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College of Social and Behavioral Sciences

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John Cascamo

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Dr. Denise Horton, Committee Member, Psychology Faculty
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Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2013

Abstract

Gatekeeper Suicide Prevention Training

and its Impact on Attitudes Toward Help Seeking

by

John Angelo Cascamo Jr.

MS, Chaminade University, 2003

MS, Chaminade University, 1996

BS, Chaminade University, 1992

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

School of Psychology

Walden University

May 2013

Abstract

Gatekeeper Suicide Prevention Trainings such as Question Persuade and Refer (QPR) are used to increase suicide awareness and teach participants basic suicide intervention skills. Previous researchers showed that QPR training increases knowledge of suicide risk factors and increases participants' willingness to intervene with individuals at risk of suicide. It was hypothesized that completion of QPR would also increase positive attitudes toward the utilization of mental health services and that this outcome would be more pronounced among male participants. The examination of attitudes was rooted in the theoretical framework of Ajzen's theory of planned behavior. The Inventory of Attitudes toward Seeking Mental Health Services (IASMHS) was the instrument used for the study. The study occurred in a rural community college in southern Oregon. Student attitudes were assessed prior to completion of a 1-hour QPR presentation followed by a 3-week post assessment. Analysis of Variance revealed significant effects of QPR training. IASMHS scores were significantly higher at post QPR training. A significant interaction between gender and QPR training showed that women scored significantly higher than men only at pre QPR training. There was no statistical gender difference in attitudes measured by the IASMHS at post QPR training. QPR increased help seeking attitudes in both men and women with the increase being more pronounced in men. Increasing positive attitudes toward help seeking can contribute to positive social change. Practitioners in the field of men's health should consider using gatekeeper suicide prevention training such as QPR as a means of increasing male help seeking.

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Dedication

This paper is dedicated to my son Giovanni Victor Angelo Cascamo. Gio, while the themes of this research are suicide and help seeking, my fundamental interests in this field are rooted in my beliefs regarding the sanctity, dignity, and sheer joy of life. You came into this world at only two and one half pounds, but I will never forget how you held my finger minutes after you were born. Even as they intubated you, I could tell from your grip that your entire being was focused on survival. I tell people that at the moment you told me everything would be OK, and from that moment I have believed in you. I continue to believe in you. May you be blessed with a life worthy of the struggle you were presented with at life's onset.

Acknowledgments

My interest in suicide prevention was cemented by my work with a young and troubled adolescent in Hawai'i many years ago. I will not mention his name; but, I will use this space to wish him well and thank him for the many lessons he taught me.

I would like to thank my wife for believing in me when I no longer believed in myself and for simply insisting that I finish this research and this degree. I would also like to thank Dr. Quinnett of the QPR institute for nurturing my interest in this field and encouraging me over the course of several years. Lastly, I would like to thank Dr. Perry and Dr. Horton for their patient prompting and encouragement.

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Chapter 1: Introduction to the Study

Background of the Study

According to the World Health Organization (WHO; 2009), approximately 1 million people worldwide die from suicide each year. This number equates to an annual global suicide rate of 16 per 100,000 people. In their most recent national statistics as of 2007, the Centers for Disease Control and Prevention (CDC) reported the yearly average for completed suicide in United States is 34,000. This equates to a suicide rate of 11.26 per 100,000 people (CDC, 2010). Knox, Yeates, Conwell, and Caine (2004) cited the US Air Force Suicide Prevention Program (USAFSPP), and its emphasis at widespread gatekeeper training for suicide prevention, as a model of cultural change. Knox et al. (2004) also cited the program as pinpointing the relevance of improving a community's health by focusing on the overall community through health promotion. As a result of the program, the Air Force demonstrated a reduction in the number of completed suicides (Knox et al., 2003).

One important element of the USAFSPP is gatekeeper training for suicide prevention. I analyzed whether or not gatekeeper training plays a particular role in influencing individual attitudes toward seeking professional mental health services. If gatekeeper training demonstrates a positive effect on individual attitudes toward seeking professional mental health services, this would be an important secondary effect of the training with pedagogical implications for public health practice. If it is possible to impact individual attitudes by training individuals to care for others, public health and

psycho educational interventions can be tailored on this basis with significant implications for affecting positive social change.

Prior to the 1950s, suicide in the United States was most often viewed as an idiosyncratic occurrence, not as a public health problem (Bauer, 1953). There was concern that dealing with suicide from an educational/public health approach might exacerbate the problem (Crocetti, 1959). However, as the decade progressed, the idea that suicide could be examined and perhaps prevented from the systematic study of intentional self-harm began to take hold (Shneidman & Farberow, 1956). In the 1960s and 1970s, public health approaches towards reducing suicide focused on equipping communities to provide such crisis services as suicide hotlines (US Department of Health and Human Services, 2001).

An approach that is more recently gaining national and international support is the concept of gatekeeper training. Gatekeeper training is a practice that seeks to teach individuals how to recognize suicidal risk and how to intervene with suicidal individuals through a Question, Persuade, and Refer (QPR) approach (Isaac et al., 2009). Initially, gatekeepers have been divided into two categories: designated and emergent (Isaac et al., 2009). Designated gatekeepers include individuals engaged in professions such as medicine, counseling, and social work (Isaac et al., 2009). Emergent gatekeepers are typically trusted community members whose roles or relationships increase their likelihood of encountering, recognizing, and being able to intervene with persons at risk for suicide (Isaac et al., 2009). Advocates of gatekeeper suicide prevention training are

stressing the broad applicability of gatekeeper training and are advocating for widespread training of laypeople (Isaac et al., 2009).

Mann et al. (2005) and his colleagues undertook a large-scale review of suicide prevention efforts and determined that in areas where physicians received training in the recognition and prevention of depression, there were corresponding reductions in the rate of suicide for that area. Training physicians to recognize depression and suicidal risk is considered a selective prevention effort. Mann and his colleagues concluded that broad awareness campaigns equipped to help the general public understand suicide, depression, and overcome obstacles to treatment seeking have not resulted in actual reductions in suicide or suicide attempts, nor have they demonstrated an effect on people's willingness to consult with a professional – help-seeking for depressive and/or suicidal feelings. Gatekeeper training is not an awareness campaign; it is a specific curriculum designed to equip individuals with the ability and knowledge to identify and respond to suicidal individuals in order to refer them to care.

Mann et al. (2005) also noted that the Norwegian Army and US Air Force both succeeded in lowering suicide rates by incorporating gatekeeper suicide prevention training within the broader context of their institutional prevention efforts. The US Air Force, in particular, has been particularly inclusive in its approach to gatekeeper training, making some form of suicide prevention training mandatory for each of its members on an annual basis. It is likely that there are aspects of military culture and organization that have led to the success of their gatekeeper initiatives (Mann et al., 2005). The military

has a designed rank structure, and its members have access to universal health care (Mann et al., 2005). However, military members are especially fearful of seeking professional help for psychological distress due to concerns regarding security clearances and fitness for duty reports (Mann et al., 2005). That the US Air Force Suicide Prevention Program was able to engender a greater willingness for its members to accept professional help is noteworthy. These experiences are helping to build momentum towards a universal approach towards suicide prevention that relies upon laypersons trained in suicide prevention such as gatekeeper training (Bryan, Dhillon-Davis, & Dhillon-Davis, 2009).

The majority of suicidal individuals are most inclined to seek help from those closest to them, for instance friends, siblings, and parents (Moskos, Olson, Halbren, & Gray, 2007). Therefore, a broad approach to gatekeeper suicide prevention training might have the most impact. A large scale study in Tennessee demonstrated individuals who receive QPR gatekeeper training reported they were more knowlegeable, equiped, and willing to intervene with persons at risk of suicide and as a result of the training had greater confidence in their ability to prevent suicide (Keller et al., 2009).

Most researchers of gatekeeper training concentrated on the gatekeeper's ability or perception to intervene on behalf of an at risk individual. Little is known about how gatekeeper training impacts the participant's own attitudes towards personal disclossure of vulnerabilities, depression, or suicidal feelings.

Cartmill, Deane, and Wilson (2009) stated that there is an assumption in the literature that those trained as gatekeepers will value and be positively inclined toward help-seeking for mental health issues. In a small study involving 47 Australian youth workers (i.e., case managers and outreach workers), Cartmill et al. found that even among this group, there were many who held negative beliefs regarding help-seeking. These negative beliefs were resistant to change. Cartmill et al. found that participation in a series of professional development trainings entitled the Youth Empowerment Series (YES-workshops) did not lead to a significant reduction in negative beliefs regarding help-seeking. Cartmill et al. recommended further study.

Gourash (1978) defined help-seeking as, "any communication about a problem or troublesome event which is directed toward obtaining support, advice, or assistance in times of distress" (p. 414). Mackenzie, Knox, Gekoski, and Macauly (2004) defined help-seeking attitudes as an internal evaluative process towards help-seeking for psychological problems. Help-seeking attitudes are believed to be relevant towards actual help seeking (Fuller, Edwards, Procter, & Moss, 2000). Men are more likely to hold negative attitudes toward help seeking and seek help less often than woman for a wide variety of physical and mental health problems despite even acute and severe symptoms (Addis & Mahalik, 2003).

Problem Statement

The research problem addressed in this study is whether participation in a standardized curriculum of gatekeeper suicide prevention (Question Persuade Refer)

increases suicide knowledge, awareness, and intervention skills, thereby increasing positive attitudes towards seeking mental health services among participants. Gatekeeper training has been previously studied and found to be effective in equipping individuals to help others (Isaac et al., 2009). Gatekeeper training results in participants demonstrating increased knowledge of suicide, suicide prevention and intervention, and referral skills (Mann et al., 2005). However, previous researchers have not asked how gatekeeper training impacts individual attitudes regarding their own help seeking and willingness to seek mental health services or consult with mental health providers. This study is consistent with recent recommendations that QPR be examined for its health promoting potential as it has the capacity to challenge social norms and destigmatize needing and seeking help (Cross, Matthieu, Cerel, & Knox, 2007).

Background of the Problem

I examined possible gender differences with regard to help seeking attitudes and willingness to seek mental health services. The literature demonstrated significant differences between men and women's willingness to seek psychological help. A range of theories and explanations have been offered as to why it appears men may be more reluctant (Addis & Mahalik 2003). The most common conceptual framework for these differences often has a basis in hegemonic masculinity (Connell & Messerschmidt, 2005). The concept of hegemonic masculinity posits that while all men are not the same, social forces tend to endorse certain aspects of masculinity such as independence, strength, and toughness. These attributes are in contrast to behaviors such as admitting

pain, relinquishing control, seeking the aid of another, all of which can be seen as a loss of power and control (Courtenay, 2000).

Although hegemonic masculinity most certainly contains broader implications than individual psychological and attitudinal components, the attributes and cultural constructs of its ideal include (at the very least) an overall reticence to seek help or show oneself as vulnerable (Gillon, 2005). However, as ubiquitous as it is in the literature and as difficult to measure, the concept of the hegemonic masculinity is increasingly challenged (Connell & Messerschmidt, 2005).

I was interested in the examination of how QPR affects participants' overall attitudes toward help seeking. I was not only interested in whether or not they thought help seeking was good for others but whether or not they were positively inclined towards personal help seeking. Therefore, consistent with recent researchers who suggested that men's attitudes can be positively affected through psychoeducational efforts, this study will attempt to determine if the QPR training results in a greater impact among men. It is believed that participating woman will enter the study with more positive attitudes toward help seeking then the men. Post QPR assessment will determine if the QPR results in a greater increase in positive attitudes among male participants (Fuller, Edwards, Procter, & Moss, 2000).

Public health efforts with the aim of educating men about personal health are often difficult because there are few natural venues or opportunities for this education to occur (Hammer & Vogel, 2010). Since QPR is already offered in a myriad of venues

where men are in attendance, such as in college classrooms, it makes sense to investigate whether QPR results in more openness towards help seeking for them. According to Hammer and Vogel, men fare better if they see the help process as an active goal or directed endeavor. QPR is a curriculum that encourages active and direct intervention.

