Social Work Students Go to Camp: The Effects of Service Learning
On Perceived Self-Efficacy

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Abstract

This study explored the effects of an intensive, service learning course on the perceived self-efficacy of participating MSW students. A self-efficacy scale was developed following Bandura’s (1977) model, based on the goals and objectives of the MSW program and was administered pre and post. The findings indicated a statistically significant increase in perceived self-efficacy (p < .001) following completion of the course. In addition, the students demonstrated significant increases in self-efficacy related to mezzo (p < .001) and macro-level skills (p < .001). These results suggest that service learning, underutilized in social work education, may be an effective learning approach in master’s level programs.
Service learning, a developing trend in higher education is a unique form of experiential education distinctive from the mandated field practicum in social work curricula. Service learning is a collaborative relationship between the community and the classroom where students function in roles that further the mission of the community/organization while receiving course credit for their participation. This approach can be differentiated from field placement in that the student’s role is determined by the needs of the community they are serving and not driven by the specific learning goals of the student. The students’ learning, therefore, becomes an outgrowth of their participation in the service-focused activities, and enhanced through structured assignments that allow them to apply and integrate their experiences to theory and self-knowledge learned in other parts of the program. The emphasis on service embedded in a service learning approach, especially with vulnerable populations, would seem to be a natural “fit” with the mission and objectives of the social work profession.

Schools of social work, however, have lagged behind other fields in implementing service learning in their curriculum (Rocha, 2000). One explanation for this may be a misconception that social work educators hold that the field practicum is a form of service learning (Kropf & Tracey, 2000). There is a growing body of research that is demonstrating the positive impact of service learning in professional schools of business, communication, education and a few in social work, (Cohen & Kinsey, 1994; Markus et al., 1993; Morton & Troppe, 1996; Rocha, 2000; Zlotkowski, 1996). Some social work educators are noting the potential of this form of learning for social work students and are calling for social work researchers to empirically study the impact of a service learning course on practical skill development (Rocha, 2000). This may serve as an encouragement for more social work educators to consider service learning courses as valuable learning enhancements to their
curriculum. Additionally, it has been suggested that a service learning experience can serve as an especially effective preparatory bridge for social work students’ entry into their concentration level field placement (Kropf & Tracey, 2000) which may be particularly relevant in light of noted concerns from field supervisors regarding students’ lack of readiness for their field practicum (DeWeaver & Kropf, 1995).

Statement of Purpose

The purpose of this study is to explore the possible effectiveness of a service learning course in an accredited master’s of social work program and the impact of the course on the students’ perceived self-efficacy based on the objectives of the curriculum. Because of the experimental nature of this course and the dearth of empirical studies on service learning in social work, much of the study’s focus is exploratory. The research questions for this study are as follows:

1. Did students’ perceived self-efficacy increase from pre-to post-test following participation in this service learning course?
2. What areas of self-efficacy were most affected by participation in this service learning course as they related to the curriculum objectives for learning mastery?
3. Did students who plan to work with children and families following graduation differ in perceived self-efficacy from those who plan to work with organizations and communities?

Service Learning

Service learning has been described as a method of student learning through participation in an organized service activity that is conducted within, and meets the needs of the community,
in coordination with an institution of higher learning (Corporation for Community Service, 2000). For nearly two decades, service learning has been used increasingly to promote community service and student development in a variety of disciplines, including business (Zlotkowski, 1996), political science (Markus et al., 1993), sociology (Morton & Troppe, 1996), communications (Cohen & Kinsey, 1994) and social work (Rocha, 2000). Additional criteria specified in The National and Community Service Act of 1990 (cited in Cohen & Kinsey, 1994) that makes service learning educationally beneficial include: the experience is integrated into the academic curriculum and provides structured time to think, talk, or write about actual service activities, students gain the opportunity to use newly acquired skills and knowledge in real-life situations in their own communities, and classroom learning is enhanced by extending student learning beyond the classroom and into the community.

