = 3) strongly agree, 43.75% (n = 7) neutral, 6.25% (n = 1) disagree, and 31.25% (n = 5) strongly disagree. Following the conclusion of the education, role-play, and debriefing sessions, the participants were asked again for their agreement in perception regarding their abilities in maintaining a therapeutic relationship. Ratings for the 16 students indicated 68.75% (n = 11) strongly agreed, 12.50% (n = 3) agreed, and 12.50% (n = 2) self-reported as being neutral (see Figure 3).
Figure 3. Comparison of presurvey and postsurvey results of the participants’ responses when asked their agreement on “Ability to maintain a therapeutic relationship while using telehealth” (n = 16).

The postsurvey also included the level of agreement on how strongly the participants felt that the role-play facilitated development of interpersonal and communication skills. The participants’ postsurvey results indicated that role-play was effective for teaching skills needed for developing a therapeutic relationship, with 75% (n = 12) reporting that they strongly agreed and 25% (n = 4) reporting that they agreed. When trying to determine if the lecture was an effective tool for improving the ability to maintain a therapeutic relationship during telehealth, the participant responses on the postsurvey were, overall, positive. Analysis of responses for lecture effectiveness indicated that 75% (n = 12) strongly agreed and 18.75% (n = 3) agreed, while 6.25% (n = 1) were neutral. When asked if the case studies were realistic, the responses were also positive, with 87.50% (n = 14) reporting that they strongly agreed, while 6.25% (n = 1) agreed, and 6.25% (n = 1) were neutral. The participants were also asked if the case studies were relevant to their program of study, and 81.25% (n = 13) strongly agreed with the statement, 6.25% (n =1) agreed, 6.25% (n = 1) were neutral, and 6.25% (1 student) disagreed. Table 1 displays a summary of these results.

<table>
<thead>
<tr>
<th>Postsurvey Item</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lecture was an effective tool for teaching the coursework</td>
<td>75.00%</td>
<td>18.75%</td>
<td>6.25%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The case studies were realistic</td>
<td>87.50%</td>
<td>6.25%</td>
<td>6.25%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The case studies were relevant to the profession</td>
<td>81.25%</td>
<td>6.25%</td>
<td>6.25%</td>
<td>6.25%</td>
<td>0%</td>
</tr>
</tbody>
</table>
To understand the participants’ feelings about the educational modules, open-ended questions were also included on the postsurvey. These questions were designed to examine whether the course content was effective at teaching the interpersonal and communication skills required to maintain a therapeutic relationship while using telehealth. In the postsurvey, the participants were asked to elaborate on how the coursework improved their telehealth communication skills. The responses were coded with two recurrent themes emerging.

The first theme was improved knowledge regarding telehealth. The participants reported that they had improved knowledge in their use of telehealth with their patients and that they have the information needed to be able to advocate for telehealth as a cost-effective way to provide health care. They also reported that they would be able to provide services to individuals in geographic areas that they may not be able to deliver in person. Important to note is that this was highlighted as a strength of telehealth throughout the presentations and discussions.

The second common theme that emerged was that the coursework improved their abilities to maintain therapeutic relationships. The participants reported that they felt they had improved their abilities to develop relationships with their patients during telehealth. The participants also reported that role-play, interpersonal skills training, and mindfulness instruction impacted their abilities to create relationships that could benefit the evaluation and treatment sessions involved in telehealth. Table 2 displays examples of quotes from the open-ended questions on the postsurvey related to these themes.

### Discussion

As seen in the literature, differences exist in how we interact with our patients while using telehealth when compared to face-to-face encounters. These interactions include both verbal and nonverbal communication, which can be quite different in telehealth. The purpose of the lecture portions of the modules taught students the differences in interactions while using telehealth as opposed to face-
to-face encounters. The results of the pre to postsurvey indicated that students valued the lecture portion of the project, with all but one of the participants agreeing or strongly agreeing.

The role-play module was developed using information gleaned from the literature. Results of several studies indicate that role-play is an effective method for teaching the interpersonal and communication skills needed for developing and maintaining therapeutic relationships (Lewis et al., 2008; Lewis et al., 2013; Rutledge et al., 2013). This module provided opportunities for the students to practice the interpersonal and communication skills they will need when interacting with their patients while using telehealth. During the debriefing, one student expressed her initial discomfort with the experience; however, the student indicated improved confidence and comfort for future role-play scenarios and fieldwork experience. Instructors should be aware of potential student discomfort prior to role-play experiences and provide support. Postsurvey results indicated that students either strongly agreed or agreed that this was an effective tool for teaching these skills, thus supporting results from previous studies.

