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Implementation of a Human Trafficking Educational Module for College Students: Pre/Post Design

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Implementation of a Human Trafficking Educational Module for College Students: Pre/Post Design

Abstract

This research study aimed to implement an educational module and to determine the effectiveness of that module on increasing the awareness of human trafficking and risk factors for incoming freshman students at a medium-size, Southern university from September 2021 through November 2021. Two hundred students consented and participated in the study by completing the pretest and posttest to indicate their knowledge of human trafficking before and after being presented an online educational module. The pre and posttest included 10 questions with 24 possible responses. An average of 12.34 correct responses were provided on the pretest and 19.13 were correct responses on the posttest. This data indicates a 58.6% improvement in awareness of human trafficking risk factors. A one-tailed pair-wise student's t-test and a single factor ANOVA were used to compare pretest scores with posttest scores both resulting in a p value of < 0.001 . The results of the study support the original hypothesis that students will have greater knowledge and awareness of human trafficking, as evidenced by a positive change in pretest to posttest scores, after completing the educational module on human trafficking. Limitations were found in the study as some students did not complete both the pre and posttest. The researchers believe this could be addressed through a stepwise testing module where one has to complete the first step to proceed to the next.

Comments

The authors declare that they have no competing financial, professional, or personal interest that might have influenced the performance or presentation of the work described in this manuscript.

Keywords

human trafficking, educational module, university students

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Human trafficking is a global issue that the United Nations Office on Drugs and Crime is mandated to report yearly to create an action plan to combat the ever-growing crisis in vulnerable populations (UNODC, 2020). Because of the low numbers reporting this crime, it is difficult to gather complete statistics; however, in 2020, the National Human Trafficking Hotline reported 29,426 substantive phone calls and 13,562 texts. Occupational therapists have a unique view of clients through a holistic and client-centered perspective to address the physical and psychosocial needs of human trafficking victims. Occupational therapists are considered proficient in providing trauma-informed care to address physical, cognitive, and psychosocial rehabilitation in various settings, such as hospitals, rehabilitation centers, schools, community clinics, mental health centers, and community-based programs (Gorman & Hatkevich, 2016).

Shana Cerny (2016) published a study on the specific role of occupational therapy for victims and survivors of human trafficking in the United States based on the *Federal Strategic Action Plan*. Cerny reported that human trafficking could leave behind physical and emotional scars leading victims to suffer from a wide range of mental disorders affecting function in meaningful occupations. Those disorders may include depression, anxiety, post-traumatic stress disorder, suicide ideation, memory loss, and loss of self. Occupational therapists are skilled mental health professionals who can assess and treat physical and psychological symptoms, occupational performance issues, and performance patterns using client-centered and occupation-based methods (Gorman & Hatkevich, 2016). Gorman and Hatkevich (2016) recommended that occupational therapists should provide human trafficking education to at-risk populations.

While occupational therapists are well-equipped to treat the residual effects of human trafficking, an important first step in the treatment process is the identification of victims. An ethics case article published by Bohnert et al. (2017) noted a severe deficit in education on human trafficking across the majority of medical professionals. Bohnert et al. established future goals emphasizing the need to develop undergraduate and post-graduate curricula on human trafficking with studies to prove the students' clinical skills after participation. The purpose of this study was to provide an educational module and determine the effectiveness of that module in increasing the awareness of human trafficking and risk factors for incoming freshman students at the University of Louisiana at Monroe (ULM). The Master of Occupational Therapy research team hoped that providing an educational module to this at-risk population would increase knowledge of risk factors, identifiers, and recruitment tactics of human trafficking. This study will aid in the prevention of human trafficking and provide support for human trafficking victims.

