Experiences of Resident Assistants with Potentially Suicidal Students: Identification, Referral, and Expectations

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EXPERIENCES OF RESIDENT ASSISTANTS
WITH POTENTIALLY SUICIDAL STUDENTS:
IDENTIFICATION, REFERRAL, AND EXPECTATIONS

by
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B.A., May, 2000, Georgetown University
M.S., May, 2008, The University of Scranton

A Dissertation Submitted
to the Faculty of Old Dominion University
in Partial Fulfillment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY
COUNSELING

OLD DOMINION UNIVERSITY
July 2013

Approved by

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ABSTRACT

EXPERIENCES OF RESIDENT ASSISTANTS WITH POTENTIALLY SUICIDAL STUDENTS: IDENTIFICATION, REFERRAL, AND EXPECTATIONS

Katherine M. Bender
Old Dominion University, 2013
Director: Dr. Theodore P. Remley, Jr.

Resident Assistants (RAs), living on campus and tasked with advising students while keeping them safe, are in a position to identify and refer students who may be at risk for suicide or other mental health issues. This study examined RA ability to identify students at risk for suicide, RA comfort in working with students at risk for suicide, RA actions taken when working with students who may be at risk for suicide, and RA expectations for shared information about students the RAs have referred for counseling because they may be at risk for suicide. The study found that RAs report they are comfortable working with students at risk for suicide; however, the study also found that RAs’ ability to recognize students who may be at risk for suicide depends on whether or not the student has been trained to know the most critical warning signs of suicide. It was determined that RAs who had suicide prevention training and who were able to identify the most critical warning signs of suicide were more efficacious and less reluctant to work with potentially suicidal students than those who did not.

Keywords: Resident Assistants, gatekeeper, suicide prevention training
Acknowledgements

Dr. Remley: Words alone cannot express my gratitude. Without a doubt this PhD would not have been possible without you. Thank you for not being behind me throughout this process, but instead, for always being beside me. (Even from a different continent!)

Dr. Ward: Despite the miles between us, it always felt like you were in my corner!

Dr. Burnett: Your excitement about my research, given your expertise, meant the world to me.

Barb, Carole, & Amy: Your supervision, support, and friendship are a huge part of these pages and an equally huge part of my passion for mental health and higher education.

JVB: You never get enough credit. Simply stated however, without you there could never have been one (let alone three) Dr. Benders to emerge from Harvest Road. No candles need lighting, no statues need burying, no St. Anne novenas need to be said; Mimi is already a saint. Dad: The dishwasher, the armoire, and the Wawa coffees kept me going as they represented your love, affection, and support of me in even the darkest moments. I hope only to influence a quarter of the students you have in my new role as “Dr. Bender.” Eric: Expert, editor, encourager. Thank you for your patience, guidance, and use of your grade school desks. SK: Thank you for letting me see that yoga is not something just done in a studio. M&L: I am pretty sure this is the last graduation I will ask you to attend. Now…Charcoal? My beloved tutu clad training partners: Thanks for not letting me give up, even when I could not see the finish line through the pain.

My buddies at 317: Thank you for treating me like a rock star no matter what degree I have; and for reminding me of what is truly important in this world. Residents of 138 77th Street: Thanks for adopting me. No work at Easter now! Scavenger hunt!!!

Alison: From practicum to PhD, I could not have asked for anyone better to be my “person.”

THo: Your pep talk from the parking lot and your constant loyalty are inked in these pages.
Acknowledgements

STP: While this is one of the few papers you did not actually edit for me, your voicemails of encouragement and humor fueled me to continue. Maybe now I can meet your kids? KMC: Thanks for making so many trips over the bridge to support me!

To my SJ friends: a Jesuit pope, a few ordinations, and this in the same year? Not a coincidence: your prayers and faith make miracles happen. Thank you for the continued inspiration & motivation, and for your belief in me. *SP: you are an integral part of each of my degrees.

Hospitality Committee: You saved me more than you will ever know.

Bruce, Katey, and Wawa: your music, your friendship, and your Carmel coffee (respectively) consoled me in this process and continue to make me proud to be from NJ!

Bayview: never before has your beauty or your residents brought me more solace than this summer. I look forward to more sunsets with you. Chappins: extra candlelight, one tiny bikini, and the table outside were perfect for my self-imposed time out to do my last round of edits.

WPK: from classmate to editor to supervisor you continue to make me proud of the work we do.

Jason & Nathan: you are next and I have no doubt that with your minds and determination you will be able to do it and come out with a lot less debt!

Paige and Alex: I would still be staring at an SPSS output screen without you!

Finally, to my beautiful and very much loved nieces Elizabeth and Abigail: yes I am done my diskertation; yes I can play.
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CHAPTER ONE: INTRODUCTION

Background

According to the Center for Disease Control, suicide is the third leading cause of death in the United States for 10-24 year olds (CDC, 2009). One study found that over a 10-year period, the average college student suicide rate was 7.5/100,000 (Silverman, Meyer, Sloane, Raffel, & Pratt, 1997). In a more recent study published on college student suicides from 1990 through 2004, the average suicide completion rate for college students was 6.45/100,000 (Schwartz, 2006a). Additionally, the American College Health Association reported that in 2010, six percent of college students reported seriously considering suicide within the past year. Further, in the 2010 national survey of college counseling directors, 133 completed suicides were reported (Gallagher). While concerns have been made about the accuracy of completed college student suicides due to various definitions of student (full-time, part-time), location of the suicide (on-campus or off-campus; Haas et al., 2003; Schwartz, 2006; Silverman et al., 1997); and whether the data collected came from students or from university records (Westefeld & Furr, 1987), researchers have agreed that college student suicide is problematic and of concern (Hirsch, Conner, & Duberstein, 2007; Scwhartz & Friedman, 2009; Westefeld et al., 2005; Westefeld et al., 2006).

The problems associated with college student suicides are multifaceted and complex. Recent issues surrounding college student suicide have focused on liability in light of the very public tragedy of the shootings at the Virginia Polytechnic Institute and State University (Virginia Tech) and the media attention given to legal action following Elizabeth Shin’s suicide at the Massachusetts Institute of Technology (MIT; Dyer, 2008;
Pavela, 2006; Shuchman, 2007; Schwartz & Kay, 2009). Questions have arisen about the responsibility and liability of the campus community to prevent these specific deaths but also how to prevent similar future suicides. While more attention has been given to the notion of college student suicide prevention and intervention with these cases, other studies and events continue to indicate a pressing need for additional suicide prevention efforts.

In 2008, Joffe conducted a study establishing the efficacy of a suicide prevention program at one large university. In 2006, Westefeld and colleagues published a position paper entitled, “College Student Suicide: A Call to Action.” These works provided an overview and insight into the complex nature of college student suicide and offered specific tools for prevention. In addition, The Garret Lee Smith Memorial Act passed in 2004 by the United States Congress provided funding for adolescent and young adult suicide prevention programs. This Act has afforded college campuses the opportunity to channel resources into campus wide suicide prevention efforts (Goldston et al., 2010; Schwartz & Friedman, 2009). Although these programs have only surfaced within the past decade, as far back as 1999, the Surgeon General issued a “Call to Action to Prevent Suicide” which outlined specific criteria for suicide prevention programs (Davidson, Potter, & Ross, 1999).

The complexity of college student suicide is an obstacle in addressing the issue. Some university officials are reluctant to provide screening programs for students because they are concerned that the public may believe the prevention programs themselves give students the idea to attempt suicide (Haas et al., 2003). College and university officials are challenged in deciding where to invest resources and what
population to target for student suicide prevention: the suicidal individual, faculty members who may be gatekeepers, the student body as a whole, counseling center staff members, or residential life staff members. Ultimately, college counseling centers and residence life offices are two critical components of college student suicide prevention on residential college campuses (Francis, 2003; McLeon, Tercek, & Wisbey, 1985).

College counseling centers are involved with consulting faculty and staff members regarding disruptive students or students who may need counseling services (Birky, Sharkin, Marin, & Scappaticci, 1998; Lamb, 1993). The 2010 National Survey of Counseling Center Directors involved 320 participating centers that account for 2.75 million college students (Gallagher, 2010). College counseling center directors in 2010 reported working with students in personal counseling for issues ranging from career decision-making to crisis intervention (Gallagher, 2010). College and university counseling centers typically not only provide direct counseling services to individual students but many of them also serve to provide outreach services to the campus community (Reynolds & Chris, 2008). The International Association of Counseling Services (IACS; 2011) recently revised their standards for university and college counseling services. These standards state nine specific functions of college counseling centers with a focus on assisting students with personal, academic, and career issues: (1) individual and group counseling; (2) crisis intervention; (3) outreach intervention; (4) consultation intervention; (5) referral sources; (6) research; (7) program evaluation; (8) professional development, and (9) training programs.

At the forefront of supporting college and university students are Resident Assistants (RAs), typically upperclass undergraduate or graduate students whose primary
function is to assist students living in the residence halls (Boswinkel, 1986). Because RAs interact with the students living in their dormitory or on their floor on a regular basis, RAs are often in positions to refer students who need help to college counseling centers (Boswinkel, 1986; McLeon et al., 1985; Sharkin, Plageman, & Mangold, 2003; Taub & Servaty-Seib, 2011). Yet, the role of the RA is often seen as ambiguous (Boswinkel, 1986, p. 54) because students see RAs as friends or peers, but RAs also serve as official representatives of the college or university (Boswinkel, 1986; Reingle, Thombs, Osborn, Saffian, & Oltersdorf, 2010).

**Purpose of the Study**

The primary purpose of this study was to gain an understanding of RAs’ perceptions of their ability to recognize students who may be at risk for suicide, their comfort level in working with students who may be at risk for suicide, the actions they take when working with students who may be at risk for suicide, and their expectations for follow up information after they have made a referral. These perceptions and expectations were measured using a survey instrument developed for this study that was taken by current RAs at various residential institutions of higher education. The items included on the survey instrument were based on existing literature regarding warning signs of suicide. Further, items that addressed attitudes and beliefs regarding working with students who may be at risk for suicide were adapted from an instrument used in similar studies (Wyman et al., 2008). Items included on the instrument that inquired about post-referral expectations were also based on current literature regarding referrals on college campuses, an expert panel’s feedback, and my experience working at a college counseling center and as a chaplain in residence.
Significance of Study

Assisting Suicidal College Students

Some of the increased attention and focus on college student suicide by college and university officials may stem from a fear of liability. However, the primary reason and need for research on the treatment of suicidal college students has less to do with liability and has more to do with preventing death and saving lives. It is crucial to raise awareness about ways to assist suicidal college students on campuses.

Informing RA Training

Despite the fact that RAs are universally seen as people “on the front lines” (Taub & Servaty-Seib, 2011) and seen as students in prime positions to make referrals for counseling (Sharkin et al., 2003), there are no standards for RA training (Reingle et al., 2010; Taub & Servaty-Seib, 2011). Further, very few empirical studies have been conducted related to the understanding RAs might have of when and how to make referrals to college and university counseling centers (Reingle et al., 2010). The results of this study provide higher education administrators with information they can use to prepare RAs to recognize and refer potentially suicidal students in an appropriate manner. The results of this study provide administrators important information to inform RA training on mental health and suicide prevention.

Research Questions

There were five major research questions proposed for this study. The first research question was how will RAs report the following: RA efficacy in dealing with students who may be at risk for suicide; RA reluctance in dealing with students who may be at risk for suicide; RA ratings of importance of student behaviors when determining suicide risk; RA desire for follow-up information post-referral; RA level of confidence in
the college counseling center; RA actions taken when working with students who may be at risk for suicide; and RA hours of mental health and suicide prevention training? The second research question was the following: Do RA ratings of importance of student behaviors when determining suicide risk predict RA efficacy in dealing with students who may be at risk for suicide and RA reluctance in dealing with students who may be at risk for suicide? The third research question was the following: Is there a relationship between the level of confidence an RA has in the college counseling center and the actions RAs have taken when working with students who may be at risk for suicide? The fourth research question for this study was the following: Is there a significant difference between RAs who have had suicide prevention training and those who have not on indicators of (a) RA efficacy in dealing with students who may be at risk for suicide; (b) RA reluctance in dealing with students who may be at risk for suicide; (c) RA ratings of importance of student behaviors when determining suicide risk; (d) RA desire for follow up information post-referral; (e) RA level of confidence in the college counseling center; and (f) RA actions taken when working with students who may be at risk for suicide? The fifth and final research question was the following: Is there a significant difference between RAs who have had mental health training and those who have not on indicators of (a) RA efficacy in dealing with students who may be at risk for suicide; (b) RA reluctance in dealing with students who may be at risk for suicide; (c) RA ratings of importance of student behaviors when determining suicide risk; (d) RA desire for follow up information post-referral; (e) RA level of confidence in the college counseling center; and (f) RA actions taken when working with students who may be at risk for suicide?

Limitations & Delimitations
Creswell (2003) emphasized the need for researchers to clearly define a research problem before conducting any research. In order to do so, it is important for researchers to not only limit but also delimit their research problem. A delimitation will “narrow the scope of a study” (Creswell, 2003, p.148) as it is “what the researcher is not going to study” (Leedy & Ormond, 2013, p. 43). A limitation is defined as a “potential weakness of the study” (Cresswell, 2003, p. 148). This section outlines the delimitations and limitations of this study.

This study did not attempt to address general reasons students may be referred for counseling. Additionally, this study did not address any other possible referral sources on campuses (such as faculty or staff) for potentially suicidal college students. The study was limited to the referral process for potentially suicidal college students living in college or university housing to which there is an assigned resident assistant or resident advisor. Further, the study was focused solely on colleges and universities within the United States; it did not attempt to research international colleges and universities.

Limitations for the study related to participant selection and instrumentation. Participants for the study came from colleges and universities to which I had access. It is possible that the RAs from the selected universities were not representative of all RAs in the country, which limits generalizability. Further, given that the participants were asked to self-report when responding to the survey instrument items there might be limitations to the accuracy of the recorded data. Another limitation to the study was the survey instrument. Since a thorough review of the literature did not uncover an existing instrument to measure all that I wanted to measure, I created an instrument for the purpose of this study. This decision could possibly have threatened validity. However,
measures were taken to reduce validity threats and are discussed in chapter three, when the methodology is discussed.

Assumptions

For the purpose of this study, I held five basic assumptions: (1) Resident Assistants who participated in the study had met the qualifications set forth by their college or university to have the title Resident Assistant; (2) The instrument used in this study measured the constructs it was intended to measure in a valid and reliable manner; (3) Participants had post-referral expectations of the college counseling center and the student referred for counseling; (4) Participants in the study answered the survey instrument questions with honesty and accuracy; and (5) Participants in the study had limited information about the purpose of the study and therefore were not swayed by social desirability or knowledge about what the instrument measured.

Definition of Terms

The following is a list of key terms that are defined specifically for the purposes of this study.

**College or University Counseling Center:** A facility on a college or university campus staffed by trained mental health providers, which provides counseling to the student body and consulting and outreach services to the greater campus community.

**Expectations:** Desired assumed outcome.

**Gatekeeper:** A person in a position to identify another person who is in distress and may be suicidal. The gatekeeper is in a position to offer help and referral information to the distressed person or persons.
Office of Residence or Residential Life: The department on residential college campuses responsible for the recruitment, selection, training, and supervision of Resident Assistants.

Post-Referral: The time period following the verbal or written suggestion to a student to see a mental health professional at the college or university counseling center.

Referral: A verbal or written suggestion to a student to make an appointment to be seen by a professional at the college or university counseling center. A member of the campus community makes the suggestion.

Resident Assistant or Resident Advisor (RA): An individual on a residential college campus, who, through an application process, has been appointed to supervise, advise, and assist students living in a residence hall or dormitory under their assigned area. In many cases, the individual receives room and board in exchange for the service that he or she provides.

Residential college campus: An institution of higher education at which some enrolled students live on campus or in university controlled buildings close to campus.

Student Affairs: A division on college campuses, which oversees the Office of Residence Life, the counseling center, and other student support services.

Suicidal student: A student contemplating death by intentional self-inflicted injury.

Suicide: Death by intentional self-inflicted injury.

Suicide predictors: Behaviors, signs, or symptoms observed or reported that scientific literature suggests is correlated with dying by intentional self-inflicted injury.
CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Existing literature related to this study is discussed in this chapter. Literature on college student suicide, college student suicide prevention, identification and referral of people who may be at risk for suicide, mental health referrals on college campuses, the role of college counseling centers, confidentiality on college campuses, and the role of a resident assistant are reviewed in this chapter. Relevant empirical studies as well as conceptual articles are highlighted so that readers can understand the unique nature and need for the proposed study. The major topics in this section are denoted by headings. The order of the topics is based on relevance and importance to this study.

College Student Suicide

Respondents to the National Survey of College Counseling Center Directors reported 133 completed student suicides in 2010 (Gallagher). The rate of college student suicide is 6.5/100,000, which means that for every 100,000 college or university students in the United States, 6.5 kill themselves each year (Schwartz, 2006). Using data available from the Center for Disease Control, Schwartz stated that the estimated number of deaths by suicide for four-year college students is 100 times greater than the estimated number of deaths by meningitis (2006). While the college student suicide rate has decreased from earlier eras (13.4/100,000 in 1960 to 6.5/100,000 currently); college student suicide still remains an issue today. The major reason cited for this decrease is restriction of firearms on college campuses (Schwartz, 2006b).

In the 2006 American College Health Association National College Health Assessment, 28.3% of college students reported feeling so depressed that it was difficult
to function, 4,221 students reported seriously considering suicide, and 633 reported suicide attempts. It should be noted, however, that due to various reporting procedures and logistics, some researchers say that accuracy in determining a suicide rate or suicide attempt rate on college campuses is difficult (Gallagher, 2006; Haas et al., 2003).

In recent years, due to legal actions taken by families of students who completed suicide, college and university administrators have attempted to address the problem of college student suicide (Haas et al., 2003; Schwartz & Friedman, 2009). While more attention has been paid to students who may be at risk for suicide, addressing the problem of suicidal college students varies significantly by campus. Some campuses seem hesitant to intervene with suicidal students (Applebaum, 2006; Dashef, 1984; Lamberg, 2006) for fear of litigation, liability, etc. While other campuses such as the University of Illinois (Joffe, 2008), Emory University (Haas et al., 2003), and grantees of the Garret Lee Smith Memorial Suicide Prevention Program (Goldston et al., 2010) have embraced the need for suicide prevention and awareness on college campuses. More information about the difficulty of liability, over-reaction, and under-reaction to potentially suicidal college students is included later in this chapter.

**College Student Suicide Prevention**

Suicide prevention programs can take on many forms including awareness of warning signs, gatekeeper training, screenings, etc. The elements of an effective prevention program typically include information on suicide warning signs, knowing what to do when the signs are present, and being aware of local resources (Furr et al., 2001; Westefeld et al., 2006). It is important to recognize that literature suggests that counseling center staffs on college campuses are not the only ones who should be well
informed about suicide. Student affairs staff members, faculty members, resident assistants, and students themselves also need to be knowledgeable about suicide to assist in suicide prevention (Dashef, 1984; King, Vidourek, & Strader, 2008; Westefeld et al., 2006).

Obstacles to suicide prevention training clearly exist. One concern is that some people believe that talking about suicide will encourage one to attempt, contemplate, or complete suicide or will cause unnecessary distress to students (Gould et al., 2005). Some of this concern stems from media portrayal of suicides (Phillips, 1974). Phillips’ 1974 study suggested that death by suicide increased after media coverage of suicide. He cited front-page suicides (p. 341), death by suicide that was reported on the front page of popular newspapers, as a reason for increased suicides in regions where the papers were circulated. A similar study was conducted using information from newspaper coverage on suicides and suicide death rates in New York City (Gundlach & Stack, 1990). A few studies have been conducted to specifically measure whether talking about suicide increases suicidal behavior. The results indicated that distress levels and suicide risk levels are not increased after exposure to information about suicide (Gould et al., 2005; Rudd et al., 2006; Silbert & Berry, 1991). The website for the American Foundation for Suicide Prevention suggests that talking about suicide helps to protect those contemplating suicide and overall can reduce the stigma and shame so often associated with suicide and mental health concerns (https://www.afsp.org/, 2012).

Another obstacle to suicide prevention is lack of adequate financial resources. One article reported that campuses spend less than five dollars a year on prevention services (Keeling, 2002). An obstacle to the implementation of more suicide prevention
programs is the lack of data to support the efficacy and evaluation of such programs (Bean & Baber, 2011; Ciffone, 1993; Stein et al., 2010).

In 1984, The University of Illinois began a suicide prevention program called “Invite-and-Encourage” in which prevention efforts centered on training student affairs staff, faculty, and resident advisors to reach out to students who had recently either attempted suicide or threatened to attempt suicide. The idea behind the outreach was that any student who had attempted or threatened suicide would be encouraged to meet with a mental health professional. However, by October of 1984, when less than 5% of the students actually met with a mental health professional, The University of Illinois changed their suicide prevention efforts (Joffe, 2008).