The implementation of experiential education, in which students transform experience into knowledge, is not new to social work education. This emphasis on practice experience most noticeably occurs through mandated field placements in a variety of social work settings as a way to integrate academic coursework with practice skill development. While the field practicum offers a rich and integrative process of learning, it is a different learning experience than service learning (Kropf & Tracey, 2000). The field practicum is primarily focused on the student’s specific skill development as a practitioner and, the overarching goal for students in field placement is to focus on the student’s professional skill development coupled with the enhancement of their professional social work identity (Bogo & Vayda, 1998). The organization becomes the vehicle to assist the student in this process and it occurs, ideally, under the watchful supervision of an experienced social worker. While community service may be part of the tasks performed, reciprocity with the community and the implicit lessons of civic responsibility is not
the specific goal even if it is a possible by-product (Nnakwe, 1999). In fact, it is more common to hear complaints from field instructors that students come to their placements unprepared for professional practice. Some researchers suggest that service learning courses can better prepare Master’s level students for their practicum “jobs” (Kropf & Tracey, 2000).

Conversely, the experience in a service learning course focuses on the student’s participation as a community member not as a service provider. Functioning in a non-traditional social work setting and role puts greater emphasis on adjusting to the social and cultural milieu of the community group setting allowing for enhanced social awareness and empathy development in the student as a result (Weah, Simmons, & Hall, 2000). Service learning has been used at the baccalaureate level to provide “students with important macro-level experiences related to community needs assessment, program development, implementation, evaluation, and social work administrative functions” (Forte, 1997, p.156). Rocha (2000) conducting research using a service learning approach at the Masters level, found that students who took part in service-learning activities were more likely to perceive themselves as competent, carrying out policy-related tasks such as “organizing groups,” “implementing change,” and “creating information.” Additionally, there has been evidence of a high degree of community satisfaction with the contribution of student volunteers (Bringle & Hatcher, 1996). Agencies involved in such programs were able to expand the level and quality of services provided to their communities largely because of the increased personnel and resources associated with service learning activities (Kozeracki, 2000). This reciprocity can result in improved community relationships through the students and by association, the university’s enhanced sensitivity to specific community needs. While the findings from these studies are encouraging, they also call for further evaluation of service learning in social work programs of study in a multitude of settings.
Perceived Self-Efficacy

The socio-cognitive construct of perceived self-efficacy is widely used to link experience with behavioral change (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). Albert Bandura (1997) defined perceived self-efficacy as a situation-specific belief held by an individual about their ability to perform and complete a given task. According to Bandura, “Perceived self-efficacy refers to beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p.3). This suggests that students who perceive themselves as capable will subsequently attempt, perform, and complete tasks better than those who perceive themselves as less capable. Empirical research in the field of education has linked the concept of self-efficacy and performance-expectancies with increased motivation (Mone, 1994), persistence, decision-making, goal setting (Bandura et al., 1996) and positive academic outcomes (Schunk, 1991; Williams, 1996). In the field of social work, perceived self-efficacy has been used to develop a model of teacher empowerment (O’Connor & Korr, 1996) and to study the effects of solution-focused supervision on therapist development (Koob, 1998).

Self-efficacy is operationally defined in this study as a student’s perception of his or her ability to perform specific social work skills and tasks. This study explores the relationship between participation in a service-learning experience and perceived self-efficacy. While service learning experiences focus on service to the organization and community rather than on skill acquisition, the process of performing the service allows students to indirectly practice newly acquired skills and develop deeper understanding of system dynamics (Cohen & Kinsey, 1994). Bandura et al. (1977) supported this notion by arguing that experiences of personal mastery contribute to personal efficacy expectancies and that these positive expectancies may generalize to other activities, depending on the social context and whether the individual attributes success
to chance or skill. Thus, self-efficacy is dependent, in part, on an individual’s perception of their experience, their role in their own learning, and the meaning they have attributed to it.

Project Description

Students in this study volunteered to participate in an 8-day camp for 100 burn-injured children with approximately 100 other volunteers. The idea was initially introduced after receiving preliminary administrative support, at student gatherings, class discussions and fliers that were distributed early in the fall to all first year master’s students. The response was overwhelming—immediate and far exceeding in numbers the initial estimation of interest. Within 36 hours of distributing the flier, 25 students had signed up. Most of the students expressed interest because of their strong interest in working with children even though few of them had any knowledge or experience in working with the burn-injured population. Several of the students who had prior camp experiences were attracted to the camp aspect of the proposed course. It is worth noting that the students’ willingness to participate, initially, was not based on the knowledge that they would receive course credit for this experience. Final approval to grant course credit was not approved by the Master’s program curriculum committee until the following spring. Students attended a day long volunteer orientation session provided by the Burn Foundation prior to the experience. Additionally, there were 2 preparatory class meetings before leaving for the 8-day experience. All students were expected to remain at the campsite for the entire duration of camp and were provided meals and cabins for sleeping. Most of the students were assigned to sleep in cabins together with conditions cramped and somewhat primitive.