Purpose of the Study

The purpose of this study was to determine the effect that QPR training has on attitudes toward seeking mental health services. I attempted to determine if exposure to a 1 hour gatekeeper suicide prevention curriculum will result in increased positive attitudes toward help seeking as measured by the Inventory of Attitudes toward Seeking Mental Health Services (IASMHS; Mackenzie, Knox, Gekoski, & Macaulay, 2004) and whether there are differences between men and women. It is anticipated that both men and women will exhibit increased positive attitudes toward help-seeking after completion of QPR.

Research Questions and Hypotheses

I examined attitudes toward help-seeking as measured by the Inventory of Attitudes toward Seeking Mental Health Services or IASMHS (Mackenzie, Knox, Gekoski, & Macaulay, 2004).

1. Does completion of QPR training result in increased positive attitudes toward help-seeking behavior as measured by the IASMHS?

$H1_A$: There will be a significant difference in the mean pre test and post assessment of attitudes toward help seeking behavior as measured by the IASMHS.

$H1_0$: There will be no significant difference in the mean pre test and post assessment of attitudes toward help seeking behavior as measured by the IASMHS.

2. Does gender influence attitudes towards help-seeking behavior as measured by the IASMHS?

$H2_A$: There will be significant difference between men's and women's attitudes toward help-seeking behaviors pre and post QPR training, as measured by the IASMHS.

$H\ 2_0$: There will be no significant difference between men's and women's attitudes toward help seeking behaviors pre and post QPR training, as measured by the IASMHS.

3. Does QPR (pre and post training) and gender interact to affect attitudes toward help- seeking behavior as measured by the IASMHS?

$H3_A$: There will be a significant interaction effect between completion of QPR and gender with respect to attitudes toward help seeking behavior as measured by the IASMHS

$H3_0$: There will be no significant interaction effect between completion of QPR and gender with respect to attitudes toward help seeking behavior as measured by the IASMHS.

Theoretical Base

Aldrich and Cerel (2009) reviewed the suicide prevention literature and called for more rigorous methodologies to be employed and content that is theoretically grounded. Aldrich and Cerel suggested that the Theory of Planned Behavior (TPB) may be a useful framework to guide the content of the messages provided in suicide prevention efforts. The theoretical framework for this study is Ajzen's Theory of Planned Behavior. According to this theory, behavior is predicated and can be predicted by attitudes towards the behavior (this construct is specific in that it calls into question an attitude or feeling towards a specific behavior, e.g. giving $10.00 to a homeless man as opposed to a general attitudinal response toward the concept of philanthropy), by subjective norms (societal norms and pressures) and by perceived behavioral control. Behaviors are most likely to occur when there is a positive evaluation of a specific behavior, when the behavior is consistent with group or social norms, and when there is real or perceived behavioral control (Ajzen, 1991). An important aspect of the TPB is the distinction between behavior specific beliefs and general or global attitudes.

Definition of Terms

Attitudes toward help seeking: An individual's attitudinal disposition towards seeking help for psychological problems as measured by the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS; Mackenzie et al., 2004).

Gatekeeper Training: A form of suicide prevention training where gatekeepers, individuals who may come into contact with suicidal people, are taught to recognize the

signs and symptoms of suicide and to be able to respond to a person at risk (Swanke & Buila, 2010).

Help-seeking: The act of disclosing personal psychological problems (Mackenzie, et al. 2004).

Theory of Planned Behavior: The theory of planned behavior (TPB) is an extension of the Theory of Reasoned Action (TRA). According to Azjen (2006), the only difference between TRA and TPB is the addition of construct of perceived behavioral control (PCB). PCB was added to extend the theories capability of predicting behaviors that are not under complete volitional control. TPB is comprised of three sets variables (a) behavioral beliefs and attitude toward behavior, (b) normative beliefs and subjective norms, and (c) control beliefs and perceived behavioral control. The likelihood of actual behaviors are based upon a trajectory of the following: When an attitude toward a specific behavior is positively valued, the specific behavior is consistent with one's beliefs and cultural influences, the individual believes they are capable of the behavior, and the behavior will produce the desired outcome, the behavior is likely.

Theory of Reasoned Action: The theory of Reasoned Action (TRA) is a social psychological theory developed by Fishbein and Azjen (1975). The theory was developed with the intention of being able to predict behavior. The theory posits that behavior can be predicted on the basis of an individual's attitude towards a specific behavior combined with the individual's perception/appraisal of how the specific behavior is regarded by those important to the individual.

Question Persuade and Refer (QPR): A proprietary gatekeeper training program developed by Quinett in 1985 and has been the subject of numerous studies. The program consists of a multimedia presentation including a video, a power point presentation, and a question and answer period (and in some cases, a role playing exercise). The training introduces participants to the topic of suicide and the need for individuals to question suicidal individuals directly. The training provides tips on how to bring up the topic of suicide and strategies designed to persuade an individual at risk of suicide to seek and/or obtain help. Participants are encouraged to bring at-risk individuals to a mental health counselor or suitable person.

By 2005, there were 3,000 certified gatekeepers, and more than 300,000 individuals have been trained in QPR. The acronym QPR was developed to be analogous to a mental health CPR, and Quinett makes frequent comparisons to the similarities. For instance, CPR's goal is immediate stabilization and protection of life until the individual can be treated appropriately. QPR's goal similarly constructed and is particularly geared for lay audiences although versions exist for health care practitioners and first responders (Quinnett, 2007).

Suicide: Silverman (2006) attempted to contribute to the suicidology nomenclature by offering a definition of suicide. Silverman discovered over 15 variations in the literature but summed the three essential elements as such deliberate self destruction that ends in death, conscious self-directed act with death as the intent, or a willful self-inflicted act resulting in death (Silverman 2006).

Assumptions

I assumed that a sample of college students in and largely from Southern Oregon will yield results that will generalize across larger populations. It is assumed that individuals will be honest in their responses to the survey instrument and will take the time to consider their responses carefully. I further assumed that attitudes towards help-seeking—as measured by the Attitudes toward Seeking Mental Health Services or IASMHS Mackenzie et al. (2004)—will or may manifest in actual help seeking at some point. Further, the study assumes that Ajzen's (1985) TPB is an appropriate theory for the prediction of actual behavior.

Limitations

I focused on students attending Klamath Community College in Klamath Falls, Oregon. Participants in this study completed QPR training in the context of in-class presentation by a guest lecturer. Factors such as previous experience with mental health counseling or services or personal experiences with suicide, suicidal feelings, and so forth might impact attitudes towards help-seeking. The QPR institute is the only entity that can train and certify a QPR trainer (QPR Institute, 2011a). Trainers complete an extensive overview of the course and are required to honor the curriculum (QPR Institute, 2011b). Replication efforts might lead to some differences in outcomes based on differences in instructional styles, backgrounds, audience perception or engagement, and other factors unseen. Nevertheless, diffusion and replication of health education curriculums are well established in the public health literature (Goldman, 2003).

The instrument utilized was the Inventory of Attitudes Towards Seeking Mental Health Services (IASMHS). I assumed—consistent with social psychology theory, such as Ajzen's (1985) Theory of Planned Behavior (TPB)—that attitudes toward seeking mental health services are consistent with actual help seeking behavior.

Significance of the Study

There is a significant and growing body of literature that supports gatekeeper training. According to Isaac et al. (2009), gatekeeper training increased participant's intervention skills; it changed attitudes related to the efficacy of such interventions, that is, participants came to believe intervention efforts would work and that they were capable of performing them. It increases participant's discrete knowledge regarding factors related to suicide, for example, symptoms, correlates and means of intervention and so on. These studies have been conducted in a range of settings including public schools from kindergarten through 12th grade (Keller et al., 2009; Wyman et al., 2008) and in workplace settings (Cross et al., 2007). They have also been conducted in the military and the Veterans Administration (Knox et al., 2003; Matthieu et al., 2008). The social change implications of this study are twofold; first, to increase the effectiveness of public health initiatives by examining the impact of training individuals to help others such as in gatekeeper training, and secondly by analyzing whether that pedagogy results in an increase willingness of those trained to help others develop more favorable attitudes toward helping themselves.

Summary

One of the purposes of this study is to raise the reader's awareness with regard to the number of lives lost annually to suicide both nationally and abroad and to achieve a basic familiarization as to the conceptualization of suicide as a public health problem. The impact of gatekeeper training was examined from a perspective of both its overt intended aims, for example, increase participant skills, attitudes (towards helping others get help) and knowledge of suicide, suicide prevention, and intervention and referral skills (Mann et al., 2005), and its potential to affect the way participants formulate their own attitudes and willingness to seek mental health services. Chapter 2 is a review of appropriate literature already referenced and a discussion to demonstrate the gap in the literature with regard to QPR's effect on individual help-seeking. The literature review helped to lay a foundation for a well informed and theoretically sound inquiry as it relates to increasing help seeking. Chapter 3 is a description of the research design, information regarding the instrument, an overview of the methods, the participants and a proposal of the specific statistical analysis needed to test hypotheses introduced in chapter one. Chapter 4 is an explanation and report of the data and Chapter 5 is an analysis of the results.

Chapter 2: Literature Review

Introduction

The purpose of this research was to contribute to the existing knowledge and practice of public health approaches to suicide prevention by analyzing the impact of gatekeeper training for suicide prevention. Chapter 2 is an overview of suicide, highlighting the current emphasis of suicide as a public health issue. The review includes the context for the emergence of gatekeeper training as part of an overall public health strategy to reduce suicides and I will argue that gatekeeper training may have secondary effects such as promoting help-seeking, especially among its male participants. The idea that gatekeeper training may manifest in secondary effects such as increased help-seeking is rooted in the recent experience of the US Air Force. During 1997-2002, the US Air Force, through its Suicide Prevention Program not only demonstrated a decrease in deaths by suicide, but also demonstrated a significant decrease in accidental deaths, homicide, and moderate to severe family violence as well (Knox et al., 2008).

Literature Search Strategy

The literature was reviewed by using libraries, search engines, and web pages. The following services and sources of information were used: Centers for Disease Control, Dissertation Abstracts, Educational Resources Information center (ERIC), MEDLINE, PsychINFO, QPR Institute, Suicide Information Center (SIEC), Walden University Dissertation Database, and the World Health Organization (WHO) website. The searches were done using the keywords and search terms of: *gatekeeper; gatekeeper*

training; *help seeking*; *HELP-seeking behavior*; *male help seeking*; *suicide*; *suicide and contagion*; *suicide and iatrogenic*; *suicide and education*; *suicide and curriculum*; *suicide and treatment*; *Suicide and intervention*; *suicide prevention*; *suicidology*, and *training for suicide prevention*.

Suicide

Rates of suicide are known to vary by demographic characteristics such as age, gender, and race. For example, according to the American Association of Suicidology (AAS) suicide rates are lowest among youth aged 10 to 19 and relatively consistent between the ages of 20 to 34.They begin to rise and reach a peak among people aged 50 to 54, decline slightly and then rise sharply at ages 75 to 79 (AAS, 2007). Suicide attempts are more common among women than men; however, men die from suicide at nearly four times the rate of women, and males account for 79% of the total number of suicide deaths (CDC, 2010). European Americans have a considerably higher suicide rate than African Americans: 12.4 per 100, 000 compared to 4.9 per 100,000 (AAS, 2007). Mental health is another intrinsic factor known to have an influence on suicide rates, with depression being the mental disorder most commonly associated with suicide, followed by anxiety. Bartlett, Travers, and Cartwright (2008) found that 76% of deaths by suicide in a sample of 210 men aged 65 and over were preceded by depression.

Alcohol consumption and substance abuse are known to be associated with suicide. In an examination across 17 U.S. states from 2006-2007, 24% of suicide decedents tested for alcohol were found to have blood alcohol levels of 0.08g/dL (CDC,

2009). It has been estimated that alcoholics are at 50-70% higher risk for suicide than the general population (AAS, 2007). According to Sher (2006), alcohol dependence carries with it a 60-120 times greater suicide risk when compared to nonpsychiatric populations. The CDC also reported that opiates and opiate derivatives including prescription pain pills were present in one in five suicide decedents (CDC, 2010).

