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Student Satisfaction with a Simulated Patient Program in
Occupational Therapy Curriculum

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Student Satisfaction with a Simulated Patient Program in

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Abstract

A review of the literature reveals several prior studies using simulated patients. These studies strongly suggest that patient simulations are highly effective in student education and the application of knowledge. Student participation in simulated situations has been shown to develop a variety of clinical skills. However few studies specifically address occupational therapy curriculum. To assess the effectiveness of the use of simulated patients in an occupational therapy curriculum, thirty-nine fourth year occupational therapy students participated in the simulated patient program to promote their clinical skills. Each student completed a satisfaction survey before and after the program. The satisfaction survey consisted of eight questions regarding the use of simulated patients. The results of the first satisfaction survey supported the contention that simulated patient experiences are well received and valued by occupational therapy students. Pearson correlations between the before and after surveys found student satisfaction with the simulated patient program to have decreased over the twelve week period. The findings suggest the use of this program should be continued to be explored as a teaching tool in the clinical training of occupational therapy students. Literature on the use of simulated patients is abundant in other professions however it is all but non existent in occupational therapy. Future studies on this topic, which incorporate more objective ways of measuring students clinical skills and learning, would better contribute to curriculum development in occupational therapy.

Student Satisfaction with a Simulated Patient Program in
Occupational Therapy Curriculum

The goal of occupational therapy programs is to prepare their students for fieldwork and the clinical world. To better prepare their students, programs continually attempt to improve their curriculum. One way programs have found to improve their curriculum is by developing new and innovative teaching methods (Adams, 1973).

According to Kovner et al (1997), one challenge for many programs in health services is bridging the gap between theory and skills application by students in their professions. Part of this problem lies in the difficulty of attracting and retaining skilled teachers who can integrate perspectives and apply concepts across disciplines. A second challenge is preparing graduates to communicate effectively and to assist them in working effectively in groups. Students need to understand their own values and those of others who differ in educational background, political and religious orientation, clinical experience, or the careers and orientations of parents and siblings (Kovner, 1997). Patient simulation is a teaching method utilized to face these challenges.

The use of patients is an old technique for professional training. Patients were either untrained or trained to present their illness in a standardized way. The use of actual patients however had problems. Actual patients tended to be used in large classrooms to maximize the opportunity and minimize the burden of multiple presentations to the patient (Liu, 1997). This allowed for little individual student interaction. Patients weren't always available and their ability

to provide quality feedback was variable. Simulated patients offered an alternative. The simulated patient is a healthy individual who has been carefully trained to realistically portray a patient in a reproducible fashion (Liu, 1997). Patient simulation is the portrayal of a problem that is actually faced in the real world by the student that requires analysis, decision, and planning of a course of action (Kovner, 1997). It is a dramatic presentation of life for the purpose of learning about real experiences (Adams, 1973).

In a traditional occupational therapy program, didactic methods of teaching are most often used. The didactic or academic method of teaching allows teachers to transmit great quantities of data to students effectively and efficiently through lecture, film, or videotape. The teacher is assumed to be correct in presenting facts, the student transcribes those facts, and then transmits them back to the teacher at examination time. In the patient simulation method the teacher must assume a different role. The teacher's job is to engage the student in the simulation so that they can think independently, communicate effectively, and defend their opinions in class discussion. Often the simulation does not have one single correct answer but several (Kovner, 1997).

In a patient simulation course, some students find it hard to adjust to a classroom in which there is no authority figure, no lectures from which to take notes, and little structured information offered by the teacher. Students must learn how to make clinical decisions quickly under the scrutiny of their peers. Many students dislike "putting themselves on the line." The role of a professional working with a simulated patient makes students fear looking foolish and being

demigrated or contradicted by their peers. While there may not be one right answer students quickly learn that there are several wrong answers. According to Kovner, (1997) students should consider such self-exposure to be a small price to pay in relation to the benefit of gaining maturity and skill in fieldwork and ultimately in the clinical world.

