Summer 8-9-2016

Mental Health Stigma-Reducing Education: Trainee Confidence in their Ability to Demonstrate Skills

Jessica Barnett

Mental Health Stigma-Reducing Education: Trainee Confidence in their Ability to Demonstrate Skills

BY

JESSICA LEE BARNETT

Background

Mental health stigma-reducing and awareness trainings encourage trainees to talk about mental health with the hope that increased discussions will lead to reduced stigma and increased access to mental health services. This survey study aimed to examine the current levels of confidence among participants, or "first aiders" who completed the Youth Mental Health First Aid (YMHFA) training in their ability to demonstrate the skills that were taught in the training. Additionally, this study examined the difference in levels of confidence between the YMHFA instructors and first aiders in the ability of the first aiders to demonstrate the skills that were taught in the training. We examined differences in levels of confidence among first aiders according to their socio-demographic and personal characteristics. Finally, we explored the ways in which first aiders who completed the course used their knowledge and skills after the training.

Methods

Seven hundred fifty-seven first aider participants were surveyed post-training and 129 first aider participants were surveyed at follow-up. Fourteen YMHFA instructors were surveyed.

Results

The data indicated that there was a significant decrease in confidence among first aiders between post-training and follow-up. With the exception of age, there were no statistically significant differences in levels of confidence among first aiders according to the following sociodemographic and personal characteristics: a.) gender; b.) race; c.) reason for attendance; d.) role of use. Survey data also indicated the various ways in which first aiders are currently using their training.

Conclusions

First aiders' confidence declined after follow-up even though they reported various ways in which they are using their training. Instructors reported positive perceptions of the training and reported a high level of confidence in the ability of their trained first aiders to demonstrate the taught skills.

Mental Health Stigma-Reducing Education: Trainee Confidence in their Ability to Demonstrate Skills

by

JESSICA LEE BARNETT

B.S., GEORGIA STATE UNIVERSITY

A Thesis Submitted to the Graduate Faculty

of Georgia State University in Partial Fulfillment

of the

Requirements for the Degree

MASTER OF PUBLIC HEALTH

ATLANTA, GEORGIA

30303

APPROVAL PAGE

Mental Health Stigma-Reducing Education: Trainee Confidence in their Ability to Demonstrate Skills

by

JESSICA LEE BARNETT

Approved:

Emily Graybill, Ph.D., NCSP

Committee Chair

Brian Barger, Ph.D.

Committee Member

Andrew Roach, Ph.D., NCSP

Committee Member

Date: 7/11/16

Author's Statement Page

In presenting this thesis as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this thesis may be granted by the author or, in his/her absence, by the professor under whose direction it was written, or in his/her absence, by the Associate Dean, School of Public Health. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this thesis which involves potential financial gain will not be allowed without written permission of the author.

Jessica Barnett

TABLE OF CONTENTS

List of Tables

INTRODUCTION

Background. Adolescence is a life stage when many changes can occur. Youth experience changes in their physical, cognitive, social and academic functioning. It is a time of growth and development and as their lives and bodies change, some youth may show signs and symptoms of a mental illness (Seiffge-Krenke I. as cited in Chandra and Minkovitz, 2006). Approximately 20 percent of adolescents aged 13 to 18 experience a mental illness in a given year (National Alliance on Mental Illness, 2016). A mental illness is defined as "a condition that impacts a person's thinking, feeling or mood and may affect his or her ability to relate to others and function on a daily basis" (National Alliance on Mental Illness, 2016). Some examples of mental illnesses that adolescents may face include the following: depression, anxiety, bipolar disorder, attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD) and eating disorders (National Alliance on Mental Illness, 2016). Those who face these kinds of illnesses often experience the effects of the stigma that is associated them. Stigma is defined as "a set of negative and often unfair beliefs that a society or group of people have about something" (Merriam-Webster, 2015). Specifically, mental health stigma includes the negative stereotypes that are associated with mental illness. (Pérez-Garín, Molero, & Bos, 2015). Individuals experiencing stigma may encounter prejudices and discriminating behavior from society (Moses, 2010). Their peers may patronize them by treating them in a condescending way (Dinos et al., 2004 as cited by Whitley and Campbell, 2014), or treat them with ridicule and mockery (Whitley and Campbell, 2014). Dealing with stigma is particularly difficult for adolescents since many teens are already preoccupied with social image, peer acceptance, and forming an identity (Moses, 2010). Stigma is an ongoing problem, and research shows that

stigma related to mental illness has not decreased overtime in American society (Pescosolido et al., 2010). In order to effectively decrease stigma, programs must debunk myths and clear up misconceptions about mental illness (Corrigan & Penn, 1999). They must also enable people to understand what it is like to have a mental illness either through a simulation or through personal contact with someone that has a mental illness (Corrigan & Penn, 1999). Professional learning aims to effectively decrease stigma and provide support to adolescents with mental illnesses.

Mental Health Training Programs. There are district-wide and nationwide mental health training programs that address stigma and equip individuals to help those with a mental illness. Addressing mental health stigma and promoting the wellbeing of teens with mental illness is important for young people who may be facing a mental health crisis. Therefore, it is important to examine the effect and impact of mental health training programs. The purpose of this study is to examine whether participants in a stigma reducing training program have maintained the skills that they were taught in the training. These skills enable them to be supportive of young persons with mental illnesses, and it is important that training participants maintain these skills. This study will also examine the course instructors' level of confidence that their participants can demonstrate the skills that were taught in the stigma-reducing training program. Therefore, the study examines two perspectives on the participants' ability to retain the taught skills.

REVIEW OF THE LITERATURE

This section discusses topics that are important with regard to stigma and adolescent mental health. Examining the underlying factors of mental health stigma is critical when trying to understand issues related to adolescent mental health. There are various initiatives that aim to reduce mental health stigma and promote the wellbeing of young people who may be experiencing a mental health crisis. These initiatives include mental health supports in schools and stigma reducing curricula. Mental health stigma, mental health supports in schools and stigma reducing curricula are all discussed below.

Mental Health Stigma

When individuals internalize the stigma associated with their condition, this negatively affects their wellbeing. To internalize is "to make internal, especially to incorporate within oneself (values, attitudes, etc.) through learning or socialization" (Dictionary.com, 2016). Internalization of stigma adversely impacts their self-esteem, and can also lead to guilt, shame and self-doubt (Schulze and Angermeyer, 2003 as cited by Whitley & Campbell, 2014). After individuals internalize stigma, they become increasingly aware of their appearance towards others, and sometimes try to conceal their mental illness.

Concern for appearance. Research explores the concept of stigma management and the ways in which individuals try to conceal their mental illness. A study by Whitley and Campbell examined a group of individuals' behaviors and strategies for stigma management (Whitley & Campbell, 2014). This study included a group of predominantly female participants and most were of African American ethnicity. They were residing in a recovery community and had been diagnosed with one of the following mental illnesses: schizophrenia, major depression, bi polar disorder or schizo-affective disorder. The results of this study indicate how individuals with

severe mental illness attempted to blend in with those around them in order to avoid being stigmatized (Whitley & Campbell, 2014).

Likelihood to seek treatment. Due to their concern regarding stigmatization, many individuals with mental illness may be cautious about seeking professional help. Studies show that some delay seeking treatment (P. W. Corrigan, Druss, & Perlick, 2014), and consequently, this negatively affects their state of mental health since their condition can worsen as it goes untreated. This is particularly true among adolescents, who are highly concerned with the way that stigma can hurt their image. Studies suggest that they are hesitant to seek treatment from a mental health professional because of their fear of stigmatization and preoccupation with the way their peers perceive them (Chandra & Minkovitz, 2006). Some of the barriers that keep adolescents from seeking professional help include the following: embarrassment, not wanting to talk about personal problems and not trusting a counselor (Chandra & Minkovitz, 2006). There are gender differences among adolescents regarding willingness to seek professional help. Males are more likely than females to perceive seeking services from a counselor as a sign of weakness and are less likely to seek treatment when compared to females (Chandra & Minkovitz, 2006). Among adolescents who do seek support, they are oftentimes selective about who they will turn to for help with their struggle. Findings suggest that adolescents are more likely to turn to a friend or a parent rather than a mental health professional (Chandra & Minkovitz, 2006).