Literature Review

Reed et al. (2019) identified common risk factors among persons victimized by human trafficking and the commercial sex trade. Some characteristics are: (a) unstable disorganized familial background (i.e., loss of a parent, divorce, substance abuse); (b) history of emotional, physical, or verbal abuse; (c) poverty or poor education; (d) living in the foster system; and (e) lack of financial support. In addition, Reed et al. (2019) identified interpersonal relationship risk factors as peer pressure from friends already involved in the industry, dysfunctional family members who are part of the commercial sex trade, and relationships based on coercion and violence. These are common pathways into the trade. The exploitation of interpersonal relationships can lead at-risk individuals to become part of the commercial sex trade industry. Shrestha et al. (2015) recognized adolescent females as the most vulnerable population to become victims of human trafficking, and that Southeast Asia has one of the highest rates of human trafficking, as thousands of females are trafficked each year primarily for sexual exploitation and/or forced labor. As reported in this study, one of the most significant contributing factors to human trafficking in this area is the substantial unemployment rate and the number of residents living in poverty, especially in Nepal, one of the most poverty-stricken

countries in the world. Victims of sex trafficking include all races and ethnicities; all sexual orientations and gender identities; US citizens and non-citizens; all income levels, including at or below poverty levels, middle class, and high income; and persons with disability (U.S. Department of Justice, 2020). There is no single profile that is more at risk of being victimized.

It is estimated that as many as half of sex trafficking victims and survivors are male (National Human Trafficking Hotline [NHTH], n.d.). According to NHTH, male victims are far less likely to be identified because of social stigmas. However, LGBTQ boys and young men are seen as particularly vulnerable to trafficking. While there are numerous policies and anti-trafficking organizations in place, an effort is being made to assess knowledge, awareness, and attitudes toward human trafficking (Shrestha et al., 2015). Thompson and researchers highlighted how members of this community have distinct needs requiring an individualized approach to recovery (Thompson et al., 2020).

Literature has revealed human trafficking as a global population health threat that requires interprofessional education (IPE) to increase public awareness and reduce risk to vulnerable people. Identifying the signs of sexual exploitation is critical for early detection and prevention, as victims are not always aware they are being sexually exploited. A study by Birks and Ridley (2021) qualitatively evaluated the usefulness of providing education regarding sexual exploitation to second-year undergraduate health care students using an IPE methodology. The outcomes of this study revealed the importance of IPE in the health care community to expand an understanding of a sensitive and difficult subject and increase the identification of victims as key to help in the fight against human trafficking. Research and identification of screening tools are needed to aid in the prevention of human trafficking and to support victims. A study by Chisolm-Straker et al. (2019) identified a new screening tool, the Quick Youth Indicators for Trafficking (QYIT), which is time efficient and effective in identifying labor and/or sex trafficking victims. The participants of the study were homeless individuals between the ages of 18–22 years of age. The researchers concluded that the QYIT was the first validated, user-friendly screening tool that would benefit all service providers who may come in contact with human trafficking victims.

Another study conducted in a Texas school system showed students who received education on human trafficking were more likely to become actively involved in awareness and prevention (Zhu et al., 2020). The study found that students had a more realistic depiction of human trafficking and could identify helpful local and state resources. Students were able to better identify indicators of traffickers and those being trafficked. Students became involved in awareness walks, providing support at local women's shelters for survivors, writing letters to congress about increasing safety measures surrounding human trafficking, inviting speakers on campus to speak on human trafficking issues, and establishing a student organization to eliminate human trafficking (Zhu et al., 2020). In a recent study by Metcalf and Selous (2020), researchers implemented a three-part study for fifth-year medical students. Each student participated in a pretest questionnaire regarding their ability to recognize victims of human trafficking, followed by a 45-min interactive seminar where they were introduced to the concept of modern slavery or human trafficking. Following the training simulations, the students participated in a posttest. Ninety-three percent of students reported feeling more confident following the training seminar and role-playing activity. By conducting a similar study with incoming freshmen on a university campus, the researchers hope to replicate these results.