Availability of firearms is an additional extrinsic factor influencing suicide rates. Gun ownership, gun storage patterns, and living in a home with guns are all associated with an increased risk of suicide. Gun suicides have been reported to account for 53% of all suicides in the United States (Miller & Hemenway, 2008). Miller and Hemenway compared suicide rates between states with the highest rates of gun ownership and states with the lowest rates of gun ownership and found that between 2001 and 2005 the high gun ownership states had 14,365 firearm suicides compared with 3,971 firearm suicides in the low gun ownership states (2008). These findings support growing sentiments among public health practitioners that restriction of firearm access continues to be one of the most effective and demonstrable forms of suicide prevention (Mann, 2005).

Suicide Prevention Strategies

Suicide prevention efforts can be categorized as primary, secondary, and tertiary/postvention approaches. Primary suicide prevention efforts include awareness campaigns and other steps taken to prevent individuals from acting on thoughts or impulses of self-harm (SPAN USA, Inc, 2001). Secondary suicide prevention efforts include interventions used to treat individuals who are currently suicidal (SPAN USA,

Inc, 2001). Tertiary or postvention refers to programs and practices that occur after a suicide occurs; an example is debriefing of a school after a student suicide (SPAN USA, Inc, 2001).

Primary prevention efforts have four main foci, as explained by Drum, Brownson, Denmark, and Smith (2009):

> a) to refashion the environment so that it is both more supportive and more protective, b) to increase awareness and promote help seeking through the dissemination of educational materials and self-assessments, c) to reduce the incidence of traumatic negative life events, and d) to increase the available sources of internal resilience among the population. (p. 220)

Prevention efforts can also be categorized as universal, selective, and indicated (Isaac et al., 2009). In the case of universal approaches, the intervention is designed to affect everyone in a defined population. By contrast, selective intervention approaches are designed especially for certain subgroups at particular risk for suicide. Finally, indicated interventions are designed for individuals (or those in contact with them) who have been identified as having a risk factor or condition that puts them at high risk (US Department of Health and Human Services, 2001).

Gatekeeper training for suicide prevention can be utilized and considered as universal, selective, or indicated depending on the audience and the context in which it is being offered. Embedding gatekeeper training in college coursework and making efforts to dissementate the training in activities such as freshman orientation would fall into the universal approach(Isaac et al., 2009). The majority of suicidal individuals may be most inclined to seek help from those closest to them; therefore, it makes sense to offer

gatekeeper training to a broad array of participants (Moskos, Olson, Halbren, & Gray, 2007).

In their analysis of the suicide prevention literature spanning 1966 through 2005, Mann et al. (2005) laid out a coherent trajectory of suicide from ideation to completion. This trajectory is a useful framework that can aid in prevention efforts. Mann et al. (2005) noted that mood disorders, specifically major depressive and bipolar disorders, are associated with 60% of suicides. Suicidal behavior, they observed, most often begins with a stressful life event and is often accompanied by a mood or psychiatric disorder. Once suicidal ideation has begun, other factors converge and begin a trajectory that will lead to a suicidal behavior, these include: (a) impulsivity (often heightened by drug and alcohol abuse), (b) hopelessness and/or pessimism, (c) access to lethal means, (d) imitation, and ultimately, (e) a suicidal act. Each of these determinant stages serves as an access point for prevention efforts, including (a) education and awareness programs, (b) screening for individuals at high or elevated risk, (c) pharmacotherapy, (d) psychotherapy including programs for drug and alcohol recovery, (e) follow-up care for suicide attempters, (f) restriction of access to lethal means, and (g) media reporting guidelines for suicide (Mann et al., 2005).

In a 1984 lecture to the International Epidemiological Association, Rose (1985) challenged public health initiatives targeting high risk individuals, in favor of more universal, broad-based population approaches. This approach has become known as Rose's theorem. A cogent explanation is offered by Frohlich and Potvin (1999):

> When many people lower their risk even a little, the benefit for the population is larger than if a few people at high risk experience a large risk reduction. This is consistent with the notion that groups of individuals function collectively and as such, are affected by the average functioning of the individuals around them. (pp. 213-214)

During the last decade, suicide has increasingly been conceptualized as a public health problem. In 1999, the Surgeon General's *Call to Action to Prevent Suicide* was published (US Public Health Service, 1999), followed in 2001 with a *National Strategy for Suicide Prevention*, published by the U.S. Department of Health and Human Services, which sought to outline a coherent national plan to reduce suicide via a variety of prevention initiatives (U.S. Department of Health and Human Services, 2001).

One of the challenges of addressing suicide via conventional public health approaches is that suicide is not itself a disease. A familiar discussion in the literature is that suicide is an outcome of underlying disease(s) ranging from depression and other psychiatric illness often exacerbated by some form of substance abuse (American Foundation for the Prevention of Suicide, 2010). According to Joiner (2007), worldwide suicide is more prevalent among men with the exception of China and, while in the United States the group at highest risk is older white men, there is also a rise in suicide among African Americans, especially young men. Joiner also points out that suicide rates are higher among female athletes, anorexics, prostitutes, and physicians. Joiner (2007) uses the complexity and seeming non-connectedness of these factors to illustrate the difficulty of accounting for suicide via a single unifying theory.

Despite the confusing, often counterintuitive epidemiology of suicide, universal, community based, models of public health promotion such as the Air Force Suicide Prevention Strategy (AFSPP) demonstrated that such approaches can decrease suicide (Knox, Cornwell, & Caine, 2004). Between 1997 and 2002, the US Air Force implemented 11 key initiatives in response to growing rates of suicide within the ranks. These initiatives included: (a) Ensuring that base and unit leaders served as advocates for suicide prevention training, (b) Suicide prevention training (e.g. gatekeeper training) was embedded in professional military education—that is all members were required to annually complete suicide awareness and prevention training along with other military training requirements, such as first aid and security awareness training (c) Guidelines for the use of mental health services, (d) Community preventive services, (e) Community education and training, (f) Investigative interview policy, (g) Critical incident stress management, (h) Integrated delivery system for human services, (i) Limited patient privilege (e.g. increasing the amount of patient confidentiality that can be afforded to an Air Force member who seeks help. However, certain designations and security considerations still prevent most members for enjoying complete confidentiality with mental health providers), (j) Behavioral health survey, (k) Suicide event surveillance system (Pazur, 2004).

During the 6 years (1997-2002) this program was implemented, completed suicides within the US Air Force decreased by 33% when compared to the 6 year span of 1990 – 1996 prior to the programs implementation (Knox et al., 2008). The efforts of the

US Air Force are unique in terms of their comprehensiveness and the nature of the Air Force community. However, an examination of discrete factors utilized in this program, such as the role and effect of suicide gatekeeper training, may provide insight into developing effective strategies towards preventing suicides. According to the US Air Force Personnel Center, the US Air Force is approximately 81% male (2013). The success of the AFSPP may have particular implications for men. However, no examination of the study has compared the outcomes of the programs impact on the basis of gender. It is worth noting that during the AFSPP more than 70% of Air Force Personnel were trained in suicide prevention (with the exception of 1997 when less than 60% were trained) (Knox et al., 2008). Perhaps the potential to decrease stigma, reduce suicide, and increase help-seeking through wide-spread community education is best stated with Knox's conclusion regarding the Air Force's experience. Knox et al., (2008) asserted that the risk reduction achieved through the AFSPP was significant and, had it been achieved through a medication, that medication would receive immediate attention.

Although it is difficult to extract any one component of the AFSP, gatekeeper training is increasingly being examined in the literature for its role as part of larger prevention efforts as well as its individual potential (Isaac et al., 2009).

Gatekeeper Training and QPR

Gatekeeper training is the systematic effort to equip individuals to be able to recognize the warning signs of suicide and to provide practical assistance to individuals at risk. Gatekeeper training can be conceptualized as both a directed and universal form

of suicide prevention (Cross, Matthieu, Cerel, & Knox, 2007). Gatekeepers are individuals trained to ask those perceived to be at risk of suicide whether they are feeling suicidal or having suicidal thoughts. They are further trained to provide practical and immediate support such as reassuring the person at-risk and accompanying them to an appropriate resource.

The gatekeeper approach is based on the premise that the majority of suicidal individuals may be most inclined to seek help from people close to them, such as friends, siblings and parents (Moskos, Olson, Halbren, & Gray, 2007). According to Pazur (2004), the goal of gatekeeper training is to build networks of people who can open gates and provide resources for individuals in need. The National Strategy for Suicide Prevention (NSSP) identified as key gatekeepers "those people who regularly come into contact with individuals or families in distress"(US Department of Health and Human Services, 2001, pp. 2-3) and provided a list of individuals whose role, status, or relationships provide natural access points to intervene with people at risk of suicide such as clergy, police officers, teachers, and primary care providers. Current researchers are no longer focusing on individuals considered gatekeepers by virtue of their role or occupation; instead, Quinnett (2007) encouraged the notion that wide-spread dissemination of suicide prevention efforts should be disbursed throughout the community.

Gatekeeper training is increasingly offered in a variety of settings including, corporate, educational, and military. A variety of different gatekeeper training designs

have emerged. One of the most frequently used forms of gatekeeper training for suicide prevention is QPR. Although not all articles and studies addressing gatekeeper training specify the type of gatekeeper training, QPR has been the subject of several recent studies (e.g. Cross et al., 2007; Keller et al., 2009; Matthieu, Cross, Batres, Flora, & Knox, 2008; Reis & Cornell, 2008; Tompkins & Witt, 2009; Wyman et al., 2008). In the section that follows, I will provide an overview of QPR Gatekeeper training and address results of recent studies.

Question, Persuade, and Refer

QPR is a standardized gatekeeper training developed by Quinnett (1985) and is listed in the Best Practices Registry (BPR) for suicide prevention (Suicide Prevention Resource Center, 2012). Currently there are 29 educational programs listed in this registry of which five, including QPR, use the term *gatekeeper* in their title. Programs in this registry have been judged by a panel of three suicide prevention experts to meet specified standards of accuracy, safety and programmatic guidelines.

QPR training can be provided in as little as one hour and is a low cost form of training that has gained empirical support for use with a variety of audiences and contexts. Cross et al. (2007) have recommended that community level gatekeeper training be further examined in order to reduce stigma and increase help seeking,

The training can be delivered in a face-to-face event taught by a certified trainer or taken entirely on-line. Recently, a blended approach has been utilized which includes the on-line version of QPR along with face to face follow-up sessions to allow for

questions and answers as well as role play. According to Quinnett (2007), the theoretical underpinnings of QPR include Systems Detection Theory. QPR teaches that suicide communication may be veiled or encapsulated in statements such as "I won't be around much longer or I think I'll take the spirit trail" (Quinnett, 2007, p. 8). QPR encourages participants to attend to vague comments and directly inquire as to whether the person at risk is suicidal by asking. QPR is also informed by the concept of motivational interviewing. Motivational interviewing is an approach that seeks to reduce ambivalence by direct questions that challenge underlying assumptions and bring attention to the negative consequences of thinking and behavioral patterns. A central tenet of motivational interviewing is the belief that brief focused questioning can yield significant gains (Miller & Rollnick, 2002).

Empirical Studies of Gatekeeper Training & QPR

Current evidence indicates that gatekeeper training increases participant knowledge, skills and positive attitudes towards suicide prevention (Isaac et al., 2009). What is more difficult to ascertain is whether gatekeeper training actually results in fewer deaths by suicide. While it is true that the AFSPP lowered suicide rates, no efforts have been undertaken to disaggregate the components of the AFSPP in order to determine what role individual components of the program played. Mann et al. (2005) found mixed evidence from their analysis of the suicide prevention literature. They found that physician education in depression recognition and treatment, as well as restricting access to lethal means, resulted in reduced levels of suicide. These authors also concluded that,

although public education campaigns appeared to have "no detectable effects on primary outcomes of reducing suicidal acts or on intermediate measures such as more treatment seeking" (Mann et al., 2005, p. 2067), the use of gatekeeper training as one facet in a multilevel approach had enabled both the U.S. Air Force and Norwegian Army to reduce suicide rates among their personnel.

To date, the majority of research into the role of gatekeeper training in suicide prevention has focused on the intended overt effects of increasing the participant's likelihood to recognize and intervene with others who are at risk for suicide. Evidence indicates that gatekeeper training increases participant knowledge, skills and positive attitudes towards suicide prevention (Isaac et al., 2009).