Microaggressions. Parents and friends sometimes exhibit positive behaviors and offer support to adolescents with a mental illness. However, they sometimes exhibit microaggressions by treating the individual in a negative way. Microaggressions can be deliberate statements to offend someone or they can come in more subtle forms like microinsults and microinvalidations (Gómez, 2013). Both microinsults and microinvalidations are subconscious, and the person

speaking is unaware that they are communicating in an offensive manner (Gómez, 2013). Adolescents with mental illness who experience microagressions may start to feel differently in their family relationships and social networks. Various studies have explored the effects of microagressions on the relationships of adolescents who are experiencing a mental illness, and the findings of two of these studies are discussed below.

Exhibition of Microagressions

This section discusses the various behaviors in which microagressions are exhibited. It also discusses how these behaviors impact the relationships of adolescents who may be experiencing a mental illness.

Changes in relationships between classmates and friends. In order to understand the dynamics of relationships of adolescents with and without mental illness, one qualitative study explored the attitudes and beliefs of the classmates of students dealing with depression or ADHD (O'Driscoll et al., 2015). The participants of this study indicated certain conditions in which it is appropriate to socially exclude a classmate who is dealing with a mental illness. This study found that social norms and moral judgements influence adolescent's decisions on whether or not to accept or reject a peer with a mental illness. Social norms are "customary rules that govern behavior in groups or societies" (Bicchieri, Muldoon, 2014), and moral judgements are evaluations of whether an action is good or not (Burns, 2014). The study showed that one reason why students chose to exclude a classmate with a mental illness was that the classmate could not follow the social norms of that peer group. They also believed that including a peer with a mental illness in their social network would pose a risk to the social dynamics of the group as well as the individual group members.

The findings of this study showed other conditions in which students believed it was appropriate to exclude a classmate. Students discussed the hypothetical scenario of having a classmate with depression. Students indicated that if a person was not responsible for their depression because of grief over a death, then it would be inappropriate to exclude them from social groups. However, if the individual was constantly depressed for no apparent reason, then it would be necessary to exclude them from the group. They indicated that a person who is often depressed could start to make the group feel depressed. Overall, this study showed the ways in which microagressions manifest themselves in relationships between students with and without a mental illness. In addition to experiencing changes in their relationships with classmates, some mentally ill adolescents experience changes in their friendships.

A study by Moses explored the changed relationships between adolescents with mental illness and their friends (Moses, 2010). Some participants in this study reported being rejected by their friends, but were able to cope with this loss of friends by forming new friendships. Other participants also reported being judged by the parents of their friends. Sometimes parents will tell their children to stop socializing with their peers who have a mental illness and this causes adolescents with a mental illness to lose their friends indirectly. Overall, this study reported adolescent's perceptions of the mistreatments that they were receiving from their friends and the changes that were happening in their friend networks. Microagressions look differently in different types of relationships, and the section below discusses how these behaviors may look in family relationships.

Changes in family relationships. In addition to being treated differently by classmates and friends, adolescents also face the possibility of being treated differently by their parents (Moses, 2010). Moses also investigated the changed relationships between adolescents with a

mental illness and their family members (Moses, 2010). The adolescents who were interviewed in this study stated that their parents exhibited blame, mistrust, rejection, avoidance and pessimism towards them (Moses, 2010). One participant in this study stated the following:

My dad's really big on "you're just a screw-up and it's gonna be like that forever."

This statement is an example of the kind of mistreatment that some adolescents with mental illness may be subject to receiving from their family members. As teens come to internalize criticism and judgement, it may not be beneficial for their well-being or for the improvement of their mental state (Moses, 2010). Moses reveals how microagressions manifest in adolescent's closer relationships with friends and family, and also explores how they manifest in student-teacher relationships.

Changes in student-teacher relationships. In addition to being treated differently by family and friends, students with a mental illness also report being treated differently by school personnel (Moses, 2010). The attitudes and treatments that students receive from teachers can be either positive or negative. In a survey of 56, about one in five youth respondents stated that teachers encourage them to perform well and to reach out if they need support (Moses, 2010). Just over a third expressed experiencing microaggressions from teachers and school staff. Microaggressions may include the following: being unfairly blamed, being underestimated for his or her potential, being feared, excluded or disliked (Moses, 2010). When considering the types of treatments that adolescents with mental illness experience in their environments, it is important to consider the potential benefit of an intervention, which may reduce the stigma on mental illness, and potentially improve the treatment that adolescents with mental illness face.

Mental Health Supports in Schools

Schools are a place where students would greatly benefit from such an intervention. Because adolescents spend a significant portion of their time at school, there is an opportunity to reach them in a great capacity. When adolescents receive assistance in the school setting, this has the potential to benefit them personally and help them improve their performance in their studies.

Improvement in Academic Performance. Published literature indicates that interventions to improve the mental health of students will benefit them academically (Wolpert et al., 2013). Some students with mental illness exhibit poor academic performance, and the benefit that they receive from school based mental health supports may help to improve their school performance. The effects of these mental health supports may affect them while they are in school and many years after they graduate. In an effort to promote wellness among youth who may be at risk for mental illness, schools increasingly are implementing wellness and mental health prevention programs. Numerous local education agencies have recognized the benefit that a school based mental health program may offer, and many have already implemented programs in their school systems.

Current School-based programs. Schools are the most common place where mental health promotion programs are delivered (Cook et al., 2015). Examples of some district-wide programs include those offered by The New York City Department of Education and Miami University's Center for School-Based Mental Health Programs (NYC Department of Education, 2016; Miami University Center for School-Based Mental Health Programs, n.d.). These are comprehensive programs that both serve to identify students who may be at risk and also to provide services to those with a mental illness (NYC Department of Education, 2016; Miami University Center for School-Based Mental Health Programs, n.d.). Schools are an effective

place to implement mental health promotion programs for adolescents because they are accessible by students and schools are able to reach students in a high capacity. In order to ensure that students to get the most benefit out of school based programs, it is important that educators are properly trained to provide support. Therefore, there are recommendations in the literature for effective training programs.

Recommendations related to training. It is important that those who undergo these trainings are taught to recognize the warning signs that indicate that a student may be dealing with a mental illness. Additionally, it is recommended that they are taught to consider the hardships and adversity that students may be facing. Published literature by Doll et al. suggests the need for educators to consider a student's level of risk to succumbing to adversity (Doll, 1998). For youth who are at high risk, it is recommended that secondary schools have resources in place where youth can reach out to receive support for emotional problems. In order to adequately prepare educators to effectively provide support for an adolescent who is experiencing a mental illness, it is necessary to teach stigma-reducing curricula.

Stigma Reducing Curricula

Several mental health awareness programs provided through professional development strive to educate teachers and school staff and provide them with skills that they can later utilize. There are certain components of this professional development that makes it effective at preparing individuals to positively impact a young person with a mental illness. It is essential that they equip teachers with new knowledge and skills, and that they enable teachers to utilize those skills with their youth. A study by Yamaguchi et al. reviewed a variety of school-based curricula to increase awareness and knowledge of youth mental health and to reduce stigma toward individuals with mental illness (Yamaguchi, Mino, & Uddin, 2011). Some interventions

were successful at reducing stigma while others were effective at debunking myths that people have about those with mental illness (e.g. that those with a mental illness are violent).

Essential components of a professional development curricula. According to the literature, there are various components that professional development curricula should include. Corrigan and Penn (1999) mention *protest, education* and *contact* as essential components for a curriculum in mental health awareness. By *protest*, educators seek to abolish the stigmatizing attitudes and behaviors that participants may have regarding those with mental illness. Through *education*, any misconceptions that participants have regarding mental illness are addressed. Stigma and false beliefs are replaced with accurate information about mental disorders. Through *contact*, participants engage in interaction with individuals with mental disorders. Didactic programs educate individuals with a variety of formats including written materials, audio/visual materials and videos. These teachings are supplemented with discussions, and research indicates that participants are more likely to remember information and get rid of false assumptions when engaging in discussion with the educators and other participants in the session (Corrigan & Penn, 1999). Another method used in educational programs involves a simulation. There is a simulation where participants try to complete simple tasks while listening to an audio recording of voices. This kind of simulation helps participants gain understanding of what it like to try to function with a mental illness in day-to-day life.