The new prevention program still utilized student affairs staff, faculty, and students, but in this program the community was mandated to report any incidents of suicide threats or attempts. Members of the campus community had to complete a Suicide Incident Report Form and submit it to the Suicide Prevention Team comprised of mental health specialists and an administrative assistant. The team met on a regular basis and followed up on each incident. Only the suicide prevention team had the authority to decide whether the incident reported required mandated assessment. Typically, the student was required to attend four sessions with a qualified mental health professional on campus free of charge. Students could have waived this mandate if they saw a mental health professional in the community; however, they had to pay for that on their own. If students failed to comply by attending the sessions, they were forced to withdraw from the university because it was deemed a disciplinary infraction. While the “Invite-and-Encourage” program showed only 5% of students who had threatened or attempted
suicide met with a mental health professional, the mandated program showed that 90-95% of students who made suicide attempts or threats met with mental health professionals (Joffe, 2008). It is easy to see when a suicide was not prevented; but with the exception of the study by Joffe on the University of Illinois' suicide prevention program (2008), empirical research on the reduction of deaths by suicide as a direct result of suicide prevention programs on college campuses is limited.

More research has been conducted on the efficacy of suicide prevention programs at the secondary school level. However, most of these studies measured awareness levels and knowledge about suicide. Most prevention programs included an awareness component and the posttests show statistically significant increases in knowledge about suicide (Bean & Baber, 2011; Portzky & van Heeringen, 2006; Wyman et al., 2010). However, the University of Illinois program stands alone in terms of correlating suicide prevention program implementation and decrease in number of completed college student suicides or attempts.

There are a number of obstacles that stand in the way of college and university officials addressing the topic of suicide prevention. The next section will discuss the legal and ethical issues that can arise when college officials do not intervene or intervene too severely with potentially suicidal students.

**Identification and Referral of People who may be at Risk for Suicide**

While it is impossible to predict who will actually attempt or complete suicide, literature suggests certain warning signs of suicide exist. With suicide prevention as a primary goal, many studies have focused on the risk factors and predictors of college student suicide or suicidal ideation. Events or behaviors that have an empirical
relationship to students contemplating suicide include the following: academic/grade problems (Drum, Brownson, Burton-Denmark, & Smith, 2009; Furr, Westefeld, McConnell, & Jenkins, 2001; Westefeld & Furr, 1987); assault (Stephenson, Pena-Shaff, & Quirk, 2006); depression (Konick & Gutierrez, 2005; Westefeld et al., 2006; Westefeld & Furr, 1987); problems with friends (Drum et al., 2009); previous attempt (Joffe, 2008); helplessness (Furr et al., 2001; Westefeld et al., 2006; Westefeld & Furr, 1987); hopelessness (Furr et al., 2001; Gutierrez, Osman, Kopper, Barrios, & Bagge, 2000; Konick & Gutierrez, 2005; Westefeld et al., 2006; Westefeld & Furr, 1987); interpersonal aggression/hostility (Gutierrez et al., 2000; Stephenson et al., 2006); loneliness (Furr et al., 2001; Westefeld & Furr, 1987); financial problems (Drum et al., 2009; Furr et al., 2001; Westefeld & Furr, 1987); negative life events (Konick & Gutierrez, 2005); parental/family problems (Drum et al., 2009; Furr et al., 2001; Konick & Gutierrez, 2005; Westefeld & Furr, 1987); romantic relationship problems (Drum et al., 2009; Furr et al., 2001; Westefeld & Furr, 1987); sexual assault (Drum et al., 2009; Stephenson et al., 2006); and substance/alcohol abuse (Drum et al., 2009; Stephenson et al., 2006; Westefeld et al., 2006).

Remley and Herlihy (2010) have provided information and guidelines related to ethical and legal issues related to suicidal clients. They stated that mental health professionals have both ethical and legal obligations to know the warning signs of suicide, to use the warning signs of suicide to assist in accurately assessing clients for suicide lethality, and to take action if they determine a client may be at risk for attempting or completing suicide. In cases in which mental health professionals assess that a client may be at risk for suicide, then professionals must ensure the client is
evaluated to determine whether the client is, in fact, at risk. If mental health professionals fail to recognize the signs of suicide, do not conduct an assessment, or do not properly refer clients who may be at risk for suicide; then professionals most likely will have violated both ethical and legal standards.

On the other hand, it is possible that a mental health professional may over-react to possible suicide warning signs. In these situations, it is possible that if mental health professionals overreact and inappropriately break client confidentiality and consult with a friend or loved one without the client’s written permission, such an action could not only have a negative impact on the helping relationship but could also be considered an ethical or legal violation (Remley & Herlihy, 2010). While the warning signs, assessment, and referral of clients who are potentially suicidal is a complex process for mental health professionals, when applied to the collegiate environment another level of complexity is added, as noted below in the legal actions that have taken place as a result of suicides on college campuses.

Both under-reacting and over-reacting to potentially suicidal college students has proven to end in tragedy and lawsuit for colleges and universities. Some argued that under-reaction to Seung-Hui Cho’s behaviors at Virginia Tech, which included becoming intoxicated at a party and using a hunting knife to stab a carpet as well as writing essays about death, led to the eventual murder of 32 members of that community and to Cho’s own death by suicide (McAnaney, 2008). The parents of Elizabeth Shin believed that under-reaction by Massachusetts Institute of Technology (MIT) officials to Elizabeth’s reported self-injurious behavior by other students and to her suicide note received by
university officials the day of her death by suicide resulted in her death (Dyer, 2008; McAnaney, 2008).

On the other hand, Anne Giedinghagen, a Cornell University student and Joshua Nott, a George Washington University student, felt that forced dismissal from their respective universities when they reported depressive symptoms and possible suicidal thoughts was unfair and discriminatory (McAnaney, 2008). Each of the university officials from these universities, Virginia Tech, MIT, Cornell, and George Washington, faced publicized criticism as well as legal action (McAnaney, 2008). At Virginia Tech and MIT, officials were criticized for under reacting, while at Cornell and George Washington officials were accused of over reacting.

University officials are in a difficult and perhaps conflicted position. On a list-serve for the American College Counseling Association, a member solicited input from the group on college/university policies regarding suicidal students. Specifically she asked about who should be notified about a student’s suicidality, who is responsible for proper assessment, and what follow up treatment should be given (DeSouza, ACCA-L, September 5, 2012). No college or university official wants to see a repeat tragedy of the Virginia Tech shootings, nor do they want to see a student die by suicide on campus. However, they might be fearful that if they force a student to withdraw from a university they will face violations of the Americans with Disabilities Act (ADA), 42 U.S.C. § 12101 et seq. or if they reveal information to the student’s parents that they will be found in violation of the Family Educational Rights and Privacy Act of 1974 (FERPA) (http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html). Knowing the best and safest practices for students who may be suicidal on college campuses is very important.
Recent history has proven that both over and under reacting can end in trauma, tragedy, and litigation.

One month before the Virginia Tech tragedy, a Virginia bill was signed which prevented colleges and universities from discriminating against students with a history of suicide or with a suicidal threat (McAnaney, 2008). One might hope that a law such as this would encourage students wrestling with suicidal thoughts to disclose their thoughts to someone so that they may get the professional help they need. However, what happens once a student makes these thoughts known? The referral process is also complex.

At Virginia Tech, Cho was referred to the college counseling center. At MIT, Elizabeth Shin was referred to the dean. But what happens once a referral has been made when a campus community member is concerned that a student may be at risk for suicide? For mental health professionals, it is important that documentation of any consultation or supervision with colleagues is made and there are other steps that need to be taken to ensure the safety of the client and of others (Remley & Herlihy, 2010). Ultimately, involvement of a client’s loved one and or medical assistance is usually required when the assessment that the person may be at risk for suicide is made. However, a mental health professional cannot simply make a referral and walk away. Continued contact with that client is necessary on a therapeutic as well as a legal and ethical level. College counseling centers are staffed by mental health professionals who are thus placed in a difficult position when it comes to upholding confidentiality and privacy laws but also working as part of a community.

Mental Health Referrals on College Campuses
In order to make effective referrals faculty, staff, and students need to be aware of the counseling services available on campus. Some studies showed a disparity between knowledge of the services and utilization of the services. For example, one study reported that 91% of faculty and staff made referrals to the counseling center and 93% of the students were aware of the services. However, the same study reported that very few of the students reported they had ever been referred for counseling services (Fletcher, Bryden, Schneider, Dawson, & Vandermeer, 2007). A similar study reported that 44% of the faculty had in the past referred students to the college counseling center, but only 15% of the students reported having used the services (Brown & Chambers, 1986). While one study showed that 86% of students were aware of the counseling services available and 42% used counseling services (Neal & Heppner, 1986), another study found that only 6% of the students surveyed utilized services (Harrar, Affsprung, & Long, 2010).

Often the percentage of students who reported an awareness of the services was higher than the reported utilization of services. Another important finding is that students reported knowing that the counseling center existed, but reported not understanding what services were available (Kahn, Wood, & Wiesen, 1999). One study even found that students would not refer other students for counseling for fear that the student being referred would get into trouble (Sharkin et al., 2003). Further, the percentage of students who reported that they were not aware of counseling services available for suicidal students ranged from 26% (Westefeld et al., 2005) to 71% (King, Vidourek, & Strader, 2008).
In order to meet the standards of the International Association of Counseling Services (IACS), which is the accrediting body for college and university counseling centers, and to be an integral and important part of the campus community, it is necessary for counseling centers to make their services known to faculty members (Nolan, Pace, Iannelli, Palma, & Palkans, 2006), staff members, and students. This will help to ensure that distressed students are appropriately referred and get the treatment they need.

**Role of College and University Counseling Centers**

When referrals are made on college campuses for students who appear to be distressed, typically the referral is to the college or university counseling center (Jobes, Jacoby, Cimbolic, & Hustead, 1997; Meilman & Pattis, 1994). The role of college and university counseling centers has changed over the years (Bishop, 1990; Kitzrow, 2003; Schwartz, 2009; Sharkin, 1997). The International Association of Counseling Services (IACS), which sets forth standards even for those counseling centers which are not accredited, has played a large part in outlining the responsibilities and duties of college and university counseling centers. In 2010, IACS not only revised their standards but they also emphasized some of the previous standards.

There are six major topics covered by the IACS standards: relationship of the counseling center to the university community; counseling services roles and functions; ethical standards; counseling service personnel; related guidelines; and special concerns. Within each of these six topics, specifics regarding the role of the center, the counseling staff, the administrative staff, information sharing between the counseling center and other departments on campus, and privacy rights of students are highlighted. Of
particular interest are the IACS standards on the counseling center relationship with the university community, the counseling services roles and functions, and ethical standards.

In terms of the relationship between the counseling center and the university community it is clear that the counseling center needs to be in a position of "administrative independence" in which the staff are not expected to "be responsible for admissions, disciplinary, curricular, or other administrative decisions involving students" (IACS, 2011, p. 164). Further, the standards clearly state that there is to be open communication between the counseling center and the rest of the community to enhance and enable "referral and consultation" (IACS, 2011, p. 165).

The collaborative relationship between the counseling center and the university community is further outlined in the roles and functions of counseling services which include "(1) provide counseling to students experiencing personal adjustment, vocational, developmental and/or psychological problems that require professional attention; (2) play a preventive role assisting students in identifying and learning skills which will assist them to effectively meet their educational and life goals; (3) support and enhance the healthy growth and development of students through consultation and outreach to the campus community; and (4) play a role in contributing to campus safety" (IACS, 2011, p. 166).

The IACS standards suggest that counseling services staff members have the ability to consult legal counsel when necessary and that the counseling service staff will be very aware of legal issues. Further, emphasis is placed on the "confidential nature of the counseling relationship" (p.170) and therefore only with consent from the student/client or under those exceptions made by law can the counseling center staff
share information that would otherwise be confidential. It is noted however that when the student/client is a clear danger to self or others, confidentiality must be broken and the counseling center staff has an obligation to inform pertinent campus officials (IACS, 2011, p. 170-171).

While the policy, the law, and the ethical standards are clear, surprisingly few college counseling centers have a policy on suicidal students. In a 1987 study, only 22% of college counseling center directors reported a specific protocol for dealing with suicidal students. Even a study conducted much later in 2003 found there was still “limited information available on the prevalence of formal policies regarding suicidal students on college and university campuses” (Francis, 2003, p. 114). However, as was mentioned in a previous section of this chapter, tragedies within the past 10-12 years have heightened awareness about the need for college counseling centers and college administrators to create policies to deal appropriately, effectively, ethically, and safely with suicidal students.

Confidentiality on Campus

College counseling center staff members are often placed in positions in which not only the IACS standards on information sharing, but also the laws and ethics surrounding mental health, may be violated. In Gallaher’s 2010 National Survey of College Counseling Center Directors, the following was reported:

59% of directors report that because of recent tragedies on college campuses they have experienced increased pressure to share their concerns about troubled students who might pose a risk to others even if not to a specific person. Because of this reality, 49% of directors report that they are more likely to ask such
students for permission to contact parents, residence life staff or higher level administration about their concern...and 9% will express their concerns to students and alert appropriate others, even without the student’s permission (p. 8).

Further, 20% of the counseling center directors reported they had given warnings about students who may be a danger to others.

While college counseling center directors report the above statistics, Sharkin (1995), who served as a psychologist at a university counseling center, has published a number of articles on the “strains on confidentiality” in college counseling centers. In one article (Sharkin, 1995), he suggested that the counseling center include in the informed consent a few lines that ask students to report if they have been referred by a member of the campus community, to name that member of the campus community who referred the student, and to agree to allow the counseling staff member acknowledge to the campus referral source that the student had an appointment. While this is not typical practice for the counseling professional, Sharkin purposed that sometimes it might be best for the campus community to relax some of the normally strict confidentiality rules in the name of maintaining a safe and communal campus (Sharkin, 1995). Echoing Sharkin’s sentiment, a 2008 article published in the Chronicle of Higher Education stated that the United States Department of Education is offering colleges and universities some flexibility in privacy laws, particularly when it comes to FERPA. Again the notion behind these relaxed rules is not to disregard confidentiality and privacy but rather to understand the confidentiality and privacy of the student while adhering to maintaining a safe campus.
In another article published in 1995, Sharkin and his colleagues (Sharkin, Scappaticci, & Birky, 1995) conducted research on expectations of referral sources and access to confidential information. A total of 88% of resident assistants, 84% of student affair professionals, and 89% of faculty members who made a referral to the college counseling center reported they should be given access to confidential information (1995). This suggests that it may be important for lines of communication between referral sources and the college counseling center to be more open than in other more stringent clinical settings. In a follow up exploratory study, researchers found that faculty members who hypothetically made referrals to the counseling center and were not given any information about the student post referral reported feelings of "anger, confusion, and disgust" (Birky, Sharkin, Marin, & Scappaticci, 1998, p. 180). While it should be noted that the faculty members did not state that lack of information shared by the counseling center post-referral would influence future referrals it is still important to note the negative emotions. This study contributes further to an understanding of the post-referral expectations by resident assistants, a campus community that is often faced with students in distress.

**Role of the Resident Assistant**

Resident assistants or resident advisors (RAs) are present on most college and university campuses that offer on-campus housing for enrolled students (Bowman & Bowman, 1995; Carns, Carns, & Wright, 1993; Reingle, Thombs, Osborn, Saffian, & Oltersdorf, 2010). Often undergraduate juniors or seniors or graduate students are provided with free room and board in exchange for their roles as RAs that requires them to live in the residence halls and advise undergraduate students. RAs live in rooms or
apartments provided by the institution and often receive a stipend for food or a meal plan as well. On most campuses that utilize RAs the system to become an RA is similar: one attends an information session, applies for the position, interviews for the position, and if accepted, commits to attending an intense training session that is usually a week long or more before the university year officially begins. A committee from the Office of Resident or Residential Life on these campuses selects RAs and that department is part of the division of student affairs. As with most jobs, the applicants for the RA position are usually asked to provide letters of recommendation or to list available references. The application, recommendation, interview, and training process for the RAs is supposed to ensure that responsible and capable undergraduate or graduate students are selected for the position because of all that is expected and required of an RA (Bowman & Bowman, 1995).

Resident assistants’ primary function is to provide assistance to and ensure the safety of the residents/students that live within the geographic area to which they have been assigned (Blimling, 2010; Elleven et al., 2001; Van Brunt & Ebbeling, 2009). Providing assistance and ensuring safety involves tasks that range from making sure that each resident follows fire safety codes in their individual living area to providing comfort to a resident who may be depressed. The RA position is a difficult one because there are so many roles the RA must play: disciplinarian, counselor, mentor, crisis worker, student, conflict resolution worker, representative of the university, and referral source (Blimling, 2010; Deluga & Winters, 1990; Deluga & Winters 1991; Hardy & Dodd, 1998; Paladino, Murray Jr., Newgent, & Gohn, 2005). The ambiguity and ever changing role of RAs leads not just to role conflict but also burnout for RAs (Blimling, 2010; Hardy & Dodd,
If the RAs are properly trained then there is less burnout and less stress (Elleven et al., 2001; Murray, Snider, & Midkiff Jr., 1999; Servaty-Seib & Taub, 2008; Van Brunt & Ebbeling, 2009). In some instances, legal action has been taken in cases in which RAs were deemed to not have been trained properly to fulfill the role expected of them (Dyer, 2008; Kaplin & Lee, 1995).

While most institutions of higher education can agree that resident assistants need training to effectively perform their jobs, no universal training standards currently exist for RAs (Bowman & Bowman, 1995; Elleven et al., 2001; Reingle et al., 2010). Suggestions and best practices for resident assistant training exist in the professional literature but there are no national training standards. Further, little empirical evidence exists to show the effectiveness of the RA training that does take place. If higher education administrators and student affairs professionals agree that the role of the resident assistant is to “be on the frontline” (Taub & Servaty-Seib, 2011; Van Brunt & Ebbeling, 2009), to “be the eyes and ears of the campus” (Van Brunt & Ebbeling, 2009), and to be held to such a standard that they may even be found liable for not performing their job properly; it seems incongruous to not adopt standards and procedures for the trainings that take place. While the Council for Advancement of Standards of Higher Education (CAS, 2012) has suggested that student affairs divisions adopt standards, and have standards for Housing and residential life programs (http://www.cas.edu/), studies show that few universities do actually adopt or implement these standards (Arminio & Gochenauer, 2004). Further, no one monitors whether or not the standards are upheld.

This study is related to the training that resident assistants receive on the mental health needs of college students and more specifically training on suicide prevention.
Interestingly, only 60.5% of institutions involved in a study of RA training programs reported suicide as an area included in their training (Bowman & Bowman, 1985). The literature is clear that resident assistants serve as counselors and that residents/students in distress often turn to a resident assistant (Blimling, 2010; Elleven et al., 2001; Paladino et al., 2005; Servaty-Seib & Taub, 2008; Schuh, Shipton, & Edman, 1986). One study from 25 years ago reported that 43% of female RAs reported dealing with a suicide threat and 9% reported dealing with a suicide (Schuh et al., 1986).

It is expected that resident assistants will know when it is appropriate or necessary to refer the student for professional counseling at the counseling center on campus (Boswinkel, 1986; Sharkin, Plageman, & Mangold, 2003; Taub & Seraty-Seib, 2011). However, to date, very few studies have been published to report whether RAs know when it is appropriate to refer students for mental health concerns, whether RAs know how to make the referral for mental health concerns, if RAs actually do make referrals for mental health concerns, and what happens after the mental health referral has been made (Reingle et al., 2010).

Reingle et al. (2010) conducted a study on RAs making referrals for students who may need assistance with alcohol related concerns, but did not address mental health referrals or making referrals for students who may be at risk for suicide. In 2009, Tompkins and Witt published a study that was conducted on RAs and the short term effect of suicide prevention training. In this study, RAs were trained using the QPR (Question, Persuade, and Refer) gatekeeper training program. In a pre-test, post-test design, RAs were asked to recall information from the training and to report on levels of efficacy and reluctance in dealing with students who may be suicidal. While the results
indicate that the training was effective, the study did not measure the impact of the training on RAs making referrals to the college counseling center.

In 2013 Taub et al. published a study conducted on RAs and the impact of suicide prevention training. This study measured the communication skills and suicide knowledge. However, that study did not examine RAs making referrals or actions taken when a student at risk for suicide was identified.

**Literature Summary**

This chapter has provided a review of the literature relevant to the topic of college student suicide, particularly as it pertains to prevention efforts and the role of RAs. To thoroughly understand the complexity of the problem of college student suicide, the following topics were discussed: past and current suicide prevention efforts, identification and referral processes for students at risk for suicide, legal and ethical issues faced by colleges when working with suicidal students, and maintaining confidentiality on campus while working with students at risk for suicide. This study examined the relationship between RA knowledge of suicide warning signs; RA efficacy in dealing with residents who may be at risk for suicide; RA reluctance in dealing with students who may be at risk for suicide; RA level of experience referring residents who may be at risk for suicide; RA desire for follow-up information post-referral; and RA level of confidence in the college counseling center. The contributions of this study to the extremely limited body of empirical research include an analysis on RAs reported efficacy and reluctance in working with students at risk for suicide, as well as an analysis of RA referrals to the college counseling center and expectations for information from both the counseling center as well as the student referred for counseling.
CHAPTER THREE

METHODOLOGY

The primary purpose of this study was to gain an understanding of Resident Assistants’ (RAs’) perceptions of their comfort level in working with students who may be at risk for suicide, Resident Assistants’ ability to recognize students who may be at risk for suicide, and the actions Resident Assistants take when working with students who may be at risk for suicide. The secondary purpose of this study was to clarify RA expectations for follow up information after they have made a referral. A third purpose of the study was to determine whether or not Resident Assistants’ experiences after making a referral to the college counseling center influence RA actions when dealing with a student at risk for suicide. A fourth and final purpose of this study was to see what training in suicide prevention or mental health issues RAs have had. For the purposes of this study, a survey instrument partly created by me and validated by an expert panel and partly adapted from an instrument used in similar studies was used to gather information.