The impact of QPR gatekeeper training on clinical and nonclinical staff of the Veterans Administration was recently assessed using a pre post-training design (Matthieu et al., 2008). This study found positive gains in satisfaction, knowledge, self-efficacy and three gatekeeper helper skills: (a) questioning, (b) persuading, and (c) referral of a suicidal individual, with these gains being more pronounced among nonclinical staff. In relation to nonclinical staff, it was concluded that role-playing was an element of the training that was of particular value (Matthieu et al., 2008).

Gatekeeper training has also been adopted in the education context. Tennessee became one of the first states to adopt a comprehensive suicide prevention strategy/program in its public school system for its staff, teachers, coaches and counselors following the guidelines outlined in the 2001 national strategy for suicide prevention.

Gatekeeper training was selected as one aspect of their Tennessee Lives Count (TLC) project because of its applicability to a variety of agencies serving children as well as the number of youth it could impact (Keller, et al., 2009, p. 127). These impact measures included perceived knowledge and self-efficacy to prevent youth suicide and attitudes toward the inevitability of youth suicide (Keller, et al., 2009). Keller et al.(2009) studied the effects of an enhanced version of the Question Persuade and Refer gatekeeper training program, but did not describe or provide specific information regarding how QPR was enhanced. Keller et al., (2009) found that participants demonstrated increases in perceived knowledge, self-efficacy. Keller et al. (2009) also noted that prior to training, participants believed that suicidal individuals would inevitably attempt or complete suicide and that after training these attitudes shifted toward greater confidence that intervention could prevent suicide and/or suicide attempts.

The identified emotional and financial costs of suicide at the workplace led Cross et al. (2007) to study the impact of gatekeeper training in the employment context. Results of this study generated evidence that QPR resulted in increases in participant knowledge about suicide and their sense of self-efficacy with regard to their ability to effectively intervene with a suicidal individual. Cross et al (2007) also evaluated training participant's role-plays and determined that half of the participants were demonstrating satisfactory skills. Cross et al. (2007) found that 74 of the 76 participants discussed the training with others during a 6-week follow up period. The social marketing effect of such programs may play a role in normalizing discussion of mental health issues

including suicide. Destigmatization and normalization of attitudes and behaviors are an important component in the theory of planned behavior (Ajzen, 1991).

Quinnett, founder of the QPR institute, is an advocate of harnessing technology as a vehicle for the delivery of gatekeeper training. A growing body of research has provided evidence that distance learning and/or e-learning results in faster student mastery of the material (Quinnett & Baker, 2009). Working with the Salvation Army in Australia in 2007, the QPR Institute tested the impact of the on-line version of QPR customized for an Australian audience. The results of this study were consistent with previous research on traditional QPR in which participants were found to demonstrate gains in general knowledge about suicide, knowledge of suicide prevention and self-efficacy – or confidence in their ability to intervene with a suicidal person. However, this is the first study to compare the on-line version of QPR with the traditional QPR format, so caution must be taken before equivalency is concluded.

Potential for iatrogenic effects

The question of suicide contagion and the potential for iatrogenic effects of suicide prevention education is an important consideration. Chambers, Pearson, Lubell, Brandon, O'Brien, and Zinn (2005) asked, "Is a campaign that does good for a large number of persons, but possibly causes harm to a smaller number of persons, still valuable?" (p. 138). The answer to the question posed by Chambers et al. (2005) can be found in a review of a significant body of literature that attests to both the efficacy and the safety of suicide prevention efforts.

Suicide awareness and education campaigns do not lead to a negative or iatrogenic effect; on the contrary, suicide education and screening have been shown to enhance mood and functioning (Bryan, Dhillon-Davis, & Dhillon-Davis, 2009, p. 625). Rudd, Mandrusiak, Joiner, Berman, Van Orden, and Hollar (2006) found that participants exposed to a list of warning signs for suicide scored lower on various measures of emotional distress than did participants similarly exposed to a list of warning signs for a heart attack. Similarly, Gould et al.(2005) examined the impact of a suicide screening program in a study conducted in six New York area High Schools and involving over 2,000 students over a 2- year period. Gould et al. (2005) used the Beck Depression Inventory (BDI) and the adolescent version of the Profile on Mood States (POMS-A) to evaluate whether exposure to suicide screening would lead to increased levels of distress. Gould et al. (2005) found no evidence that exposure to suicide screening led to increases in distress levels, suicidal ideation or depressive symptoms.

Gould et al.(2005) also determined that students identified as depressed on the BDI actually showed lower distress levels as measured by the Profile on Mood States adolescent version (POMS-A) after exposure to suicide screening. Gould et al.'s (2005) findings indicated that there were no iatrogenic effects, and they concluded that professionals should not avoid direct questioning regarding suicidal ideation or intent for fear of possible negative consequences. Therefore, it is reasonable to anticipate no iatrogenic effects secondary to gatekeeper suicide prevention training.

A central component of the Air Force Suicide Prevention Program (AFSPP) is the mandatory participation among all ranks of the active duty U.S. Air Force along with the reserve components in annual suicide awareness and prevention training. Since 2005, the Air Force has delivered this in the form of computer-based training. The computer based suicide prevention training includes a series of video vignettes. This video content is described as emotionally powerful and addresses suicide warning signs, intervening with persons at risk, the impact of on survivors (those who knew or were close to the person who committed suicide) and help seeking (Bryan, Dhillon-Davis, & Dhillon-Davis, 2009). Researchers evaluated the effect of these videos and found no indication of any iatrogenic effect; conversely, a therapeutic effect was noted. Positive impacts of the training were observed, even among those who were identified as currently suicidal and those who were survivors of suicide attempts

QPR training with its emphasis on positive action rather than mere awareness may be particularly resonant with men. Theories of evolutionary psychology postulate that males who consider themselves broken or inadequate may be at risk for suicide (Brown et al., 2009). These thoughts are consistent with Joiner's interpersonal personal theory of suicide as expressed in his concept of thwarted belongingness (Joiner, 2009). It is possible to infer from these constructs that depressed and suicidal men may already be engaged in a recursive cognitive cycle where their self-loathing, pain, and interpersonal disconnection prevent them from seeking help.

Men who participate in gatekeeper training learn to recognize that suicidal and depressed men are often resistant to receiving professional help and may be encouraged to persuade those at risk to meet with a professional. Gatekeepers are also taught that an accompanied referral, like bringing an at-risk person to a clinic or hospital is the preferred intervention. This targeting of a specific behavior is consistent with the theory of planned behavior (Ajzen, 1991). It is important to remember that males trained as gatekeepers often have the same negative attitudes toward seeking help as those they seek to help do. Therefore, when we train them to take care of others we may also be planting the seed of self care, thereby, normalizing the idea of seeking professional help.

Help Seeking

Gender is a variable believed to influence help seeking. One explanation that has been put forward as to why fewer women than men commit suicide is that women are more likely to receive treatment and intervention (Moller-Leimkuhler, 2002). Reluctance toward help-seeking is believed to result in higher death rates from a variety of preventable conditions including, heart disease, cancer, infectious disease, and accident as well as suicide (Courtenay, 2000). However, it is interesting to note that examination of men's reluctance to seek help is relatively new (Smith, Braunack-Mayer, & Wittert, 2006). Researchers have determined that men's reluctance to seek help is attributable for higher mortality rates; however, there has yet to be wide-spread agreement in how to engage men, promote men's health awareness, and lead more men to visit their physicians and other providers (Mansfield, Addis, & Mahalik, 2003).

Men may resist or avoid seeking help due to their negative attitudes towards help-seeking (Mackenzie, Gekoski, & Knoz, 2006). These negative attitudes toward help-seeking may be explained through a variety of socio-cultural theories. A number of practical factors may also shape attitudes toward help seeking among men, including concerns about the possible impact on their careers, as well as the availability of and access to services (Visco, 2009). These attitudes may be reinforced by the awareness that actual negative consequences may be associated with help seeking. An example of this might include a pilot who is grounded after revealing that he has an alcohol problem or a police officer who is pulled from his patrol assignment after seeking counseling for depression. Quinnett (2007) asserts that men may reasonably avoid admission of conditions or problems that they perceive would threaten their livelihood.

There is evidence that men who do seek help tend to have more severe symptoms and levels of distress then men who do not. In general, however, males seek help less than women at similar levels of distress (Cusack, Deane, Wilson, & Ciarrochi, 2004).

Social influence is another variable believed to influence help-seeking. In their Theory of Reasoned Action (TRA), Azjen and Fishbein (2005) theorized that personal beliefs are the driving force behind individuals' attitudes toward behavioral norms. The Theory of Reasoned Action is the precursor to the Theory of Planned Behavior, which expands on TRA and introduces the role of perceived behavioral control into the equation: "Changes in behavior-specific beliefs are found to produce corresponding changes in attitudes, subjective norms and

perceived behavioral control, and that these changes, in turn influence intentions and actions" (Fishbein, & Ajzen, 2005, p. 30).

According to Ajzen, it is important to differentiate the construct of perceived behavioral control – which he offers is a perception to the ease or difficulty of completing a particular behavior and more global constructs such as Rotter's Locus of Control (Ajzen, 1991):

> The intervention targets behavioral, normative, and/or control beliefs in an effort to produce positive intentions among participants who, prior to the intervention, either did not contemplate the behavior or were disinclined to do so. (p. 183)

The positive influence of others appears to be a significant factor among men who will seek or have sought help. The expectations of others with regard to how normal or expected a behavior is can be a significant predictor of help-seeking intentions according to Ajzen's theory of planned behavior (Cusack et al., 2004). Armitage and Connor (2001) recently did a meta analysis of 185 independent studies of TPB concluding with support for the efficacy of TPB. The analysis revealed that in wide range of studies TPB was significantly correlated with changes in attitudes (behavioral intentions). Additionally, TPB was also found to be significantly correlated with behavior changes in studies where a variety of health related behaviors were later independently observed or taken from records.

Training men as gatekeepers may have several benefits. One benefit is that gatekeeper training in and of itself may not only make men more likely to come to the aid of someone feeling suicidal but might also provide them the additional education, awareness, and sense of importance toward treatment for mental health issues, thereby reifying their own personal attitudes and beliefs toward their own help seeking.

Summary

Chapter 2 provided an overview of the literature associated with suicide, factors related to suicide, suicide prevention and the emergence of a public health response to suicide. It examined the role of gatekeeper training for suicide prevention and focused on QPR-Question Persuade and Refer as a specific model of gatekeeper training with a growing body of support in the literature for its efficacy. The chapter also summarizes literature related to the iatrogenic potential suicide prevention efforts, in that regard concluding such efforts are safe and likely health promoting.

The literature review reveals that men are less positively inclined towards help-seeking and that help-avoidance is a likely factor contributing to higher incidence of suicide in men. The gender differences regarding attitudes toward help-seeking provide a base from which to begin exploring the differential impact QPR may have on men and women.

Chapter 3 provides the research design, the methodology, and a detailed overview of QPR. The hypotheses are enumerated; the instrument, the Inventory of Attitudes

toward Seeking Mental Health Services (IASMHS) is described, and a statistical analysis for hypothesis testing will be proposed.

Chapter 3: Research Method

Introduction

This chapter is an explanation of the research design used to determine if there is a statistically significant difference in pre and post test scores on the Inventory of Attitudes toward Seeking Mental Health Services (IASMHS) in participants who receive QPR Training. The following is an overview of the salient aspects of the research design, a description of the participants, an overview of the instrument and its psychometric properties, as well as a discussion of ethical considerations and informed consent.

Research Design and Approach

A quasi-experimental pre-post design will be used to determine if QPR increases positive attitudes toward help seeking. A 2 (QPR training: pre/post) X 2 (Gender) mixed factorial design was used with QPR training as the within subjects variable and gender as the between subjects variable. The dependent variables in this study included attitudes toward seeking mental health services as measured by the total score on the Inventory of Attitudes toward Seeking Mental Health Services (IASMHS; Mackenzie et al., 2004) and the scores for the three IASMHS subscales (psychological openness, help-seeking propensity, and indifference to stigma). In previous studies, the IASMHS has distinguished between participants' past use of mental health services as well as their future use. A mixed two-way analysis of variance was performed to compare means among treatment groups for each dependent measure. What sets this study apart is that it

is the first study to examine the effects QPR has on the individual with regard to their own attitudes toward help-seeking, not their attitude towards refering others or their willingness to to encourage others to get help. This research evaluated wheter the QPR curiculim, with its emphais on encouraging participants to persuade and refer others to seek mental health services would have a significant effect on the participants' own personal attiudes toward seeking help for themselves.