Change in confidence. There is a concern about whether or not individuals who receive training from mental health awareness programs are confident about utilizing their learned skills when they interact with youth post-training. It is possible that their confidence in their ability to demonstrate these skills may diminish overtime. Some of the components of these trainings are

effective at helping the individual maintain their skills temporarily while other components are effective at producing long-term behavior change.

Short-term behavior change. Research indicates that there are a few key factors that make a professional development effective at increasing knowledge and skills. These factors may contribute to the participants developing a short-term level of confidence in demonstrating the skills that were taught to them. These factors that contribute to this short-term level of confidence include content focus, active learning, coherence, duration, and collective participation (Truscott et al., 2012). When an educational session is content focused, participants have a chance to participate in activities that focus on the subject matter of the educational session. One component of active learning is when participants engage in the materials and methods in a way that they can provide feedback about the educational session. In order for a professional learning session to be coherent, it must be in line with school and district level policies and the beliefs and knowledge of teachers. Research findings suggest that at least 20 hours of contact time are important for an effective intervention (Truscott et al., 2012). Finally, with collective participation, those who work in the same grade level or age group are organized together to participate in group activities. This is important because those who work with the same grade level share similar challenges and can advise one another on how to address those challenges. Other research supports that when participants receive professional development, they are more likely to retain information after practicing their learned skills in a simulated setting (Joyce & Showers, 2002). Practicing their learned skills in a simulated setting enables them to develop a short term level of confidence for demonstrating their learned skills.

Long-term behavior change. Peer coaching is a practice that enables participants to maintain their learned skills for a longer period of time, and this practice increases their

confidence in demonstrating their learned skills. Specifically, peer coaching is the practice of discussing any potential issues that may arise as they attempt to utilize their learned skills in a real life setting (Joyce & Showers, 2002). It is something that is practiced after the professional development is over, and it is effective because it makes participants more prepared and increases their confidence. Research indicates that incorporating theory, demonstration and practice with peer coaching makes participants more strongly equipped to demonstrate what they have learned to the youth that they work with (Joyce & Showers, 2002). Theory consists of the underlying concepts behind a skill or strategy (Joyce & Showers, 2002). Demonstration is the modeling of skills, and practice is the practice of those skills under simulated settings (Joyce & Showers, 2002). Studies show that when participants receive theory and demonstration, this results in an effect size for skill of around 0.5, and when practice activities are incorporated, this raises the effect size to about 1.18 (Joyce & Showers, 2002). When participants go through peer coaching, the effect size rises to 1.42 (Joyce & Showers, 2002). After participants receive training on how to reach out to adolescents who may be suffering from a mental illness, it may be necessary for them to build support networks with their colleagues. As mentioned above, this will enable them to utilize the practice of peer coaching and to increase their levels of confidence in reaching out to youth. Adding the component of peer coaching to youth mental health awareness programs may greatly increase participants' ability to make a difference in the lives of adolescents who may be suffering from a mental illness.

Purpose of the Current Study

Mental illness stigma promotes an environment that presents many challenges for mentally ill adolescents. They face challenges when they experience the effects of stigma in educational environments and personal environments. Therefore, mental health professionals and

other adults need to be aware of professional learning that aims to reduce stigma and equip individuals to help adolescents with mental illnesses. These professional learning programs have potential to equip adults to make a positive impact in the lives of adolescents who may be facing a mental health crisis. However, there is a concern of how long adults are able to practice the skills that they learned in the training after the training session is over (Joyce & Showers, 2002). Therefore, as more adults undergo professional learning to assist adolescents with mental health concerns, it is important to consider the long-term impact of these mental health trainings on them. This study will examine the levels of confidence of the adults who completed the YMHFA course (Youth Mental Health First Aid, 2014), in order to become first aiders. In the context of this study, confidence is their level of certainty in their ability to perform the skills taught in the course. This study will examine first aiders' current levels of confidence that they can demonstrate the skills that they learned in the YMHFA course. Additionally, will also examine relationships between confidence levels of first aiders and their socio-demographic and personal characteristics. Results of behavioral research surveys are subject to self-report bias (Donaldson, Grant-Vallone, 2002), therefore, this study will also examine the YMHFA course instructor's levels of confidence that their trained first aiders can demonstrate the skills that were taught in the course. Additionally, this study will examine the ways in which first aider's are using their training.

Youth Mental Health First Aid

Adults who receive training in the YMHFA course learn about the warning signs for when an adolescent may be struggling with a mental illness (Youth Mental Health First Aid, 2014). YMHFA is designed for educators, parents, coaches and youth workers (Youth Mental Health First Aid, 2014). The aim of YMHFA is to equip adults with the necessary skills to reach

out to an adolescent who may be dealing with a mental illness and stabilize the situation until a mental health professional can assist them (Youth Mental Health First Aid, 2014). YMHFA allows adults who work with adolescents in similar capacities to go through the training together. Through the use of theory, demonstration and practice, YMHFA aims to debunk any myths and misconceptions that the course participants may have about mental illness. It provides training on various mental health diagnoses and aims to reduce stigma. Like other effective mental health awareness trainings (National Empowerment Center, 2015), simulations are a component of the YMHFA training that help participants to understand what it is like to live with a mental illness. Role playing helps participants learn how to assess a mental health crisis (Youth Mental Health First Aid, 2014). They are also given the opportunity to discuss challenges that may arise when reaching out to a young person who may be at risk. The opportunity to discuss these potential challenges is another part of YMHFA training that makes it effective (Joyce & Showers, 2002). Participants also engage in active learning by providing feedback on how to improve the course. YMHFA provides the following five step action plan: (1) assess for risk of suicide or harm, (2) listen nonjudgmentally, (3) give reassurance and information, (4) encourage appropriate professional help, (5) encourage self-help and other support strategies (Youth Mental Health First Aid, 2014). Through this training, the goal is that participants will be better equipped to support a young person who may be struggling with a mental illness.

METHODS

Research Questions

This study aims to answer the following questions: (1) Do instructors and first aiders who were surveyed at follow-up differ in their levels of confidence in the ability of these first aiders to demonstrate the skills that they learned in the YMHFA course? These skills are under the following overarching areas: recognizing the signs of a mental illness, reaching out to a young person with a mental illness, communicating with that person, putting them in contact with a mental health professional, and being aware of their own personal views related to mental illness. (2 a) What are the current levels of confidence of the adults who completed the YMHFA training? (2 b) This study will examine if first-aiders who were surveyed at follow-up differ in their levels of confidence by (a) race, age and gender; (b) taking the YMHFA course voluntarily vs. taking it at their employer's request; (c) the personal and professional roles in which they specified they will be using their training. This study will also answer the following: (3) How have trained first-aiders used the skills that they learned in the YMHFA course?

Participants

Participants of the current study included the instructors of the YMHFA course as well as the recipients of the training. The recipients of the YMHFA training were adults who became certified as "first aiders" upon completion of the training. The YMHFA course was administered under a school based mental health grant in a Southeastern region of the United States. It was administered statewide across five local education agencies. Most of the first aiders from in this study were from three of these local education agencies.

Baseline sample. The baseline sample included 757 first aiders and 21 instructors. This sample included all individuals who received the YMHFA training between January 2015 and November 2015. It also included all YMHFA instructors who lead trainings during this same time frame. The racial makeup of the baseline first aider sample is as follows: 45.4% (n=217) Black or African American, 45.4% (n=217) White, other/unspecified, 9.2% (n=44) (Table 1). There were a small number of first aiders who were of various racial minorities. In order to protect their identity, they were grouped into the other/unspecified category. One point six percent (n=8) were between the ages of 16 and 24. Fifty four percent (n=258) were between the ages of 25 and 44 while 36.6% (n=175) were between the ages of 45 and 60 (Table 1). Three point eight percent (n=18) were between the ages of 61 and 80. Three percent (n=14) did not specify their age.