In the past, student participation in simulated situations has been used to develop a variety of clinical skills. Madan et al (1998) published a study finding the use of simulated patients to be effective in the training of medical resident interviewing skills. Broder et al (1996) found that the use of simulated patients enhanced medical residents interpersonal and data-gathering skills. Johnson et al (1997) found that patient simulations were an effective instructional method for teaching dental hygiene students the clinical problem solving skills of information gathering, assessment and treatment to patients. The results of these studies suggest that simulations may prove especially valuable at institutions that are unable to provide clinical geriatric experiences. Students also can be introduced to difficult concepts that are meaningful and understandable when experienced first hand. For example, students' problem solving skills, self-motivation and self-confidence have all been enhanced through simulation experiences (Adams, 1973).

For most programs the resources and training required for new teaching methods are not always available. It is difficult to keep pace with the growing technological expansion in education today. Schools struggle to develop and implement methods that involve active learning without depending on high

technology experiences (Adams, 1973). The programs that do have the resources, find that implementing high technology does not necessarily increase learning in students. Patient simulation is considered a low technology method that is cost effective and has been shown to be a viable alternative to work/clinical experience (Adams, 1973).

Student satisfaction with their educational experience in higher education is an important part of any academic program. In the past, when institutions of higher education enjoyed expanding student enrollments and increasing financial resources, student satisfaction surveys were the domain of student affairs administrators. The primary purpose of these early student surveys was to measure student involvement in and satisfaction with campus activities (Franklin, 1994). Today, the assessment of student satisfaction has become an integral component in determining accountability in higher education. There are two primary reasons for the continued interest in student satisfaction: program effectiveness and student retention. "Assessing and improving the effectiveness of colleges and universities has ... taken on a new urgency in public dialogue" (Franklin, 1994, p. 2). This "urgency" has propelled the benign interest in student satisfaction of the past, toward a new formula to be used into the next millennium. This new formula equates satisfaction with educational effectiveness. A study completed at the University of Alabama (1989) found student satisfaction surveys to provide useful information to school administrators on various aspects of the department including program content, teacher evaluation, and class scheduling. The results were also used by the

school in preparation for re-accreditation (Hebbler, 1989). The measurement of student satisfaction is the first step in developing the educational standards that are the foundation of an effective higher education program. Student satisfaction is of crucial importance to the success or failure of educational approaches and media, for a negative reaction will inhibit learning whereas a positive one will make students more receptive to the learning activity (Franklin, 1994).

There have been several past studies demonstrating the effectiveness of the use of simulated patients as a teaching method. In one study completed at the University of Alberta, Canada (1997) the use of simulated patients with occupational and physical therapy students was evaluated. The study set out to determine the effectiveness of using simulated patients versus videotapes to teach clinical skills to the students. The study split 73 occupational therapy and physical therapy students into two seminars. One interacted with simulated patients and the other viewed videotape of a patient interacting with a clinician. Each student submitted the following for each seminar: a list of problems and treatment plans. A satisfaction form rated group participation and the topics covered. The problem lists and treatment plans of both seminar groups were evaluated by expert clinicians. Within-group comparisons showed that the identification of patient problems by the students tended to agree with the expert clinicians in the simulated patient group when compared with videotape group although this difference failed to reach significance. More of the student treatment plans agreed with the expert clinicians in the videotape group than

those in the simulated patient group. Group process and content ratings in the simulated patient group exceeded those in the videotape group (Liu, 1997).

Another study addressing the simulated patient teaching method was completed at the University of Tulane's Medical School (1998). The study set out to determine how well physicians need to be trained in HIV risk assessment interview skills (Madan, 1998). The study compared a didactic model of a standard lecture with an interactive model that used simulated patients to teach the residents about an HIV Risk Assessment. Twelve medical residents were taken through either the interactive session or the didactic session. Pre-post changes from questionnaires were calculated to determine the differences between the two sessions. The Objective Structured Clinical Examination (OSCE) was also used to grade all residents two weeks after their sessions. The results found the pre-post change scores were not statistically significantly different. When the OSCE interpersonal skill scores and content scores were calculated, the interactive group was found to have statistically significant higher scores. This study found the interactive, simulated patient method to be more effective in training the HIV Risk Assessment interview skills, than the didactic method (Madan, 1998).