The Camp
The camp, staffed completely by volunteers, is open to any child in the state who has suffered a severe burn and has spent at least four days in either of Georgia’s two burn units. It was established 8 years ago by the Georgia Firefighter’s Burn Foundation, a grass-roots, non-profit organization comprised of firefighters from around the state who work year-round to raise the money to fund the camp as well as organize the camp activities. The age range of the children is between 5-17 and many of the campers are repeat attendees. The camp has grown to serve over 100 children annually in its eight years of existence and is staffed by nearly 150 volunteers. There is only one paid staff member, the camp director. The rest of the administrative and volunteer staff is comprised of firefighters, emergency medics and burn unit staff as well as adult burn survivors. The camp takes place at a state park facility located in the woods in a rural area about 45 minutes from campus.

Method

Participants

All participants were enrolled in the class “Social Work with Burn Survivors: A Service Learning Experience” at the University of Georgia during the Maymester session, 2000. Maymester occurs at the university during the month of May, after spring semester has ended, and before summer classes begin when intensive coursework can be offered. The time spent in coursework during Maymester is equivalent to that of a regular semester. The decision to offer the course during this time was based exclusively on the camp schedule. However, since it was a pilot course, the timing of it facilitated more initial faculty support since Maymester is a less traditional time of study.

The sample (N=24: 22 females and 2 males) was composed of first year (22) M.S.W. students and recent graduates (2) of the M.S.W. program. Students were predominantly
Caucasian (22) with one identifying as Hispanic and another as Asian. They ranged in age from 22 to 40 years old, (SD = 4.12). Of the twenty-four students in the sample, 2 were male and 22 were female. Two of the students were following the Community Empowerment (macro practice) concentration track in the Master’s program and 22 were following the Family-Centered concentration track (micro practice). Based on the anticipated focus of this course, students primarily interested in working with children on a micro level signed up for the course. Thus, fifteen of the students indicated that they planned to work with children and/or families following graduation while nine indicated “other” populations.

Upon arriving at camp, 4 participants were assigned the role of counselor by camp staff, based on prior camp counselor experience. The students understood that they were there to meet the staffing needs of the camp and as such, the remaining students were assigned support staff duties which included, kitchen work, computers, distribution of liquids, decorations for special events, photography, supervision of special activities and relief care for the children. During the course of the week all the students had significant opportunities to interact with the children on an informal basis despite their work assignments.

Procedure and Design

This quantitative-descriptive study employed a pre-experimental, pre-test post-test design to describe the perceived self-efficacy of a group of M.S.W. students before and after participating in a service learning experience. Students were required to attend an 8-day burn camp and two research meetings. Twenty three of the students spent the entire eight days at the burn camp, sleeping in cabins with the other volunteer staff, while one student left after four days. Each of the research meetings lasted an average of three hours. The university’s Institutional Review Board approved the research and participation by the students was voluntary, having no bearing
on final course grades. The participants represented a non-probability sample, as all volunteered for the class. The entire sample received the initial Social Work Self-Efficacy Scale at the beginning of the pre-camp meeting with the primary investigator and research assistant prior to discussion of the service experience and course expectations. Items on this scale were drawn from the School of Social Work’s objectives across concentrations for the Master’s level and related to specific skills at the micro, mezzo, and macro levels.

All participants were provided with a randomly generated subject number that was used to code both the pre- and post-assessments. This number was used instead of the students’ name in an attempt to maintain anonymity. The primary investigator and research assistant administered the dependent measure of perceived self-efficacy to all participants at both the pre- and post-assessments to help reduce random error. Both measures were scored after the post-assessment was complete and all instruments were accounted for to help control for possible experimenter bias. Following the service experience, the students received and completed the post-assessment at the beginning of a debriefing session also conducted by the primary investigator and research assistant. Two students were not present at the debriefing. One of these students mailed in the post-test measure within one week following debriefing and one did not submit a post-test measure.