Seventy nine percent (n=380) were women, 19% (n=91) were men, and 2% (n=7) did not specify their gender (Table 1). Sixty four point nine percent (n=310) specified that they would be using their training in multiple roles, while 34.3% (n=164) indicated that they would only be using their training in the workplace (Table 1). Point eight percent (n=4) were in the "other/unspecified category. Those that selected that they were attending for any other reason were grouped into the "other unspecified" category. Seventy one point three percent (n=341) stated that they were attending the YMHFA training involuntarily while 27.2% (n=130) stated that they were attending on a voluntary basis (Table 1). One and a half percent (n=7) did not specify their reason for attending. Instructor demographics from this sample are not available.

Follow-up sample. The follow up sample included the 129 first aiders and 14 instructors who responded to the surveys that was administered as a part of this study. In the follow-up sample of first aiders, 83% (n=107) were female, and 16% (n=20) were male (Table 1). One

percent (n=2) did not specify their gender. Forty eight point one percent (n=62) of first aiders were between the ages of 25 and 44. Forty three point four percent (n=56) were in the age range of 45 to 60 (Table 1). Approximately 5% (n=7) were between the ages of 61 and 80, and about 3% (n=4) did not specify their age.

Sixty two point eight percent (n=81) were White, while 31% (n=40) were Black or African American (Table 1). Six point two percent (n=8) were classified as "other/unspecified." There were a small number of first aiders who were of various racial minorities. In order to protect their identity, they were grouped into the other/unspecified category. Fifty one point nine percent (n=67) stated that they would be using their training in multiple roles while 43.4% (n=56) indicated that they would only be using their training in the workplace (Table 1). Four point seven percent were classified in the "other/unspecified" category.

Sixty-six point seven percent (n=86) that they had attended the course voluntarily while 31% (n=40) indicated that they had attended the training involuntary at their employer's request (Table 1). Two point three percent (n=3) were classified as "unspecified."

Instructor demographics will not be reported to avoid identifying the instructors who responded to the survey.

Table 1

First Aider Socio-Demographics and Personal Characteristics

Variable	First Aider (Baseline)	First Aider (Follow-up)
	n (%)	n (%)
Gender Identity		
Male	91 (19)	20 (16)
Female	380 (79)	107 (83)

Unspecified	7 (2)	2 (1)
Race		
Black or African American	217 (45.4)	40 (31)
White	217 (45.4)	81(62.8)
Other/Unspecified	44 (9.2)	8 (6.2)
Age		
16-24	8 (1.6)	0 (0)
25-44	258 (54)	62 (48.1)
45-60	175 (36.6)	56 (43.4)
61-80	18 (3.8)	7 (5.4)
81 years or older	0 (0)	0 (0)
Unspecified	14 (3)	4 (3.1)
Role of Use		
Multiple Roles	310 (64.9)	67 (51.9)
At work	164 (34.3)	56 (43.4)
Other/Unspecified	4 (0.8)	6 (4.7)
Reason for Attendance		
Voluntarily	130 (27.2)	86 (66.7)
Involuntarily	341 (71.3)	40 (31)
Unspecified	7 (1.5)	3 (2.3)

Table 1

IRB approval. The current study was approved through the university's institutional review board for the protection of human subjects. This approval allowed for the administration of surveys to the follow up samples.

Procedure after Training

Survey received upon completion of YMHFA training. The 757 adults who underwent YMHFA training to become first aiders received a post assessment survey immediately upon their completion of the training. This post assessment survey assessed (a) these 757 individuals' evaluation of their instructors in their teaching of the YMHFA course (b) their levels of confidence at demonstrating skills that were taught in the course (c) their overall response to the course (d) their feedback on strengths and weaknesses of the course (e)socio-demographic information such as age, race and gender (f) why they attended the course (g) what situational roles they saw their training being of use (h) whether or not they would recommend the course to others. YMHFA instructors did not complete a survey after leading their trainings.

Follow-up Procedure

First Aider Follow-up. As part of the current study, individuals who had received the YMHFA training in the year 2015, received a follow-up survey in January 2016 (Table 2). This survey was administered to individuals who had attended one of the thirty YMHFA training sessions between January 2015 and November 2015. Like the survey that they received upon completion of their training, this follow-up survey assessed their levels of confidence in their ability to demonstrate the skills that they learned in the training. However, this survey assessed their current levels of confidence for the time of January 2016. Like the post assessment survey that they completed upon their training, this follow-up survey asked for socio-demographic information such as age, race and gender. Additionally, the follow-up survey asked why they attended the course, in what role they saw their training being used, and whether or not they would recommend the course to others. Unlike the survey that they completed upon training, this follow-up survey asked one-open ended question about how they had used the skills that they

learned since their completion of the YMHFA training. Additionally, it asked for any additional comments that they had regarding the YMHFA training. From this follow-up survey, the researchers took trained first aiders' scores and examined them to see if there were significant differences in their scores on this survey and their scores on the survey that they took immediately after completing the YMHFA training. The researchers looked for a change in scores for survey items 1 through 8 (see Appendix A).

Instructor survey. YMHFA course instructors received a follow-up survey in January 2016. Like the two surveys that were administered to first aiders, this survey assessed their confidence levels regarding how well they believed their trained first aiders could demonstrate the skills that were taught in the course. These skills include (a) recognizing a situation when a youth may be dealing with a mental health crisis, (b) reaching out to that person, (c) actively and compassionately listening to them (d) asking the person if s/he intends to kill her/himself, (e) offering basic information and reassurance, (f) assisting them to seek professional help, (g) being able to connect the person with appropriate community and individual supports (h) ability to be aware of their own thoughts and feelings regarding mental health disorders. They completed this follow-up survey for trainings that they had lead any time between January 2015 and November 2015. The survey asked for socio-demographic information such as age, race and gender. It also asked for their feedback on the strengths and weaknesses of the course, and any additional comments that they may have had. Scores on this survey were examined against scores on the first-aider follow-up survey. Specifically, we examined differences in scores for survey items 1 through 8 between the first-aider follow-up survey and the instructor survey.

Administration and response rates. The researchers administered the instructor and first aider follow-up surveys through the Qualtrics survey platform (Qualtrics, 2016). Both

instructors and first aiders received a recruitment email with a link to complete their surveys. The first aider follow-up survey had a response rate of 17.02 percent, and the response rate for the instructor follow-up survey was 66.67 percent. Literature indicates that response rates of 25 to 30 percent are common for surveys administered by email (Fincham, 2008). Therefore, the first-aider follow-up survey was subject to a greater amount of non-response bias than is expected for an email survey. The non-response bias for this survey was 83 percent. Fortunately, the instructor survey was subject to a non-response bias of only 33.33 percent, which is less than what is expected for an email survey. Table 2, below, shows the content that was asked on each survey.

Table 2

Content of Surveys

First Aider Post Assessment survey	Instructor Follow-up survey	First Aider Follow-up survey	Survey Item
X	X	X	Recognize the signs that a young person may be dealing with a mental health challenge or crisis. [a]
X	X	X	Reach out to a young person who may be dealing with a mental health challenge. [a]
X	X	X	Ask a young person whether s/he is considering killing her/himself. [a]
X	X	X	Actively and compassionately listen to a young person in distress. [a]
X	X	X	Offer a distressed young person basic "first aid" level information and reassurance about mental health problems. [a]
X	X	X	Assist a young person who may be dealing with a mental health problem or crisis to seek professional help. [a]
X	X	X	Assist a young person who may be dealing with a mental health problem or crisis to connect with appropriate community, peer, and personal supports. [a]
X	X	X	Be aware of my own views and feelings about mental health problems and disorders. [a]
X			Course goals and objectives were achieved. [a]

X			Course content was practical and easy to understand. [a]
X			There was adequate opportunity to practice the skills learned. [a]
X			The instructor's presentation skills were engaging and approachable. [a]
X			The instructor demonstrated knowledge of the material presented. [a]
X			The instructor facilitated activities and discussion in a clear and effective manner. [a]
X			Feedback for this instructor? [b]
X	X		What is your overall response to this course? [b]
X	X		What do you consider to be the strengths of the course? [b]
X	X		What do you consider to be the weaknesses of the course? [b]
X	X		Was there any issue/topic you expected this course to cover which it did not address? [b]
		X	How have you used the information learned from the YMHFA course? [b]
	X	X	Please list any additional comments you have about the YMHFA course. [b]
X		X	Why did you attend this course? [c]
X		X	In what role do you see your Mental Health First Aid training being of use? [c]
X	X	X	Would you recommend this course to others? [c]
X	X	X	What is your gender? [c]
X	X	X	How would you describe your ethnicity? [c]
X	X	X	What is your age? [c]

[a] Likert scale response

[b] Text response

[c] Multiple choice response

Table 2

Data Analysis

Data from the post assessment survey that the first aiders completed immediately after receiving the YMHFA training was manually entered into an Excel document. This data in the Excel document was then checked against the original survey data by using a continuous sampling plan method. With the continuous sampling plan method, the first 10 entries of a data set are checked for accuracy against the original data (King & Lashley, 2000). If those 10 entries are all correct, then every tenth entry that follows is checked (King & Lashley, 2000). When an error is found, it is corrected, and the researcher goes back to checking 100 percent of the data until 10 accurate entries are found (King & Lashley, 2000).