Research Design

A non-experimental survey research design approach was used for this research study. The instrument used in the study was created for use in the study. The instruments’ development and psychometric properties are discussed later in this chapter.

Research Questions

Below are the five research questions the study attempted to answer.

RQ1: How will RAs report the following: RA efficacy in dealing with students who may be at risk for suicide; RA reluctance in dealing with students who may be at risk for suicide; RA ratings of importance of student behaviors when determining suicide risk;
RA desire for follow-up information post-referral; RA level of confidence in the college counseling center; RA actions taken when working with students who may be at risk for suicide; and RA hours of mental health or suicide prevention training?

**RQ2:** Do RA beliefs about suicide indicators predict RA efficacy in dealing with students who may be at risk for suicide and RA reluctance in dealing with students who may be at risk for suicide?

**RQ3:** Is there a relationship between the level of confidence an RA has in the college counseling center and RA actions taken when working with students who may be at risk for suicide?

**RQ4:** Is there a significant difference between RAs who have had suicide prevention training and those who have not on the following indicators:

a. RA efficacy in dealing with students who may be at risk for suicide?

b. RA reluctance in dealing with students who may be at risk for suicide?

c. RA ratings of importance of student behaviors when determining suicide risk?

d. RA desire for follow up information post-referral?

e. RA level of confidence in the college counseling center?

f. RA actions taken when working with students who may be at risk for suicide?

**RQ5:** Is there a significant difference between RAs who have had mental health training and those who have not on the following indicators:

a. RA efficacy in dealing with students who may be at risk for suicide?

b. RA reluctance in dealing with students who may be at risk for suicide?

c. RA ratings of importance of student behaviors when determining suicide risk?

d. RA desire for follow up information post-referral?
e. RA level of confidence in the college counseling center?

f. RA actions taken when working with students who may be at risk for suicide?

**Hypotheses**

Hypotheses are provided for each of the above research questions.

**H01A:** RAs will report varying degrees of efficacy in dealing with students who may be at risk for suicide.

**H01B:** RAs will report varying degrees of reluctance in dealing with students who may be at risk for suicide.

**H01C:** RAs will report varying degrees of importance of student behaviors when determining suicide risk.

**H01D:** RAs will report varying levels of desire for follow up information from (a) college counseling centers, and (b) residents after referring a resident who may be at risk for suicide.

**H01E:** RAs will report varying degrees of confidence in the college counseling center as a place to refer residents who may be at risk for suicide.

**H01F:** RAs will report varying levels of actions taken when working with students who may be at risk for suicide.

**H01G:** RAs will report varying levels of training in suicide prevention.

**H01H:** RAs will report varying levels of training in mental health issues.

**H02:** RA rating of importance of student behaviors when determining suicide risk will not predict RA efficacy in dealing with students who may be at risk for suicide and RA reluctance in dealing with students who may be at risk for suicide.
**H₀₃**: The level of confidence an RA has in the college counseling center has no relationship to RA actions taken when working with students who may be at risk for suicide.

**H₀₄A**: There is no significant difference between RAs who have had suicide prevention training and those who have not on RA efficacy in dealing with students who may be at risk for suicide.

**H₀₄B**: There is no significant difference between RAs who have had suicide prevention training and those who have not on RA reluctance in dealing with students who may be at risk for suicide.

**H₀₄C**: There is no significant difference between RAs who have had suicide prevention training and those who have not on RA ratings of importance of student behaviors when determining suicide risk.

**H₀₄D**: There is no significant difference between RAs who have had suicide prevention training and those who have not on RA desire for follow-up information post-referral.

**H₀₄E**: There is no significant difference between RAs who have had suicide prevention training and those who have not on RA level of confidence in the college counseling center.

**H₀₄F**: There is no significant difference between RAs who have had suicide prevention training and those who have not on RA actions taken when working with students who may be at risk for suicide.

**H₀₅A**: There is no significant difference between RAs who have had mental health training and those who have not on RA efficacy in dealing with students who may be at risk for suicide.
H₀5B: There is no significant difference between RAs who have had mental health training and those who have not on RA reluctance in dealing with students who may be at risk for suicide.

H₀5C: There is no significant difference between RAs who have had mental health training and those who have not on RA ratings of importance of student behaviors when determining suicide risk.

H₀5D: There is no significant difference between RAs who have had mental health training and those who have not on RA desire for follow-up information post-referral.

H₀5E: There is no significant difference between RAs who have had mental health training and those who have not on RA level of confidence in the college counseling center.

H₀5F: There is no significant difference between RAs who have had mental health training and those who have not on RA actions taken when working with students who may be at risk for suicide

Participants

The participants for this exploratory study were RAs from five universities. These universities were selected based on ease of access resulting from pre-existing relationships with me (previous places of employment or having a personal or professional connection with current administrators at the universities). In addition, these institutions were chosen to try to increase sample size and to diversify demographics to make the results more generalizable. RAs from various regions of the United States participated in this study. Community colleges and colleges that do not offer on-campus
housing were not considered. All of the participating universities were private and four of the five universities were Catholic.

Administrators in student affairs departments at the respective institutions were asked if they would be willing to provide their RAs an opportunity to participate in a research project aimed at gathering information about RA understanding of the mental health needs of college students. In exchange for their participation, I offered to provide either (1) a psycho-educational presentation for the RAs on mental health concerns of college students and warning signs that a student needs to be referred for mental health treatment or (2) another psycho-educational presentation of the university’s choice. While the presentation component was mandatory for the RA, participation in the study was voluntary. To minimize validity threats, only after the instrument was administered did the presentations begin. An 80% response rate was expected based on these proposed procedures. The actual response rate was 90.4%.

The total number of participants required, by following Cohen’s (1992) suggestions for a medium effect size, for linear regression, assuming a power of .80 and \( p = .05 \), was a sample size of at least 107 participants to achieve adequate statistical power. An invitation to participate was extended to all RAs from the selected universities. The invitations generated a total of 303 completed surveys, and 265 useable surveys, thus meeting the minimum requirement. A pilot study was conducted on 34 RAs who were excluded from the final data. Protection of the RA privacy is discussed in the procedures section.

Instrument
Before the participants completed the instrument, they were given a cover letter (Appendix A) to explain the nature of the research as well as to inform the participants of Institutional Review Board approval. The survey instrument used in this study (Appendix B) included seven sections.

Section one of the survey instrument consisted of items related to the RA perceived efficacy in dealing with residents who may be at risk for suicide. Section two consisted of items related to the RA perceived reluctance in dealing with residents who may be at risk for suicide. Section three consisted of items connected to behaviors exhibited by potentially suicidal students. Section four consisted of items regarding RA desire for follow-up information post-referral. Section five consisted of items regarding RA attitudes about the college counseling center. Section six included a list of potential actions RAs have taken when working with potentially suicidal students. Section seven consisted of demographic items about the RA, including major and number of months as an RA. Additional details, including scoring procedures, are provided below for each section of the instrument.

**Section I: RA efficacy in dealing with residents who may be at risk for suicide**

This section of the instrument was adapted from a gatekeeper training instrument created by Wyman et al. (2008) that has been used with similar studies. Items in this section related to RA perceptions of their abilities to work with students at risk for suicide. RAs were asked to rate their level of agreement with each statement using a 4 point Likert rating scale 1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree. An example of a statement is, “I can recognize students contemplating suicide by the way they behave.” Higher scores indicate a higher level of efficacy, items (4, 6, &7) were
reverse scored. RA responses for each item are reported in chapter 4, and an overall efficacy scale score is reported as well.

**Section II: RA reluctance in dealing with residents who may be at risk for suicide**

This section of the instrument was adapted from a gatekeeper training instrument created by Wyman et al. (2008) that has been used with similar studies. Items in this section related to RA perceptions of their abilities to work with students at risk for suicide. RAs were asked to rate their level of agreement with each statement using a 4 point Likert rating scale 1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree. An example of a statement is, “Resident Advisors should not discuss suicide with students.” Higher scores indicated a higher level of reluctance. Items 6 and 8 were reverse scored. RA responses for each item are reported in chapter 4 as well as an overall reluctance scale score.

**Section III: Student Behaviors**

This section included a list of possible student behaviors that RAs might observe. The behaviors listed consisted primarily of behaviors that professional literature indicates are consistent with behaviors of people at risk for suicide. RAs were asked to rate the importance of each behavior as an indicator that a resident/student might be at risk for suicide. RAs rated each behavior with a 4 point Likert rating scale 1=not important; 2=somewhat important; 3=quite important; 4=extremely important. An example of a behavior is, “Student exhibits poor hygiene.” Additionally, this section included some behaviors that are not indicative of potentially suicidal people. RA responses were compared with the ratings of the expert panel used in this study and that process is described in a later section of this chapter.
Section IV: Expectations for follow-up information

The items in this section were selected based on input from an expert panel, my personal experience of working in the resident halls, and my personal experience working in a college counseling center. This section included a list of possible desired outcomes from an RA of both the counseling center staff and the resident, after referring a student. RAs were asked to rate their level of agreement with each potential outcome. Because some of the listed desired outcomes are not possible based on current confidentiality laws, each outcome was prefaced with the word ideally. An example of an item from this section is, “Ideally, I would like the counseling center staff to tell me if the student I referred for counseling attended a session at the counseling center,” 1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree.

It is important to note that there were two subscales in this section, as items 1 through 6 measured desire for information from the counseling center staff, while items 7 through 10 measured desire for information from the resident/student referred. Higher scores indicated RAs had higher expectations for follow-up information after making a referral.

Section V: RA confidence in the college counseling center

This section of the survey instrument asked RAs about their attitudes, beliefs, and experiences with the counseling center when they have referred a potentially suicidal student there. An example of a statement is, “I have confidence that the college counseling center will help potentially suicidal residents who have been referred there.” Participants were asked to rate items from 1, indicating strongly disagree, to 4, indicating strongly agree about their experiences when they have made referrals to the college
counseling center. Higher scores indicated RAs had a greater level of confidence in the college counseling center as a referral resource for residents who may be at risk for suicide.

Section VI: Actions taken by RAs when working with students at risk for suicide

In this section, RAs were asked to report the number of times they have taken the listed action when they developed a concern that a resident was at risk for suicide. There were 13 possible actions listed with an optional 14th item titled other. The list of options was created based on literature and best practices for working with suicidal students. An example is, “Called the police.” The responses are forced choices: N/A, 0 times, 1 time, 2 times, or 3 or more times. Higher scores indicated that the RA has not only had an incident working with suicidal students, but also higher scores indicated greater variety among RAs in actions taken when students are at risk for suicide.

Section VII: Demographic Information

In this section, participants were asked to report information about themselves including their age, sex, ethnicity, year in college, program of study, number of months as an RA, and extent of their mental health training. Most of this information was used to describe the participants for generalization purposes. However, two of the research questions for the study addressed whether there is a difference between RAs who have had mental health training or suicide prevention training and those who have not. To measure the possible impact of such training on indicators that include RA comfort level regarding working with students at risk for suicide, RA expectation of shared information after referring a student at risk for suicide, and RA actions taken when working with students at risk for suicide, it was important to learn about the type of training RAs have
had. An additional item in this section was an open-ended question asking RAs to comment about their experience working with students at risk for suicide. Information gained from that particular question was recorded and coded and is included at the end of chapter four.

Scoring applied to only two of the nine items in the demographic section. Scoring is used for items one and two only: respectively, “Have you had any suicide prevention training?” and “Have you had any general mental health training?” A response of NO earned one point and a response of YES, without specifying number of hours, earned two points, a response of YES that listed the number of hours of training received a score equivalent to the number of hours given.

**Item Generation and Content Validation**

A thorough review of the literature on the topic did not produce an existing instrument suitable to measure the areas of interest in this study. Therefore, I created an instrument for the proposed study based on current literature and adapted two sections from a related gatekeeper instrument. When utilizing an instrument for measurement, it is important to establish solid psychometric properties to minimize threats to validity and reliability of the study. Therefore, necessary steps were taken to ensure validity of the instrument (Leedy & Ormond, 2010).

There were seven sections total for the instrument. The first two sections, which measured RA efficacy and RA reluctance (described in detail above), were adapted from an instrument created for and used on measuring the impact of suicide prevention training on gatekeepers (Wyman et al., 2008). Some items for these sections were kept exactly the same and some were added. The items for the remaining five sections of the instrument
were developed using current literature on the topics of suicide prevention, peer
counseling interventions, the American College Counseling Association’s practices and
interventions for suicidal students, as well as my personal experience living in residence
halls in an advisory role and serving as a counselor at a college counseling center. Once
the initial instrument was created, to establish validity, the instrument was sent to an
expert panel for review.

The expert panel was comprised of five mental health professionals at the doctoral
level with expertise in the mental health needs of college students, particularly with
suicidal college students. The experts had both teaching and direct clinical experience in
the area of college counseling and/or suicide prevention. One of the experts helped to
develop and run a suicide training program on university campuses. The panel also
included one psychiatrist with experience as an RA and a specialty in both adolescent and
adult psychiatry as well as experience with suicidal clients. The panel members were
asked via electronic communication to provide overall feedback on the instrument.
Further, they were asked to comment on the appropriateness of each item on the
instrument. They were also asked to provide suggestions for additional items or thoughts
on items to delete. Based on the feedback from the panel and discussion with dissertation
committee members, the instrument was revised and adapted. Input from the expert
panel helped establish content validity.

Of particular importance to the instrument development were some of the
suggestions that the expert panel made. Originally, section one of the instrument was the
section on behaviors, which included 40 items. Expert panelists recommended altering
the order of the sections to include some of the shorter sections first to prevent participant
fatigue and to facilitate the likelihood of students completing the instrument. Further, section four, which included items asking about RA expectations for information from either the counseling center or the student referred for counseling included items that, under current confidentiality laws for mental health professionals, are not permitted. However, since the purpose of this section was to try to understand what RAs expect after making a referral to the counseling center, one of the experts suggested including the word *ideally* before the item so as not to confuse students about the confidentiality laws. Additional changes included those in section six, which was the section that asked RAs which actions they have taken when they have identified a student at risk for suicide. This section was altered to include a place for students to write in another action they may have taken but was not listed.

Finally, an important contribution from the expert panelists for the survey instrument came from their rankings of the importance of behaviors demonstrated by students that might indicate that the student is at risk for suicide. The experts were asked to complete this portion of the instrument in their role as mental health expert, and each expert returned their responses/ratings of importance for each of the behaviors. Once all 5 of the expert panelists completed this process, individual responses were recorded and averaged item by item. Contact was made with one expert who did not choose an exact number for a few items but rather circled the space between two numbers. That panelist was asked to choose a specific whole number. A few of the experts made notes on the behaviors, which helped me understand their scores. For example item #10, “Student is involved in an intermural sports team,” some experts rated as quite important while the majority rated it as not important. Experts explained that they examined this item as a
protective factor. This explanation informed me regarding how to instruct participants when completing this section of the RA survey instrument. To this end, participants were instructed as follows, “You are trying to decide whether a particular student/resident is at risk for suicide. To what degree do you believe the following behaviors are important as indicators that a student/resident is at risk for suicide?”

Once the expert scores were recorded, compared, and averaged, an item was assigned an expert score. Scores for items that had 100% consensus from the experts were easily assigned the score the experts agreed upon. Scores of items that did not have a 100% consensus were averaged, and those averaged scores were then rounded (up or down) to the nearest whole number score.

Once the instrument was reviewed, it was used in a pilot study of 34 RAs who were then excluded from the final study. Data collected from the pilot study was analyzed. Specifically reliability tests were conducted. Cronbach’s alpha for the total items on the instrument was high ($\alpha = .909$). Reliability for each section is as follows: Efficacy, nine items, ($\alpha = .687$); Reluctance, 9 items, ($\alpha = .455$); Behaviors, 40 items, ($\alpha = .949$); Expectations, 10 items, ($\alpha = .846$); Confidence, 5 items, ($\alpha = .606$); Actions, 14 items, ($\alpha = .856$). These steps helped to determine the appropriateness of the items on the instrument. Based on the pilot study feedback, some adjustments to the instrument were made. For example, in section six, a not applicable (N/A) response was added for each item so that students who had not ever dealt with a student at risk for suicide were not forced to circle “0” thus potentially skewing the data. Also, some items were altered to support gender inclusive language. The finalized version used in the study is included in Appendix B.
Procedures

The methods and procedures of the proposed study were reviewed and approved by Old Dominion University’s Institutional Review Board (IRB). Student Affairs administrators at colleges and universities within the United States where I had pre-existing relationships (previous place of employment, past internship site, etc.) were contacted and asked if they were willing to provide their RAs an opportunity to participate in a research project aimed at gathering information about RA understanding of the mental health needs of college students. In exchange for allowing me to ask RAs for their participation at each institution, I offered to provide either (1) a psycho-educational presentation for the RAs on mental health concerns of college students and warning signs that a student needs to be referred for mental health treatment or (2) another psycho-educational presentation of choice of the Student Affairs staff. While the presentation component was mandatory for the RAs, participation in the study was voluntary.

Student Affairs administrators from each of the participating colleges and universities collaborated with the residence hall directors in charge of coordinating continuous RA trainings to select a day for the training to be conducted. On that designated day, RA participation in the study was requested during the assigned time, but it was made clear that participation in the study was not mandatory. A cover letter (Appendix A) and the survey instrument (Appendix B) were distributed to all of the RAs; it was explained that if they did not wish to participate they could hold onto the blank instrument and return it at the designated time. Completing the instrument took from 10-30 minutes, depending on the speed by which the RAs completed the instrument.
Upon completion of the instrument, participants were asked to place the survey instruments in a designated container, whether the RA had completed the instrument or not. The instruments were then secured. The participants’ answers were kept anonymous. While there were not any university identifiers on the survey instrument, the completed survey instruments from each participating college or university were kept in separate envelopes. To the extent possible, any university identifiers were taken out of the final report; however, each institution’s administrators were given the option of seeing the final results for their own institution.

A cover letter explaining the purpose of the study was distributed to the RAs in the training session. After a brief explanation that the research study was about RA understanding of mental health needs on campus and that it was completely voluntary, the survey instrument was distributed. The presentation was given after participants were given the option to complete the survey instrument to minimize threats to validity.

A total of five universities were included in this study. I went to four out of the five universities and offered three training sessions: two on mental health and one on conflict resolution and group dynamics. At one university where the RAs had recently participated in extensive suicide prevention training (Question Persuade Refer [QPR]), the RAs were given an in-depth presentation about the purpose of the study, only after they had the opportunity to complete the instrument. Due to a scheduling conflict, the survey instrument was administered by someone known to me and given a script by me at one of the five universities. This was done during a mandatory RA training session; however, the RAs were told that participation was voluntary. An offer to come to that university to do a follow-up training session was extended, but the university officials
explained that they had someone from the counseling center built into their mandatory training already. Nevertheless, that university was still willing to have RAs participate.

All five institutions were private. Four of the five universities were Catholic. Three universities were from the Mid-Atlantic States, one university from the South, and one from the Midwestern United States. The total number of RAs at all five institutions was 335 and the total number of RAs who actually completed the survey was 303, which is an overall response rate of 90.45%. The expected response rate was 80%.

Data Analysis

After entering the data for all 303 survey instruments using SPSS 21, data screening and cleaning were conducted. Several outliers and extreme cases were identified using the SPSS boxplot method and extreme cases function. Specifically, RAs who reported receiving more than 10 hours of suicide prevention training or more than 13 hours of general mental health training were removed from the analysis. Once these outliers were removed, the total number of participants included in the research study was n = 265. Missing data greater than 5% was limited to one item in the demographic section (discussed in the results specific to that section) and missing data greater than 10% was limited to one item in section six, actions taken, which will be discussed in that specific results section.

Descriptive statistics were then used to answer the first research question. To address the second research question, multiple regression analyses were used. To address the third question, Pearson’s correlation was conducted to determine if there was a relationship between RA confidence in the college counseling center and RA actions taken when working with students who may be at risk for suicide. To answer the fourth
and fifth research questions, multiple ANOVAs were conducted to see if there were significant differences between groups of RAs who had completed suicide prevention training and those who had not and between those RAs who had completed mental health training and those RAs who had not.

Summary

This chapter has explained the methods used in this exploratory non-experimental survey research. Chapter four presents the findings of the research.
CHAPTER FOUR

RESULTS

The purpose of this study was to understand experiences of Resident Advisors/Assistants (RAs) while working with suicidal students: identification of students at risk for suicide, referral of students at risk for suicide, expectations for follow-up information post-referral of a student at risk for suicide, and actions taken when working with a student at risk for suicide. This chapter discusses the results of the research study. To begin the chapter, participant demographics are discussed and then each of the five research questions is answered.