Data Collection

Quantitative data was gathered using a scale constructed to measure the perceived self-efficacy of social work students at the Masters level. Adopting a method suggested in the professional literature by Koob (1998), content was drawn from the list of core competencies for social workers at the Masters level at a CSWE accredited program (CSWE, 1994). While initially, it was anticipated that there would be a greater emphasis on micro skill development, it
was decided that specific skill development related to community practice on the mezzo and macro levels also be included. Therefore, items on this scale were drawn from the School of Social Work’s objectives across both the Family-Centered and Community Empowerment tracks. Because self-efficacy theory asserts that expectations of personal mastery are specific to a target behavior (Bandura, 1997), the scale was designed to reflect relevant social work skills as represented in the SSW’s curriculum objectives.

The Social Work Self-Efficacy Scale is a 47-tem self-report measure with (3) sub-scales. Each subscale is defined by one of three levels of practice (micro, mezzo, or macro) and items were grouped accordingly. Each item is scored Yes or No, indicating whether the respondent uses the skill or not. For each item scored as Yes, a 0-100 rating is provided indicating the respondents’ perceived confidence performing the skill. Higher ratings indicate a higher degree of perceived confidence. The ratings are then totaled and divided by the number of items answered as Yes, with higher scores indicating a higher degree of perceived self-efficacy.

The development of this scale was based on CSWE Curriculum Standards (1994) and no attempt to assess internal consistency by calculating alpha coefficients or determine test-retest reliability was made. The scale was not correlated with other existing measures prior to this study thus concurrent validity remains untested. Despite these limitations, the instrument demonstrated good face and content validity.

Results

Table 1 shows the descriptive statistics and the results of t-tests for the overall scale and the three subscales. The first research question dealt with the difference between the pre- and the post-test mean self-efficacy scores for all subjects. This will be referred to hereafter as the “total” difference. The mean on the pre-test was 76.3 ($SD = 9.14$) and the mean on the post-test was
81.8 (SD = 7.92). A paired sample t-test was conducted and a significant “total” increase from pre-test to post-test was found (t (21) = -3.83, p < .001). Two paired sample t-tests were conducted to test hypothesis two which predicted an increase between the pre- and post-test means for both the mezzo and macro-level sub-scales. The mezzo-level sub-scale pre-test mean was 73.83 (SD = 8.72) and the post-test mean was 81.64 (SD = 8.75). A significant increase from mezzo pre-test to mezzo post-test was found (t (21) = -5.01, p < .001). The macro-level sub-scale pre-test mean was 71.2 (SD = 12.3) and the post-test mean was 78.9 (SD = 11.2). There was a significant difference between macro pre-test and macro post-test means (t (21)= -3.69, p< .001). A subsequent paired sample t-test was conducted to test the pre- and post-test means of the micro sub-scale. The micro-level sub-scale pre-test mean was 77.4 (SD = 8.92) and the post-test mean was 78.90 (SD = 7.66). No significant difference from pre-test to post-test was found (t (21) = -.966, p>.05).

An independent sample t-test was conducted to determine whether students who plan to work with children and families (n=14) after graduation demonstrate different post-test self-efficacy means than those who plan to work with organizations (n=8). There was no significant difference found (t (20)=. 029, p>.05) between those with a family focus (M=82, SD=7.6) and those with an organizational or macro focus (M=82, SD=8.98).

Discussion

The results of this study are consistent with the research question of whether participation in a service learning experience can positively affect the perceived self-efficacy of social work students. Masters level social work students who volunteered in this service learning course demonstrated a significant increase in perceived self-efficacy related to social work practice skills and tasks following participation. Because the service learning experience was designed to
focus on small group functioning, teamwork, and service within a grass roots, non-profit organization, it was further hypothesized that students would demonstrate improvement in both group and organizational development-related competencies. The findings confirmed that students perceived themselves having a significantly greater sense of perceived self-efficacy relating to group (mezzo level) and organizational (macro-level) skills and tasks following the service learning experience. Since the experience did not focus on micro-level skill development, no increase from pre- to post-test was noted.