Statistical Procedures

Data distribution. The researchers checked for normality in the distribution of scores for levels of confidence among instructors, the first aiders contacted at follow-up, and the baseline sample of first aiders. Among these three groups, the data was negatively skewed. All three groups had mode scores at the high end of the scale. The mode score for instructors was 38 while the mode score for follow-up first aiders was 40. The mode score for baseline sample of first aiders was also 40. One of the assumptions of parametric tests, such as the t-test, is that data are normally distributed for both groups (Elrod, n.d.). Some other assumptions are that the two groups are independent, and the dependent variable is continuous (Elrod, n.d.). Not only do the data for this study not have a normal distribution, but the dependent variable is measured on an ordinal scale. Therefore, the data in this study do not meet the assumptions of a t-test.

Non-parametric tests. Because the data in this study did not meet the assumptions of the t-test, the Wilcoxon Rank Sum test was an appropriate non-parametric alternative for

analyzing the data. This test does not assume normality in sample distributions, and instead of testing for a difference in means, it tests for a difference in medians (D'Agostino et al., 2006).

Use of the Wilcoxon Rank Sum test. Researchers used the Wilcoxon Rank Sum test for all statistical analyses in the present study. To examine research question 1, scores for survey items 1 through 8 were combined for each instructor and for each first aider in the follow-up sample. Incomplete scores were omitted from analysis. The lowest possible score for these eight items was 8 and the highest possible score was 40.

We tested for differences in scores for the socio-demographic variables of race, age and gender. Races were combined into (a) white first-aiders, and (b) non-white first-aiders. Scores for age groups were categorized into (a) first aiders aged 25 to 44, and (b) first aiders aged 45 and older. Gender groups were categorized into (a) male, and (b) female. Those who did not specify their gender were grouped with males. We also used the Wilcoxon Rank Sum test to test for differences in scores for those who attended voluntarily and those who attended involuntarily. Participants who answered on the survey that they had taken the course at their employer's request were counted as taking it involuntarily. Those who answered that they were taking it for any other reason were counted as taking it voluntarily.

We also tested for differences in scores among first aiders according to the roles in which they would be using their training. For roles of use, scores for participants were classified into two groups. One group was for first aiders who selected that they would be using their training in multiple roles. The other group was for first aiders who selected that they would be using their training only in the workplace. All statistical analyses were carried out using SAS version 9.4 (SAS Institute Inc., Cary, NC, USA).

Examining Qualitative Data. In order to examine how first aiders used their skills, we examined data from question 2 on the first aider follow up survey (Appendix A). While examining this data, we developed inductive codes to represent the themes in the data. Inductive coding is a process where the researcher does not anticipate finding any specific codes, but lets the codes emerge from the data itself (Hennick, Hunter, Bailey, 2011). We individually compared themes in the data and then categorized them into codes. Finally, through inter-coder-agreement (Hennick et. al, 2011), we compared codes and check for consistency in our codes. The codes identified in the data are reported below.

RESULTS

Differences in Confidence Levels

Instructors and first aiders at follow-up. Results from the follow-up surveys indicated no statistically significant differences in scores between instructors and first aiders. Instructors had a median score of 38 while first aiders had a median score of 36 (Table 3).

Table 3

Differences in Scores between Instructors and First Aiders at Follow-up

value	Instructors	First Aiders	Z value	P
	n=14	n=126	-0.55	0.29
Level of Confidence				
Median	38.00	36.00		
Mean ± SD	35.14 ± 5.29	35.6 ± 3.98		
Range	24 - 40	24 - 40		

Table 3

First aiders at baseline and first aiders at follow-up. Results indicated statistically significant differences between the baseline sample of first aiders and the sample of first aiders at follow-up. The median level of confidence for the baseline sample was 39 while the median level of confidence for the follow-up sample was 36 (Table 4).

Table 4

Differences in Scores between Baseline Sample First Aiders and First Aiders at Follow-up

value	Baseline Sample First Aiders	First Aiders at Follow-up	Z value	P
	n=466	n=126	-3.31	0.0005
Level of Confidence				
Median	39.00	36.00		
Mean ± SD	36.93 ± 3.64	35.69 ± 3.98		

Range	17 - 40	24 - 40

Table 4

Socio-demographic and personal characteristics. There were no statistically significant differences in scores among the socio demographic variables of gender, age category and race. The median score was higher for females than for males (Table 5). There was a statistically significant difference in scores between age categories. The median score for age category 1 (ages 25 to 44) was higher than the median score for age category 2 (ages 45 and older) (Table 5). There was no statistically significant difference in scores between white and non-white first aiders. Median scores were the same for both groups (Table 5).

There was no statistically significant difference in scores for those who took the training voluntarily and those who took the training involuntarily. However, those who took the course involuntarily had a higher median score (Table 5). There were no statistically significant differences among first-aiders according to the different roles in which they would be using their training. Median scores were the same for both groups (Table 5).

Table 5

Differences in Scores by Socio-Demographic and Personal Characteristics

	Median	Mean ± SD	Range	Z value	P value
Level of Confidence					
Gender					
Males (n=20) (Unspecified=2)	35.50	35.18±4.79	24-40	-0.39	0.35
Females (n=104)	36.00	35.75±3.83	27-40		
Age Category					
Category 1 (n=62)	37.50	36.48 ±3.84	24-40	2.560	0.005
Category 2 (n=64)	34.00	34.92 ±4.00	27-40		

Race					
Non-White (n=47)	36.00	35.97 ± 3.61	29-40	0.634	0.263
White (n=79)	36.00	35.48 ± 4.20	24-40		
Reason for Attendance					
Voluntarily (n=86)	35.50	35.44 ± 3.98	24-40	0.659	0.260
Involuntarily (n=40)	36.00	35.88 ± 4.14	27-40		
Role of Use					
Multiple Roles (n=72)	36.00	35.93 ± 3.79	27-40	-0.780	0.220
Only at work (n=54)	36.00	35.39 ± 4.24	24-40		

Table 5

How First-Aiders Used Their Training

The responses to the open-ended survey question were analyzed qualitatively. The following themes emerged from the open-ended responses: increased confidence; increased identification of signs and symptoms; improved communication with students; improved collaboration and referral skills; dissemination of information and part of current role. These themes are defined and supported by illustrative quotes below.

Increased confidence.

First aiders in the follow-up sample indicated that they gained confidence to apply the skills they learned in the training. They also indicated that the YMHFA training gave them confidence in assessing situations and assisting young people who may be dealing with a mental illness. One first aider noted,

"It gave me confidence to apply the knowledge and skills when working with students who struggle with mental illness."

Another first aider reported,

"My coworker and I had to deliver a presentation on suicide to all of the county admin & counselors. I used a lot of the info provided during the YMHFA class in our presentation. I am also now involved in threat assessments & feel like this class gave me a better level of confidence in dealing with different situations."

Increased identification of signs and symptoms.

First aiders in the follow-up sample also indicated that they were better able to identify situations when a young person may be struggling with a mental illness. These situations included students who were hurting themselves and students who may have gone unnoticed if the first aider had not been able to recognize that the student needed help. One first aider reported,

"I was able to identify and help a child that was cutting themselves. She trusted only me to talk to and trusted me with getting her help." Another noted,

"I have been more keenly aware of at risk students who may otherwise fly under the radar."