A study completed at the University of Melbourne (1998) also had excellent results following the implementation of a patient simulation program (Suvinen, 1998). This study used both high technology methods including interactive video-discs and computer based simulations, and low technology methods including patient simulations. The study compared the initial

experiences and responses of second, third and fourth year undergraduate dental students in the case-based simulations with the preclinical exercises in the traditional curriculum. The results did not differentiate student response between high and low technology methods. Student response to the new teaching and learning method in general was uniformly positive, over a three year period. Students were very enthusiastic about the learning environment and educational approach, preferring it to the traditional preclinical laboratory instruction (Suvinen, 1998).

In a study by Johnson et al (1997) the simulated patient teaching method was again utilized with dental students. In this study dental hygiene students were required to practice a variety of clinical skills including information gathering, assessment, and treatment in a computer based simulated patient program. Each participating student interacted with two computer based simulations. Upon completion of the second simulation, the computer scored the students performance according to the explicit criteria set by an expert dental panel. A preliminary evaluation of the program, conducted at four institutions, suggested that computer-based simulations were an effective instructional method as measured by pre/post-tests. Results suggest that patient simulations may prove especially valuable at institutions that are unable to provide authentic clinical geriatric experiences (Johnson, 1997).

Several studies also address the use of simulated patients to develop a variety of clinical skills. In a study by Broder et al (1996) a simulated patient program was used to improve student's data gathering and interpersonal skills.

In this study, a total of 132 students interviewed four simulated patients during a three hour rotation. Each patient simulation portrayed one of six scenarios. The simulated patients evaluated each student providing the student with constructive feedback regarding their interpersonal behavior and their ability to identify salient content items from the patient's history. Significant improvement was noted on content checklists between the first and second interviews. Significant improvement was also found on the checklists, between rounds one, two and three. The results indicate that using simulated patients can enhance data-gathering and interpersonal skills. Student evaluation of the program was also positive (Broder, 1996).

Another study addressing clinical skills was completed by Eyler et al (1997), who investigated the effectiveness of using simulated patient instructors to instruct third-year medical students counseling techniques counseling techniques in smoking-cessation. The study included 159 students participating in a smoking-cessation counseling session in which simulated patient instructors and the students themselves assessed cognitive and behavioral endpoints. Results found that student performance in the cognitive and behavioral components of smoking-cessation counseling were rated acceptable by the simulated patients as well as the students. Areas rated poorly included, under emphasis on the personal and social benefits of smoking-cessation, and over emphasis of their competence on a number of skill items. The study concluded that smoking-cessation can be taught effectively to third year medical students by simulated patient instructors during a clinical clerkship (Eyler, 1997).

Smith et al (1998) investigated the effectiveness of a one-month training rotation on medical students interviewing skills and development of physician-patient relationship. To determine the effects of the rotation, a randomized, controlled study was developed to determine, 1) resident's attitudes toward and skills in interviewing and, 2) patient's physical and psychosocial well-being and satisfaction with care. The study consisted of 63 primary care residents in postgraduate year one. The method consisted of a monthly intervention on interviewing and related psychosocial topics over a full medical student rotation. A multiple choice questionnaire was used to assess residents' knowledge and commitment to interviewing and psychosocial medicine before and after the one month rotation. Resident physicians were asked to estimate the importance of such care and the confidence in their ability to provide the care. Audio taped interviews with real patients and videotaped interviews with simulated patients were rated for resident interviewing behaviors. To determine the level of satisfaction with the medical visits, patient anxiety, depression, social dysfunction, role limitations and somatic symptom status were assessed by questionnaires and telephone interviews. Results show that the trained residents were superior to untrained residents in knowledge, attitudes, confidence in psychological sensitivity, somatization management, interviewing of real and simulated patients. The study concluded that the use of simulated patients and a monthly intervention on interviewing skills improved residents' knowledge, attitudes, and skills in interviewing over a full medical student rotation (Smith, 1998).