Demographic Information of Participants

All of the 265 participants were Resident Advisors/Assistants (RAs) at five private universities from the Mid-Atlantic, Southern, and Midwestern United States. Four of the five universities were Catholic. Participants were asked to indicate their age, sex, race/ethnicity, year in college, number of months as an RA, and their major. A majority of the participants reported that they were female (55.8%, n = 253) and White (73.2%, n = 249). This information is displayed in Table 1.
<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>148</td>
<td>55.8</td>
</tr>
<tr>
<td>Male</td>
<td>105</td>
<td>39.6</td>
</tr>
<tr>
<td>Transgender</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>No Response</td>
<td>12</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>194</td>
<td>73.2</td>
</tr>
<tr>
<td>White &amp; American</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Indian/ Alaskan Native</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White &amp; Hispanic/Latino(a)</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>White &amp; Asian American</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>African American/Black</td>
<td>18</td>
<td>6.8</td>
</tr>
<tr>
<td>Hispanic/Latino(a)</td>
<td>11</td>
<td>4.2</td>
</tr>
<tr>
<td>Asian American</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Native</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bi/Multiethnic</td>
<td>9</td>
<td>3.4</td>
</tr>
<tr>
<td>Other not specified</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Did not Respond</td>
<td>16</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Participants were also asked to indicate age and number of months as an RA. The average reported age of the RAs who participated in the study was 20.5 years ($n = 251$) and the average number of months served as an RA was 15.3 ($n = 260$), which would indicate that the average RA has been in the position at least one academic year. Table 2 displays the age and number of months served.

Table 2

*Age and Length of time as an RA*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>251</td>
<td>18.00-30.00</td>
<td>20.50</td>
</tr>
<tr>
<td>Months as an RA</td>
<td>260</td>
<td>1.00-42.00</td>
<td>15.33</td>
</tr>
</tbody>
</table>

Participants were also asked to report their current year in college as well as their major. Options for current year in college were as follows: 1st, 2nd, 3rd, 4th, 5th, graduate student, and other. The mean of the reported scores was 3.099, which indicates that the average year of the RAs in this study was 3rd year. Table 3 indicates the participants' year in college.
Table 3

*RA Year in College*

<table>
<thead>
<tr>
<th>Year</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; year student</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; year student</td>
<td>71</td>
<td>26.8</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; year student</td>
<td>98</td>
<td>37.0</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; year student</td>
<td>67</td>
<td>25.3</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; year student</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Graduate student</td>
<td>9</td>
<td>3.4</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Did not respond</td>
<td>12</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Participants were also asked to report their majors. A total of 86 different majors were reported. The most frequent majors among participants were Biology 5.7%, Biomedical Sciences 4.5%, and Psychology 4.5%. Table 4 lists the frequency and percentage for each major.
Table 4

*Participant Majors*

<table>
<thead>
<tr>
<th>Major</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>7</td>
<td>2.6</td>
</tr>
<tr>
<td>Accounting &amp; Finance</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Accounting and International Business</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Advertising</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Applied Statistics</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Art Education</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Athletic Training</td>
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<td>0.8</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Bioelectrical Engineering</td>
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<td>0.4</td>
</tr>
<tr>
<td>Biology</td>
<td>15</td>
<td>5.7</td>
</tr>
<tr>
<td>Biology &amp; Environmental Science</td>
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<td>0.4</td>
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<tr>
<td>Biology &amp; Philosophy</td>
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<td>0.4</td>
</tr>
<tr>
<td>Biology &amp; Psychology</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>4</td>
<td>1.5</td>
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<tr>
<td>Biomedical Sciences</td>
<td>12</td>
<td>4.5</td>
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<td>Biotechnology</td>
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<td>0.8</td>
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<tr>
<td>Broadcast &amp; Electronic</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Communications</td>
<td>5</td>
<td>1.9</td>
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<tr>
<td>Chemistry</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Communications</td>
<td>9</td>
<td>3.4</td>
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<tr>
<td>Communications &amp; Theology</td>
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<td>Communications &amp; Political Science</td>
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<td>Communications &amp; Journalism</td>
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<td>0.4</td>
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<td>Major</td>
<td>Students</td>
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<tr>
<td>-------------------------------------------</td>
<td>----------</td>
<td>------</td>
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<td>Counseling</td>
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<tr>
<td>Criminal Justice</td>
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<td>Criminology &amp; Psychology</td>
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<tr>
<td>Criminology &amp; Sociology</td>
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<td>0.8</td>
</tr>
<tr>
<td>Early/Elementary Education</td>
<td>11</td>
<td>4.2</td>
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<td>Economics</td>
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<td>0.8</td>
</tr>
<tr>
<td>Electrical &amp; electronic engineering</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Engineering</td>
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<td>Exercise Science</td>
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<td>Family &amp; Consumer Science</td>
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</tr>
<tr>
<td>Finance</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Health</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>History</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Illustration</td>
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<td>0.4</td>
</tr>
<tr>
<td>Integrative Health Science</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Interior Architecture</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>International Affairs</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>International Business</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>International Studies</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Journalism</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Marketing</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Math</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Molecular Biology</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Music Education</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Neuroscience</td>
<td>3</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Research Question One

The first research question was the following: How will RAs report the following: efficacy in dealing with students at risk for suicide; reluctance in dealing with students at
risk for suicide; RA rating of student behaviors when determining suicide risk;
expectations for follow-up information post referral of a student at risk for suicide;
confidence in the college counseling center; actions taken when working with a student at
risk for suicide; hours of training in suicide prevention; and hours of training in general
mental health? Each section of the instrument was analyzed using descriptive statistics,
which are reported next.

**Efficacy**

The first section of the survey instrument included 9 items related to the efficacy
of dealing with students at risk for suicide. Each participant was asked to respond using a
4 point Likert scale. A score of 1 indicated strongly disagree and a score of 4 indicated
strongly agree, the range was 1 to 4. Item numbers 4, 6, and 7 were reverse scored. The
mean score for each item is listed in the table below (Table 5). Higher scores indicated a
higher level of self-efficacy in working with students at risk for suicide. The frequencies
of each ranking for each of the efficacy items are also included in the table.

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>M</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am aware of the warning sides of suicide.</td>
<td>265</td>
<td>3.16</td>
<td>0.8 % (2)</td>
<td>6.0 % (16)</td>
<td>69.8 % (185)</td>
<td>23.4 % (62)</td>
</tr>
<tr>
<td>2. I can recognize students</td>
<td>265</td>
<td>2.81</td>
<td>0.8 % (2)</td>
<td>25.7 % (68)</td>
<td>65.3 % (173)</td>
<td>8.3 % (22)</td>
</tr>
</tbody>
</table>
contemplating suicide by the way they behave.

3. My college encourages me to ask other students about thoughts of suicide when I have a concern.

4. I do not have sufficient training to assist students contemplating suicide.

5. I feel comfortable discussing issues of suicide with students.

6. I don’t have the necessary skills to discuss issues of suicide with a fellow student.

7. I do not know most students well enough to question them about suicide.

8. I know the steps my college needs me to take to help keep a student safe from suicide.

9. I can talk with a student about how to seek help related to thoughts of suicide.
In addition to reporting on the individual items on the efficacy section, it is important to examine the overall scores of efficacy, or a scale score. The range of possible scores per question was 1 to 4 and there were 9 items in this section so the lowest possible sum scaled score was 9 (indicating a low level of efficacy) and the highest possible score was 36 (indicating a high level of efficacy). The average scale score sum was 27.45 (n = 260). The range of scores was 18.00 to 36.00. The overall scale scores indicate that while RAs do not report the highest level of efficacy indicated by the highest possible score (36), the average RA scores indicate that RAs report they are efficacious. Only 1.5% of RAs reported a scale score of 36. The table below (Table 6) shows the sum of the scale score as well as the mean of the scale score. The mean of all of the mean scale scores for efficacy was 3.05 (n = 265). The 3.05 mean indicates that the average RA response for all 9 items was 3 or “agree”, indicating that most RAs agree with statements about RA efficacy in dealing with students at risk for suicide.

Table 6

*Participants Efficacy Scale Score*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy Sum Score</td>
<td>260</td>
<td>27.45</td>
<td>3.47</td>
<td>18.00-36.00</td>
</tr>
<tr>
<td>Efficacy Mean Scale Score</td>
<td>265</td>
<td>3.05</td>
<td>0.39</td>
<td>2.00-4.00</td>
</tr>
</tbody>
</table>
Reluctance

The second section of the instrument consisted of items related to assessing RAs' levels of reluctance in dealing with students at risk for suicide. There were 9 items in this section. Each participant was asked to respond using a 4 point Likert scale. A score of 1 indicated strongly disagree and a score of 4 indicated strongly agree, the range was 1 to 4. Item numbers 6 and 8 were reverse scored. The mean score for each item is listed in the table below (Table 7). The frequencies of each ranking for each of the reluctance items are also included in the table. A higher score indicates the RA's stronger level of agreement with the statement about reluctance in working with students at risk for suicide.

Table 7

Reluctance Items

<table>
<thead>
<tr>
<th>Items</th>
<th>$n$</th>
<th>$M$</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td>1. If a student experiencing thoughts of suicide does not discuss these thoughts with anyone, there is very little that I can do to help.</td>
<td>265</td>
<td>1.96</td>
<td>17.7 (47)</td>
<td>69.1 (183)</td>
<td>12.5 (33)</td>
<td>0.8 (2)</td>
</tr>
<tr>
<td>2. Resident advisors should not discuss suicide with students.</td>
<td>265</td>
<td>1.56</td>
<td>48.7 (129)</td>
<td>47.9 (127)</td>
<td>2.6 (7)</td>
<td>0.8 (2)</td>
</tr>
<tr>
<td></td>
<td>If a student contemplating suicide does not seek assistance, there is nothing I can do to help.</td>
<td>263</td>
<td>1.68</td>
<td>36.5</td>
<td>59.3</td>
<td>4.2</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>If a student contemplating suicide refuses to seek assistance it should not be forced upon him/her.</td>
<td>264</td>
<td>2.26</td>
<td>9.5</td>
<td>58.7</td>
<td>28.4</td>
</tr>
<tr>
<td></td>
<td>A suicide prevention program at my college will give students inadvertent ideas about suicide.</td>
<td>262</td>
<td>2.01</td>
<td>29.0</td>
<td>45.0</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>A suicide prevention program at my college will send a message to students that help is available.</td>
<td>264</td>
<td>3.10</td>
<td>0.4</td>
<td>1.5</td>
<td>58.3</td>
</tr>
<tr>
<td></td>
<td>I cannot understand why a student would contemplate suicide.</td>
<td>265</td>
<td>1.86</td>
<td>32.8</td>
<td>52.8</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>It is important for resident advisors to report identified cases of suicidal students to a supervisor.</td>
<td>265</td>
<td>3.63</td>
<td>0.8</td>
<td>1.9</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>I worry that reporting a student at risk for suicide might cause more problems student.</td>
<td>265</td>
<td>2.09</td>
<td>21.9</td>
<td>50.9</td>
<td>23.8</td>
</tr>
</tbody>
</table>
In addition to reporting on the individual items on the reluctance section, it is important to look at the cumulative scores of the reluctance items, or a scale score. The range of possible scores per question was 1 to 4 and there were 9 items in this section so the lowest possible scale sum score was 9 and the highest possible score was 36. Higher scores indicate greater levels of reluctance. The average scale sum score was 16.37 (n = 259). The range of scores was 9.00 to 24.00. The overall scale scores indicate that RAs do not report a high level of reluctance indicated by the fact that the highest possible score on this scale was 36 and the average score for the RAs who participated was well below that. In fact the highest score on this scale was 24, which was reported by only .8% (n=2) of the participants. These results indicate that the average RA reported a low level of reluctance in working with students at risk for suicide. An average of all of the items, or a mean of the mean reluctance scale score was 1.82 (n =265). The 1.82 mean indicates that the average RA response for all 9 items was close to 2 or “disagree.” Disagreeing with the items on the reluctance section indicates that students disagreed with statements about reluctance to work with students at risk for suicide. Table 8 below shows the overall mean of the scale score as well as the overall mean for all items in the reluctance scale.
Table 8

Participants Reluctance Scale Score

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reluctance Sum Score</td>
<td>259</td>
<td>16.37</td>
<td>1.82</td>
<td>9.00-24.00</td>
</tr>
<tr>
<td>Reluctance Mean Scale Score</td>
<td>265</td>
<td>1.82</td>
<td>0.32</td>
<td>1.00-2.88</td>
</tr>
</tbody>
</table>

**Behaviors/Indicators**

Section three of the survey instrument asked participants to rate the level of importance of behaviors displayed by students as indicators that a student/resident might be at risk for suicide. There were 40 total behaviors listed in this section and participants were asked to rate the level of importance of each behavior using a 4 point Likert scale. A score of 1 indicated that it was not important while a score of 4 indicated that it was extremely important. In reporting and interpreting the results for this particular section, it is important to report how the RAs responded but also to compare what the RAs rated as important to what the expert panel rated as important. Thus, Table 9 not only indicates the mean score of the RAs for each item but also indicates the level of importance that experts rated each item, as well as the percentage of RAs whose ratings matched the expert panel’s ratings.

The experts used the same 4 point Likert scale that the RAs used. Once the expert scores were recorded, compared, and averaged, an item was assigned an expert score. Scores for items that had 100% consensus from the experts were easily assigned the score the experts agreed upon. Scores of items that did not have a 100% consensus were
averaged, and those averaged scores were then rounded (up or down) to the nearest whole number score.

Table 9

RA and Expert Rating of Importance of Behaviors with Percentage of RA agreement with Experts

<table>
<thead>
<tr>
<th>Behavior</th>
<th>N</th>
<th>RA</th>
<th>Expert</th>
<th>Match % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student exhibits poor physical hygiene</td>
<td>265</td>
<td>2.17</td>
<td>2</td>
<td>59.6 (158)</td>
</tr>
<tr>
<td>2. Student abuses substances (alcohol and/or drugs)</td>
<td>265</td>
<td>3.19</td>
<td>3</td>
<td>46.0 (122)</td>
</tr>
<tr>
<td>3. Other residents complain about student’s odd behavior</td>
<td>264</td>
<td>2.89</td>
<td>3</td>
<td>45.8 (121)</td>
</tr>
<tr>
<td>4. Student has access to a weapon</td>
<td>265</td>
<td>3.56</td>
<td>4</td>
<td>65.3 (173)</td>
</tr>
<tr>
<td>5. Student reports getting along with roommate</td>
<td>264</td>
<td>1.49</td>
<td>2</td>
<td>24.6 (65)</td>
</tr>
<tr>
<td>6. Student reports being seriously depressed</td>
<td>265</td>
<td>3.79</td>
<td>4</td>
<td>79.6 (211)</td>
</tr>
<tr>
<td>7. Student does not appear to have any friends</td>
<td>265</td>
<td>3.15</td>
<td>4</td>
<td>32.1 (85)</td>
</tr>
<tr>
<td>8. Student demonstrates disturbed sleeping patterns: (e.g. student never sleeps, student sleeps for more than half of the day)</td>
<td>265</td>
<td>3.03</td>
<td>2</td>
<td>21.5 (57)</td>
</tr>
<tr>
<td>9. Student reports a romantic relationship just ended</td>
<td>265</td>
<td>2.44</td>
<td>2</td>
<td>55.5 (147)</td>
</tr>
<tr>
<td>10. Student recently joined an intramural sports team.</td>
<td>265</td>
<td>1.27</td>
<td>1</td>
<td>77.0 (204)</td>
</tr>
</tbody>
</table>
11. Student identifies as gay, lesbian, bisexual, or transgender

12. Student was recently involved in a physical altercation

13. Student was just initiated into a sorority or fraternity

14. Student talks about death

15. Student’s room is messy

16. Student makes a statement about hopelessness

17. Student recently changed major due to a new career path

18. Student reports having a mental illness

19. Student reports financial problems

20. Student is known to engage in disordered or extreme eating (i.e. anorexia, bulimia, binge eating)

21. Student reports recently beginning a new romantic relationship

22. Student demonstrates low self-esteem

23. Student takes unnecessary risks

24. Student exhibits unpredictable anger or aggression

25. Student experienced a sexual assault

26. Student reports recently
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27.</td>
<td>Student displays noticeable or unpredictable mood change</td>
<td>265</td>
<td>3.10</td>
<td>4</td>
</tr>
<tr>
<td>28.</td>
<td>Student makes a statement about contemplating suicide</td>
<td>265</td>
<td>3.96</td>
<td>4</td>
</tr>
<tr>
<td>29.</td>
<td>Student just returned from a vacation</td>
<td>265</td>
<td>1.25</td>
<td>1</td>
</tr>
<tr>
<td>30.</td>
<td>Student gives away possessions</td>
<td>265</td>
<td>3.37</td>
<td>4</td>
</tr>
<tr>
<td>31.</td>
<td>Student reports failing classes</td>
<td>264</td>
<td>2.94</td>
<td>3</td>
</tr>
<tr>
<td>32.</td>
<td>Student complains about being stressed</td>
<td>265</td>
<td>2.59</td>
<td>2</td>
</tr>
<tr>
<td>33.</td>
<td>Student reports a history of suicide attempts</td>
<td>265</td>
<td>3.97</td>
<td>4</td>
</tr>
<tr>
<td>34.</td>
<td>Student reports family conflict</td>
<td>264</td>
<td>2.86</td>
<td>2</td>
</tr>
<tr>
<td>35.</td>
<td>Student appears optimistic</td>
<td>265</td>
<td>1.43</td>
<td>1</td>
</tr>
<tr>
<td>36.</td>
<td>Student exhibits a sudden change in behavior</td>
<td>265</td>
<td>2.86</td>
<td>4</td>
</tr>
<tr>
<td>37.</td>
<td>Student makes a post on Facebook, or other social media outlet, about being distressed or upset</td>
<td>265</td>
<td>2.89</td>
<td>3</td>
</tr>
<tr>
<td>38.</td>
<td>Student does not leave the dorm room</td>
<td>265</td>
<td>3.07</td>
<td>3</td>
</tr>
<tr>
<td>39.</td>
<td>Student appears anxious or agitated</td>
<td>265</td>
<td>2.76</td>
<td>3</td>
</tr>
<tr>
<td>40.</td>
<td>Student is very involved in a religious organization</td>
<td>265</td>
<td>1.42</td>
<td>1</td>
</tr>
</tbody>
</table>
Of particular importance are the items that the RAs underrated that the experts rated as extremely or quite important. This will be discussed further in chapter five; however, below in Table 10, they are listed.

Table 10

*Items Rated Extremely and Quite Important by Experts with Percentage of RA Agreement with Experts*

<table>
<thead>
<tr>
<th>Item Number and Behavior</th>
<th>N</th>
<th>RA M</th>
<th>Expert</th>
<th>Match % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Student does not appear to have any friends.</td>
<td>265</td>
<td>3.147</td>
<td>4</td>
<td>32.1 (85)</td>
</tr>
<tr>
<td>14. Student talks about death.</td>
<td>265</td>
<td>3.313</td>
<td>4</td>
<td>50.2 (133)</td>
</tr>
<tr>
<td>16. Student makes a statement about hopelessness.</td>
<td>265</td>
<td>3.392</td>
<td>4</td>
<td>50.6 (134)</td>
</tr>
<tr>
<td>27. Student displays noticeable or unpredictable mood change.</td>
<td>265</td>
<td>3.102</td>
<td>4</td>
<td>27.9 (74)</td>
</tr>
<tr>
<td>30. Student gives away possessions.</td>
<td>265</td>
<td>3.374</td>
<td>4</td>
<td>56.6 (150)</td>
</tr>
<tr>
<td>36. Student exhibits a sudden change in behavior.</td>
<td>265</td>
<td>2.860</td>
<td>4</td>
<td>17.7 (47)</td>
</tr>
<tr>
<td>3. Student takes unnecessary risks.</td>
<td>265</td>
<td>2.860</td>
<td>3</td>
<td>44.9 (119)</td>
</tr>
<tr>
<td>23. Student appears anxious or agitated</td>
<td>265</td>
<td>2.755</td>
<td>3</td>
<td>50.6 (134)</td>
</tr>
<tr>
<td>39. Other residents complain about student’s odd behavior</td>
<td>264</td>
<td>2.890</td>
<td>3</td>
<td>45.8 (121)</td>
</tr>
</tbody>
</table>
Expectations

Section four of the survey instrument asked participants to report their expectations for follow up after referring a student to the college counseling center for any reason. The purpose of this section was to determine the expectations of RAs for information about a student they had referred to counseling. Statements in this section included RA expectations of both the counseling center staff and of the student referred. Because of current confidentiality rules for mental health providers, the items related to the counseling center staff (1-6) in this section are not possible. To avoid giving a mixed message to RAs about confidentiality, each item was prefaced with the word "ideally" to indicate and recognize that it is not currently possible; this was also addressed with the students in the training sessions conducted after completion of the survey instrument.