Improved communication with students.

First aiders in the follow-up sample also reported that the YMHFA training helped them improve their communication with youth who may be experiencing a mental health challenge. It also helped them to change their approach with youth and interact with them in a different way.

"I've used it to better understand how to communicate with youths (sic) who may be experiencing a mental health challenge or crisis." Another first aider reported the following:

"I have approached students differently and given encouragement in a different way."

Collaboration and referral skills.

First aiders in the follow-up sample reported being able to refer students to appropriate resources for help with their situations. Some mentioned that they were able to collaborate with parents, schools and community resources. For example, one first aider noted:

"In working with a parent of student who required crisis intervention and in working with school to assess whether a more intense level of support is needed in the school setting in light of the mental health issues the student is facing."

Dissemination of information.

The data from the follow up sample shows that first aiders were able to share what they learned in the YMHFA training with their coworkers. Additionally, they reported sharing it with parents of youth.

Part of current role.

Data from the follow-up sample suggested that some first aiders were already using the information from the course in the workplace. For some, the YMHFA training provided a refresher for information that they do not use on a regular basis.

"I am not sure that I learned new information but the course served as a good reminder of things I have been trained but don't practice in my job daily."

Instructor Perception of Training

The following themes emerged from the open-ended responses: participant involvement and discussions. These themes are defined and supported by illustrative quotes below:

Participant involvement.

YMHFA instructors reported that the exercises of the YMHFA training are engaging and prepare first aiders to handle crisis and non-crisis situations when a young person is experiencing a mental illness. Instructors also stated that the engaging environment enables first aiders to learn the vast amount of content that is presented in the course. One instructor noted,

"The hands on exercises are very valuable and equip participants with tools and confidence needed to effectively handle crisis and non-crisis situations." Another instructor noted,

"The course is extremely engaging and participa[nt]-centered, which allows trainers to create an environment conducive to learning the vast amount of material."

Discussions.

YMHFA instructors also reported that the discussions were valuable for the first aiders who completed the training. They described how the discussion of youth mental health and protective and risk factors for youth were beneficial for the training.

"The inclusion of discussion of protective and risk factors for youth."

"The trainings provide a space for people to discuss mental health and youth."

DISCUSSION

Purpose of the current study. The purpose of this study was to examine instructor/first-aider confidence that first aiders who were surveyed at follow-up could use the skills learned in a mental health stigma-reducing curriculum. Specifically, we aimed to (1) examine levels of confidence among YMHFA instructors and first aiders who were surveyed at follow-up that the first aiders can demonstrate the skills that that were taught in the YMHFA trainings, (2a) examine the current levels of confidence of the adults who completed the YMHFA training (Youth Mental Health First Aid, 2014) in order to become first aiders, (2b) examine differences in levels of confidence among first aiders in the follow-up sample by socio-demographic and personal characteristics, (3) and to examine the ways in which first aiders who were surveyed at follow-up are using their training.

Research Question 1

At follow-up, YMHFA instructors and trained first aiders both reported high levels of confidence in the first aider's ability to use the skills learned in the training. The results suggested that instructors and first aiders did not significantly differ in their levels of confidence in the ability of the first aiders to transfer the skills that they learned in the YMHFA training. There are various factors that contributed to high levels of confidence in both instructors and first aiders, and these factors are discussed below.

The data show that one of these factors was the interactive components of the YMHFA training. Published literature indicates the importance of discussions and simulations for professional development trainings (Joyce & Showers, 2002). Since the YMHFA training included discussions and simulations, this positively influenced instructors' level of confidence

in the ability of their trained first-aiders to demonstrate the skills from the training. This level of confidence in the instructors is evidenced by their quotes in the results section. The simulations gave first-aiders an experience to practice the skills as they were learning them in the YMHFA training. This opportunity to practice these skills may have enabled them to become competent in these skills. Additionally, the discussions that were a part of the training enabled first aiders to discuss any challenges that may rise while assisting youth with a mental health crisis. These discussions could have better equipped first aiders to practice the skills that they were learning in the training.

There are also reasons why first aiders who were surveyed at follow-up maintained a high level of confidence in their ability to demonstrate the skills from the training. As described in the qualitative results section, the first aider follow-up sample reported various ways in which they were able to apply their learned skills from the YMHFA training. Practicing these skills may have led to their high level of confidence in demonstrating these skills. The practice of skills leads to competence in those skills (Joyce & Showers, 2002). If first aiders are feeling competent in their skills, then they will feel confident in demonstrating those skills. The data show that approximately 31 percent of first-aiders who were surveyed at follow-up reported that they attended the YMHFA training at their employer's request. If they had specific goals for how they would use the skills from the training in their workplaces, then this may have increased their confidence in demonstrating these skills after the training (Nikandrou, Brinia, & Bereri, 2009).

Research Question 2a

Even though first aiders who were surveyed at follow-up showed a high level of confidence in their ability to demonstrate their skills, the data indicate that their level of

confidence has slightly declined since they completed the YMHFA training. The results of this study indicate that first aiders decreased slightly in their level of confidence from the time they completed the training to the time that they took the follow-up survey. Even though the data indicate a statistical significance in this decline of confidence, these results should be considered with caution. The change in medians from 39 to 36 and the p value of .0005 should be interpreted while considering other factors. One factor to consider is the distribution of the data in the first-aider baseline and follow-up samples. The data distribution of these two samples varies greatly, and the Wilcoxon Rank Sum test tests both the location and the shape of the data (Hart, 2001). Therefore, researchers should consider the distribution and shape of their data when interpreting results (Hart, 2001).

In addition to the distribution and shape of the data, researchers should also consider the median. The median is less sensitive to the range of the data (D'Agostino et al., 2006).The range of data in first aider baseline sample is wider than the range of data for those who responded to the follow-up survey. The baseline first aider data has a range of 17 to 40 while the first aider data has a range of 24 to 40. These differences in ranges make it appear as though first aiders in the follow-up sample may have been more confident in their ability to demonstrate the skills than the first aiders in the baseline sample. However, the first aider follow-up sample was approximately 27% of the size of the baseline sample. These two samples greatly differ in size, which makes it difficult to compare the medians of the two groups. It is possible that if more first aiders had responded to the follow-up survey, that this median may have shifted downward. Additionally, it is possible that first aiders who responded to the follow-up survey were, as a whole, more confident in using their skills than those in the baseline sample. When considering this possibility, it is difficult to determine that there was truly a decline in confidence.

Research Question 2b

There were statistically significant differences in scores between the two age groups of first aiders who were surveyed at follow-up. These results imply that older first aiders who were surveyed at follow-up had slightly lower levels of confidence in their ability to demonstrate their skills several months after the training. However, these results should also be interpreted with caution. First aiders aged 45 and older who were surveyed at follow-up had a median level of confidence that was only 3.5 points lower than first aiders aged 25 to 44. This difference in medians is minimal. Additionally, the data ranges for these two samples are different. The sample of older first aiders surveyed at follow-up had a higher range of scores from 27 to 40 while the ranges of scores for younger first aiders was 24 to 40. Also, the median is less sensitive to all values in the distribution of the data (Plonsky, 2016), and this should be taken into consideration when interpreting the results.

Even though there were slightly significant differences in levels of confidence by age, there were no significant levels of confidence by gender, race, or the first aiders' reasons for attendance. Additionally, there were no significant differences in scores among first aiders in the follow-up sample by the personal and professional roles in which they would be using their training. This finding is consistent with the findings of published literature (Pisani, Cross, Watts, & Conner, 2012). An evaluation of a mental health professional development training found that there was no difference in levels of confidence among participants in their ability to demonstrate the skills that were taught in the course according to the settings in which they would be using their training (Pisani et al., 2012). This study examined the effectiveness of a suicide prevention training curriculum. The study sample consisted of 119 participants who received the training and who primarily worked for the Veterans Health Administration. The roles in which the

participants were using their training were as follows: treatment provider, administrator, supervisor, case manager, and student/trainee. On the follow-up questionnaire, nearly half of participants (48.4%) reported that they already had some experience in assessing a patient's risk for suicide. In addition to this, most (62.3%) reported that they had attended a suicide prevention training before. The participants in this study came in contact with individuals with mental illnesses on a regular basis just like the first aiders who were surveyed at follow-up in the current study come in contact with youth on a regular basis. The results of the published literature and the current study imply that when a professional has continual contact with their target population (e.g. mentally ill veterans, youth), that they are more likely to maintain confidence in demonstrating their learned skills. Perhaps this continual contact is more important for demonstrating skills than the role in which the professional will be using their training. First aiders who were surveyed at follow-up in this study have continual contact with youth, and had the opportunity to immediately start practicing their learned skills after the YMHFA training. Because many of them are in contact with youth on a regular basis, they have the opportunity to become more comfortable and confident in demonstrating the skills that they learned in the YMHFA training.