Setting and Sample

A convenience sample of students attending Klamath Community College, in Klamath Falls, Oregon served as the population for this study. Klamath Community College is a 2-year public institution with a wide variety of programs preparing students for careers and/or transfer opportunities. In 2001, the Surgeon General's National Strategy for Suicide Prevention: Goals and Objectives for Action (US Department of Health and Human Services) specifically named colleges as a venue where evidence based suicide prevention programs should be initiated and maintained. This call was strengthened in 2004 when the Garret Lee Smith Memorial Suicide Prevention Act was signed into law. This bill is in memory of Oregon Senator Gordon Smith's son who died by suicide. The Act provides money for a variety of suicide prevention programs and strategies directed at reducing college suicide.

The Suicide Prevention Resource Center (SPRC) and the American Foundation for Suicide Prevention (AFSP) have collaborated to form the Best Practices Registry under a grant funded by the Substance Abuse and Mental Health Services Administration

(SAMHSA). QPR is included under Section III of the BPR list of programs (Suicide Prevention Resource Center, 2012). Organizations such as the American College Health Association (2004) have called for colleges to utilize evidenced-based practices for health promotion such as suicide prevention.

Participants in the study were students enrolled in a variety of courses, including, criminal justice, health, and psychology at Klamath Community College. Courses may meet at a variety of different times throughout the day from morning to early evening. The study and the QPR presentation occurred in the various classrooms during the regularly scheduled class times. Students wishing not to participate in the QPR training were granted permission to visit the library during the QPR presentation without any consequence. Students were told that if they did not want to participate in the study they would be excused without consequence for the duration of class time utilized for the study, this included class time utilized during all phases of the study, including preassessment, the QPR training and the post-assessment.

Data Collection and Analysis

The QPR training took place during regular class meetings by invitation of the instructor. The only restriction for student inclusion in the study was age. Students were told that they must be over age in order to participate in the study. Students attending Klamath Community College tend to be older than traditional college students and are reflective of the demographics of Klamath County. The majority of students are White and women accounted for approximately 60% percent of student participants. Students

were provided with an in-class presentation detailing the QPR and the study. During this presentation, a detailed explanation of the voluntary nature of participation was provided, and stressed that there would be no negative consequence for choosing not to participate. Students interested in participation received, reviewed, and signed the informed consent form. They were also provided with the demographic questionnaire and instructed to fill it out. Once, collected I distributed the IASMHS and provide the necessary instructions for participants to complete the IASMHS. It took approximately 35 minutes to provide students with an overview of the study, provide a thorough description of informed consent, including the voluntary nature of the study, and to complete the demographic questionnaire and IASMHS (overview -5 minutes, informed consent-10 minutes, demographic questionnaire -5 minutes, IASMHS-15 minutes).

Completing the IASMHS took students approximately 15 minutes. At the conclusion of the presentation I collected the forms and completed instruments and announced that I would return to the next regularly scheduled class meeting, 24-48 hours later. Upon my return, I provided participants with a one-hour QPR presentation (described later in this chapter). I returned to each class 3 weeks after the QPR session to conduct the post assessment.

A power analysis was conducted using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). Choosing ANOVA with 1 between-groups factor (Gender) with 2 levels (male and female) and 1 within-groups factor (QPR training) with 2 levels (pre and post), with effect size set at .25, alpha at.05, and power at .85; the estimated needed sample size

is 110. Efforts, including oversampling, were utilized to help ensure a balance of men and women in the study.

Institutional Review Board approval was secured from Walden University (IRB approval # 03-14-12-0018995) as was permission from the president of Klamath Community College.

Procedures

Participants received a 1-hour version of the standardized QPR Gatekeeper course delivered by the researcher, a certified QPR instructor. This researcher has been licensed as a QPR instructor since 2004. The licensure process involved completion of an 8-hour QPR certification workshop conducted by Dr. Paul Quinnett the founder and CEO of the QPR Institute. In order to be certified participants must pass a multiple choice and essay examination. Initial certification is for a period of three years and requires entering into a formal License Agreement for Certified QPR Instructors. Certified trainers agree to utilize the copyrighted QPR Power Point slides, QPR video, to follow the training with a period of question and answers and to provide participants with the QPR booklet and card (QPR, 2011a)

The training will be initiated by the showing of a ten-minute QPR video distributed by the QPR Institute. The video introduces the subject of suicide via a variety of situational vignettes where a diverse set of characters portray the reasons and circumstances for their suicidal feelings. The vignettes include a high school athlete; an

elderly retired man, and a middle-aged woman struggling with alcoholism and a recent arrest for driving under the influence of alcohol.

The situational vignettes are intended to demonstrate how suicide crosses situational and demographic lines. The video moves towards an overview of the basic outline of the QPR approach. The basics of this approach include that suicidal thoughts are often not communicated directly; however, a variety of situational cues can alert the potential gatekeeper that a person is at risk of suicide. When suicidal indicators are observed, gatekeepers are instructed to (a) Q-Question directly about suicide, (b) P-Persuade the person to get or accept help, and (c) R-Refer to additional support, such as a medical or mental health provider, a crisis hot line and so forth. The video concludes with the testimony of a surgeon who states that by learning QPR participants will be able to follow an organized and proven approach to helping individuals respond to people at risk of suicide.

Once the video is concluded, the didactic portion of the training will begin, utilizing a standardized power point provided by the QPR institute; the researcher sequentially progresses through the following:

1. QPR – Goals which include active intervention, alleviation of immediate risk factors, and ultimately a referral, preferably an accompanied referral to a higher level of help then the gatekeeper can provide.
2. Overview of state and national rates of suicide

3. Previous research on QPR that indicates participants tend to retain knowledge and that once trained, they are more likely to intervene
4. An overview of common suicide myths and facts
5. A description of possible protective factors
6. An overview of risks, circumstances, and underlying conditions that are associated with suicide
7. Emphasis that all potential causes of suicide and/or distress in an individual are real and that a person experiencing suicidal thoughts and behaviors is in need of intervention
8. Emphasis on positive action – a presupposition of QPR is that hopelessness/helplessness are underlying themes in suicidal crises and that any action taken by another on behalf of a person experiencing suicidal thoughts is likely to result in acceptance and protection from suicidal behavior.
9. Tips for asking the suicide question, i.e. directly inquiring about suicide such as, are you feeling suicidal? And emphasis that such questioning must be direct.
10. Tips for persuading the at the risk individual to accept help
11. Suggestions of possible referrals and when they may be appropriate
12. A discussion of local resources and handing out of the QPR booklets/cards.

The training is concluded with the researcher providing student's QPR booklets/with attached QPR cards. The QPR booklet is 24 pages and reiterates the major points of the QPR presentation. Students are encouraged to read the booklet in the near future with the urging that it will help them retain what they just learned. They are further encouraged to place the attached QPR card in their wallets. The cards contain prompts reminding participants to 1) Q- Question the Person about suicide, P- Persuade the person to get help, and R-Refer for help. The card offers the following list of resources as potential referrals, parents, faith leaders, tribal elders, teachers, counselors and national crisis lines including 1-800-273 TALK and 1-800-SUICIDE.

Instruments and Materials

Demographic Questionnaire

The demographic questionnaire is a three item self-report instrument which will be used to collect information pertinent to this research including: (a) Age: What is your age? (b) Sex: What is your sex? Please circle one (male or female), (c) Ethnicity: What is your ethnicity? Please select all that apply: (a) Asian, (b) Black, (c) Hispanic, (d) Mixed, (e) Native, (f) White, (g) Other/Decline. The questionnaire is found in Appendix D.

Inventory of Attitudes toward Seeking Mental Health Services (IASMHS)

The Inventory of Attitudes toward Seeking Mental Health Services (IASMHS) is an adaptation and extension of Fisher and Turner's (1970) Attitudes toward Seeking Professional Psychological Help Scale (ATSPPHS; Mackenzie et al., 2004). The instrument is in the public domain and no permission is required to use the inventory.

According Mackenzie et al., (2004), the IASMHS has several advantages over the the ATSPPHS on which it was based. Although, Mackenzie, et al. (2004) state that the the ATSPPHS is a psychometrically valid and relaible instrument they go on to state that ATSPPHS is limited as a a unidimensional measure of the attitude, psychological openess. Further, while the content was developed in consultation with mental health providers, the instrument was not grounded in any particular theory. In fact, Mackenzie et al. posited that the instrument predates social psychological theories "that have improved the prediction of behavior and behavior intention from attitudes" (p. 2411).

Mackenzie developed the IASMHS relying on Fishbein and Ajzen's theory of reasoned action (TRA) and Ajzen's theory of planned behavior to provide a theoretical context and base to guide the revision of the ATSPPHS. The resulting IASMHS is a 24-item three-factor inventory measuring (a) psychological openness, (b) help-seeking propensity, and (c) indifference to stigma (Mackenzie et al., 2004).

Psychological openness is a global measure consistent with original intent of the ATSPPHS, it is a measure of general attitude towards help seeking. Psychological openness serves as baseline from which to consider attitudes toward professional psychological help. A sample question related to psychological openness is question nine: "People should work out their own problems; getting professional help should be a last resort."

Help-seeking propensity refers to the individual attitudes toward their both willingness and ability to seek professional psychological help. A sample question related

to help-seeking propensity is question fifteen: "I would want to get professional help if I were worried or upset for a long period of time."

Indifference to stigma refers to the extent of consideration individuals have towards the opinions others may have towards their decision to seek or receive professional psychological help. A sample question related to indifference to stigma is question six: "having been mentally ill carries with it a burden of shame."

The IASMHS utilizes a series of Likert scaled questions ranging from 0- to- 4. Scoring is as follows: (0) *disagree*, (1) *somewhat disagree*, (2) *are undecided*, (3) *somewhat agree*, or (4) *agree*. The authors utilized Pearson correlation coefficients to determine reliability. Results of the test-retest comparisons were: a) total ISAMHS score, $r = .85$, $p < 0.01$; b) for the subscale – psychological openness $r = 0.86$, $p < 0.01$; c) for the subscale of help – seeking propensity $r = 0.64$, $p < 0.01$; d) for the subscale – indifference to stigma $r = 0.91$, $p < 0.01$. Using Cronbach's alpha, the full scale IASMHS displayed internal consistency at .87 with the three subscales yielding the following alphas: psychological openness (.82); help seeking propensity (.76); indifference to stigma (.79) (Mackenzie et al., 2004).

A community sample ($n = 206$) with a mean age of 45.6 years ($SD = 17.8$) and a replication sample ($n = 297$ students) with a mean age of 21 years ($SD = 2.7$) was used to analyze the instruments validity. Criterion validity was established by examining the instrument's ability to determine both previous and future use of mental health services (Mackenzie et al., 2004). Discriminate validity was established by examining response

patterns to questions related to talking to family members, talking to friends and keeping problems to one's self. The authors found that willingness to talk to family members and friends was not significantly correlated with attitudes towards utilizing professional services. However, response patterns to questions related to an individual's desire to take care of the problem on one's own were strongly correlated (negatively) to both the respondents overall score on the instrument and scores on each of the instrument's subscales (Mackenzie et al., 2004).

Results from the pre and post test tests were entered into SPSS Professional Edition 18.0 and evaluated. A mixed two-factor ANOVA was utilized to determine the effects of QPR training (pre-post training) and gender (male, female) on attitudes toward seeking mental health services. The dependent variables include attitude toward seeking mental health services, as measured by the total score on IASMHS

Research Question 1 is: Does completion of the QPR training session result in increased positive attitudes toward help-seeking behavior as measured by the IASMHS? This question was answered using an *F*-test for differences within the groups (pretest, posttest).

Research Question 2 is: Are there gender differences in attitudes toward help-seeking behavior as measured by the IASMHS? This question will be answered using an *F*-test for differences between groups (males, females).

Research Question 3 is: Do QPR (pre and post training) and gender interact to affect attitudes toward help-seeking behavior as measured by the IASMHS? This

question will be answered using an *F*-test for the interaction between QPR training (pre/post) and gender.