This section included 10 items total, the first 6 items asked about RAs' expectations for information shared from the counseling center staff about the student referred by the RA while the last 4 items asked about RA expectations from the student they referred to the counseling center. Participants were asked to respond using a 4 point Likert scale. Participants were asked to rate their level of agreement with each statement. A score of 1 indicated strongly disagree and a score of 4 indicated strongly agree. The item number and the corresponding response from the participants are included in Table 11.
### Table 11

**Expectations Items**

<table>
<thead>
<tr>
<th>Item</th>
<th>$N$</th>
<th>$M$</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ideally, I would like the counseling center staff to tell me if the student I referred for counseling attended a session at the counseling center.</td>
<td>264</td>
<td>2.84</td>
<td>9.1 (24)</td>
<td>17.8 (47)</td>
<td>53.0 (140)</td>
<td>20.1 (53)</td>
</tr>
<tr>
<td>2. Ideally, I would like the counseling center staff to tell me whether the student I referred remains in regular counseling sessions.</td>
<td>264</td>
<td>2.48</td>
<td>16.3 (43)</td>
<td>30.7 (81)</td>
<td>41.7 (110)</td>
<td>11.4 (30)</td>
</tr>
<tr>
<td>3. Ideally, I would like the counseling center staff to share the diagnosis of the student I referred for counseling.</td>
<td>264</td>
<td>1.81</td>
<td>41.7 (110)</td>
<td>38.3 (101)</td>
<td>17.0 (45)</td>
<td>3.0 (8)</td>
</tr>
<tr>
<td>4. Ideally, I would like the counseling center staff to tell me about any behaviors I should be concerned about in the student I referred.</td>
<td>264</td>
<td>3.03</td>
<td>6.8 (18)</td>
<td>12.1 (32)</td>
<td>51.9 (137)</td>
<td>29.2 (77)</td>
</tr>
<tr>
<td>5. Ideally, I want the counseling center staff to give me advice about the student I referred there.</td>
<td>264</td>
<td>3.13</td>
<td>3.8 (10)</td>
<td>11.4 (30)</td>
<td>53.0 (140)</td>
<td>31.8 (84)</td>
</tr>
<tr>
<td>6. Ideally, I would like</td>
<td>263</td>
<td>2.57</td>
<td>11.4</td>
<td>31.6</td>
<td>45.6</td>
<td>11.4</td>
</tr>
</tbody>
</table>
the counseling center staff to inform me if the student I referred stops attending counseling sessions for any reason.

7. Ideally, I would like the student I referred for counseling to tell me if/when the student makes an appointment at the counseling center.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>264</td>
<td>2.44</td>
<td>17.0</td>
<td>35.6</td>
</tr>
<tr>
<td></td>
<td>(45)</td>
<td>(94)</td>
<td>(88)</td>
<td>(37)</td>
</tr>
</tbody>
</table>

8. Ideally, I would like the student I referred for counseling to tell me what happens in the counseling sessions.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>264</td>
<td>1.87</td>
<td>43.2</td>
<td>32.6</td>
</tr>
<tr>
<td></td>
<td>(114)</td>
<td>(86)</td>
<td>(49)</td>
<td>(15)</td>
</tr>
</tbody>
</table>

9. Ideally, I would like the student I referred for counseling to tell me if counseling sessions ended for any reason.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>264</td>
<td>2.09</td>
<td>11.7</td>
<td>29.2</td>
</tr>
<tr>
<td></td>
<td>(31)</td>
<td>(77)</td>
<td>(123)</td>
<td>(33)</td>
</tr>
</tbody>
</table>

10. Ideally, I would like the student I referred for counseling to tell the student’s roommate if they are attending counseling sessions.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>263</td>
<td>2.09</td>
<td>41.4</td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>(109)</td>
<td>(103)</td>
<td>(44)</td>
<td>(7)</td>
</tr>
</tbody>
</table>

Table 12 shows the scale score. The first scale includes items 1 to 6 which asked the RAs about the expectations they have of the counseling center staff after referring a student. The lowest level scale score, indicating the lowest level of expectation for
information about a student referred to the counseling center from the counseling center staff, is a 6 and the highest scale score, indicating the highest level of expectation for information about a student referred to the counseling center from the counseling center staff, is a 24. The mean expectation of the counseling center staff scale score was 15.87 (n = 263). 1.9% (n = 5) of RAs reported the lowest score (6) and 2.3% (n = 6) reported the highest score (24).

Table 12 also reports the scaled scores for items 7-10 which asked RAs about the expectations they have for information about the student referred for counseling from the student referred. The lowest score on this scale is a 4 and the highest is a 16. A total of 6.4% (n = 17) of students scored at the lowest level, indicating that they had no expectation for information about the student they referred for counseling from the student they referred and 1.5% (n = 4) scored at the highest level. The mean score was 8.77 (n = 263). Results indicate that the RAs reported a higher expectation of the counseling center staff for shared information than of the student the RA referred for counseling for shared information.

<table>
<thead>
<tr>
<th>Participants' Expectations Scale Scores</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation of Counseling Staff Sum</td>
<td>263</td>
<td>15.87</td>
<td>3.72</td>
<td>6.00-24.00</td>
</tr>
<tr>
<td>Expectation of Counseling Staff Mean</td>
<td>263</td>
<td>2.65</td>
<td>0.62</td>
<td>1.00-4.00</td>
</tr>
<tr>
<td>Scale Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectation of Student Referred Sum</td>
<td>263</td>
<td>8.72</td>
<td>2.56</td>
<td>4.00-16.00</td>
</tr>
</tbody>
</table>
Confidence

Section five of the instrument used in the research study asked participants to rate their level of agreement for each statement about the counseling center on campus. The purpose of this section was to record the RA level of confidence in the services provided to students at risk for suicide at the counseling center on campus. Participants were asked to respond to each statement using a 4 point Likert scale with a score of 1 indicating strongly disagree and a score of 4 indicating strongly agree. Table 13 displays the results of this section, including the mean of the scores for each item as well as the frequency for each response.

Table 13

Confidence Level Items

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>M</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I believed a student was suicidal, I am likely to refer the student to the college counseling center.</td>
<td>265</td>
<td>3.78</td>
<td>0.0 (0)</td>
<td>0.8 (2)</td>
<td>20.4 (54)</td>
<td>78.9 (209)</td>
</tr>
</tbody>
</table>
2. I have confidence that the college counseling center will help potentially suicidal residents who have been referred there.

3. I understand what would happen at the college counseling center if I were to refer a potentially suicidal student there.

4. I believe that the college counseling center staff will be concerned about the safety of potentially suicidal students I refer there.

5. I would tell other RAs that the best option is to refer potentially suicidal students there.

Based on the RA scores, it is clear that RAs "agree" or "strongly agree" with statements indicating confidence in the campus counseling center. Examining the scores collectively, at the scale score, with the lowest range of the scale score as a 5 and the highest score as a 20, the average scale score was 17.75. A total of 24.2% (n=64) of the RAs scored a 20 on this scale, which indicates the highest level of confidence in the
campus counseling center. Table 14 reflects the scale score and the mean score of all of the confidence items.

Table 14

\textit{Participants' Confidence Level Scale Score}

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence Sum</td>
<td>265</td>
<td>17.75</td>
<td>1.97</td>
<td>12.00-20.00</td>
</tr>
<tr>
<td>Confidence Mean Scale Score</td>
<td>265</td>
<td>3.55</td>
<td>0.39</td>
<td>2.40-4.00</td>
</tr>
</tbody>
</table>

\textbf{Actions Taken by RAs}

Section six of the survey instrument asked participants to indicate actions they have taken when they have developed a concern that a student may be at risk for suicide. Thirteen actions were listed and item 14 read “OTHER: please indicate.” Students had five answer choices for each item. Possible responses included: N/A, 0 times, 1 time, 2 times, 3 or more times. Students were instructed to circle the answer choice N/A for every item if they had never developed a concern for a student who may be at risk for suicide. Item 14 was not included in the quantitative analysis. However, the qualitative data that participants reported by indicating what “OTHER” action they took was deemed valuable, so a list of the actions is included below.

The results for this section reveal that of the 265 RAs who participated in the research study, only 34% of them (n= 99) had dealt with a student at risk for suicide.
Further, when an RA had developed a concern that a student might be at risk for suicide, the three most common actions that RAs reported they had taken included the following: encouraged the student to make an appointment at the college counseling center, reported the information to the RA's supervisor, and encouraged the student to talk with friends. The three least common actions that RAs report taking when they have developed a concern that a student may be at risk for suicide included the following: calling the police, accompanying the student to the counseling center on campus, and calling a crisis hotline with the student. Table 15 shows the actions and the frequency the participants took these actions.

Table 15

RA Actions Taken

<table>
<thead>
<tr>
<th>Action</th>
<th>n</th>
<th>0 times</th>
<th>1 time</th>
<th>2 times</th>
<th>3+ times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encouraged the student to make an appointment at the counseling center</td>
<td>99</td>
<td>7</td>
<td>34</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>2. Accompanied the student to the counseling center on campus.</td>
<td>97</td>
<td>67</td>
<td>22</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>3. Directed the student to call a crisis hotline.</td>
<td>91</td>
<td>73</td>
<td>10</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>4. Called a crisis hotline with the student.</td>
<td>91</td>
<td>82</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5. Called campus security.</td>
<td>96</td>
<td>62</td>
<td>15</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>
6. Accompanied the student to a local hospital. 92 73 13 5 1
7. Called the campus counseling center. 94 54 28 10 2
8. Called the police. 93 84 6 3 0
9. No action. 84 77 5 2 0
10. Reported the information to my supervisor. 98 13 35 23 27
11. Asked the student for a verbal or written promise to not hurt or kill self. 89 70 17 0 2
12. Encouraged the student to call the student’s parents. 99 49 27 12 1
13. Encouraged the student to talk with friends. 95 32 36 18 9

Seventeen participants indicated that they had taken an “other” action. However, only 14 indicated what the “other” action was. The list of responses is included below.

1. I usually make an effort to become involved in their life as a friend/mentor who cares so they don't feel so alone and unloved in the world. I also try to keep up w/ their life and interests so they know I care.
2. Refer to off-campus therapist.
3. Had continuous discussions with student about going to counseling and talking to the area coordinator.
4. Spoke with supervisor first, let them help with the process.
5. Encouraged them to seek out other potential resources such as University Ministries.

6. Offered myself as a resource.

7. Follow up with the resident.

8. Spoke with the residents to see how they’re feeling.

9. Checked back in with student and roommate.

10. Shared personal experience with counseling center/depression with student that I was concerned about.

11. Keep an eye out for her.

12. Discussed concerns with roommates.

13. Ensuring her that I am here for her, letting her know that I hear her concerns.

14. Continued to check in with the student regularly.

Training

Section seven of the instrument asked the participants for their demographic information. This information was used to describe the participants at the beginning of this chapter. Also in this section, participants were asked to answer the following question: “Have you had any suicide prevention training” and they were able to respond by checking no or yes. Then participants who responded yes were asked to report the approximate number of hours of training they had. Similarly in this section, students were asked to report whether or not they had any general mental health training and if so approximately how many hours. Of the 265 participants, 13.4% reported that they had not had any suicide prevention training and of the 265 participants, 26.8% reported that they had not had any general mental health training. Table 16 reflects the results from
the RAs' responses to the question about whether or not they had received training in suicide prevention or mental health.

Table 16

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>No % (n)</th>
<th>Yes % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you had any suicide prevention training?</td>
<td>261</td>
<td>13.4 (35)</td>
<td>86.6 (226)</td>
</tr>
<tr>
<td>Have you had any training regarding general mental health?</td>
<td>261</td>
<td>26.8 (70)</td>
<td>73.2 (191)</td>
</tr>
</tbody>
</table>

A total of 86.6% of participants who reported having had suicide prevention training reported an average 2.67 hours of training ranging from 0.00 to 8.00 hours. A total of 73.2% of RAs who reported having had training on general mental health reported 2.56 average number of hours ranging from 0.00 to 12.00. When conducting the data analysis to screen for missing data, it was discovered that 7% of the 265 participants did not complete the question regarding the number of hours of mental health training. Thus, using SPSS, the missing values for this question were replaced using the linear interpolation method and those values are reflected in the table below which shows the number of hours RAs reported having had in suicide prevention as well as general mental health training.
Table 17

*Participants Number of Hours of Training*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide Preventing Training</td>
<td>254</td>
<td>2.673</td>
<td>1.745</td>
<td>0.00-8.00</td>
</tr>
<tr>
<td>General mental health training</td>
<td>265</td>
<td>2.558</td>
<td>2.628</td>
<td>0.00-12.0</td>
</tr>
</tbody>
</table>

**Research Question Two**

The second research question was the following: Do RA ratings of importance of student behaviors when determining suicide risk predict RA efficacy in dealing with students who may be at risk for suicide and RA reluctance in dealing with students who may be at risk for suicide? To answer this question a linear regression was performed. In order to conduct this regression, the scores that the RAs reported for each of the behaviors were compared to that of the experts and thus each of the regressions were compared as follows: Do the RA ratings of importance of student behaviors when determining suicide risk as “Not Important,” “Somewhat Important,” “Quite Important,” or “Extremely Important” when compared to the ratings of the expert panel predict RA efficacy in dealing with students who may be at risk for suicide?; and, Do the RA ratings of importance of student behaviors when determining suicide risk as “Not Important,” “Somewhat Important,” “Quite Important,” or “Extremely Important” when compared to the ratings of the expert panel predict RA reluctance in dealing with students who may be at risk for suicide?
Simple regression models were used to examine whether RA beliefs about suicide indicators predicted RA efficacy and RA reluctance in dealing with residents who may be at risk for suicide. The direction of the differences was computed as RA rating minus Expert rating. For each behavior that the expert rated as “Not Important,” “Somewhat Important,” “Quite Important,” and “Extremely Important,” the sum was computed to provide four separate categories. Individual simple regression models were then conducted for each sum of the differences between the RA and expert rating as either Not Important, Somewhat Important, Quite Important, and Extremely Important. A significance level of .05 was used to indicate if the RA beliefs about suicide indicators predicted RA efficacy or predicted RA reluctance.

Some significant (p < .05) associations were found. RA beliefs about behaviors rated as “Quite Important” and “Extremely Important” were significant for predicting RA efficacy in dealing with residents who may be at risk for suicide. The results show a positive association between the RA rating of behavior and RA efficacy. For every belief indicator that the RA rated as “Quite Important,” that the expert panel also rated as “Quite important” the RA efficacy scale score increased by 0.012 and for every additional belief indicator that the RA rated as “Extremely Important,” that the expert panel also rated as “Extremely Important” the RA efficacy scale score increased by 0.023. Table 18 provides the results for each simple regression model predicting RA efficacy or RA reluctance from the RA beliefs about suicide indicators.
An RA rating of behaviors as “Extremely Important” is significant for predicting RA reluctance in dealing with residents who may be at risk for suicide. The results in Table 19 show a negative association between the RA belief predictor and RA reluctance. For every additional belief indicator that the RA accurately rated as “Extremely Important,” the RA reluctance scale score decreased by 0.022.
These results indicate that the RAs’ beliefs about actions that are quite important and extremely important do predict RA efficacy. Similarly, RA reluctance can be predicted by RA beliefs about behaviors rated as “Extremely Important.”

**Research Question Three**

The third research question in this study was the following: Is there a relationship between the level of confidence an RA has in the college counseling center and RA actions taken when working with students who may be at risk for suicide? A Pearson’s correlation analysis was conducted using SPSS 21 to determine the answer to this research question. Before conducting the correlation analysis, the actions that the RAs took were recoded to represent only those participants who indicated that they had in fact encountered a student at risk for suicide and thus took an action. When students responded to section six in the survey instrument, which asked the RAs to report what actions they have taken when they have identified a student at risk for suicide, students were given an option per item to indicate N/A. Therefore, the number of participants for research question three (n=99) was significantly less than the total number of participants for the study (N= 265).

Pearson’s correlation analysis was conducted on each of the 13 actions RAs reported taking when they identified working with a student at risk for suicide with RA level of confidence in the college counseling center. Results of the Pearson’s correlation analysis failed to reject the null hypothesis for 12 of the 13 possible actions taken. However, for action 11, “Asked the student for a verbal or written promise to not hurt or kill self” a relationship was indicated, $r = .212$ at $p < .05$ level. Thus, while there is no relationship between RA level of confidence in the college counseling center and most of
the RA actions taken when working with students who may be at risk for suicide; there is a positive correlation between RA level of confidence in the college counseling center and the RA asking a student identified at risk for suicide to make a verbal or written promise to not hurt or kill self. This is discussed in chapter five.

Table 20

*Correlation between RA Actions Taken and RA Level of Confidence in the College Counseling Center*

<table>
<thead>
<tr>
<th>Action</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encouraged the student to make an appointment at the counseling center on campus</td>
<td>-0.062</td>
</tr>
<tr>
<td>2. Accompanied the student to the counseling center on campus</td>
<td>-0.057</td>
</tr>
<tr>
<td>3. Directed the student to call a crisis hotline</td>
<td>0.151</td>
</tr>
<tr>
<td>4. Called a crisis hotline with the student</td>
<td>0.063</td>
</tr>
<tr>
<td>5. Called campus security</td>
<td>0.047</td>
</tr>
<tr>
<td>6. Accompanied the student to a local hospital</td>
<td>0.006</td>
</tr>
<tr>
<td>7. Called the campus counseling center</td>
<td>0.030</td>
</tr>
<tr>
<td>8. Called the police</td>
<td>0.020</td>
</tr>
<tr>
<td>9. No action</td>
<td>-0.177</td>
</tr>
</tbody>
</table>
10. Reported the information to my supervisor -0.072

11. Asked the student for a verbal or written promise to not hurt or kill self 0.212*

12. Encouraged the student to call the student’s parents 0.044

13. Encouraged the student to talk with friends -0.702

*Significant at $p < .05$

While RAs in this study indicated a high level of confidence in the college counseling center, this study found, as Table 20 indicates, that there is not a relationship between the levels of confidence that an RA has in the college counseling center and the actions that RAs took when they identified a student who may be at risk for suicide.

**Research Question Four**

Research question four was the following: Is there a significant difference between RAs who have had suicide prevention training and those who have not on indicators of RA efficacy in dealing with students at risk for suicide; RA reluctance in dealing with students at risk for suicide; RA ratings of importance of student behaviors when determining suicide risk; RA expectations for follow-up information post referral of a student at risk for suicide; RA confidence in the college counseling center; and RA actions taken when working with a student at risk for suicide. To answer this question multiple ANOVAs were performed.
Before conducting a one-way analysis of variance, several assumptions must be made. One of these assumptions is that the dependent variables are normally distributed. For the purpose of this research, normality was tested measuring skewness and kurtosis. If the skewness statistic was more than twice the standard error of skewness (+ or -) then the data was found to be not normally distributed. For the scales of reluctance, expectation of the counseling center staff, and expectations of the student referred for counseling, the data was found to be normally distributed. The results for the efficacy scale showed that the scale was slightly positively skewed and so using a square root data transformation process, the data was transformed and found to meet the standard of normalcy described above. For the confidence scale, the data were found to be significantly negatively skewed so a data transformation using the LOG10 function was used and this resulted in the data being more normally distributed. These tests for normality and transformations allowed for a one way analysis of variance to be conducted. Further, tests for homogeneity of variance were conducted and there were no violations.

The results of the multiple ANOVAs indicated that there were some statistically significant differences between RAs who reported having had suicide prevention training and those who had not on the following indicators: efficacy, reluctance, and confidence. However, the results of the multiple ANOVAs indicated there was not a statistically significant difference between RAs who reported having had suicide prevention training and those who had not on the indicators of expectation for follow up after referring a student for counseling who may be at risk for suicide. The hypothesis for research question four stated that there would be no difference between RAs who have had suicide
prevention training and those who have not; therefore the null hypothesis was rejected. It
should also be noted that there was a medium effect size for the statistically significant
difference on efficacy, but only a small effect size on reluctance and confidence.
However the null hypothesis failed to be rejected for the between group differences on
the indicators of RA expectations for follow up information from the counseling center
staff and from the student referred. Table 21 displays the results.

Table 21

ANOVA Suicide Prevention Training Results

<table>
<thead>
<tr>
<th>Indicators</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA Efficacy in working with students at risk for suicide</td>
<td>(1, 259)</td>
<td>16.445</td>
<td>0.000*</td>
<td>0.060</td>
</tr>
<tr>
<td>RA Reluctance in working with students at risk for suicide</td>
<td>(1, 259)</td>
<td>4.663</td>
<td>0.032*</td>
<td>0.018</td>
</tr>
<tr>
<td>RA expectation for information from the counseling center staff following referral of a student who may be at risk for suicide</td>
<td>(1, 258)</td>
<td>0.302</td>
<td>0.583</td>
<td>0.001</td>
</tr>
<tr>
<td>RA expectation for information from the student referred to counseling following referral of the student</td>
<td>(1, 258)</td>
<td>3.000</td>
<td>0.084</td>
<td>0.011</td>
</tr>
</tbody>
</table>
Table 21 indicates that the RAs who have had suicide prevention training reported higher levels of efficacy and lower levels of reluctance when working with students who may be at risk for suicide. Table 21 also indicates that the RAs who had suicide prevention training had greater levels of confidence in the college counseling center.