Bowman et al (1992) investigated if educational materials could improve primary care physicians practices of sexual history taking and counseling. To carry out the study 232 simulated patients made visits to primary care physicians. The patient simulated was a sexually active young woman with vaginitis and sexually transmitted disease/human immunodeficiency virus risk behaviors. Prior to the visit, physicians were provided with educational materials (monograph, pamphlet and audio tape) developed for the study, including a risk assessment questionnaire to be used with the patient. The results of the study showed that physicians who interviewed a simulated patient, rated the experience highly. The simulated patients assessed the physicians concluded that physicians who prepared for the visit with the educational materials provided performed significantly better than those who were not prepared. Approximately two third's of the physicians indicated they reviewed the materials, many for a second time, after the simulated patient visit. Physicians who performed the risk assessment questionnaire performed better. Many of the physicians assessed by the simulated patients did not meet the goals of the visit. The study concluded that the simulated patient visit was acceptable to most physicians practicing in the community and was viewed as an appealing and effective educational experience. This type of simulated patient program however, has limited feasibility due to its costs (Bowman, 1992).

Baile et al (1997) looked at physician skills in difficult communications such as breaking bad news, discussing life support, and addressing emotional concerns in cancer patients. Physicians are traditionally given little formal

training in communication skills. The study conducted a three day workshop in communication skills for nine oncology attending physicians. Topics for the workshop were selected by participants per a pre-workshop questionnaire. Groups of four to five participants interviewed simulated patients whose role-played scripts were based on the selected topics. Results of pretest and posttest questionnaires showed the use of simulated patients in the workshop increased participants confidence in several communication areas and in aspects of the physician-patient relationship (Baile, 1997).

Kraan et al (1990) looked at growth patterns of medical interviewing skills over a six year undergraduate curriculum. The study assessed 563 medical student interviews of simulated patients. Their skill was measured by means of history taking, advice checklist and an observation instrument that measures five categories of interviewing skills pertaining to initial medical consultations. The method used in this study featured a group teaching program with expert and peer review of videotaped encounters with simulated patients. The findings suggest that skills for history taking, presenting solutions, and structuring the interview were effectively learned. The results suggest that it may be helpful for curriculum planners to incorporate this program to make interviewing skills more effective. The teaching effects of the program were less evident in the areas exploring the reasons for the encounter and in basic interviewing skill (Kraan, 1990).

The above studies all strongly support the simulated patient teaching method. However, not all studies support the use of simulated patients.

Buellens et al (1997) reviewed the advantages and disadvantages, reliability and validity of simulated patients in general practice and primary care research. Performance in general practice was measured by direct methods; including observation, video and audio tapes. These methods had face validity, but nevertheless had shortcomings. The simulated patient method could avoid some of the shortcomings of the direct methods. The presentation of simulated patients could be accurate and reproducible. Simulated patients were generally believable. Less than one in five simulated patients were identified by the physicians, so the researchers felt the method had face validity. The major problem the researchers found with the simulated patient teaching method was that in order to obtain sufficient reliability and validity, a thorough selection and training of simulated patients was required. This required a large amount of time and work which then limited the number of physicians that would be measured. In addition, the patient simulations had to be limited to one consultation and in reality diagnostic and therapeutic interventions are often spread over several consultations (Beullens, 1997).

Another study out of New South Wales, Australia (1992) challenges the use of the simulated patient teaching method not for the amount of time and work it requires but for lack of results. In this study, the researchers set out to determine whether interns' performance with simulated problems such as the technical, preventative, and communication skills improve over the intern year (Gordon, 1992). To determine this, at the beginning and end of the intern year, the interns' consulted with three simulated patients. The consultations were

videotaped and scored according to explicit criteria set by an expert panel. The simulated problems included urinary tract infection, bronchitis, and tension headache. The study was done on 28 interns. The results indicated only slight improvements in technical competence or preventative care. The researchers speculate that possibly a different teaching method would have caused larger improvements (Gordon, 1992).