Method

This study used a pre and posttest survey to gather data on students' knowledge of human trafficking before and after being presented an online educational module. Master of Occupational Therapy research group and faculty members created the pre and posttest survey based on common myths

and facts reported by the National Human Trafficking Hotline and the U.S. Department of Homeland Security. Students who were enrolled in the University Seminar 1001 course and who consented to participate in this study completed a 10-question pretest to determine their baseline knowledge of human trafficking. The participants were presented with an online educational module, which provided information about human trafficking, including risk factors, facts and statistics, methods of prevention, and resources for human trafficking victims. After completion of the educational module, students completed a 14-question posttest about the information presented in the module. The posttest collected data on the students' perceptions of the quality of the educational module and their confidence in identifying and responding to the signs of human trafficking. All of the participants were given a 4-digit identification number so all pre and posttest scores could be matched and compared to determine the efficacy of the education module presented to the students. The information obtained in this study was used to identify changes in knowledge about human trafficking to determine the effectiveness of the educational module.

Sample

Subjects were recruited by their enrollment in the freshmen university seminar course required for all incoming freshmen students at the university. The module was posted in the online freshmen course, with no incentives to participate, from September 2021 to November 2021. The sample size included approximately 1200 students of varying ages, genders, and ethnicities. The Institutional Review Board at the University of Louisiana Monroe approved this study. Informed consent was obtained through electronic correspondence via SurveyMonkey. Of the approximate 1200 students, 264 students consented to participate in the study. Of the 264 students who consented, 237 completed the pretest, and 264 completed the posttest. There were 200 students who completed both the pretest and posttest. The informed consent form provided the participants with a description of the study along with an explanation of the procedures used, the duration of the study, and the possible risks and benefits. The consent form was written in layperson's terms to ensure that the wording was understandable to all participants. It also described how the students' confidentiality would be maintained and that participation is voluntary. All information obtained will remain anonymous and confidential to protect the participants' privacy. The participants were not asked for any personal or identifying information, and a numeric code was used that was not linked to their name to allow for pre to posttest comparisons.

Data Analysis

The study's objective was to determine if a statistically significant change was observed between the pretest and posttest scores of the students. A one-tailed pair-wise student's *t*-test was used to analyze the test score means (see Figure 1). In addition, a single-factor ANOVA was also conducted to analyze the pretest and posttest score means. All statistical analyses were run using Microsoft Excel.

Results

The increase of 58.6% in test scores from the pretest to posttest shows the effectiveness of the educational module and the students' improved knowledge of human trafficking signs, which was statistically significant with a *p* value of <0.001 . A one-tailed pair-wise student's *t*-test and a single factor ANOVA both indicated a *p* value of < 0.001 . Out of a possible 24 points, the mean score for the pretest was 12.34, and the mean score for the posttest was 19.125 (see Figure 1). Figure 2 provides a summary of ANOVA data results.