A separate ANOVA was conducted on the actions taken by RAs when they have developed a concern that a student is at risk for suicide. An analysis was conducted using only the students who had encountered a student who was at risk for suicide. Therefore the ANOVA for actions taken had a much smaller $n=99$ than the previous analyses. Further, it should be noted that the assumptions for normality and homogeneity of variance were not met for this data set. The data for the actions taken was not normally distributed and the variance test was not met for actions 5 (called campus security) and 11 (asked the student for a verbal or written promise not to hurt or kill self) so the results should be interpreted with caution.
Table 22

*ANOVA Suicide Prevention Training Actions*

<table>
<thead>
<tr>
<th>Action</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encouraged the student to make an appointment at the counseling center on campus.</td>
<td>(1, 95)</td>
<td>2.315</td>
<td>0.131</td>
<td>0.024</td>
</tr>
<tr>
<td>2. Accompanied the student to the counseling center on campus.</td>
<td>(1, 93)</td>
<td>0.238</td>
<td>0.626</td>
<td>0.003</td>
</tr>
<tr>
<td>3. Directed the student to call a crisis hotline.</td>
<td>(1, 87)</td>
<td>0.089</td>
<td>0.767</td>
<td>0.001</td>
</tr>
<tr>
<td>4. Called a crisis hotline with the student.</td>
<td>(1, 88)</td>
<td>0.239</td>
<td>0.626</td>
<td>0.003</td>
</tr>
<tr>
<td>5. Called campus security.</td>
<td>(1, 92)</td>
<td>4.041</td>
<td>0.047</td>
<td>0.042</td>
</tr>
<tr>
<td>6. Accompanied the student to a local hospital.</td>
<td>(1, 88)</td>
<td>0.008</td>
<td>0.927</td>
<td>0.000</td>
</tr>
<tr>
<td>7. Called the campus counseling center.</td>
<td>(1, 90)</td>
<td>0.173</td>
<td>0.678</td>
<td>0.002</td>
</tr>
<tr>
<td>8. Called the police.</td>
<td>(1, 89)</td>
<td>1.058</td>
<td>0.306</td>
<td>0.012</td>
</tr>
<tr>
<td>9. No action.</td>
<td>(1, 80)</td>
<td>0.007</td>
<td>0.932</td>
<td>0.000</td>
</tr>
<tr>
<td>10. Reported the information to my supervisor.</td>
<td>(1, 94)</td>
<td>0.067</td>
<td>0.796</td>
<td>0.001</td>
</tr>
<tr>
<td>11. Asked the student for a verbal or written promise to not hurt or kill self.</td>
<td>(1, 86)</td>
<td>2.825</td>
<td>0.096</td>
<td>0.032</td>
</tr>
<tr>
<td>12. Encouraged the student to call the student’s parents.</td>
<td>(1, 86)</td>
<td>0.639</td>
<td>0.426</td>
<td>0.007</td>
</tr>
<tr>
<td>13. Encouraged the student to talk with friends.</td>
<td>(1, 91)</td>
<td>1.272</td>
<td>0.262</td>
<td>0.014</td>
</tr>
</tbody>
</table>
As seen in Table 22, whether the RAs had suicide prevention training or not did not make a difference in the actions that RAs took when they identified a student who may be at risk for suicide.

To fully answer research question four it was also important to examine the between group differences on the RA rating of importance of certain behaviors when trying to identify students at risk for suicide.

First, RA responses for each behavior were compared to the responses that experts gave for each behavior. All of the items that the experts ranked as extremely important were placed into a scale deemed extremely important. If RAs matched the expert score on all 10 of the extremely important items, the total scale score would have been 4. The range of the RA scale scores for the items ranked extremely important were 2.5 to 4. A score of 2.5 indicated that the mean of the individual RA’s rating of importance on the items the experts rated as extremely important, signified by a 4, was a 2.5. A 2.5 would signify that an RA underrated the behaviors that the experts rated as extremely important, because a 2 signified somewhat important and 3 signified quite important.

Similarly, all of the items that the experts ranked as quite important were placed into the quite important scale. If the RAs matched the expert rankings then the total scale score would have been a 3.0. The range of RA scores on the quite important scale was 1.64 to 4. A score of 1.64 indicates that the mean of the individual RA’s rating of importance on the items the experts rated as quite important, signified by a 3, was a 1.64. A 1.64 score would signify that some RAs underrated the behaviors that the experts rated as quite important, because a 1 signified not important and a 2 signified somewhat
important. A score above a 3.0 indicates that RAs overrated (4 = extremely important) some of the items that experts labeled as quite important.

All of the items that the experts ranked as an importance of 2, or somewhat important, were also scaled. If the RAs matched the experts then they would have a score of 2. The range of scores of the RAs on the somewhat important scale was 1.22 to 4.0. A 1.22 score would signify that some RAs underrated the behaviors that the experts rated as somewhat important, because a 1 signified not important and a 2 signified somewhat important. A score above a 2.0 indicates that RAs overrated (4 = extremely important, 3 = somewhat important) some of the items that experts labeled as somewhat important.

Finally a scale score was created for the items that the experts rated as not important. The scale score for an RA who evenly matched the experts for not important items would be a 1. The RA scores on this scale ranged from 1.0 to 3.11. A score of 1 means that the RA rating of importance matched the expert rating of importance, scores above a 1 indicate that the RAs overrated the level of importance of behaviors. The next step in the analysis was to check for the normality of distribution for each of the scaled scores.

Normality was tested measuring skewness and kurtosis. If the skewness statistic was more than twice the standard error of skewness (+ or -) then the data was found to be not normally distributed. For the scale of RA ratings of behaviors that the experts rated as quite important the data was found to be normally distributed. However, the scale of RA ratings of behaviors that the experts rated as extremely important, somewhat important, and not important, the data was found to be not normally distributed. Using the square root transformation for both the extreme and somewhat behaviors resulted in
normal distribution of the data. However, three different types of data transformation: square root, log 10, and ln, did not result in a normal distribution of the not important scale. Thus the results should be interpreted with caution. Further, the Levine’s assumption was violated for the extremely important scale.

Table 23 displays the results of the ANOVA test for differences between RAs with suicide prevention training and without suicide prevention training. Results indicate there was no statistically significant difference on the rating of importance of behaviors as compared with the expert rating of importance between RAs who have had suicide prevention training and those who had not had suicide prevention training. While Table 23 indicates a significant difference between groups for RA rating of behaviors that experts rated as extremely important, with a small effect size, because the assumptions were not met for conducting the ANOVA, this result should be interpreted with caution.

Table 23

*ANOVA Suicide Prevention Training and Rating of Importance of Behaviors*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA ratings of behaviors that experts rated extremely important</td>
<td>(1, 259)</td>
<td>9.864</td>
<td>0.002*</td>
<td>0.037</td>
</tr>
<tr>
<td>RA ratings of behaviors that experts rated as quite important</td>
<td>(1, 258)</td>
<td>0.089</td>
<td>0.765</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Table 23 indicates that the RAs who had suicide prevention training rated the behaviors that the experts rated as extremely important when determining if a student may be at risk for suicide with greater accuracy than RAs who did not have suicide prevention training. However, Table 23 also indicates that there was no difference between the RAs who had suicide prevention training and those who had not on the way RAs rated behaviors that the experts rated as quite, somewhat, and not important when trying to determine if a student is at risk for suicide.

**Research Question Five**

Research question five was the following: Is there a significant difference between RAs who have had mental health training and those who have not on indicators of RA efficacy in dealing with students at risk for suicide; RA reluctance in dealing with students at risk for suicide; RA ratings of importance of student behaviors when determining suicide risk; RA expectations for follow-up information post referral of a student at risk for suicide; RA confidence in the college counseling center; and RA
actions taken when working with a student at risk for suicide. To answer this question multiple ANOVAs were performed.

Before conducting a one-way analysis of variance, several assumptions must be made. One of these assumptions is that the dependent variables are normally distributed. For the purpose of this research, normality was tested measuring skewness and kurtosis. If the skewness statistic was more than twice the standard error of skewness (+ or -) then the data was found to be not normally distributed. For the scales of reluctance, expectation of the counseling center staff, and expectations of the student referred for counseling, the data was found to be normally distributed. The results for the efficacy scale showed that the scale was slightly positively skewed and so using a square root data transformation process, the data was transformed and found to meet the standard of normalcy described above. For the confidence scale, the data was found to be significantly negatively skewed so a data transformation, using the LOG10 function was used and this resulted in the data being more normally distributed. These tests for normality and transformations allowed for a one way analysis of variance to be conducted. Further, tests for homogeneity of variance were conducted and there were no violations.

Tests for normality allowed for a one way analysis of variance to be conducted. Test for homogeneity of variance were conducted and results indicated that there were no violations allowing for the ANOVAs to be conducted.

The results of the multiple ANOVAs indicate that there were some statistically significant differences between RAs who reported having had mental health training and those who had not on the following indicators: efficacy, reluctance, and expectation of
the counseling center staff after referring a student who may be at risk for suicide, with a small effect size. However, the results of the multiple ANOVAs indicate there was not a statistically significant difference between RAs who reported having had mental health training and those who had not on the indicator of expectation for follow up from the student who was referred for counseling and on level of confidence in the counseling center.

The hypothesis for research question 5 stated that there would be no difference between RAs who have had mental health training and those who have not; therefore the null hypothesis was rejected. It should also be noted that while there was a statistically significant difference, the effect size was small. However the hypothesis failed to be rejected for the between group differences on the indicators of RA expectations for information from the student referred for counseling and level of confidence in the counseling center. Table 24 displays the results.

Table 24

*ANOVA Mental Health Training Results*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>df</th>
<th>F</th>
<th>a</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA Efficacy in working with students at risk for suicide</td>
<td>(1, 259)</td>
<td>6.128</td>
<td>0.014*</td>
<td>0.023</td>
</tr>
<tr>
<td>RA Reluctance in working with students at risk for</td>
<td>(1, 259)</td>
<td>5.913</td>
<td>0.016*</td>
<td>0.022</td>
</tr>
</tbody>
</table>
Table 24 demonstrates that there was a difference between RAs who had mental health training and those RAs who did not have mental health training on efficacy and reluctance levels as well as expectations for shared information from the counseling center staff. This will be discussed further in chapter 5.

A separate ANOVA to compare the group differences between those RAs who had mental health training and those who did not was conducted on the actions taken by RAs when they have indicated that a student is at risk for suicide. An analysis was conducted using only the students who had encountered a student who was at risk for suicide. Therefore the ANOVA for actions taken had a much smaller $n$ than the previous
analyses. Further, it should be noted that the assumptions for normality and homogeneity of variance were not met for this data set. The data for the actions taken was not normally distributed and the variance test was not met for actions 3 (directed the student to call a crisis hotline), 4 (called a crisis hotline with the student), 9 (no action), and 12 (encouraged the student to call the student’s parents), so the results should be interpreted with caution. The reason for this is because of the difference in group size, the number of RAs who had general mental training and had experience with students who were suicidal (n=73) was far greater than those who did not have mental health training and had experience with students who were suicidal (n=24).

Table 25

ANOVA Mental Health Training Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>df</th>
<th>F</th>
<th>a</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encouraged the student to make an appointment at the counseling center on campus</td>
<td>(1, 70)</td>
<td>0.214</td>
<td>0.645</td>
<td>0.003</td>
</tr>
<tr>
<td>2. Accompanied the student to the counseling center on campus</td>
<td>(1, 70)</td>
<td>3.759</td>
<td>0.057</td>
<td>0.051</td>
</tr>
<tr>
<td>3. Directed the student to call a crisis hotline</td>
<td>(1, 70)</td>
<td>0.643</td>
<td>0.425</td>
<td>0.009</td>
</tr>
<tr>
<td>4. Called a crisis hotline with the student</td>
<td>(1, 70)</td>
<td>0.128</td>
<td>0.721</td>
<td>0.002</td>
</tr>
<tr>
<td>5. Called campus security</td>
<td>(1, 70)</td>
<td>0.223</td>
<td>0.638</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>Action</td>
<td>Sample</td>
<td>t</td>
<td>p</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>6</td>
<td>Accompanied the student to a local hospital</td>
<td>(1, 70)</td>
<td>0.005</td>
<td>0.946</td>
</tr>
<tr>
<td>7</td>
<td>Called the campus counseling center</td>
<td>(1, 70)</td>
<td>0.212</td>
<td>0.646</td>
</tr>
<tr>
<td>8</td>
<td>Called the police</td>
<td>(1, 70)</td>
<td>2.750</td>
<td>0.102</td>
</tr>
<tr>
<td>9</td>
<td>No action</td>
<td>(1, 70)</td>
<td>1.410</td>
<td>0.239</td>
</tr>
<tr>
<td>10</td>
<td>Reported the information to my supervisor</td>
<td>(1, 70)</td>
<td>5.069</td>
<td>0.028</td>
</tr>
<tr>
<td>11</td>
<td>Asked the student for a verbal or written promise to not hurt or kill self</td>
<td>(1, 70)</td>
<td>0.056</td>
<td>0.813</td>
</tr>
<tr>
<td>12</td>
<td>Encouraged the student to call the student's parents</td>
<td>(1, 70)</td>
<td>0.408</td>
<td>0.525</td>
</tr>
<tr>
<td>13</td>
<td>Encouraged the student to talk with friends</td>
<td>(1, 70)</td>
<td>0.363</td>
<td>0.549</td>
</tr>
</tbody>
</table>

As demonstrated in table 25 there was no statistically significant difference between those RAs who had completed mental health training and those who had not on the actions RAs have taken when they have identified a student is at risk for suicide. Thus the actions that the RAs took when they identified a student at risk for suicide did not differ between those RAs who had mental health training and those who did not.

To fully answer research question five it was necessary to examine the between group differences on the RA rating of importance of certain behaviors when trying to identify students at risk for suicide. Similar to research question four however, the data
did not meet the necessary statistical assumptions in order to perform an ANOVA so certain transformations were made.

First, RA responses for each behavior were compared to the response that the experts gave for each behavior. All of the items that the experts ranked as extremely important were placed into a scale deemed extremely important. If RAs matched the expert score on all 10 of the extremely important items, the total scale score would have been a 4. The range of the RA scale scores for the items ranked extremely important were 2.5 to 4. A score of 2.5 indicates that the mean of the individual RA’s rating of importance on the items the experts rated as extremely important, signified by a 4, was a 2.5. A 2.5 would signify that an RA underrated the behaviors that the experts rated as extremely important, because a 2 signified somewhat important and 3 signified quite important.

Similarly, all of the items that the experts ranked as quite important were placed into the quite important scale. If the RAs matched the expert rankings then the total scale score would have been a 3.0. The range of RA scores on the quite important scale was 1.64 to 4. A score of 1.64 indicates that the mean of the individual RA’s rating of importance on the items the experts rated as quite important, signified by a 3, was a 1.64. A 1.64 score would signify that some RAs underrated the behaviors that the experts rated as quite important, because a 1 signified not important and a 2 signified somewhat important. A score above a 3.0 indicates that RAs overrated (4 = extremely important) some of the items that experts labeled as quite important.

All of the items that the experts ranked as an importance of 2, or somewhat important, were also scaled. If the RAs matched the experts then they would have a score
of 2. The range of scores of the RAs on the somewhat important scale was 1.22 to 4.0. A
1.22 score would signify that some RAs underrated the behaviors that the experts rated as
somewhat important, because a 1 signified not important and a 2 signified somewhat
important. A score above a 2.0 indicates that RAs overrated (4 = extremely important,
3 = somewhat important) some of the items that experts labeled as somewhat important.

Finally a scale score was created for the items that the experts rated as not
important. The scale score for an RA who evenly matched the experts for not important
items would be a 1. The RA scores on this scale ranged from 1.0 to 3.11. A score of 1
means that the RA rating of importance matched the expert rating of importance, scores
above a 1 indicate that the RAs overrated the level of importance of behaviors. The next
step in the analysis was to check for the normality of distribution for each of the scaled
scores.

Normality was tested measuring skewness and kurtosis. If the skewness statistic
was more than twice the standard error of skewness (+ or -) then the data was found to be
not normally distributed. For the scale of RA ratings of behaviors that the experts rated
as quite important the data was found to be normally distributed. However, the scale of
RA ratings of behaviors that the experts rated as extremely important, somewhat
important, and not important, was found to be not normally distributed. Using the square
root transformation for both the extreme and somewhat behaviors resulted in the data as
normally distributed. However, three different types of data transformation: square root,
LOG 10, and ln, did not result in a normal distribution of the not important scale. Thus
the results should be interpreted with caution. Further, the Levine’s assumption was
violated for the somewhat important scale. Table 26 displays the results which indicate
that there is no statistically significant difference between RAs who have had mental health training and those who had not on RA rating of importance of behaviors when trying to determine whether or not a resident/student is at risk for suicide.

Table 26

*ANOVA Mental Health Training and Rating of Importance of Behaviors*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>df</th>
<th>F</th>
<th>a</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA ratings of behaviors that experts rated extremely important</td>
<td>(1, 259)</td>
<td>0.365</td>
<td>0.546</td>
<td>0.001</td>
</tr>
<tr>
<td>RA ratings of behaviors that experts rated as quite important</td>
<td>(1, 258)</td>
<td>0.153</td>
<td>0.696</td>
<td>0.001</td>
</tr>
<tr>
<td>RA ratings of behaviors that experts rated as somewhat important</td>
<td>(1, 259)</td>
<td>0.001</td>
<td>0.977</td>
<td>0.000</td>
</tr>
<tr>
<td>RA ratings of behaviors that experts rated as not important</td>
<td>(1, 258)</td>
<td>2.011</td>
<td>0.157</td>
<td>0.008</td>
</tr>
</tbody>
</table>

Unlike the results in Table 23 about suicide prevention training, Table 26 indicates that whether or not they had mental health training did not impact RAs ratings of behaviors.
displayed by students who may be at risk for suicide matching the experts ratings of these same behaviors.

OTHER FINDINGS

After participants completed the scale section of the instrument and reported their experience with suicide prevention or general mental health training, they were asked to make any additional comments about their experience working with students at risk for suicide. (Participants were reminded to maintain confidentiality). Sixty-seven participants (25.2%) wrote a comment. The qualitative data was recorded into an Excel spreadsheet, and that data was reviewed for recurring or prominent themes within the responses. Some of the most common themes within the comments were as follows: the RA became aware of the situation and then the RA contacted the counseling center or the RA's supervisor; the situation was difficult or stressful; the RA felt prepared for the situation; the RA had personal experience with depression or with family members with mental health issues and that helped the RA to relate to the student; and RAs have not yet experienced a resident who was at risk for suicide. It is interesting to note that a common theme was both it is scary or stressful to deal with a student who may be at risk for suicide as well as feeling prepared to deal with the situation.
CHAPTER FIVE

DISCUSSION

This chapter discusses implications of the results of the research study. Specifically, this chapter focuses on the summary of findings and implications of the findings for college counseling centers, resident assistant training programs, and student affairs administrators. Further, this chapter outlines the limitations of the study and highlights recommended areas for further research.

Summary of Findings

The primary purpose of this study was to gain an understanding of resident assistants' (RAs') perceptions of their ability to recognize students who may be at risk for suicide, their comfort level in working with students who may be at risk for suicide, the actions they take when working with students who may be at risk for suicide, and their expectations for follow up information after they have made a referral. These perceptions, actions, and expectations were measured using a survey instrument developed for this study that was completed by current RAs at residential institutions of higher education. The participants used for the survey were RAs from five different four year private universities in the United States. Of the 335 RAs at these institutions, 303 completed the survey resulting in a 90.4% response rate.

Institutions used in the study represented regional diversity. The institutions were located in three different regions in the United States: one university from the Midwestern region, three from the Mid-Atlantic, and one from the South. Further, these institutions were of varying sizes. Three universities had total enrollments of less than 5,000 students, one university had an enrollment between 5,000 and 10,000 students, and
one university had an enrollment above 10,000 students but below 15,000 students. Four of the five institutions were Catholic.

All participant RAs had gone through the selection and training process at their respective institutions. All RAs had at least one month of experience working as an RA and the average participant had 15 months of experience. The average age of the RA was 20.5 years. RAs reported over 60 different majors. Regarding ethnicity, 73.2% of the RAs reported that they were White, 55.8% indicated they were female, and over 65% of them were in their third year of undergraduate studies or at a higher level.

The demographics of the RAs and the institutions from which they were recruited for this study are comparable to two different studies that researched a similar topic. Reingle et al. (2010) conducted a qualitative study on RAs' attitudes and referral experience with students experiencing mental health and/or substance abuse. The Reingle study participants, all RAs, were described as 77.1% upperclassmen, 64.6% female, and 66.7% White. In addition, three universities were utilized to generate these participants and the institutions were described as one large university from the South, one large university from the Midwest, and another small university from the Midwest.

Tompkins and Witt published a study in 2009 on the effectiveness of a suicide prevention program with resident assistants. While the 240 RAs who participated in the study were selected from six universities, all six universities were private, small (with an average of 2,500 enrolled students), and were located in the Pacific Northwest. The RA demographics were similar to those in this study and in the Reingle study with 83% of RA participants reporting they were White, 59% female, and an average age of 20 years.
This demographic comparison of previous studies suggests that the sample for this research study was representative of the RA population.

**Research Question 1**

**Efficacy and Reluctance**

This study found that the majority of RAs reported that they believed they had personal efficacy in dealing with students at risk for suicide and that they did not have personal reluctance in dealing with students at risk for suicide. However, two individual items from the efficacy scale showed lower scores indicating concerns about their abilities to deal with students at risk for suicide. Item number 2 in the Efficacy section stated, “I can recognize students contemplating suicide by the way they behave.” More than 25% of participants reported that they disagreed. Similarly, item 5 stated, “I feel comfortable discussing issues of suicide with students.” More than 30% of participants disagreed with this statement. Therefore, while the results suggest that RAs reported an overall level of efficacy, these individual items show particular areas (recognizing students contemplating suicide and discussing issues of suicide with students) in which RAs reported lower levels of efficacy.