The review of the research suggests that patient simulation could be highly effective in occupational therapy student education and the application of knowledge. However, only one study addressed occupational therapy students directly. The purpose of this study was to determine occupational therapy student satisfaction with the simulated patient experience as a method of learning and enhancing clinical skills. Due to the lack of research with patient simulation in the occupational therapy curriculum and the effectiveness of simulated patients found in other professions, the results of this study could indicate an excellent, new teaching strategy for occupational therapy programs to incorporate to better prepare their students for the future.

Methods

To assess the satisfaction of the simulated patient teaching method, the senior occupational therapy class at Russell Sage College, a small (approximately 2,500 undergraduates) private school in Troy, NY, participated in a simulated patient program which was incorporated into their physical dysfunction class. Prior to the first patient simulation and upon completion of the last, the students completed a satisfaction survey to determine if they believed

that patient simulation was an effective method of learning (see Appendix A & B).

The subjects were 39 (37 female, 2 male) fourth year occupational therapy students, age 20 to 50. In the simulated patient program the occupational therapy students fulfilled the clinical occupational therapy role and six theater arts students from the college fulfilled the patient role. The theater arts students attended a new class to learn how to portray different signs and symptoms of typical diagnoses a clinical occupational therapist would evaluate and treat. The typical diagnoses included stroke, traumatic brain injury, chronic pain, spinal cord injury, and multiple sclerosis. In an introductory class, the occupational therapy students met with the Theatre Arts Chairman and questions about the program were discussed. Following the discussion the occupational therapy students completed the first survey. The occupational therapy students had not met any of the theatre arts students prior to patient simulation. The simulations took place during the occupational therapy student's adult physical dysfunction class. Two to three occupational therapy students and one theater art student interacted per patient simulation. The interactions were videotaped and class discussion of the occupational therapy student's clinical skills followed. Simulations were spread out, one per week, over a twelve week period. Following the last patient simulation the occupational therapy students were given the second survey.

The student satisfaction surveys were designed to measure the following dimensions of the student's educational experience: interviewing skills,

developing a therapeutic relationship, clinical decision making, self confidence, person development as a therapist, effectiveness, and importance of the program. The surveys consisted of eight questions. All questions used a five point Likert scale worded as "strongly agree", for 1, "agree", for 2, "either agree or disagree", for 3, "disagree", for 4, and "strongly disagree", for 5. Each question measured a student attitude specific to one of the dimensions listed above. A cover letter explained the purpose of the survey and requested that the completed instrument be returned within approximately ten minutes (see Appendix C & D). Each student participating in the study was asked to fill in the last 4 digits of their social security number at the top of each survey, to maintain anonymity and to allow before and after surveys to be matched. The surveys were similar in format with the second survey asking students to make comments on the program.

Results

Percentages of student responses to both, before and after, satisfaction surveys by each question are listed in Table 1. The results of Pearson correlations between the two surveys are listed in Table 2. A moderate, positive correlation was found for student ratings prior to patient simulations with the ratings after the patient simulations for the following questions: effectiveness of teaching method ($r= 0.448$), importance of the program ($r= 0.398$), viability of program as an alternative to clinical experiences ($r= 0.407$), development of therapeutic relationship ($r= 0.375$), enhanced clinical decision making skills ($r= 0.397$), enhanced self confidence ($r= 0.354$), and enhanced personal

development ($r= 0.351$). A weak, positive correlation was found for student ratings of interviewing skills prior to the patient simulations with the ratings of interviewing skills after the patient simulations ($r= 0.222$).

An additional question on the second survey asked the students to comment in their own words what they thought of the program. Of the 39 students in the study, 19 (49%) chose to make comments. Selected summations of these comments are listed in Table 3.

Discussion

The results of the first satisfaction survey supported the contention that simulated patient experiences are well received and valued by occupational therapy students. The results of the first satisfaction survey relate to several of the studies discussed earlier. Suvinen et al (1998) found medical students to be very enthusiastic about the simulated patient learning environment and educational approach, preferring it to the traditional preclinical laboratory instruction. Broder et al (1996) found dental student evaluation of a simulated patient program to be positive as well. Also in the Bowman et al (1992) study, they concluded that a simulated patient method was not only acceptable to most physicians practicing in the community but viewed as an appealing and effective educational experience.