Figure 1

Mean scores for Pretest and Posttest Results

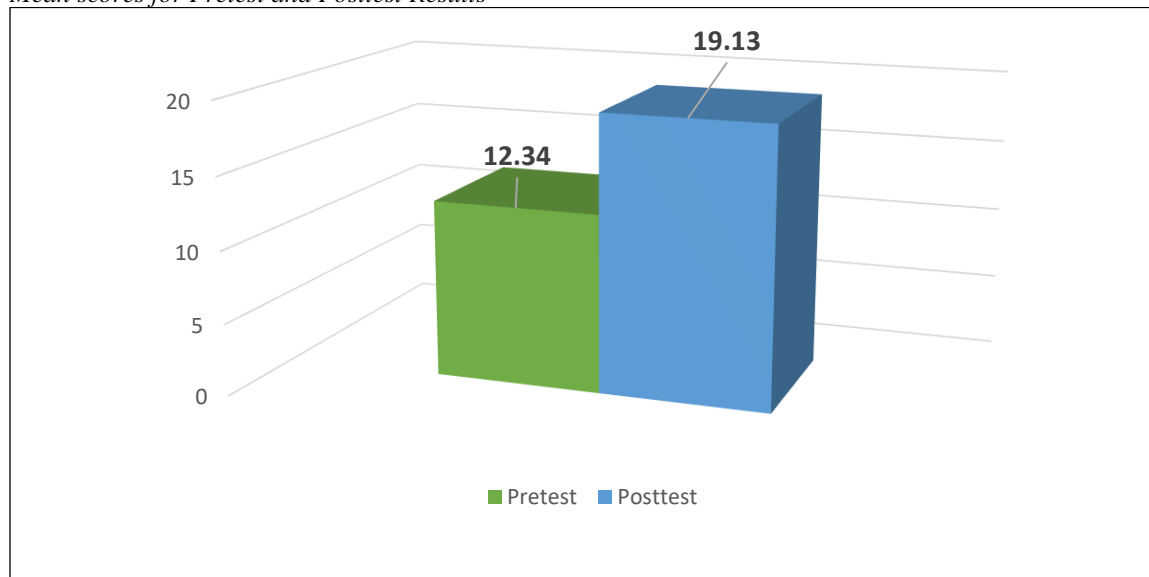


Figure 2

Summary ANOVA Data Results

Anova: Single Factor				
SUMMARY				
Groups	Count	Sum	Average	Variance
Pretest	200	2468	12.34	25.86372
Posttest	200	3825	19.125	20.76319

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4603.622	1	4603.622	197.4663	1.05E-36	3.864929
Within Groups	9278.755	398	23.31345			
Total	13882.38	399				

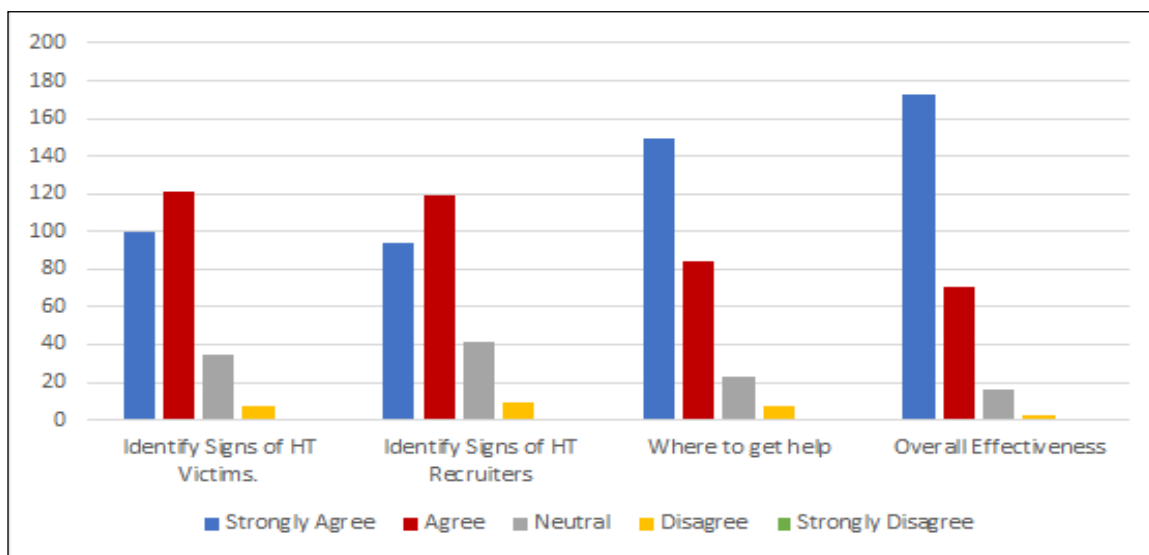
The incoming college freshmen demonstrated inadequate knowledge of human trafficking, as evidenced by their performance on the pretest. Prior to their participation in the educational module, the students had little confidence in their ability to identify victims, recognize how they are recruited, or know where to get help once the victim was identified. The students’ comments support the efficacy of using the educational model to increase awareness around this topic:

- “Very well put together and knowledgeable. Allowed me to know things that I did not know about human trafficking.”
- “People shouldn’t be forced or threatened to do anything. Everyone is at risk with human trafficking.”