The students’ perceptions of their confidence in their abilities to develop a therapeutic relationship while using telehealth following the role-play educational experience was also changed. The use of standardized patients (actors that were trained in a standardized method) offered practice in using the skills needed for telehealth encounters. The literature has supported this type of role-play to improve communication and interpersonal skills. Role-play with standardized patients was found to decrease anxiety in interactions and improve the ability to communicate with patients (Lewis et al., 2008; Lewis et al., 2013). Overall, the students agreed that role-play was an effective teaching tool that improved their confidence and preparedness for telehealth service delivery, which is consistent with existing literature.

The current study indicates that students can improve knowledge regarding the skills needed for telehealth service delivery as well as their confidence in their interactions. As such, OT academic programs should introduce telehealth and prepare students to use this innovative and growing method of OT service delivery.

Limitations and Future Research

A probable limitation of the project was the short timeline, as it consisted of only three modules over two sessions; thus, it was not comprehensive. The first session included Module 1 on telehealth and lasted for 2 hr. The second session included Module 2, developing a therapeutic relationship, and Module 3, the role-play, and lasted 4 hr. This did not allow the students to practice the skills outside of the classroom. Another possible limitation is that because this project was not required, the students that voluntarily participated may have been highly motivated individuals; therefore, the results may not be generalizable to students completing required coursework. Because the research coordinator designed the project and the survey and analyzed the data, the results may have been biased. The project also contained a small sample, and students from only three health related programs participated, thus the results may not be generalizable to all health care students. This research was an educational model and, although it was effective in improving students’ perceptions of their skills, occupational therapists may require a different and/or more advanced learning experience. The last limitation is that the coursework did not include various cultures and client factors that may have influenced the experience.

As the literature discusses, how therapists connect with their patients when using telehealth is different from face-to-face interactions; therefore, it is important for all health care students to
understand how to address any communication barriers. Future projects that contain a more diverse group of students from a variety of programs of study is indicated.

Future projects should also examine differences in students’ abilities for developing therapeutic relationships using a group that participates in telehealth and role-play based education compared to a control group that participated only in their program coursework. A comparison of the participants’ abilities to develop therapeutic relationships with their peers who did not participate is indicated for future research. As students transition into fieldwork and begin developing therapeutic relationships, whether in person or when using telehealth, they will require the interpersonal and communication skills that were developed during the project; skills that could benefit all students in the school involved in telehealth in clinic settings.

**Recommendations**

Because of the high number of students who volunteered to participate in the study, telehealth seems to be a topic of interest. Thus, it is recommended for schools to include education on telehealth as an emerging service delivery model. As the use of telehealth continues to grow and new opportunities emerge, preparing health related profession students with the knowledge and skills to develop quality therapeutic relationships is needed.

In addition, legislation, such as the PPACA (U.S. Department of Health and Human Services, 2010) and the Triple Aim, requires increased effectiveness and efficiency of services. As telehealth is one way of achieving these goals, it is essential that students are prepared as therapists to offer this service. In addition, research should inform education and practice; thus, this project provides information that can contribute to the emerging roadmap for educating students in health professional programs and better prepare them to meet the demands of this growing practice area.

The outcomes of this project indicate that additional education for health care students on developing a therapeutic relationship, as well as specific skills for building and maintaining the therapeutic relationship involved in telehealth, is warranted. This project indicated that education inclusive of lecture and role-play was effective at teaching these skills and improving confidence so that students can interact more successfully with patients during telehealth encounters. Students in all programs should have multiple opportunities to engage in role-play with peer and standardized patients, with some opportunities for interaction via telephone or videoconferencing.

Telehealth is an efficient and effective way to provide health care while addressing the goals of the Triple Aim (U.S. Department of Health and Human Services, 2010). For future therapists to become leaders and providers of telehealth services while maintaining a therapeutic relationship, students require a unique set of interpersonal and communication skills. This project used role-play as an educational tool that may be used as a model for teaching these skills to students in any health care program that will improve patient and therapist satisfaction with a telehealth service delivery model.

---

**Lynn McIvor, OTD, MS, OTR/L,** received her BS/MS degree in occupational therapy in 2000. Following that, she worked in a variety of settings, including neonatal intensive care, early intervention, and school based, prior to taking her full-time faculty position at D’Youville College in 2013. This project was completed to fulfill Dr. McIvor’s OTD degree from Chatham University.

**Michele Karnes, EdD, MS, OTR/L,** graduated from the University at Buffalo and has been an occupational therapist for over 20 years. She received her EdD in Health Education from D’Youville College in 2011. Dr. Karnes has worked in academia since 1994 at D’Youville College and currently holds a faculty position at Gannon University.
References