Participants Rights

Obtaining Informed Consent

Permission of the Institution Review Board (IRB) of Walden University was sought and obtained. Additionally permission from the President of Klamath Community College or his designee will be sought and obtained. Rewards or remuneration for participating in this study were not provided, participating or not participating had no impact on the student's grade. No eligible participants were excluded. All participants were given an "Informed Consent Form" explaining the voluntary nature of the study, the minimal risk involved in participating, and confidentiality of all data obtained. All participants were afforded the opportunity to participate in a debriefing of the study and were provided with further information at their request. Data is securely stored in a password-protected file on a secure external drive and/or locked file cabinet for 5 years, after which it will subsequently be destroyed by shredding or physical destruction of the drive on which the data were stored.

Ethical Considerations

Careful consideration was given to the risks of this study. The QPR curriculum is listed as an evidenced based strategy for suicide prevention with the Best Practices Registry of the Suicide Prevention Resource Center (Suicide Prevention Resources Center, 2012). According to the QPR institute 725, 000 individuals have received QPR

training to date (http://www.qprinstitute.com/gatekeeper.html). As discussed in Chapter Two, previous studies regarding suicide related education have demonstrated no iatrogenic effect (Gould et al., 2005; Rudd et al., 2006). There is minimal risk associated with participation in this study. While there are no anticipated harmful effects, there is the possibility that a discussion related to suicide might be disturbing or make some students uncomfortable. Taking this possibility under consideration, all Klamath Community College students participating in the study were informed both verbally and in writing (via the Informed Consent Form) of the free counseling and consultation services provided to them through "Solutions INC," which is a contracted Employee Assistance Provider. This counseling is available for free to all currently registered/enrolled KCC students.

Summary

Chapter three provided a description of the research design, information regarding the instrument, an overview of the methods, participants, and a proposal of the specific statistical analysis needed to test hypotheses. It is hoped that this proposed research will add to the existing literature both in terms of the effect of teaching QPR and more specifically the role QPR may play in encouraging positive attitudes toward help seeking behavior.

Chapter 4: Results

Introduction

The purpose of this study was to determine if QPR, a gatekeeper suicide prevention training aimed at developing suicide intervention skills among the general public, would increase the participants own attitudes toward seeking mental health services. It was hypothesized that both men and women would show an increase in positive attitudes toward seeking mental health services after the training. It was also hypothesized that the increase in positive attitudes would be higher among the male participants. It was hoped that by raising awareness of suicide, and the importance of utilizing mental health services, these services would become normalized and resistance to help seeking would be reduced. It is further hoped that increases in positive attitudes toward mental health seeking will result in actual help seeking when appropriate.

In this chapter, I will review the results of a quasi-experimental, mixed factorial ANOVA design which compared pre and post intervention scores on the IASMHS prior to QPR training and three weeks post QPR training. The discussion will also provide an overview of the research questions, hypotheses, descriptive statistics, reliability data for the instrument, and review of the data analysis procedure. The chapter will end with a summary and transition into interpretation of the findings.

Overview of Design and Procedure

The study took place at Klamath Community College in Klamath Falls Oregon, as planned and outlined in Chapter 3, and occurred during the weeks of April 9 and April

30, 2012. Volunteers were recruited from eight different courses including courses in Education, Health, and Psychology. The courses were selected on the basis of teacher interest in the study as well as alignment of the study's purpose to the courses stated learning outcomes.

I began by providing participants with an overview of the study and securing informed consent. Once informed consent was provided, participants completed a demographic questionnaire and the IASMHS. I then provided a QPR presentation, lasting approximately 1 hour, followed by a brief period for questions and discussion. I returned 3 weeks later and again administered the IASMHS.

Research Questions

I set out to answer the following research questions:

1. Does completion of QPR training result in increased positive attitudes toward help-seeking behavior as measured by the IASMHS?
2. Does gender influence attitudes towards help-seeking behavior as measured by the IASMHS?
3. Does QPR (pre and post training) and gender interact to affect attitudes toward help-seeking behavior as measured by the IASMHS? The research questions were tested by the following hypotheses.

Hypotheses

$H1_A$: There will be a significant difference in the mean pre test and post assessment of attitudes toward help seeking behavior as measured by the IASMHS.

$H1_0$: There will be no significant difference in the mean pre test and post assessment of attitudes toward help seeking behavior as measured by the IASMHS.

$H2_A$: There will be significant difference between men's and women's attitudes toward help-seeking behaviors pre and post QPR training, as measured by the IASMHS.

$H\ 2_0$: There will be no significant difference between men's and women's attitudes toward help seeking behaviors pre and post QPR training, as measured by the IASMHS.

$H3_A$: There will be a significant interaction effect between completion of QPR and gender with respect to attitudes toward help seeking behavior as measured by the IASMHS

$H3_0$: There will be no significant interaction effect between completion of QPR and gender with respect to attitudes toward help seeking behavior as measured by the IASMHS.

Descriptive Statistics

The selected classes provided an opportunity to recruit over 150 participants which supported the researcher's strategy of oversampling to achieve a minimum sample of 110 participants. Although, the initial data gathering resulted in the consent and pretesting of 148 (105 females, 43 males) student participants, there was considerable attrition during the 3week interval between pre and postassessment with the final sample yielding 108 participants (68 females, 40 males). Consultation with Klamath Community College faculty revealed that large swings in attendance and failure to persist through the course term are not uncommon at their college and was unrelated to the study. Except for a few individuals who voiced questions regarding privacy of information and resistance to being surveyed, student participants expressed a great deal of interest in the study. Delivery of the QPR material was consistent with the QPR curriculum and the expectations of certified trainers.

During evaluation and input of the preassessment data it was discovered that a minor, a student under age 18, had participated in the initial preassessment by completing the demographic survey and the IASMHS. This was reported to the Walden? IRB and the related data were discarded. When I returned 3 weeks later to administer the post assessment of the IASMHS, each class was reminded that only data from students age 18 and over would be used in the study. It is extremely rare for students under the age of 18 to take classes at Klamath Community College.

The outline of data collection in Chapter 3 accurately predicted the need for oversampling. The final sample fell just shy of the power analysis goal of 110. The majority of participants were white (74.3%), female (62.4%), and between the ages of 18 and 29 (67.9%). It has already been identified that the proposed sample was a convenience sample. For the purpose of this study, the most important demographic variable was gender. It is believed that variables such as gender, education, and ethnicity play a role in IASMHS scores (Mackenzie et al., 2004). However, with the expectation of this sample being uneven with regard to the female – male distribution it is an appropriate sample for the type of pre- and post assessment that was conducted.

Table 1

Frequencies and Percentages According to Age, Sex, and Ethnicity

Demographics			
Age			
	18-29	74	67.9%
	30-35	8	7.3%
	36-41	9	8.3%
	42-59	18	16.5%
Sex			
	Female	68	62.4%
	Male	40	36.7%
	Unknown	01	0.9%
Ethnicity			
	Black	3	2.8%
	Hispanic	5	4.6%
	Two or more	13	11/9%
	Native	4	3.7%
	White	81	74.3%
	Other/Decline to state	2	1.8%

Reliability Analysis of IASMHS

The IASMHS is used to measure attitudes toward seeking mental health services. The instrument is in the public domain and no permission is required to use the inventory. The reliability and validity data for the current study was consistent with what the original authors found. The test-retest reliability of the IASMHS was evaluated using the Pearson correlation coefficient statistic, $r = .80$ $p < 0.01$. Internal consistency of the pre and post QPR IASMHS were analyzed using the Cronbach's Alpha statistic, the pre QPR scores displayed internal consistency at .86 and the post QPR scores displayed internal consistency at .86.

Data Analysis Procedure

A 2 (QPR training: pre/post) X 2 (Gender) mixed factorial design ANOVA was used to test Hypotheses 1, 2, and 3 to determine if following the QPR presentation participants showed an increase in positive attitudes toward help seeking as measured by the IASMHS when pre intervention scores are compared to post intervention scores.

The 2 (QPR training: pre/post) X 2 (Gender) mixed factorial design ANOVA includes one repeated measure on the same subjects. The dependent variable is attitudes toward mental health services as measured by the IASMHS. There is one between subjects variable, gender.

The assumptions for repeated measures ANOVA include normality, homogeneity of variance, and sphericity of variance (Howell, 2002). The pre and post QPR data sets were examined and were determined to meet the assumptions required for ANOVA. Post

hoc analysis was not conducted since there were only 2 levels of each independent variable.

In evaluating for normality the statistic for Skewness and Kurtosis should fall between, -1.0 and +1.0. -1.0. The Skewness and Kurtosis statistics for the pre QPR IASMHS was -.024 and -.236 respectfully. The Skewness and Kurtosis statistics for the post QPR IASMHS was -.054 and -.198 respectfully. These analyses suggest the data is normal.

The Kolmogorov-Smirnov statistic – KS was applied to the both the pre and post QPR IASMHS scores. Neither KS test yielded a significant result. The pre QPR IASMHS scores yielded a result of $p = .119$ and the post QPR IASMHS scores yielded a result of $p = .448$. These data demonstrate that both the pre and post QPR IASMHS scores meet the assumption of normality.

Homogeneity of variance was assessed using Levene's test of equality. Both the pre and post IASMHS scores resulted in statistics that were not significant at $p > .05$ suggesting the variances in the pre and post data were equally distributed. The pre IASMHS yielded a result of $p = .091$ and the post IASMHS scores yielded a result of $p = .855$. Homogeneity of Intercorrelation was assessed using Box's Test of Equality of Covariance Matrices - Box's M. The statistic was not significant $p = .335$.

Results

The main effect for QPR (pre/post) was statistically significant, $F(1, 106) = 44.22$, $p = < .001$, $\eta^2 = .294$. Null Hypothesis 1 was rejected, as a significant difference

was found between the pre and post assessment of attitudes toward help seeking behavior as measured by the IASMHS. Examination of the mean IASMHS scores revealed a significant increase from a mean pre-QPR score of 61.09 to a mean post QPR score of 66.34.

The main effect for gender was not significant, F (1, 106) = 1.034, $p > .05$, $\eta^2 = .010$, suggesting no statistical difference in the total IASMHS scores between men and women. The estimated marginal mean on the IASMHS for men was 62.05, and the estimated marginal mean on the IASMHS for women was 64.70. Therefore, Null Hypothesis 2 was retained since no significant difference between men's and women's total score on the IASMHS was found.

The interaction effect between QPR and gender was significant, F (1, 106) = 4.503, $p < .05$, $\eta^2 = .041$. The interaction between gender and QPR demonstrated that women scored significantly higher on the IASMHS than men only at pre QPR training. The mean score for women was 62.75 and the mean score for men was 58.28. At post QPR training both women and men increased their IASMHS scores. The mean score for women was 66.64 and the mean score for men was 65.82. However, at post training there was no statistically significant difference between the IASMHS cores of men and women. Therefore Null Hypothesis 3 was rejected.