Regarding reluctance levels in working with students at risk for suicide, RAs reported low levels of reluctance and there were no particular items that stood out as RAs feeling more or less reluctant. However, it seems that RAs did not all agree about whether or not a student who is suicidal should be forced to seek treatment. Scores on item number 4, “If a student contemplating suicide refuses to seek assistance it should not be forced upon him/her,” indicated that over 25% of the RAs agreed with this statement.
It is important to compare the RA scores in this study to those of similar studies. Tompkins and Witt (2009) did a baseline survey of RAs before they received suicide prevention training. The baseline efficacy and reluctance levels were based on a 7 point scale, the higher the score the more efficacious or reluctant. At baseline, the RA mean for efficacy was 4.23 and the reluctance mean at baseline was 2.74. While those scales were based on a 7 point scale, the RAs’ responses indicated that they agreed more than they disagreed about statements surrounding efficacy in working with students at risk for suicide and that they disagreed more than they agreed about statements surrounding reluctance in working with students at risk for suicide. Further, in a study conducted on secondary school staff as gatekeepers, Wyman found at baseline the mean efficacy score was 3.40 and mean reluctance score was 5.68 (Wyman et al., 2008). Wyman’s study was also based on a 7-point scale and he stated that higher scores of reluctance indicated lower reluctance based on the recoding of the items. Despite scaling differences, the reluctance level from the Wyman study is comparable to the reported RA level of reluctance in this study (disagreeing with statements about reluctance to work with students at risk for suicide). However; the baseline efficacy score in the Wyman (2008) study was lower than the RAs efficacy score in this study; indicating that the RAs in this study reported higher levels of efficacy than the secondary school staff.

**Importance of Behaviors**

The majority of the RAs in this study reported minimal levels of reluctance and moderate levels of efficacy in working with students who may be at risk for suicide. The results of section three of the survey instrument compared RA knowledge of suicide indicators. It is important to examine the knowledge of the RAs compared with the
efficacy and reluctance they reported. Section three of the survey instrument asked RAs to rate the level of importance of resident behaviors when trying to determine if a student might be at risk for suicide. The responses of the RAs were then compared with the responses of the experts. RA responses to these items are of particular importance for informing RA training.

Of particular concern are the items that the experts scored as a 4, indicating a high level of importance for determining if a student is at risk for suicide, that the RAs rated as less important. Less than 60% of the RAs agreed that the following items/behaviors were as important as the experts noted: student does not appear to have any friends; student talks about death; student makes a statement about hopelessness; student displays noticeable or unpredictable mood change; student gives away prized possessions; and student exhibits a sudden change in behavior.

There were three other items that the RAs underrated in comparison with the experts. Experts rated the following items as quite important and less than 51% of RAs agreed with this rating of importance: other residents complain about student’s odd behavior; student takes unnecessary risks; and student appears anxious or agitated.

While other discrepancies existed between the expert rating of importance and the RA rating of importance of behaviors, these particular findings bear the strongest implications for student affairs administrators and for future RA training programs. While there were items in which the RAs did not match the experts, the items that are most significant are those that the experts rated as quite and extremely important that the RAs underrated. When RAs are trained to recognize potential suicide risk, these
behaviors should be emphasized because the results of this study indicate that RAs in this study did not see these behaviors as indicators of suicide risk.

The American Association of Suicidology (AAS) suggests using the mnemonic device, IS PATH WARM, standing for suicidal Ideation, Substance abuse, Purposelessness, Anxiety, Trapped, Hopelessness, Withdrawal, Anger, Recklessness, and Mood change to determine level of suicide risk for an individual (www.suicidology.org). Lester, McSwain, and Gunn (2011) questioned the validity of these warning signs to “distinguish malingerers from nonmalingerers” (p. 403). Yet these same researchers concluded that the 10 warning signs set forth by the AAS may be a good tool for “identifying suicidal individuals and distinguishing them from non-suicidal individuals” (McSwain, Lester, & Gunn, p. 187, 2012). Five of the 10 symptoms, (specifically anxiety, withdrawing, mood change, recklessness, and hopelessness) account for nine of the items that the RAs underrated on the survey instrument.

It also appears that the RAs in this study placed higher levels of importance on items that the experts rated as somewhat important. RAs rated a recent romantic relationship ending, financial problems, complaints about stress, and family conflict as more than somewhat important. This may speak to the developmental stage (young adulthood) of the RAs who completed the survey instrument. Chickering (1969) identified developing autonomy, establishing an identity, and forming interpersonal relationships as important parts of development for the traditional college aged student. Therefore, it is possible that RAs viewed these behaviors as particularly challenging. However, relationship problems were not found to be a significant factor in contributing to suicidal thoughts or suicide attempts among college students and only 19% of college
student suicide attempters indicated that money problems were the cause of their suicide attempt (Westefeld & Furr, 1987).

As mentioned in previous chapters, limited empirical research on RA knowledge of suicide indicators exists. Therefore, comparisons made between RA knowledge of suicide indicators in this study as compared to other gatekeeper studies on knowledge of suicide indicators are difficult to make.

Tompkins and Witt (2009) found that RA baseline knowledge of warning signs and intervention behaviors was 71.3 on a 100 point scale, compared to 78.3 for social work students (Jacobson, Osteen, Sharpe, & Pastoor, 2012) and 71.04 for secondary school staff (Wyman et al., 2008). However, these studies assessed gatekeeper knowledge about suicide warning signs and self-evaluation of knowledge. These studies did not provide a comprehensive list of possible suicide indicators. For example, the Wyman instrument, which has frequently been adapted and used in other gatekeeper studies, includes a section on knowledge of suicide warning signs. However, the section is comprised of 14 questions, only six of which are focused on risk factors (Jacobsen et al., 2012; Wyman et al., 2008). For example, one of the items stated, “The number one contributing cause of suicide is,” and four options followed. Another question asked “Which of the following is not a possible warning sign of suicide?,” and was followed by choices. Thus, the Wyman instrument (used in the studies just discussed) did not ask gatekeepers to rate the importance of a behavior when trying to determine if a person is possibly at risk for suicide.

Expectations for follow-up information
A section of the survey instrument addressed expectations for information sharing. This section was specifically included to determine which information RAs would like access to, and to examine whether such access would be possible under current confidentiality laws on college campuses. Sharkin (1995) has published articles on this topic and comments on the “strain” placed on confidentiality within the college setting. He has concluded that college counseling staffs are at risk for alienating members of the campus community who have made referrals to the counseling center but are then denied access to information about the student referred (1995). In fact, the data from one of his studies indicated that higher levels of anger, confusion, and disgust were reported from faculty members who referred students to the college counseling center and were denied any information from the counseling center staff about the student referred.

While this study did not measure emotions connected to RAs not obtaining information from the counseling center after referring students, there are interesting findings from the study. This study found that RAs who make referrals to the college counseling center have expectations to receive follow up information from both the college counseling center staff as well as the student referred. More than half of the RAs (56%) surveyed wanted the counseling center staff to let the RA know if the student referred attended a counseling session, remained in counseling sessions, and/or ended counseling sessions. More than 80% of RAs surveyed also wanted the counseling center staff to give the RA advice about the student referred and to be told if there were particular behaviors the resident should be concerned about if observed in the student referred. The majority of RAs, however, did not have an expectation that the counseling center staff share the diagnosis of the student referred.
While results indicated that the RAs have expectations to receive information from the professional staff at the counseling center regarding the student they referred, results also indicated that RAs do not have the same expectations of the student they referred. Less than 50% of RAs expected the student they referred to the counseling center to tell the RA if the student made an appointment or what happened in the counseling session. Less than 20% of RAs expected the student referred to counseling to tell the student’s roommate about counseling. However, close to 60% of RAs expected the student to tell the RA if the student stopped attending counseling sessions.

One interpretation of these results is that the RAs have lower expectations for access to private or confidential information from their peers than they do from professionals. It is possible that RAs want access to this private or confidential information but believe it would be too intrusive to directly ask the student. It is also possible that RAs feel it would be less intrusive to obtain the information from a third party. Another way to interpret the results is that perhaps the RAs have higher levels of trust in the professional staff than in their peers and therefore wish to access the information from what they consider a more trustworthy source.

The findings from this study add to the findings from similar studies about information sharing on college campuses. One study found that 88% of resident assistants reported they should have access to confidential information from the counseling center when calling the center to follow up on a referral (Sharkin et al., 1995). Another finding from Sharkin’s research suggested pretherapy communication with the referral source about the limits of confidentiality and also suggested that counseling center staff word confidentiality and intake forms in such a way to grant permission to
the counseling center staff to acknowledge to the referral source if the student came to
counseling (p. 186). Particularly since the RAs in this study did not want information on
the diagnosis of the student but rather were desirous of information about the student’s
counseling session attendance, the results from this study support Sharkin’s previous
findings and suggestions.

Confidence in the college counseling center

One of the significant findings of this study was the high level of confidence that
the RAs reported in the college counseling center. The mean score of 3.55 indicates that
most RAs responded with a 3 “agree” or 4 “strongly agree” to positive statements about
the college counseling center. This finding supports Reingle et al.’s qualitative finding
that all of the RAs reported potentially positive outcomes for referrals to the counseling
center (2010). This is similar to a study conducted in 1986 on students’ use of campus
resources and the students reported level of satisfaction with those resources. On a 7-
point scale, the mean of the rate of satisfaction with the counseling center was 5.55 (Neal
& Heppner, 1986). In a more recent study, conducted in 2007, 91% of faculty/staff
reported referring students to the counseling center, which might suggest a high level of
confidence in the center. Further 74% of the faculty and staff rated the counseling center
services as average/good (Fletcher et al., 2007). The 2007 study did not specifically
survey RAs but the faculty and staff in the study served as gatekeepers in a similar
manner to the roles of the RAs in this study therefore, it is appropriate to make the
comparison. In a 2008 study conducted on client satisfaction with the college counseling
center, results indicated that generally “clients were very pleased with the services they
received at the Counseling Center” (Reynolds & Chris, 2008, p. 379). The results of that
2008 study contrast slightly with an earlier study, which found that only 72% of the students knew that their campus had a counseling center (Kahn, Wood, & Wiesen, 1999). However, that study was conducted on the general student population and not just RAs.

**Actions Taken**

A section in the survey instrument measured what actions RAs took when they identified that a student might be at risk for suicide. An attempt was made to determine if there was a correlation between the level of confidence in the college counseling center and the actions RAs take when they have identified that a student may be at risk for suicide. However, the data from this section was difficult to interpret. Less than 50% of the RAs in the study actually reported having worked with a student who was at risk for suicide. In addition, the way the questions were asked of the RAs did not specifically indicate if the actions they took were actions that they took each time they came into contact with a potentially suicidal student, if they took more than one action, etc.

However, it is important to note that the most common actions RAs took when working with potentially suicidal students was to encourage the student to make an appointment at the college counseling center and to report the information to the RA supervisor.

One reason these findings are significant is that it reflects that RAs are following the appropriate procedures for dealing with students in crisis. The policies of each university included in the study for actions the RAs are supposed to take when they encounter a suicidal student included reporting the information to the supervisor and involving the counseling center. It is also interesting to note that the RAs were likely to encourage students to talk with their parents and or their friends. It is significant that the RAs encouraged potentially suicidal students to talk to friends because the literature does
suggest that students are more likely to confide in peers than in professionals (Bean & Baber, 2011; Dadonna, 2011; Sharkin et al., 2003).

It is difficult to compare the results of this part of the study with other studies since the empirical data on RAs making referrals and dealing with students with mental health issues is limited. Reingle et al. (2010) conducted a qualitative research study of 48 RAs at three different universities and found that only 26% of their RAs made a referral to the college counseling center for a mental health concern and only 35% had made a referral for substance abuse issues. Tompkins and Witt (2009) found that 68% of RAs would be very likely to encourage a student who might be suicidal to get help, although they did not specify what that help meant. Also 11% of the RAs in the Tompkins and Witt (2009) study reported that the RAs did not know where to refer a potentially suicidal student. In this study, of the 99 students who encountered a student at risk for suicide, 93% referred the student to the counseling center. Thus it seems that the RAs in this study were better informed about where to refer a student who is suicidal and were more likely to make the referral than the RAs in other similar studies.

**Training Programs**

The majority of the RAs (87%) in this study reported they had received suicide prevention training and 73% reported that they had received training in mental health. This is similar to the Reingle et al. (2010) qualitative study in which RAs reported they had training before the semester began from campus mental health professionals. However, "behavioral assessment and counseling skills were not typically part of RA training" (p. 332). In an older study of RA training, 60.5% of the universities surveyed reported they included suicide prevention in the RA training and 83.8% of the
universities reported including peer helping or counseling skills in the training of RAs (Bowman & Bowman, 1995). The results of this study indicated that most RAs received some type of training in mental health or suicide prevention; however, based on the results of the rating of behaviors, one might question the quality of the training and its efficacy.

**Research Question 2**

This study also examined the relationship among the RAs' ratings of importance of behaviors and RA efficacy in working with students at risk for suicide and RA reluctance in working with students at risk for suicide. Results indicated that RAs' efficacy scores increased and their reluctance scores decreased when RAs accurately rated a behavior as quite or extremely important. That is, for each RA rating of importance that matched what experts rated as a "quite important" or "extremely important" behavior in determining whether or not a student is at risk for suicide, the RA was more efficacious. For each RA rating of importance that matched what experts rated as an "extremely important" behavior in determining whether or not a student is at risk for suicide, the RA was less reluctant when working with students at risk for suicide.

This finding is significant because it suggests that when training Resident Assistants emphasizing the behaviors that are most critical in determining whether or not a person is at risk for suicide will have an impact on individual’s efficacy and reluctance in working with a student at risk for suicide.

To date, other studies have not examined predicting efficacy and reluctance based on knowledge of suicide risk factors. Rather studies have focused more globally on the overall impact of specific suicide prevention training on scales of efficacy, reluctance,
and knowledge. In a study of non-clinical gatekeepers, Matthieu, Cross, Batres, Flora, and Knox (2008) found that post training, staff reported greater awareness and knowledge of the risk factors of suicide and greater efficacy levels in working with people at risk for suicide. In a study on secondary school staff, results indicated that the training had a significant impact on increasing knowledge and efficacy but not on decreasing reluctance (Wyman et al., 2008). Similarly in their study of the impact of Question Persuade Refer (QPR) suicide prevention training on RAs, Tompkins and Witt (2009) found a statistically significant difference in the pre-test and follow-up on knowledge and efficacy but not reluctance.

**Research Question 3**

Another purpose of the study was to see if there was any correlation between RA confidence in the counseling center and the actions RAs have taken when they have identified a student who might be at risk for suicide. As previously noted, the data from this section was difficult to interpret. Less than 40% of the RAs in the study actually reported having worked with a student who was at risk for suicide; further it was unclear if the actions the RAs reported they took when they identified a student was at risk for suicide was taken each time or just once. For all but one action, there were no statistically significant correlations found between RA level of confidence in the college counseling center and the actions that RAs took when they identified a student at risk for suicide. However, there was a statistically significant positive correlation between level of confidence in the college counseling center and action eleven: asking students to make a verbal or written promise not to hurt or kill themselves. Despite the fact that there was a statistically significant correlation for this action, given the limitations to interpreting
the data collected on the “actions taken” portion of the survey instrument; it is likely that this is simply a random finding and not of major significance.

Given that the most common action among RAs in the study who had worked with a student at risk for suicide was to refer that student to the college counseling center and given that the RAs in the study reported high levels of confidence in the college counseling center; it is interesting to note that the level of confidence in the college counseling center did not correlate to any actions involving the counseling center. It is difficult to make comparisons from the results of this part of the study to other studies since there is limited empirical data from other studies about RA referrals to the college counseling center or level of confidence in the college counseling center.

**Research Question 4**

The purpose of this question was to determine whether there was a significant difference between RAs who have had suicide prevention training and those who have not had suicide prevention training on the following indicators: efficacy in dealing with students at risk for suicide; reluctance in dealing with students at risk for suicide; RA ratings of the level of importance of behaviors when determining if a student is at risk for suicide; RA expectations for follow up information post referral of a student at risk for suicide; RA confidence in the college counseling center; and RA actions taken when working with students at risk for suicide. The most significant finding from this research question was that RAs who have had suicide prevention training reported higher levels of efficacy in working with students at risk for suicide, lower levels of reluctance in working with students at risk for suicide, and higher levels of confidence in the college counseling center. The findings of this study are comparable to other similar studies that
also measured efficacy or reluctance rates before and after suicide prevention training was administered.

Pasco, Wallack, Sartin, and Dayton (2012) studied the effectiveness (on RAs) of a suicide prevention gatekeeper program called Campus Connect, which used experiential exercises. While the measures in that study were different than those used in this study and other gatekeeper studies, the results were similar. After the training, RAs’ efficacy scores increased and RAs’ scores on the Suicide Intervention Response Inventory were more aligned with the professional response. The effectiveness of a different type of suicide prevention gatekeeper training (QPR) program also conducted with RAs, found a statistically significant difference in the pretest and follow-up on gatekeeper efficacy but not gatekeeper reluctance (Tompkins & Witt, 2009).

Results of other studies on the efficacy of suicide prevention training programs in school or community settings were also compared with this study. A community based youth suicide prevention training program’s effectiveness was measured. Results indicated that the training increased knowledge in preventing youth suicide and also altered attitudes towards youth suicide (Bean & Baber, 2011). In a study of non-clinical gatekeepers, Matthieu et al. (2008) found that post training, staff reported greater efficacy. Results from a study on secondary school staff indicated that training had a significant impact on increasing efficacy but not reluctance (Wyman et al., 2008).

While none of these studies measured differences in rates of confidence in the college counseling center or comparable referral sources, one study of a suicide prevention training program did measure the likelihood of high school students to make referrals to adults within the school. The results of a study conducted on the Sources of
Strength suicide prevention program indicated that the training "increased peer leaders’ referrals of friends to adults because of concerns about suicide" (Wyman et al., 2010, p. 1659).

This study did not find significance between group differences on the indicator of expectations for information post referral. However, as previously discussed in this chapter, the findings of the study related to expectations for follow-up information were similar to those found in other studies conducted on expectations for follow-up information. However, those studies did not conduct any comparative analyses thus it is unclear how this study’s findings compare.

Similarly, this study found no significant difference for those who have had suicide prevention training and those who had not on actions taken when a student was identified as being at risk for suicide. However, this finding should be interpreted with caution due to nonequivalent group sizes. Only 37% (n=99) of the RAs in the study had worked with a student at risk for suicide, and of those 99, only 12% had not had suicide prevention training. Thus the fact that there was not a statistically significant difference in actions taken between those RAs who had suicide prevention and those who had not should be interpreted with caution.

While other studies did not measure actions taken, one study did measure the effect of suicide prevention training on “gatekeeper behaviors,” such as convincing a peer to seek help or taking the student to a counselor. The results of the QPR training on RAs found that there were no “sizeable behavior changes” after the training on these behaviors (Tompkins & Witt, 2009, p. 142). However, these results should not prevent providing RAs with a protocol for working with students at risk for suicide especially given that
other studies found that suicide prevention increased RAs’ familiarity with referral sources (Pasco et al., 2012; Taub et al., 2013).

While this study did not find a statistically significant difference between RAs who have had suicide prevention training and those who have not regarding their ratings of behaviors that the experts identified as quite important, somewhat important, and not important, the study did find a difference between RAs who have had suicide prevention training and those who have not on RA ratings of behaviors that experts rated as extremely important. This study found that when RAs correctly identified behaviors as extremely important when determining a student to be at risk for suicide, they had higher ratings of self efficacy and lower ratings of reluctance when working with students at risk for suicide. Therefore, the fact that this study found that RAs who have had suicide prevention training were better able to identify behaviors that the experts rated as extremely important bears even greater significance since it indicates that those who have had training may more readily identify and thus refer students who are potentially at risk for suicide.

As discussed previously, other studies have measured baseline and post intervention knowledge of suicide warning signs or knowledge about suicide, but other studies have not specifically measured ratings of importance of certain behaviors when assessing whether someone may be at risk for suicide. Although comparisons will be made to other studies, the lack of comparable studies should be noted.

Pasco et al. (2012) found that RAs were more aware of suicide risk factors after the Campus Connect suicide prevention gatekeeper training program was completed. Another study that was much smaller in scale found that post training increased
knowledge of risk factors and warning signs of suicidal behavior (Portzky & van Heeringen, 2006). Taub et al. (2013) found an increase in knowledge about suicide and suicide warning signs in new RAs who received suicide prevention training but not in RAs who had previously served as RAs. Similarly, Wyman et al. (2008) found that “training had a medium-size effect on increasing participants’ accuracy to identify warning signs and risk factors for youth suicide” (p. 113). However, Tompkins and Witt (2009) found that there was no significant increase in RAs scores on the QPR knowledge quiz post training. Further, Jacobsen et al. (2012) found that the QPR training had a “moderate” effect on knowledge of suicide warning signs and self-evaluation of suicide prevention knowledge on social work students.