Research Question 3

Results also indicate that first-aiders who were surveyed at follow-up were able to use their training in a variety of ways. The ways that they used their training align with the aims of the curriculum. The YMHFA curriculum aims to improve first-aiders' communication skills with youth. First aiders who were surveyed at follow-up reported that they were able to demonstrate effective listening skills and speak effectively to young people. The course also aimed to equip first-aiders to refer young people to appropriate resources for help, and first-aiders who were

surveyed at follow-up reported that they are able to identify youth who are potentially struggling with a mental health crisis and also refer these youth to the appropriate resources. These results show how the first aiders who were surveyed at follow-up are using their training and how this relates to the aims of the YMHFA course. As first-aiders have practiced their skills that they learned in the training, perhaps they have been able to maintain a high level of confidence in using those skills. As first aiders practice their skills, they become more competent. Additionally, as first aiders become more competent in their skills, they become more confident in demonstrating those skills. Equipping first aiders to disseminate the information was not an aim of the YMHFA course, however first aiders who responded at follow-up reported that they were able to share the information from the training among their co-workers. Perhaps their opportunity to share the information from the YMHFA training is a factor that enhanced their confidence to demonstrate the skills that they learned in the training. Overall, the data show that first aiders who responded at follow-up reported a relatively high level of confidence in their ability to assist a young person who may be facing a mental health crisis.

Future Directions

The current study makes a contribution to the growing body of literature on professional development. It is an exploratory study that examines the issue of confidence regarding skill transfer, and it is unique in that it examines confidence of skill transfer as opposed to actual skill transfer. The results show that first aiders who responded at follow-up maintain a high level of confidence in transferring their skills because they use their skills. This study also raises questions for a follow-up study. Some examples of questions may include the following: (1) How frequently have first aiders been able to use the skills that they learned in the YMHFA training? (2) Is there a relationship between how frequently first aiders use the skills from the

training and their long-term level of confidence? (3) What are the outcomes of the situations in which first-aiders have used the skills that they learned in the YMHFA training? Asking these questions will give researchers some insight as to how first aiders are maintaining confidence in their ability to transfer the skills from the training. It will also show the results of situations in which first aiders are using their skills.

Limitations

There are several limitations that should be noted in the current study. Firstly, the socio-demographic data in Table 1 is only representative of 63% (n=478) of the first aider baseline sample. Secondly, data that were entered from the survey that first aiders took upon completion of the YMHFA training was checked under a continuous sampling plan protocol (King & Lashley, 2000). The continuous sampling plan is not as effective at identifying errors as the double data entry checking method. With the double data entry method, the data is entered once, and then verified for accuracy as it is entered a second time (King & Lashley, 2000). However, the continuous sampling plan protocol allows the researcher to save time while checking data for accuracy. One additional limitation to this study was the low response rate on the first-aider follow-up survey. The response rate of 17% was under the expected response rate of 25% to 30% (Fincham, 2008).

Conclusion

The current study found that YMHFA instructors and first aiders had similar levels of confidence in the ability of the follow-up first aiders to demonstrate the skills that were taught in the training. Additionally, the data from this study indicated that long term levels of confidence among follow-up first aiders only decreased slightly after the YMHFA training. The findings of

this study indicated that there were only minimal differences in long-term levels of confidence among the different age categories of first aiders who responded to the follow-up survey. Additionally, study findings indicated that long-term levels confidence did not differ by socio-demographic and personal characteristics among first aiders who responded to the follow-up survey. This study also found that first aiders who responded to the follow-up survey are using their training in ways that relate to the aims of the YMHFA curriculum. The qualitative data indicated that there are components of the curriculum that instructors believe make the training effective. The findings of this study make a contribution to the body of literature on mental health awareness training, and they also provide direction for future research on these types of trainings.

APPENDIX A

First Aider Follow-Up Survey

Thank you for taking the time to complete this survey. This survey will assess your **current** levels of confidence in demonstrating the skills that you learned in your Youth Mental Health First Aid training course. This survey will also ask for your comments on the course. Please answer the questions below:

1. As a result of participating in the Youth Mental Health First Aid Training, I feel more confident that I can…

	Strongly Agree (1)	Agree (2)	Uncertain (3)	Disagree (4)	Strongly Disagree (5)
Recognize the signs that a young person may be dealing with a mental health challenge or crisis.					
Reach out to a young person who may be dealing with a mental health challenge.					
Ask a young person whether s/he is considering killing her/himself.					
Actively and compassionately listen to a young person in distress.					
Offer a distressed young person basic "first aid" level information and reassurance about mental health problems.					
Assist a young person who may be dealing with a mental health problem or crisis to seek professional help					
Assist a young person who may be dealing with a mental health problem or crisis to connect with appropriate community, peer, and personal supports.					

Be aware of my own views and feelings about mental health problems and disorders.					

2. How have you used the information learned from the YMHFA course?

3. Are there any additional comments you would like to make about the YMHFA course?

4. Why did you attend this course? (select all that apply)

___ My employer asked/assigned me
___ Personal interest
___ Other professional development (specify profession) _____
___Community or volunteer interest (please specify) _____
___ Other (please specify) _____

5. In what role do you see your Mental Health First Aid training being of use? (select all that apply)

___ At work (please describe your work position) _____
___ As a parent/guardian
___ As a family member
___ As a peer/friend
___ As a volunteer/mentor
___ Other (please describe) _____

6. Would you recommend this course to others?

___ Yes
___ No

7. What is your gender?

___ Male
___ Female

8. How do you describe your race/ethnicity? (select all that apply)

___ American Indian or Alaskan Native
___ Asian
___ Black or African American
___ Hispanic or Latino origin
___ Native Hawaiian or other Pacific Islander

__ White
__ Multiracial
__ Other (please describe) _____

9.) What is your age?

__ 16 to 24 years
__ 25 to 44 years
__ 45 to 60 years
__ 61 to 80 years
__ 81 years or older

APPENDIX B

YMHFA Instructor Survey

Thank you for taking the time to complete this survey. This survey will assess your levels of confidence that your first aiders can demonstrate the skills that they learned in your Youth Mental Health First Aid training. The survey will also ask for your feedback on certain aspects of the YMHFA course. Please answer the questions below:

1. As a result of participating in my Youth Mental Health First Aid trainings, I feel more confident that my trained first aiders can...

2. What is your overall response to the YMHFA course?

	Strongly Agree (1)	Agree (2)	Uncertain (3)	Disagree (4)	Strongly Disagree (5)
Recognize the signs that a young person may be dealing with a mental health challenge or crisis.					
Reach out to a young person who may be dealing with a mental health challenge.					
Ask a young person whether s/he is considering killing her/himself.					
Actively and compassionately listen to a young person in distress.					
Offer a distressed young person basic "first aid" level information and reassurance about mental health problems.					
Assist a young person who may be dealing with a mental health problem or crisis to seek professional help					
Assist a young person who may be dealing with a mental health problem or crisis to connect with appropriate community, peer, and personal supports.					
Be aware of their own views and feelings about mental health problems and disorders.					