Table 2

Means and Standard Deviations for IASMHS Total Scores Pre-and Post QPR

Factor	Gender	*M*	*SD*	*N*
QPR Pretest	Male	58.28	15.65	40
	Female	62.75	12.59	68
	Total	61.09		
QPR Posttest	Male	65.82	14.51	40
	Female	66.64	13.28	68
	Combined	66.34	13.69	108

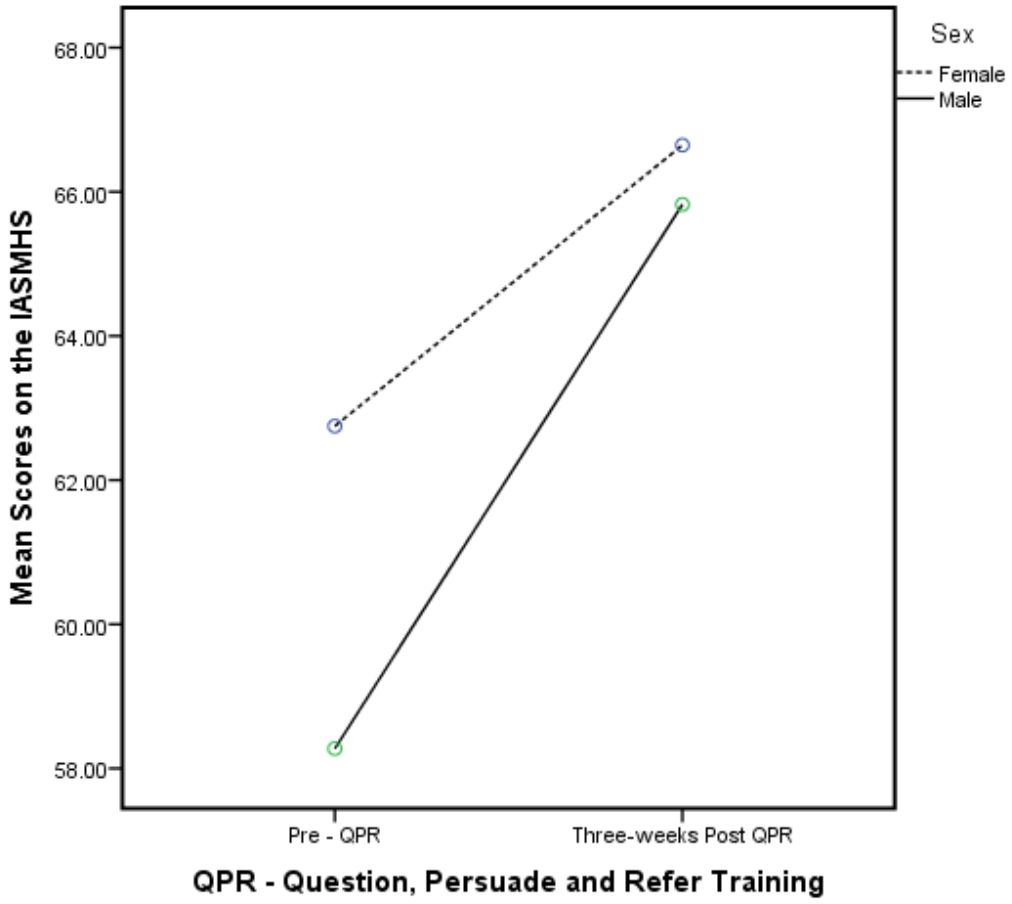

Figure 1.*The Effect of QPR Training (pre/post) and Gender on Total IASMHS Scores*

Table 3

Summary ANOVA Table for Main Effects and Interaction Effect of QPR (pre/post) and Gender on IASMHS Scores

Variable and Source	*df*	*MS*	*F*	*p*	n^2
QPR (pre/Post)	1	165.07	44.223	000	.294
Gender	1	353.33	1.034	.312	.010
QPR*Gender	1	168.04	4.503	.036	.041

Summary

This study was conducted to determine if participation in QPR training would increase positive attitudes towards seeking mental health services. The study was conducted with adult student participants at Klamath Community College, in Klamath Falls Oregon. The study involved pre-assessment of attitudes toward mental health services, followed by a one-hour QPR presentation, and concluding with a post intervention assessment of attitudes via the IASMHS.

To test the Hypotheses a 2 (QPR training: pre/post) X 2 (Gender) mixed factorial design ANOVA was used to determine the effect that participation in QPR would have on attitudes toward help seeking as measured by the IASMHS.

A statistically significant difference between the mean pre QPR IASMHS scores and the mean post QPR IASMHS scores was found. Both men and women showed an

increase post QPR, and Null Hypothesis 1 was rejected. No statistically significant difference was found between men and women on the aggregate pre/post IASMHS, and therefore, Null Hypothesis 2 failed to be rejected.

The most dramatic finding of this study was the interaction affect between QPR and gender. While both men and women increased in their post training IASMHS scores, the increase of scores for men were particularly pronounced, with a gain of 7.5 points post-training. Women showed an increase of 3.89. Additionally, the increase in scores is most telling when you consider pre QPR training; women scored 4.5 points higher than men, but post QPR training, the difference was reduced to less than 1 point. Women typically score higher than men on the IASMHS, so the findings are interesting on two counts. First, the dramatic increase in men's scores, and secondly, that the post scores between men and women are not significantly different. This suggests that QPR training has the ability to significantly increase the attitudes towards mental health services seeking in men.

In Chapter 5, I will provide further interpretation of the findings, discuss the limitations of the current study, provide recommendations for future research, and consider this study's potential for positive social change.

Chapter 5: Discussions, Conclusions, and Recommendations

QPR is a standardized suicide intervention course designed to equip laypersons with the knowledge, skills, and confidence to intervene with people showing signs of suicidality. The program is which is used in a variety of settings and in increasingly being used in colleges. QPR has been the subject of extensive research, which has validated its aim of equipping individuals to help others. I chose to evaluate if QPR would have the additional benefit of increasing the participants' own disposition towards seeking mental health services. It was hypothesized that the instruction provided in QPR would normalize the discussion of suicide and causal roots of depression, alcohol dependency and so forth, and that through open discussion of these topics and instructing others to bring persons' at risk for mental health consultation, the individual being trained as a helper would also adopt more open and positive attitudes toward mental help seeking.

From a theoretical framework, this was linked with Ajzen's (1985) theory of planned behavior. The theory of planned behavior posits that when specific behaviors are accompanied by positive attributions and are consistent with group norms and are perceived within an individual's control and ability, that attitude will manifest into particular behaviors. The instrument chosen to evaluate this effect was the IASMHS—which is based on the theoretical constructs of Ajzen's theory. This chapter will provide a discussion of the findings as well as analysis of the limitations, conclusions, implications for social change and recommendations for future research.

Summary of the Research and Findings

Findings

Consistent with the initial hypotheses, the research demonstrated a number of supporting findings. The first question posed was whether both men and women would have increased positive attitudes towards mental health seeking. The findings were that there was a significant increase between the pre/post assessment between both men and woman participants. The second question posed was whether there would be significant differences in how men and women appraise attitudes towards help seeking behavior. This question is perhaps more difficult to understand and is more subtle. When one examines the pre QPR assessment, it was found that men's scores were statistically lower than the scores of women. However at post QPR, the scores of men and women were statistically the same. The third question was whether QPR would have a different effect on men and women. Prior to receiving QPR training women scored statistically higher than men on the IASMHS. However, at post training, the difference between the women and men's QPR IASMHS scores was not statistically significant. Therefore, a significant gender interaction was found.

Since men disproportionately account for deaths by suicide and some researchers believe male mortality to suicide is correlated with reticence to seek help, a demonstration of increasing males' attitudes towards mental health help seeking behavior is encouraging. Mansfield, Addis, and Mahalik (2003) found that men's attitudes towards help seeking could be increased via the presentation of male-centric literature on

depression. It is beyond the scope of this study to determine or define male-centric. However, it was believed from the outset of the study that QPR would be well received by male audiences. It is again worth noting that it is not a stated aim or objective of QPR to increase participants' positive attitudes toward seeking mental health services. The fact that both male and female participants did demonstrate statistically significant increases in their positive attitudes towards seeking mental health services should be of interest to health educators and has pedagogical implications

Summary of the Research

According to Aldrich and Cerel (2009), there is a need for increased rigor in the examination of suicide prevention efforts as well as a need to increase the theoretical grounding of such examination. Aldrich and Cerel suggested that the TPB may provide a useful framework from which to assess suicide prevention efforts. Azjen's TPB is comprised of three sets variables a) behavioral beliefs and attitude toward behavior, b) normative beliefs and subjective norms, c) control beliefs and perceived behavioral control. The likelihood of actual behaviors are based upon a trajectory of the following: When an attitude toward a specific behavior is positively valued, the specific behavior is consistent with one's beliefs and cultural influences, the individual believes he/she is capable of the behavior, and the behavior will produce the desired outcome, the behavior is likely. The instrument utilized in this study was the IASMHS, which was developed by Mackenzie and is theoretically grounded in Ajzen's (TPB) (Mackenzie, et al., 2004).

Limitations of the Study

This study was conducted at a small rural college in Southern Oregon. The location and venue were chosen on the basis of convenience and access. Community college students represent a considerable cross section of the population. Participants in this study were enrolled in one or more Education, Health, or Psychology courses. It is difficult to determine whether QPR represented the total impact on scores of the IASMHS or whether the students were exposed to materials in their coursework or other venues between the pre and post assessment. Every effort was made to deliver the QPR instruction in a manner consistent with the curriculum, void of my biases.

Implications for Future Research, Practice and Social Change

This study demonstrated that QPR significantly increased participants' positive attitudes toward seeking mental health services as measured by the IASMHS. Scores increased for both men and women. However, while women scored significantly higher than men prior to QPR on the IASMHS the comparison of post QPR IASMHS scores between men and women showed no statistically significant difference. This revealed that QPR increased positive attitudes toward mental health services between both men and women and at the end of training there was no statistically significant difference between how men and women viewed these services. The study was conducted in a community college and was presented in the during a typical class period. In practice, QPR is often longer and may include role plays. Since role plays were omitted during this study it would be useful for future studies to include them. There is an on-line version of QPR

which could be similarly examined for its impact on participants' attitudes. The post assessment in this study occurred three weeks post training; future studies should add additional post assessment to determine if increases persist over time. While the overall sample of this study included 108 participants, males accounted for only 40 participants. Replication efforts should seek a larger sample of men, especially as this study's results have androcentric potential.

Future Practice

QPR is increasingly being used in colleges and universities as these institutions seek to incorporate evidence based suicide prevention efforts to reduce college suicide. I found that QPR could easily be inserted into an existing curriculum and was found to increase students' positive attitudes toward seeking mental health services. Previous researchers of QPR have demonstrated that participants increase their willingness to help others, have greater understanding of suicide and depression, and state increased confidence for dealing with people at risk of suicide.

Social Change

One of the assumptions of QPR is that people at risk of suicide are most likely to seek or receive help from those closest to them (Moskos, Olson, Halbren, & Gray, 2007). It makes sense to train students or members of other organizations as they will have a natural sphere of influence and have potential to help those closest to them. However, when training groups of people in QPR as part of a classroom activity, there may be students in the class that are suffering from depression or even suicidal thoughts

themselves. While QPR is not designed as treatment, this study found that participants increased their positive attitudes toward seeking mental health services. It is hoped that these attitude gains will manifest in actual behaviors when appropriate. This study revealed that men had a significant increase in their positive attitudes toward seeking mental health services. The literature is rife with concern that men are reluctant to seek medical help and/ or consultation. It is believed that when men delay their treatment, they suffer increased health consequences. This study is consistent with efforts that look to identify ways to engage men and increase their willingness to seek help (Mansfield, Addis, & Mahalik, 2003).

Rates of suicide vary considerably by geography. In general, states in the Northwestern United States have suicide rates that are higher than the national average (AAS, 2007). Additionally, rural areas tend to have higher suicide rates. This study was conducted in rural Southern Oregon in a community with a suicide rate considerably higher than both the national rate and the rate of the state as a whole. While a discussion of the factors related to rural suicide exceed the scope of this discussion, the findings that a simple one-hour training, embedded into a community college class can increase participant' attitudes toward seeking mental health services suggests that proactive approaches toward dealing with suicide should be pursued.

This study demonstrated that QPR training could easily be inserted or embedded into a wide variety of existing curriculum. Although, student satisfaction data for the training was not collected, student and instructor comment has been unanimously

positive. Additionally, QPR listed in the Best Practices Registry (BPR) for suicide prevention (Suicide Prevention Resource Center, 2012). Utilization of evidenced based suicide prevention strategies such as QPR is consistent with the 2001 Surgeon General's National Strategy for Suicide Prevention: Goals and Objectives for Action (US Department of Health and human Services), the 2004 Garret Lee Smith Memorial Suicide Prevention Act and the American College Health Association (2004) all of which have called for colleges to utilize evidenced-based practices for health promotion and suicide prevention.

While the scope of this study was limited to student participants in a community college setting, it was guided by a larger public health approach known as Rose's theorem. According to Frohlich and Potvin (1999):

> When many people lower their risk even a little, the benefit for the population is larger than if a few people at high risk experience a large risk reduction. This is consistent with the notion that groups of individuals function collectively and as such, are affected by the average functioning of the individuals around them. (pp. 213-214)

While the aim of QPR is not to lower an individual's risk for suicide, a goal of QPR is expand the numbers of individuals in the population who have knowledge of suicide and are equipped to intervene with people at risk of suicide. These underlying premises appear to be validated through the experience of the US Air Force who demonstrated significant decreases in suicide during the years of 1997 – 2002 through

implementation of the AFSPP (Knox, Cornwell, & Caine, 2004). One of the key components of the AFSPP was gatekeeper training including QPR and other formats. The Air Force also saw its members increase in several positive health outcomes during this period. This study provides for the consideration that gatekeeper training may have also played a role in increased help-seeking.