Pearson correlations between the before and after surveys found a positive correlation between each question on the two surveys. This indicated student satisfaction with the simulated patient program decreased over the twelve week period. As a group, the survey areas of satisfaction were at best

mildly agreed to and at worst clearly neutral regarding the degree of satisfaction the class felt about the use of patient simulation within the occupational therapy curriculum. Over the twelve week period the class continued to remain fairly positive that patient simulation could be a viable alternative to real life experiences. The consistent drop in satisfaction in other areas may reflect disagreement with the method and the goals of the simulations. The student's lowest ratings occurred on methods of how the program would improve self confidence, personal development, and the overall importance of the program.

One possible reason for these findings could be what's known as a positive ceiling or halo effect. The students rated the program remarkably positive on the first satisfaction survey. A general decline on the second satisfaction survey was to be expected over time. Thus the findings may not be as dramatic as this research appears. Another possible reason for the findings are the obstacles any program must overcome in its first year. In the comments section of the second survey the students identified some obstacles future programs may consider doing differently. The students indicated the patient simulations took too long, did not allow enough individual interaction, and that the actors did not portray their roles effectively.

Programmatic change may attempt to limit the simulations to a set time period and to better incorporate the simulations into the student's schedule. In this study the simulations were conducted following the students two hour physical dysfunction lecture that ended at eight o'clock at night. Some students had been at school since eight in the morning and were not interested in staying

to participate in the program. The simulations were also scheduled to take thirty minutes but frequently took up to an hour.

The findings in this study also spoke to the dissatisfaction students felt about the limited opportunity to participate in the simulations. To allow more individual interaction future programs might split students into smaller sections, add more theater arts students, or have more than one patient simulation occurring at a time. In this study, just ten of the thirty nine students actually interacted with the simulated patients. To address the effectiveness of the acting, future programs might attempt to more rigorously train the theatre art majors to portray the roles of patients more convincingly. Another solution might be the use of trained professional actors rather the theatre arts students. This could perhaps increase the reliability of the findings, protect the emphasis of the research, and increase occupational therapy student satisfaction. In this study, although the theatre arts students were motivated to perform well by receiving higher grades, the quality of the performances may have varied across students.

Future research should also attempt to develop and implement more objective measures to better assess the learning facilitated through interaction with simulated patients. In this study, student self report was used as the measure. The change in questions asked across the time period of the course did not allow for direct comparisons of change by satisfaction measures. This could be altered to allow group comparisons in future studies. In this study the researcher depended on the student's perceptions of their performance. An additional approach would be to add an objective, blind observer such as an

instructor to rate the student performances. Students could be videotaped or viewed by an instructor through a two-way mirror while the student is interacting one-on-one, or in pairs, with a simulated patient. This would also be a more realistic situation than the group situation used in this study.

A larger sample size from several different schools would increase the significance of the results. Russell Sage College, being a smaller private school, may not be a true representative of the effectiveness of using a simulated patient program at other schools. An additional factor that might have impacted the results was that the physical therapy students in the program whose curriculum closely parallels occupational therapy students, interact with actual patients. This disparity between using actual and simulated patients may have contributed to the decreased ratings from the students.

Further studies might also address other clinical skills of interest including the ability to generate an appropriate treatment plan, ethical decision making, and the ability to manage difficult behaviors. These skills could perhaps be improved by interacting with simulated patients.

The long term results of this study are uncertain. This study was conducted over a twelve week period during the spring semester of the occupational therapy students fourth year. The study was conducted after level one fieldworks and concluded prior to the students going out on level two fieldworks. Future studies should assess student satisfaction with the simulated patient program before and after fieldworks.