Other factors that might have influenced the changes in perceived self-efficacy of students included the populations students plan to work with in the future, camp role, and graduate status. There was no evidence that students who plan to work with children and families following graduation are significantly different from those planning to work with organizations. These findings indicate that service learning experiences may be used to help increase the perceived self-efficacy of social work students in both concentration tracks.

Limitations

This study used a non-experimental design with no control group, random selection or assignment. It was an exploratory effort and no evidence of cause and effect is offered. Because of the small sample size, the self-efficacy measure could not be standardized and a number of the hypotheses could not be statistically tested. The subjects were all volunteers and so represented a non-probability sample. Additionally, the subjects were all students in the class with the implication that there could possibly be a demand factor inherent in the process of conducting research with social work students who may have had some pre-conceived notions of expectations for responses. Also, an alternative explanation in changes in perceived self-efficacy may be attributed to the difference in the time from pre to post as well as shifts in emotional state
of the participant unrelated to the experience itself. Thus, readers are cautioned in generalizing the findings of this research to other populations. Despite these limitations, the use of service learning to promote social work skill development is an overlooked area of study that can benefit from exploratory efforts to generate new information and goals for future research.

**Suggestions for Future Research**

A number of questions were raised by this study that could be addressed in future research concerning service learning and the perceived self-efficacy of social work students. How does this approach compare to traditional classroom approaches in the development of both actual self-efficacy and perceived self-efficacy? Is there a relationship between actual self-efficacy and perceived self-efficacy? How specifically geared to relevant course objectives does the content of the service learning experience need to be in order to achieve an increase in perceived self-efficacy? Is there a difference in the quality of experience between service learning sites? Finally, studies of service learning and perceived self-efficacy using an experimental design, including a control group and randomized selection/assignment procedures are necessary to provide more conclusive and generalizable findings.

**Implications for Social Work Education**

Service learning has been a successful educational approach in a variety of non-social work fields and has been linked to the development and enhancement of civic responsibility, an increase of self-esteem, moral development, and academic performance among participating students. This approach is often erroneously seen as being interchangeable with the field practicum, which is a significant part of social work curriculums. Although the field practicum is widely used to provide “real world” experience, the focus of these learning experiences is skill acquisition and performance on the part of the students. The agency provides a laboratory for
the student’s learning and any benefits derived by the community are secondary to the student’s learning. Schools of social work, however, have been criticized for not adequately preparing students for field experiences (DeWeaver & Kropf, 1995; Koerin & Miller, 1995). Participation in a service learning project in the community may be a solution to this gap by providing an educational “bridge” to field placements (Kropf & Tracey, 2000). Thus, it is suggested that the optimum timing for a service learning course is before the concentration practicum begins as was the case for the students in this study. While that may not be as easily implemented in programs with different schedules, alternative, modified service learning projects may still be effectively implemented in conjunction with other coursework.

The students’ enthusiastic reception to the introduction of this course idea was telling. Many of the 24 students had little or no work experience prior to entering graduate school. This course presented a “real life” experience where students did not have the safety of an identified social work role to provide structure. This forced students to depend on their own innate ability to adapt to a lack of role clarity and an unfamiliar environment with new populations. The students were treated like any of the other volunteers working side by side with an organization staffed primarily by firefighters whose values, beliefs, and behaviors were often very different from that of the social work students. In fact, the firefighters as a group held many misconceptions of the social work profession and presented challenges for the students as they attempted to integrate into this tight knit community. This experience provided the students with an experiential way to learn about working with individuals and small groups within a community setting, mandatory skills for all social workers regardless of their concentration foci. Additionally, this “hands-on” educational experience provided the students with an opportunity to heighten their perception of their self-efficacy with the accompanying possible positive impact
on their self-esteem as they prepared to begin their field practicum following completion of the course.