3. What do you consider to be the strengths of the YMHFA course?

4. What do you consider to be the weaknesses of the YMHFA course?

5. Was there any issue/topic you expected the YMHFA course to cover which it did not address?

6. Please list any additional comments you have about the YMHFA course.

7. Would you recommend the YMHFA course to others?

___ Yes
___ No

8. What is your gender?

___ Male
___ Female

9. How do you describe your race/ethnicity? (select all that apply)

___ American Indian or Alaskan Native
___ Asian
___ Black or African American
___ Hispanic or Latino origin
___ Native Hawaiian or other Pacific Islander
___ Caucasian/White
___ Other (please specify) _____

10. What is your age?

___ 16 to 24 years
___ 25 to 44 years
___ 45 to 60 years
___ 61 to 80 years
___ 81 years or older

References

Bicchieri, Cristina and Muldoon, Ryan. (2014). "Social Norms", *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Edward N. Zalta (ed.) Retrieved April 10, 2016 from http://plato.stanford.edu/entries/social-norms/

Burns, Stuart. (2014). Moral Judgements. Retrieved April 10, 2016 from http://www3.sympatico.ca/saburns/pg0402.htm

Chandra, A., & Minkovitz, C. S. (2006). Stigma starts early: Gender differences in teen willingness to use mental health services. *Journal of Adolescent Health, 38*(6), 754.e751-754.e758. doi: http://dx.doi.org/10.1016/j.jadohealth.2005.08.011

Cook, C. R., Frye, M., Slemrod, T., Lyon, A. R., Renshaw, T. L., & Zhang, Y. (2015). An integrated approach to universal prevention: Independent and combined effects of PBIS and SEL on youths' mental health. *School Psychology Quarterly, 30*(2), 166-183. doi: 10.1037/spq0000102

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. *Psychol Sci Public Interest, 15*(2), 37-70. doi: 10.1177/1529100614531398

Corrigan, P. W., & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Psychologist, 54*(9), 765-776. doi: 10.1037/0003-066X.54.9.765

D'Agostino, R.B., Sullivan, L.M., Beiser A.S. (2006). Introductory Applied Biostatistics. Belmont, CA: Thomson Brooks Cole.

Dictionary.com Unabridged. internalize (n.d.) Retrieved February 12, 2016 from http://dictionary.reference.com/browse/internalize

Doll, B. M. A. (1998). Risk And Resilience: Implications For The Delivery Of Educational And Mental Health Services In Schools. *School Psychology Review, 27*(3), 348.

Donaldson SI, Grant-Vallone EJ. UNDERSTANDING SELF-REPORT BIAS IN ORGANIZATIONAL BEHAVIOR RESEARCH. *Journal of Business & Psychology.* Winter2002 2002;17(2):245-260.

Elrod, D. (n.d.) Theory Behind the T-Test Talk. Retrieved June 17, 2016 from http://www.csic.cornell.edu/Elrod/t-test/t-test-assumptions.html

Fincham, J. E. (2008). Response Rates and Responsiveness for Surveys, Standards, and the *Journal . American Journal of Pharmaceutical Education*, *72*(2), 43.

Gómez, J. M. (2013). Microaggressions and the enduring mental health disparity: Black Americans at risk for institutional betrayal. *Journal of Black Psychology*, 0095798413514608.

Hart, A. (2001). Mann-Whitney test is not just a test of medians: differences in spread can be important. *BMJ : British Medical Journal*, *323*(7309), 391–393.

Hennick, M., Hutter, I., Bailey, A. (2011). Qualitative Research Methods. Thousand Oaks, CA. SAGE Publications Inc.

Joyce, B., Showers, B., & Fullan, M.G. (2002). Student Achievement Through Staff Development (3rd ed). Alexandria, VA: Association for Supervision and Curriculum Development.

King, D. W., & Lashley, R. (2000). A Quantifiable Alternative to Double Data Entry. *Controlled Clinical Trials, 21*(2), 94-102. doi: http://dx.doi.org/10.1016/S0197-2456(00)00042-8

Maurer, T. J., Weiss, E. M., & Barbeite, F. G. (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology, 88*(4), 707-724. doi: 10.1037/0021-9010.88.4.707

Merriam-Webster. stigma, n.d. Retrieved February 12, 2016 from http://www.merriam-webster.com/dictionary/stigma.

Miami University Center for School-Based Mental Health Programs. n.d. Center for School-Based Mental Health Programs (CSBMHP). Retrieved February 11, 2016 from http://www.units.miamioh.edu/csbmhp/

Moses, T. (2010). Being treated differently: Stigma experiences with family, peers, and school staff among adolescents with mental health disorders. *Social Science & Medicine, 70*(7), 985-993. doi: http://dx.doi.org/10.1016/j.socscimed.2009.12.022

National Alliance on Mental Illness. (2016). Mental Health Conditions. Retrieved February 12, 2016 from https://www.nami.org/Learn-More/Mental-Health-Conditions

National Empowerment Center. (2015). Hearing Voices Curriculum. Retrieved April 12, 2016 from http://www.power2u.org/mm5/merchant.mvc?Screen=PROD&Store_Code=NEC&Product_Code=Curricula-HearingVoicesDistressing&Category_Code=hearingvoices

The New York City Department of Education. (2016). School-Based Health Centers. Retrieved February 11, 2016 from http://schools.nyc.gov/Offices/Health/SBHC/MentalHealth.htm

Nikandrou, I., Brinia, V., & Bereri, E. (2009). Trainee perceptions of training transfer: an empirical analysis. *Journal of European Industrial Training, 33*(3), 255-270.

O'Driscoll, C., Heary, C., Hennessy, E., & McKeague, L. (2015). Adolescents' beliefs about the fairness of exclusion of peers with mental health problems. *Journal of Adolescence, 42*, 59-67. doi: http://dx.doi.org/10.1016/j.adolescence.2015.03.008

Pérez-Garín, D., Molero, F., & Bos, A. E. R. (2015). Internalized mental illness stigma and subjective well-being: The mediating role of psychological well-being. *Psychiatry Research, 228*(3), 325-331. doi: http://dx.doi.org/10.1016/j.psychres.2015.06.029

Pescosolido, B. A., Martin, J. K., Long, J. S., Medina, T. R., Phelan, J. C., & Link, B. G. (2010). "A Disease Like Any Other"? A Decade of Change in Public Reactions to Schizophrenia, Depression, and Alcohol Dependence. *The American journal of psychiatry, 167*(11), 1321-1330. doi: 10.1176/appi.ajp.2010.09121743

Pisani, A. R., Cross, W. F., Watts, A., & Conner, K. (2012). Evaluation of the Commitment to Living (CTL) curriculum: A 3-hour training for mental health professionals to address suicide risk. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 33*(1), 30-38. doi: 10.1027/0227-5910/a000099

Plonsky, M. (2016). Psychological Statistics: Central Tendancy & Variability. Retrieved July 9, 2016 from https://www4.uwsp.edu/psych/stat/5/ct-var.htm

Qualtrics. (2016). Retrieved April 13, 2016 from http://www.qualtrics.com/

Truscott, S. D., Kreskey, D., Bolling, M., Psimas, L., Graybill, E., Albritton, K., & Schwartz, A. (2012). Creating consultee change: A theory-based approach to learning and behavioral change processes in school-based consultation. *Consulting Psychology Journal: Practice and Research, 64*(1), 63-82. doi: 10.1037/a0027997

Whitley, R., & Denise Campbell, R. (2014). Stigma, agency and recovery amongst people with severe mental illness. *Social Science & Medicine, 107*, 1-8. doi: http://dx.doi.org/10.1016/j.socscimed.2014.02.010

Wolpert, M., Humphrey, N., Belsky, J., & Deighton, J. (2013). Embedding mental health support in schools: learning from the Targeted Mental Health in Schools (TaMHS) national evaluation. *Emotional & Behavioural Difficulties, 18*(3), 270-283. doi: 10.1080/13632752.2013.819253

Yamaguchi, S., Mino, Y., & Uddin, S. (2011). Strategies and future attempts to reduce stigmatization and increase awareness of mental health problems among young people: A narrative review of educational interventions. *Psychiatry & Clinical Neurosciences, 65*(5), 405-415. doi: 10.1111/j.1440-1819.2011.02239.x

Youth Mental Health First Aid (n.d.) Youth Mental Health First Aid. Retrieved February 12, 2016 from http://www.mentalhelathfirstaid.org.cs.wp-content/uploads/2014/05/Youth-Mental-Health-First-Aid-Overview.pdf