Conclusion

The stated aim of QPR training is to train members of the general public on how to help others who are experiencing suicidal thoughts. The training recommends that when a person is experiencing suicidal thoughts, they should be persuaded to seek mental health services. Previous analysis of the impact of QPR has demonstrated its effectiveness in increasing participants' willingness to assist others. This study suggests that by teaching people to persuade others to seek mental health services that the participants increase their own positive disposition towards seeking mental health services. This is an important additional gain that has not previously been identified or examined.

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Appendix A: School Letter of Permission

Date

Dear John Cascamo,

Based on my review of your research proposal, I give permission for you to conduct the study entitled Gatekeeper Suicide Prevention Training and its Impact on Attitudes toward Seeking Mental Health Services within the Klamath Community College. As part of this study, I authorize you to provide Question Persuade Refer- QPR in selected classrooms provided you gain the instructor's approval.

As part of this study, I authorize you to provide QPR training in the classroom and to collect pre and post test responses to the IASMHS- Inventory of Attitudes Toward Seeking Mental Health Services. Individuals' participation will be voluntary and at their own discretion. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting. I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB. University IRB.

Sincerely,

Gerald Hamilton
Klamath Community College
7390 South Sixth Street
Klamath Falls OR, 97603

Appendix B**:** Teacher Letter of Cooperation

Date
Dear Teacher,

I have obtained the permission of Klamath Community to collect data for my research project entitled Gatekeeper Suicide Prevention Training and its Impact on Attitudes toward Seeking Mental Health Services.

I am requesting your cooperation in the data collection process. I propose to collect data on Insert Date Range. I will coordinate the exact times of data collection with you in order to minimize disruption to your instructional activities.

If you agree to be part of this research project, I would ask that you allow me to make a presentation to your students where I will describe the study and provide them with the relevant information relating to informed consent. Then during the following scheduled class I will provide your students with a one-hour presentation entitled Question Persuade and Refer (QPR). This presentation is intended to teach your students how to recognize persons at risk for suicide and self harm and how to assist people at risk of suicide by questioning them directly about suicide, persuading them to stay safe until further help can be coordinated.

The study will include a pre and post training assessment of their attitudes toward seeking mental health services via the IASMHS.

If you prefer not to be involved in this study, that is not a problem at all.
If circumstances change, please contact me via phone at [redacted] or email at john.cascamo@waldenu.edu. Thank you for your consideration. I would be pleased to share the results of this study with you if you are interested.

I am requesting your signature to document that I have cleared this data collection with you. (For email versions of this letter, you may instead state, I am requesting that you reply to this email with "I agree" to document that I have cleared this data collection with you.)

Sincerely,
John A. Cascamo

Printed Name of Teacher _____

Date _____

Teacher's Written or Electronic* Signature _____

Researcher's Written or Electronic* Signature _____

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

APPENDIX C: CONSENT FORM

This study is being conducted by a researcher named John A. Cascamo, who is a doctoral student at Walden University. As an additional safeguard of your privacy John A. Cascamo will not know which students participated in the study as no names will be collected.

Background Information:
The purpose of this study is to examine the effect of QPR – a curriculum designed to teach laypeople about suicide.

Procedures:
If you agree to be in this study, you will be asked to:

- Fill out a brief demographic questionnaire
- Fill out an instrument called the Inventory of attitudes toward seeking mental health services (IASMHS). You will be asked to fill this out twice, both before and after QPR.

Voluntary Nature of the Study:
Your participation in this study is voluntary. Your course grade and participation will not be affected in any way by choosing to participate or not participate in this study. This means that everyone will respect your decision of whether or not you want to be in the study. No one at Klamath Community College will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:
There are no anticipated risks associated with filling responding to the IASMHS. There are no known risks associated with completing QPR. However, discussion of suicide can be difficult. If you find that you become troubled at any point during this study or at any point while a student at Klamath Community College or if you are currently feeling suicidal, please seek out the free counseling services available to you through Solutions (EAP), a contracted provider of counseling services, provided for you as a Klamath Community College student. They are located at 2621 Crosby Ave, Klamath Falls, OR, 97603, and their phone number is 541- 885-4548.

Compensation:
There is no compensation of any kind associated with participation in this study.

Confidentiality:
Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via John A. Cascamo, john.cascamo@waldenu.edu . If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is IRB approval # 03-14-12-0018995.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By completing the attached demographic questionnaire and the IASMHS I am agreeing to the terms described above.

Appendix D: Demographic Questionnaire

Participant # _____

These questions are asked with the intention of helping the researcher evaluate the data. Please answer the following:

A. What is your age ____

B. What is your sex _____ please choose (male or female)

C. What is your ethnicity? (Circle one)

Asian

Black

Hispanic

Mixed

Native

White

Other/Decline

Curriculum Vitae

John Angelo Cascamo
john.cascamo@waldenu.edu

OBJECTIVE

An executive level leadership position in higher education

EDUCATION

PhD Psychology, Walden University, 2013.
Concentrations: Research and Evaluation

MS Counseling Psychology, Chaminade University of Honolulu, 2003
Honors - Coursework completed in residence in Hawaii prior to move to Oregon in 1999. Practicum completed at Jackson County (Oregon) Mental Health Center

MS Criminal Justice Administration, Chaminade University of Honolulu, 1996
Honors - Concentrations: Counseling and Juvenile Programs

BS International Studies, Chaminade University of Honolulu, 1992
Cum Laude

EXPERIENCE

Dean, Workforce and Economic Development, 2011 - Present
Cuesta College, San Luis Obispo CA

- Provide leadership and oversight of a large and successful over a range of academic and career technical programs including: Architecture, Automotive, Business, Criminal Justice, Early Childhood Education, Fashion Design and Marketing, Interior Design, Welding
- Oversee the community and contract education programs
- Oversee the Business and Entrepreneurial Center
- Provide direct oversight and administrative responsibility for the CTEA (Perkins) grant with an annual budget of approximately $400.000
- Serve as the Academic Dean for the North County Campus
- Represent the college to the community and various stakeholders through active participation in the Chamber of Commerce and the Economic Vitality Corporation

Dean for Learning Services and Institutional Advancement, 2009-2011
Klamath Community College, Klamath Falls, Oregon.

- Chief Academic Officer
- Chair of the Academic Council and the Accreditation Liaison Officer to the Northwest Commission on Colleges and Universities
- Provided leadership and oversight of program development resulting in recent state approval for the following new Associates of Applied Science degrees: Diesel Technology, Automotive Technology and Construction Management.
- Collaborated with Health faculty and community stakeholders to develop and secure approval for a one-year certificate in Practical Nursing
- Held responsibility for the hiring and supervision of full-time and adjunct faculty and management of all academic departments including community and contract education
- Hosted a successful comprehensive site visit in October 2009 leading to a reaffirmation of the college's accreditation

Associate Dean for Learning Services, 2005-2009
Klamath Community College, Klamath Falls, Oregon.

- Responsible for day-to-day operations within the Division of Learning Services
- Co-chair of Klamath Community College's self-study steering committee, coordinator of institutional accreditation efforts, collaborated with faculty to standardize program review and assessment templates
- Implemented an annual planning tool used by faculty resulting in greater consistency in assigned course load and equitable distribution of special assignments and which serves as a venue to document and connect faculty activity with the strategic plan
- Organized and hosted faculty and adjunct faculty annual and special in-service training, greatly expanded in-house opportunities for professional development including workshops in assessment, intergenerational poverty and distance education
- Revised the faculty evaluation process ensuring the use of multiple indices
- Streamlined the process for faculty requests for professional development
- Developed a school-wide training program and policy to prevent sexual harassment
- Outsourced counseling and crisis services for students through our Employee Assistance Provider. Once implemented the aggregate cost was less than one-third of the cost of hiring a single on-site counselor

Faculty Member and Academic Unit Manager for Human Services, 1999-2005
Klamath Community College, Klamath Falls, Oregon.

Provided academic and supervisory leadership for a broadly defined Human Services division including: Criminal Justice, Education and Allied Health.

Leadership/Service Highlights:

- Extensive curriculum development, review and program evaluation
- Worked with community leaders to develop advisory committees for programs including Criminal Justice, Emergency Services and Allied Health
- Facilitated articulation agreements between Klamath Community College and other colleges throughout the state including Oregon Institute of Technology, Western Oregon University and Southern Oregon University
- Established an Addictions Counselor Pathway: including the development of curricula for five new courses enabling students to meet the academic requirements of the Oregon Addictions Certification Board as CADC - Certified Alcohol and Drug Counselor
- Established a Military Science Program in cooperation with the Oregon National Guard
- Proposed and piloted a Peace Studies Course in consultation with the Klamath Basin Peace Forum
- Embedded QPR - Question Persuade Refer, an empirically based suicide intervention protocol into several courses including Addiction Counseling, , Abnormal Psychology and Perspectives on Violence and Aggression

Courses Taught:

- CJA 218: Criminal Justice Perspectives of Violence and Aggression
- CJA 243: Criminal Justice Perspectives of Narcotics and Dangerous Drugs
- PSY 101: Psychology and Human Relations
- PSY 201, 202 and 203: General Psychology, I, II, and III
- PSY 214: Introduction to Personality
- PSY 220: Applied Psychology
- PSY 225 & 226 Abnormal Psychology I & II
- SOC 204, General Sociology
- CGS 100: College Survival and Success

Adjunct Faculty, 1996-1999
Chaminade University of Honolulu, Honolulu, Hawaii

Courses Taught:

- 200 level: Introduction to Juvenile Justice
- 300/400 level: Juvenile Justice and Delinquency

RELATED EXPERIENCE

Crisis Counselor, 2004 – 2008 (part-time – on-call)
Sky Lakes Medical Center (Formerly Merle West Medical Center)

Therapist, 2002 – 2005 (part-time)
Lutheran Community Services

Program Therapist, 1997 – 1999 (full-time)
Marimed Foundation, Kaneohe, Hawaii

Clinical Team Leader/Therapist 1995 – 1997 (full-time)
Waianae Coast Community Mental Health Center, Inc., Waianae, Hawaii

PROFESSIONAL PRESENTATIONS

Moving from awareness to action: a community approach towards reducing elder suicide
Oregon State University Annual Gerontology Conference (March 2008)

Elder Suicide
Sky Lakes Medical Center (September 2007)

Tuesday Blue
Host/mediator of numerous episodes of this Local Public Television Series aimed at fostering dialog and partnerships between the Klamath Falls Police & the community (2004)

ACADEMIC AWARDS and HONORS

Delta Epsilon Sigma, National Scholastic Honor Society, for Catholic Colleges and Universities

Alpha Phi Sigma, National Criminal Justice Honor Society

Pi Sigma Alpha, National Political Science Honor Society

PROFESSIONAL AFFILIATIONS

- Evaluator for the Northwest Commission on Colleges and Universities
- American Association of Suicidology
- Oregon Council of Instructional Administrators
- Oregon National Guard Association

COMMUNITY SERVICE & RELATED

- March of Dimes, 2009-current
- Children's Miracle Network, 2009-current
- Klamath Chamber of Commerce, Chamber Ambassador, 2007-2008
- U.S. Marine Corps League, member and Toys for Tots Volunteer, 2006-2008

MILITARY

Oregon Air National Guard, 1999-Present

- Commissioned as a Personnel Officer in 2004 and appointed as the Chief of Military Equal Opportunity for the 173 Fighter Wing (present assignment).
- Security Police, Sergeant (1999-to-2004)

United States Navy, 1984-1990

- Fleet Marine Force Corpsman, Honorable Discharge

Related Military Experience/Schooling

- Equal Opportunity and Employment Counselors Course
- United States Air Force: Personnel and Manpower Officer's Course
- Department of Defense: Equal Opportunity Management Institute
- United States Air Force: Security Forces/Police Academy

PROFESSIONAL REFERENCES

References available upon request