Appendix

Social Worker Self-Efficacy Scale

Number___________________                Date

Self-Efficacy Scale for Social Workers

Below are a list of skills and tasks that social workers perform when working with groups and individuals, particularly children. Please circle the number 1 (YES) if you perform these skills or tasks, or if you do not, then please circle the number 2 (NO). For every skill that you circle 1 (YES), please enter the number that indicates how confident you are in performing these skills or tasks on a scale from 0 to 100, where 0 = no confidence, 50 = moderate confidence, and 100 = complete confidence.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Confidence#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Establish rapport with individuals</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Use active listening skills</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
3. Use reflective skills
4. Summarize group tasks
5. Plan group action
6. Apply a strengths perspective
7. Establish rapport with groups
8. Facilitate group discussion
9. Facilitate group problem solving
10. Develop group objectives
11. View child/client as resource
12. Use networking skills
13. Assume a leadership role
14. View self as a change agent
15. Follow through with tasks
16. Ability to use negotiation skills during conflict
17. Delegate responsibilities
18. Ability to achieve goals
19. Ability to adapt to unexpected challenges
20. Comfortable working with diverse groups
21. Ability to mediate differences
22. Ability to set boundaries
23. Ability to facilitate goal setting
24. Ability to facilitate group consensus
25. Utilize play as a therapeutic tool with children
26. Apply a family systems perspective 1 2 ______
27. Self awareness of strengths and weaknesses 1 2 ______
28. Professional use of self with client population 1 2 ______
29. Create group rituals 1 2 ______
30. Critically assess effects of social policy 1 2 ______
31. Identify how institutional policies and practices affect families 1 2 ______
32. Analyze effects of social policy on families and/or organizations 1 2 ______
33. Advocate for change in social policies 1 2 ______
34. Professional use of self within the organizational structure 1 2 ______
35. Formulate strategies to improve service delivery within an organization 1 2 ______
36. Identify issues that impede healthy functioning of individuals, families, and organizations 1 2 ______
37. Ability to negotiate and develop collaborative systems in a community or organization 1 2 ______
38. Ability to implement a strengths based perspective with a community or organization 1 2 ______
39. Formulate community organizing strategies 1 2 ______
40. Identify community and/or organizational resources 1 2 ______
41. Initiate partnerships 1 2 ______
42. Complete appropriate documentation of services 1 2 ______
43. Reflect critically on practice experiences  | 1 | 2 | _____
44. Develop theory based assessments  | 1 | 2 | _____
45. Integrate professional values and ethics into practice  | 1 | 2 | _____
46. Critically assess available professional literature  | 1 | 2 | _____

Note: The surveys completed by the students did not include a key for the scale items. They are included here for the readers’ convenience.

Micro Sub-Scale (18 items): 1, 2, 3, 6, 11, 18, 22, 23, 25, 27, 28, 41, 42, 43, 44, 45, 46, 47
Mezzo Sub-Scale (16 items): 4, 5, 7, 8, 9, 10, 13, 14, 16, 19, 20, 21, 24, 26, 29, 36
Macro Sub-Scale (13 items): 12, 15, 17, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40

Table 1

Paired Sample t-tests Comparing Social Work Self-Efficacy Scale (SWSES) Scores Before and After a Service Learning Experience

<table>
<thead>
<tr>
<th>Self-Efficacy Scores (SES)</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES Total Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>76.3</td>
<td>9.1</td>
<td>22</td>
<td>-3.83</td>
<td>.001</td>
</tr>
<tr>
<td>Post</td>
<td>81.8</td>
<td>7.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES Micro Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>77.4</td>
<td>8.9</td>
<td>22</td>
<td>-.966</td>
<td>.345</td>
</tr>
</tbody>
</table>
### SES Mezzo Score

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>73.8</td>
<td>81.6</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.7</td>
<td>8.7</td>
</tr>
<tr>
<td>t-value</td>
<td>-5.01</td>
<td>1.69</td>
</tr>
<tr>
<td>p-value</td>
<td>.000</td>
<td>.10</td>
</tr>
</tbody>
</table>

### SES Macro Score

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>71.2</td>
<td>78.9</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>12.3</td>
<td>11.2</td>
</tr>
<tr>
<td>t-value</td>
<td>-3.69</td>
<td>1.69</td>
</tr>
<tr>
<td>p-value</td>
<td>.001</td>
<td>.10</td>
</tr>
</tbody>
</table>

*Note:* SES Total Score = 47 items; SES Micro Score = 18 items; SES Mezzo Score = 16 items; SES Macro Score = 13 items. Because one student did not submit a post-test measure, the n = 23 rather than 24.

### References