- “This assignment was very informative, and I feel that each student should have to complete it to raise awareness.”
- “The document and video was [sic] very educational.”

This study identified a significant knowledge gap regarding potential vulnerabilities and where and how victims are commonly recruited. Figure 3 displays the effectiveness of the educational module and further supports our objective to increase awareness at the college level.

Figure 3
Posttest Results of the Effectiveness of the Educational Module



Discussion

The study’s results support the original hypothesis that students will have greater knowledge and awareness of human trafficking, as evidenced by a positive change in pretest to posttest scores after completing the educational module on human trafficking. This study revealed a significant knowledge gap in participants’ understanding of who to contact once a human trafficking victim has been identified. Of the 200 participants, 89% either “Agreed” or “Strongly Agreed” with the statement, “I know where to get help if I suspect someone is a victim of human trafficking.” These findings are consistent with another educational survey created for nurses that reported significantly increased awareness and comfort level in understanding who to contact once a human trafficking victim has been identified. Lawrence and Bauer (2021) found that 65% of participants did not know who to contact about a trafficked patient at the beginning of the course.

A similar study by Hansen et al. (2018) used an online education module as well as a pre/posttest survey that proved to be an effective method of education on human trafficking. In their study, the education module and pre/posttest surveys were given to health care providers. At the 3-month follow-up, 92% of medical students and 90% of medical providers felt the education module improved their confidence in treating victims of sex trafficking (Hansen et al., 2018). This research team aimed to expand this process with college freshmen by providing an online training module as a tool to combat human trafficking

Similar studies have shown effectiveness in improving awareness of human trafficking and, therefore, improving the potential to protect vulnerable populations from this horrendous act. Salas and

Didier (2020) reported that California implemented human trafficking education in Grades 7–12, and they are hopeful that similar education will be implemented, preferably mandated, in all other states. The article stated human trafficking affects all 50 states, recognizing the 10 hot spot cities including: “Minneapolis, Minnesota; Dallas, Texas; Detroit, Michigan; Tampa, Florida; Chicago, Illinois; Miami, Florida; New York City, New York; Washington, DC; Las Vegas, Nevada; and St. Louis, Missouri” (Salas & Didier, 2020, p. 17). If human trafficking education were implemented in these 10 cities alone, this would make a large impact on improving awareness of human trafficking with the potential to save human lives. Research has documented the need for improvements in human trafficking education through multiple studies.

Limitations

The most significant limiting factor in this study includes the inability to ensure each student followed the instructions given by a third party, which included completing the pretest, followed by the education module and the posttest. Each phase of the module required a different hyperlink and could be skipped if the directions were not followed. Therefore, some of the students completed the education and posttest without completing the pretest.

In the future, all stages of this study will be under one hyperlink, with the progression of education happening only after completing the previous module. For example, the education module will be accessible only after completing the pretest, and the posttest accessible only after completing the education module. This link would ensure all aspects of the study are completed by all students and in proper order. A second limitation would be the low response rate, given that of the 1200 students enrolled in the seminar class only 200 completed the survey. A third limitation would be the fact that the study did not include a control group to compare to the intervention group. The addition of a control group would strengthen the results for future studies.

Conclusion

Occupational therapy researchers designed this study to increase awareness of human trafficking through an education module for college freshmen. College freshmen are at a higher risk because of their age and vulnerability. The study’s results revealed a 58.6% increase in correct answers from the pretest to posttest, indicating the module was an effective tool for educating college students on human trafficking. This study displayed how occupational therapy educators can advocate for and encourage universities to provide education on increasing awareness of human trafficking. Increasing awareness is essential to reaching high-risk populations, such as college freshmen, and informing them of the signs of human trafficking and the resources to seek help.

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Erin Bradley, MOTS; Ross Hunt, MOTS; Maria Lauer, MOTS; Danielle Lee, MOTS; Casi Martin, MOTS; and Christy Stillwell, MOTS, are Master of Occupational Therapy bridge students from the University of Louisiana Monroe who completed this research project supervised by Drs. Calk and Hill.