Literature on the use of simulated patients is abundant in other professions however; it is all but non-existent in occupational therapy. The findings suggest the use of this program should be continued to be explored as a teaching tool in the clinical training of occupational therapy students. The suggestions for future studies that were determined in this study could clarify the contributions of patient simulation to curriculum development in occupational therapy.

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Appendix A

LAST 4 DIGITS OF SS# _____

OT Student Satisfaction Survey of the Simulated Patient Program
The Sage Colleges – Spring 1999

The following 8 items ask your opinion about the simulated patient program. Please circle your response to each item based on the following scale:
1=strongly agree 2=agree 3=neither agree or disagree 4=disagree 5=strongly disagree

- | | | | | | |
|--|---|---|---|---|---|
| 1. I feel a program incorporating patient simulations could enhance my patient interviewing skills. | 1 | 2 | 3 | 4 | 5 |
| 2. I feel that a simulated patient program could be a viable alternative for learning about and experiencing real-life situations. | 1 | 2 | 3 | 4 | 5 |
| 3. A simulated patient program could assist in the growth of my skills in developing a therapeutic relationship with patients. | 1 | 2 | 3 | 4 | 5 |
| 4. I feel a simulated patient program could improve my clinical decision making skills. | 1 | 2 | 3 | 4 | 5 |
| 5. I feel I would be more self confident if I could complete a simulated patient program. | 1 | 2 | 3 | 4 | 5 |
| 6. A simulated patient program could be important for my personal development as a therapist. | 1 | 2 | 3 | 4 | 5 |
| 7. I feel a simulated patient program could be an effective method of teaching in my OT education. | 1 | 2 | 3 | 4 | 5 |
| 8. A simulated patient program could be an important part of my OT curriculum. | 1 | 2 | 3 | 4 | 5 |

Appendix B

LAST 4 DIGITS OF SS# _____

OT Student Satisfaction Survey of the Simulated Patient Program
The Sage Colleges – Spring 1999

The following 10 items ask your opinion about the simulated patient program. Please circle your response to each item based on the following scale:
1=strongly agree 2=agree 3=neither agree or disagree 4=disagree 5=strongly disagree

- | | | | | | |
|--|---|---|---|---|---|
| 1. I feel the simulated patient program enhanced my patient interviewing skills. | 1 | 2 | 3 | 4 | 5 |
| 2. I feel that the simulated patient program is a viable alternative for learning about and experiencing real-life situations. | 1 | 2 | 3 | 4 | 5 |
| 3. The simulated patient program assisted in the growth of my skills in developing a therapeutic relationship with patients. | 1 | 2 | 3 | 4 | 5 |
| 4. I feel the simulated patient program improved my clinical decision making skills. | 1 | 2 | 3 | 4 | 5 |
| 5. I feel I'm more self confident now that I have completed the simulated patient program. | 1 | 2 | 3 | 4 | 5 |
| 6. The simulated patient program was important for my personal development as a therapist. | 1 | 2 | 3 | 4 | 5 |
| 7. I feel that the simulated patient program was an effective method of teaching in my OT education. | 1 | 2 | 3 | 4 | 5 |
| 8. The simulated patient program was an important part of my OT curriculum. | 1 | 2 | 3 | 4 | 5 |

Appendix C

A. Consent to Participate in an evaluation of the simulated patient program.

Dear Student,

I am completing a master's program at Sage Graduate School which includes a research project. My topic concerns the evaluation of knowledge, skills and attitudes regarding the simulated patient program at Russell Sage College (RSC). Attached is a questionnaire, please complete all the questions on the questionnaire. The questionnaire should take you no more than 10 minutes to complete. My hope is that this information will be useful in assessing the simulated patient program for future use at RSC.

You were chosen based on the class that you registered in. I have no access to your name, therefore anonymity is guaranteed. The results of this survey will in no way affect your academic standing. You may withdraw from the study at anytime.

You are asked to detach the survey from the back of this packet and fill in the last four digits of your social security number at the top of the survey. The last four digits of your social security number are taken so anonymity is maintained and the before and after surveys can be matched.

The completion of the questionnaire acknowledges your permission to voluntarily participate in the study. Thank you for your assistance in this project.

Sincerely,

Scott Hand

I understand the purpose of this project and that my participation is voluntary and that I may withdraw at any time. I further understand that my individual anonymity will be maintained and this will not affect my academic standing.

I consent to participate in the project.

Signature _____ Date _____

Appendix D

B. Informed Consent

I, _____, having full capacity to consent, do hereby volunteer to participate in a research study entitled, *Student Satisfaction with a Simulated Patient Program in Occupational Therapy Curriculum*, under the direction of Scott Hand.

- I. The implications of my voluntary participation have been explained to me by Scott Hand as outlined in Section A of this agreement, including the nature, duration, and purpose of the study; the methods by which it is conducted; the inconveniences and risks which may reasonably be expected; and the alternative procedures and treatments beneficial to me.
- II. I have been given an opportunity to read and keep a copy of this Agreement and to ask questions concerning this study. Any such questions have been answered to my full and complete satisfaction.
- III. In the event that I am harmed by participating in this study, and this harm cannot be attributed to the fault or negligence of the investigator, I understand that compensation and/or medical treatment is not available from Russell Sage College. However, compensation and/or medical costs might be recovered by legal action.
- IV. I understand that I may at any time during the course of this study revoke my consent and withdraw from the study without prejudice.

Signed _____
Volunteer

WITNESS: I was present during the oral explanation and question period referred to in Parts A and B above and have witnessed the above signature.

Signature of Witness: _____ Date _____

This research has received the approval of The Sage Colleges Institutional Review Board which functions to insure the protection of the rights of human subjects. If you have any complaints as a participant in this study, please call: Nancy Como
Sage Graduate School
45 Ferry Street
Troy, NY 12180

Table 1

Percentages of Student Response to Satisfaction Surveys

Question	1		2		3		4		5	
	Before /	After	Before /	After	Before /	After	Before /	After	Before /	After
Effective teaching method	28.2	10.3	48.7	43.6	12.8	25.6	10.3	10.3	0	10.3
Important part of OT curriculum	23.1	5.1	48.7	35.9	20.5	25.6	7.7	20.5	0	12.8
Viable alternative to real life experiences	17.9	17.9	53.8	43.6	10.3	17.9	12.8	10.3	5.1	10.3
Enhanced interviewing skills	33.3	5.1	56.4	43.6	2.6	25.6	5.1	17.9	2.6	7.7
Enhanced therapeutic relationship skills	23.1	10.3	48.7	33.3	15.4	33.3	12.8	15.4	0	7.7
Enhanced clinical decision making skills	23.1	5.1	43.6	35.9	17.9	43.6	15.4	12.8	0	2.6
Enhanced self-confidence	12.8	5.1	43.6	25.6	25.6	35.9	17.9	28.2	0	5.1
Enhanced personal development	12.8	2.6	53.8	30.8	23.1	35.9	10.3	20.5	0	10.3

- 1- Strongly Agree
- 2- Agree
- 3- Neither Agree or Disagree
- 4- Disagree
- 5- Strongly Disagree

Table 2

Correlation Ratings of the Satisfaction Surveys

Question	Class Average Before	Class Average After	r
Effective teaching method	2.05	2.67	0.448
Important part of OT curriculum	2.13	3.00	0.398
Viable alternative to real life experiences	2.33	2.51	0.407
Enhanced interviewing skills	1.87	2.79	0.222
Enhanced therapeutic relationship skills	2.18	2.77	0.375
Enhanced clinical decision making skills	2.26	2.72	0.397
Enhanced self-confidence	2.49	3.03	0.354
Enhanced personal development	2.31	3.05	0.351

- 1- Strongly Agree
- 2- Agree
- 3- Neither Agree or Disagree
- 4- Disagree
- 5- Strongly Disagree

Table 3.

Percentages of Student Comments about the Simulated Patient Program

Generalized Comment	Total	Percentage of Class
Not enough opportunity to participate	11	28.2
Simulations took too much time	7	17.9
Poor portrayal of patients	2	5.1