Research Question 5

In addition to assessing differences between RAs who had suicide prevention training and those who had not, this study also explored potential between group differences for RAs who had mental health training and those who had not. This study found that there was no significant difference between those who had general mental health training and those who had not on expectations post follow-up from the students referred, level of confidence in the college counseling center, actions taken when a student has been identified as being at risk for suicide, and ratings of behaviors for determining whether or not a student is at risk for suicide. However, this study found that there were higher rates of reported efficacy and lower rates of reported reluctance for working with students at risk for suicide among those who have had general mental health training as opposed to those who had not. Also, there was a higher rate of expectation for follow up information from the counseling center staff from those who
had training in general mental health than those who had not. Such information might make one question the training regarding confidentiality. It would seem that the RAs who had training on mental health practices would understand the confidentiality limits more than students who did not have the training. Articles that focus on RA training in counseling referrals emphasize the need to review confidentiality laws and limits (Birky et al., 1998; Daddona, 2011; Grosz, 1990; Sharkin et al., 1995). Yet, only 55.6% of universities involved in a study about RA training included information on procedures around making referrals (Bowman & Bowman 1995).

The fact that the RAs who received mental health training reported higher levels of efficacy and lower levels of reluctance is not surprising and supports studies that showed RAs had less burnout and stress when they received proper training (Murray et al., 1999; Paladino et al., 2005). While this study did not ask RAs to describe the details of the mental health training they received, it is also possible that the students’ mental health training included information about mental health issues and that information about mental health issues commonly associated with suicide were addressed at that time.

The fact that there were no other statistically significant differences might be attributed to the difference in group sizes and the way the RAs answered the survey instrument questions about their training experiences. The fact that students responded to the item about suicide prevention training before they responded to the question about mental health training might have attributed to the greater number of students who reported that they had suicide prevention training than those who reported having had mental health training. It is possible that the mental health training the students had was about suicide prevention and that they may have reported they had mental health training
but not suicide prevention training if the questions had been asked in a different order. It is also possible that significant differences were not found because the survey instrument was geared towards measurements about the identification and referral of suicidal students and not general mental health issues that college students face. Again, as cited several times in this chapter, limited empirical studies on RA training exist, so no further comparison studies can be included at this time.

**Implications**

Findings from this study have implications for college counseling centers, RA training, and student affairs staff.

**Implications for College and University Counseling Centers**

Findings from this study indicated that RAs had high levels of confidence in their college counseling centers. The findings relay that if an RA identified a student who may be at risk for suicide, the RA suggested the student make an appointment at the counseling center. Thus university counseling centers need to have a system in place to handle the referrals from the RAs so that potentially suicidal students do not have to wait to make an appointment. Further, college counseling centers should be clear about topics of confidentiality and information sharing with resident assistants.

The study found that RAs have high expectations for receiving information from counseling center staff about the students RAs have referred. Given the current confidentiality laws, the counseling centers should consider finding ways to be supportive of resident assistants while not violating the confidentiality of the student whom the RA referred for treatment. Since RAs reported that they want to be made aware of behaviors that may be cause for concern in the student referred, the counseling center staff could
provide continuous training to the RAs based on common client issues. Further, the counseling center staff could emphasize that RAs always have a right to call the counseling center and provide information to the counseling center staff about a student they referred. The counseling center staff can receive information about a student, regardless of whether or not the student is currently in treatment, without compromising the client’s confidentiality. Another possibility is for the counseling center staff to ask the students who were referred for their permission to alert the referral source that the student did attend the counseling session. These suggestions and implications for college counseling centers are in line with those from similar studies (Birky et al., 1998, McLeon et al., 1985; Taub et al., 2013).

**Implications for Resident Assistant Training**

The findings from this study contribute to limited empirical data on the effectiveness of suicide prevention training programs with resident assistants and the even more limited data on RA training programs. The findings of this study are even more significant considering that no universal RA training standards exist (Reingle et al., 2010).

This study found that the majority (87%) of RAs received suicide prevention training and that the average length of the training was 2.7 hours. The study also found that not only did RAs who had suicide prevention training score higher on efficacy and lower on reluctance scales for dealing with students at risk for suicide, but also, those RAs were able to better identify behaviors that are most important in trying to identify if a student is at risk for suicide. The findings from this study endorse not only the need for
suicide prevention training for resident assistants, but also specifically endorse the need to focus on observable behaviors and warning signs of suicide in training programs.

While other studies have been able to show the impact of suicide prevention training on some similar measures (efficacy, reluctance, behaviors), this study is the only one that examined ways to predict an RA's efficacy and reluctance levels with working with potentially suicidal students. Since the study found that the RA efficacy scores increase when RAs know which behaviors are "quite important" or "extremely important" and reluctance scores decrease when RAs know which behaviors are "extremely important" in determining whether or not a student is at risk for suicide, then RA training programs could focus on those warning signs. The findings from this study suggest that RAs should receive training in suicide prevention and that the training should focus specifically on critical warning signs of suicide.

The findings also suggest that RAs should become trained in the confidentiality laws so that they can better understand the legal limitations of counseling center staff members sharing information about their clients. However, RAs should also be informed in their training that RAs are not legally bound to maintain a student's confidentiality and that in the case of an RA identifying a student who may have an intent to harm, RAs should take action and confide in a professional.

**Implications for Student Affairs Staff**

This study found one of the most frequent actions RAs took when they identified a student who might be at risk for suicide was to report it to their supervisor. Staff members working in residential life and student affairs who serve as supervisors for RAs need to be knowledgeable about policies and procedures for potentially suicidal students.
that exist on a campus. However, this assumes there are policies and procedures on campus for staff to follow. An obvious recommendation then becomes to have a clear procedure for RAs to follow when they determine that a student may be potentially suicidal. Further, student affairs administrators would be wise to have an *on call* system not just for RAs when they are working but for the supervisors of the RAs and perhaps counseling center staff members as well.

While RAs are often undergraduate students, residential life professional staff members are typically full time employees of the college or university and may or may not have a background in mental health counseling. Thus it is important for student affairs administrators to make training programs, professional development opportunities, and consultations with the counseling center on campus available to residential life professional staff. Further, while the residential life professional staff and other student affairs staff likely do not have as much contact with students as the RAs do, it might still be beneficial for professional staff to receive training in suicide warning signs based on the results of this study.

**Limitations**

In interpreting the results of this study, limitations should be considered. These limitations are related to the participant selection, generalizability, and instrumentation.

**Participant Selection Limitation**

Participants for this study were recruited from five institutions where I had a natural connection with an employee in the student affairs department. RAs at each of these institutions were required to attend a training that I facilitated. Before the training sessions began, I asked for the RAs to participate in a research study by completing a
survey instrument. The RAs may have felt the need to please me or their supervisor since both of us were present. Particularly when I was introduced as a friend of the student affairs administrator, students may have felt the need to perform on the instrument.

Further, because the possibility to participate in the study was limited to RAs at these select institutions, it is possible that the five institutions were not representative of all universities and all RAs. Four of the five institutions were Catholic and all were private. This is potentially limiting in generalizability. Further, while efforts were made to exclude RAs who reported more than a certain number of hours of suicide prevention or mental health training, it is still possible that certain demographic variables were not controlled for. One university had recently undergone an extensive suicide prevention program and another university had students who had been RAs for more than 2 years. No effort was made to determine whether the RAs themselves had ever been suicidal, had been impacted by suicide within their family, or if there had been a suicide on campus. Thus in interpreting the results of the study, cautions should be made with generalizability.

**Instrument Limitations**

A limitation to this study is the instrument that was used. Since there was not an existing instrument that measured all that I wanted to measure, the instrument was created specifically for use in this exploratory study. Since the instrument was created for the purpose of understanding this particular population, I did not conduct a validation study. While the instrument items were created based on current literature and best practices, researcher bias for the item development is a possibility. Further, while the
reliability tests for the pilot study indicated an overall reliability, some sections were more reliable than others.

Two of the seven sections were adapted from a similar instrument which has been used in several studies and demonstrated good reliability. However the adaption of the questions for this study altered the original scoring measures. Further, while the other sections were reviewed by experts, section 6 which asked RAs about the actions they took when they identified a student at risk for suicide had limitations. Section 6 did not include a question that asked if the RA had ever come into contact with a student they thought was at risk for suicide. Including this would have alleviated the N/A response confusion that ensued with the items in this section of the survey instrument. This also would have allowed for greater reliability in interpreting the results of that section.

Section 7, which addressed the demographics, did not ask for any descriptions about the training that the RAs may have had. Rather the question was a yes or no forced choice response. Participants may have been confused about the difference between suicide prevention training and general mental health training. Also, RAs may have responded yes to those questions because they had participated in training in high school or in some of their academic classes. The question did not specifically ask if the RAs had received suicide prevention training or general mental health training in their role as RAs.

Finally, as with many survey instruments, the data collected and recorded were all self-reported. No efforts were made to triangulate the data. For example, contacts from each institution reported anecdotal information to me that all RAs had suicide prevention training, yet not all RAs reported that response. Further, RAs from the same institutions reported varying numbers of hours of training.
Despite these sampling, generalizability, and instrument limitations, the results of the study still contribute to the very limited empirical data on RA training, RA knowledge of suicide prevention, and RA expectations for information post referrals.

**Suggestions for Future Research**

Suggestions for further research include, first and foremost taking the proper steps to validate the instrument used in this study. Administering the survey instrument to RAs at other institutions could help to achieve this purpose. Further, once the instrument’s psychometric properties have proven to be sound, then the instrument could be used not only with RAs but also with faculty and staff members at colleges and universities. This would greatly contribute to the limited literature on gatekeepers at colleges and universities.

Areas for future research also include inviting RAs from public institutions to participate. Expanding this study to include RAs from public institutions would contribute to the generalizability of the results. Comparing the results of the public institutions to that of the private institutions used in this study could complement a study conducted by Elleven, Allen, and Wircenski (2001) on the training practice differences for RAs at public and private universities.

Additionally, utilizing a different research design, for example, a pre and post test design in which the intervention simply involved training the RAs on suicide warning signs could help to expand on the findings from this study. The results of such a study could contribute to the finding from this study that knowing the most critical warning signs of suicide not only increased RAs’ comfort level with working with students at risk for suicide but can actually predict their comfort level.
Another area of focus for further research includes expectations from other referral sources on campus (such as faculty and staff) for obtaining confidential information from the counseling center staff. This would be critical information for informing staff trainings and for evidence to support public policy in information sharing on college campuses.

Summary

The primary purpose of this study was to gain an understanding of Resident Assistants’ perceptions of their comfort level in working with students who may be at risk for suicide, Resident Assistants’ ability to recognize students who may be at risk for suicide, and the actions Resident Assistants take when working with students who may be at risk for suicide. The study found that RAs report they are comfortable working with students at risk for suicide; however, the study also found that RAs ability to recognize students who may be at risk for suicide depends on whether or not the student has been trained to know the most critical warning signs of suicide. The study also found that the most common actions that RAs take when working with a student at risk for suicide are encouraging the student to make an appointment at the college counseling center, reporting the information to the RAs’ supervisor, and encouraging the student to talk with friends.

The secondary purpose of this study was to clarify RA expectations for follow up information after they have made a referral. The study found that RAs have expectations to obtain information from the counseling center staff about students they referred there. Further, the study found that RAs expectations to obtain information about the student referred are higher from the counseling center staff than from the student referred.
A third purpose of the study was to determine whether or not Resident Assistants’ experiences after making a referral to the college counseling center influence RA actions when dealing with a student at risk for suicide. The study found that RA experiences after making a referral to the college counseling center do not influence RA actions when dealing with a student who may be at risk for suicide.

A fourth and final purpose of this study was to determine the level of training in suicide prevention or mental health issues RAs have had and whether or not that training has an impact on RA comfort levels when working with students who may be at risk for suicide. It was determined that RAs who had suicide prevention training and who were able to identify the most critical warning signs of suicide were more efficacious and less reluctant to work with potentially suicidal students than those who did not.

The results of this study help to inform RA training, student affairs policy, and counseling center staff interactions with residential life staff. Future research with RAs from public institutions is recommended.
CHAPTER SIX
MANUSCRIPT

EXPERIENCES OF RESIDENT ASSISTANTS
WITH POTENTIALLY SUICIDAL STUDENTS:
IDENTIFICATION, REFERRAL, AND EXPECTATIONS

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To be submitted to the
Journal of College Counseling
ABSTRACT

This study examined the ability of university resident assistants (RAs) to identify students at risk for suicide, RA comfort in working with students at risk for suicide, RA actions taken when working with students who may be at risk for suicide, and RA expectations for shared information about students the RAs have referred for counseling because they may be at risk for suicide. Results indicated that resident assistants’ knowledge of the importance of behaviors when trying to determine if a student is at risk for suicide increases RAs’ comfort level in working with potentially suicidal students.

Keywords: Resident Assistants, gatekeeper, suicide prevention training
INTRODUCTION

In a study published on college student suicides from 1990 through 2004, the average suicide completion rate for college students was 6.45 for each 100,000 students (Schwartz, 2006a). Additionally, the American College Health Association reported that in 2010, six percent of college students reported seriously considering suicide within the past year. Further, in the 2010 national survey of college counseling directors, 133 completed suicides were reported (Gallagher, 2010). While concerns have been made about the accuracy of completed college student suicides due to various definitions of student (full-time, part-time), whether suicides occur on-campus or off-campus (Haas, Hendin, & Mann, 2003; Schwartz, 2006; Silverman, Meyer, Sloane, Raffel, & Pratt, 1997), and whether the data collected came from students or from university records (Westefeld & Furr, 1987), researchers have agreed that college student suicide is problematic and of concern (Hirsch, Conner, & Duberstein, 2007; Schwartz & Friedman, 2009; Westefeld et al., 2005; Westefeld et al., 2006).

In 2008, Joffe conducted a study establishing the efficacy of a suicide prevention program at one large university. In 2006, Westefeld and colleagues published a position paper entitled, “College Student Suicide: A Call to Action.” These works provided an overview and insight into the complex nature of college student suicide and offered specific tools for prevention. In addition, The Garret Lee Smith Memorial Act passed in 2004 by the United States Congress provided funding for adolescent and young adult suicide prevention programs. This Act has afforded college campuses the opportunity to channel resources into campus wide suicide prevention efforts (Goldston et al., 2010; Schwartz & Friedman, 2009).
The complexity of college student suicide is an obstacle in addressing the issue. Some university officials are reluctant to provide screening programs for students because they are concerned that the public may believe the prevention programs themselves give students the idea to attempt suicide (Haas et al., 2003). College and university officials are challenged in deciding where to invest resources and what population to target for student suicide prevention: the suicidal individual, faculty members who may be gatekeepers, the student body as a whole, counseling center staff members, or residential life staff members. Ultimately, college counseling centers and residence life offices are two critical components of college student suicide prevention on residential college campuses (Francis, 2003; McLeon, Tercek, & Wisbey, 1985).

College counseling centers are involved with consulting faculty and staff members regarding disruptive students or students who may need counseling services (Birky, Sharkin, Marin, & Scappaticci, 1998; Lamb, 1993). College counseling center directors in 2010 reported working with students in personal counseling for issues that range from career decision making to crisis intervention (Gallagher, 2010). College and university counseling centers typically not only provide direct counseling services to individual students but many of them also serve to provide outreach services to the campus community (Reynolds & Chris, 2008).

At the forefront of supporting college and university students are Resident Assistants (RAs), typically upperclass undergraduate or graduate students whose primary function is to assist students living in the residence halls (Boswinkel, 1986). Because RAs interact with the students living in their dormitory or on their floor on a regular basis, RAs are often in positions to refer students who need help to college counseling
centers (Boswinkel, 1986; McLeon et al., 1985; Sharkin, Plageman, & Mangold, 2003; Taub & Servaty-Seib, 2011).

Despite the fact that RAs are universally seen as people “on the front lines” (Taub & Servaty-Seib, 2011) and seen as students in prime positions to make referrals for counseling (Sharkin et al., 2003), there are no universal standards for RA training (Reingle, Thombs, Osborn, Saffian, & Oltersdorf, 2010; Taub & Servaty-Seib, 2011). Further, very few empirical studies have been conducted related to the understanding RAs might have of when and how to make referrals to college and university counseling centers (Reingle et al., 2010). The results of this study contribute to knowledge provided by other recent studies conducted on the efficacy of RA suicide prevention training programs (Tompkins & Witt, 2009; Taub et al., 2013). The results of this study provide counselors and higher education administrators with information they can use to prepare RAs to recognize and refer potentially suicidal students in an appropriate manner.

**PURPOSE**

The primary purpose of this study was to gain an understanding of RAs’ perceptions of their ability to recognize students who may be at risk for suicide, their comfort level in working with students who are at risk for suicide, the actions they take when working with students at risk for suicide, and their expectations for follow up information after they have made a referral. These perceptions and expectations were measured using a survey instrument developed for this study that was completed by current RAs at various residential institutions of higher education. Two of the seven sections of the instrument were adapted from an instrument used in similar studies (Wyman et al., 2008).
Two research questions were addressed in this study: (1) How will RAs report the following: (a) RA efficacy in dealing with students who may be at risk for suicide; (b) RA reluctance in dealing with students who may be at risk for suicide; (c) RA ratings of importance of student behaviors when determining suicide risk; (d) RA desire for follow-up information post-referral; (e) RA level of confidence in the college counseling center; (f) RA actions taken when working with students who may be at risk for suicide; and (g) RA hours of mental health and suicide prevention training? and (2) Do RA ratings of importance of student behaviors when determining suicide risk predict RA efficacy in dealing with students who may be at risk for suicide and RA reluctance in dealing with students who may be at risk for suicide?

METHOD

Participants & Procedure

The participants for this exploratory study were RAs from five universities. These universities were selected based on ease of access resulting from pre-existing relationships with one of the researchers (previous places of employment or having a personal or professional connection with current administrators at the universities). Institutions used in the study represent regional diversity. The institutions were located in three different regions in the United States: one university from the Midwestern region, three from the Mid-Atlantic, and one from the South. Further, these institutions were of varying sizes. Three universities have total enrollments of less than 5,000 students, one has an enrollment between 5,000 and 10,000 students, and one has an enrollment above 10,000 students but below 15,000 students. All five universities were private and four of
the five institutions were Catholic. Community colleges and colleges that do not offer on-campus housing were not included.

Administrators in student affairs departments at the participating institutions were asked if they would be willing to provide their RAs an opportunity to participate in a research project aimed at gathering information about RA understanding of the mental health needs of college students. In exchange for their participation, the first author offered to provide either (1) a psycho-educational presentation for the RAs on mental health concerns of college students and warning signs that a student needs to be referred for mental health treatment; or (2) another psycho-educational presentation of the university's choice. While the presentation component was mandatory for the RAs, participation in the study was voluntary. To minimize validity threats, only after the instrument was administered did the presentations begin.

An invitation to participate was extended to all RAs from the selected universities. The invitations generated a total of 303 completed surveys (90.4% response rate), and 265 useable surveys (79.1%). The total number of participants required, by following Cohen's (1992) suggestions for a medium effect size for linear regression, assuming a power of .80 and \( p = .05 \), was 107 participants. Efforts to protect the privacy of the RAs and of the institutions were taken.

All participant RAs had gone through the selection and training process at their respective institutions. All RAs had at least one month of experience working as an RA and the average participant had 15 months of experience as an RA. The average age of the RA was 20.5 years. RAs reported over 60 different majors. The three most frequent majors for participants were: Biology (5.7%), Biomedical Sciences (4.5%), and
Psychology (4.5%). A total of 73.2% of the RAs reported that they were White, 55.8% indicated they were female, and over 65% were upper-class (in at least their third year of undergraduate studies).

**Instrument**

Before the participants completed the instrument, they were given a cover letter to explain the nature of the research and to inform them of Institutional Review Board approval. The survey instrument used in this study included seven sections. Section one of the survey instrument consisted of items related to perceived efficacy in dealing with residents who may be at risk for suicide. Section two consisted of items related to perceived reluctance in dealing with residents who may be at risk for suicide. Both of these sections were adapted with permission from an instrument used to measure gatekeeper efficacy and reluctance (Wyman et al., 2008). Section three consisted of items connected to behaviors exhibited by potentially suicidal students. Section four included items regarding RA desire for follow-up information post-referral. Section five consisted of items regarding RA attitudes about the college counseling center. Section six included actions RAs may have taken when working with potentially suicidal students. Section seven consisted of demographic items about the RA, including major and number of months as an RA.

Once the initial instrument was created, to establish validity, it was sent to an expert panel for review. The expert panel was comprised of five mental health professionals at the doctoral level with expertise in the mental health needs of college students, particularly those who had expertise in counseling suicidal college students. Panel members agreed that the items on the instrument appeared to be measuring what was
intended to be measured and that the items were appropriate and were clearly worded. Panel members also provided some suggestions for improving the instrument. Based on the feedback from the panel and discussion with research team members, the instrument was revised and finalized.

An important contribution from the expert panelists for the survey instrument was their rankings of the importance of behaviors demonstrated by students that might indicate that a student is at risk for suicide. The experts were asked to complete this portion of the instrument in their role as mental health expert, and each expert returned ratings of importance for each of the behaviors. Once the expert scores were recorded, compared, and averaged, an item was assigned an expert score. Scores for items that had 100% consensus from the experts were easily assigned the score the experts agreed upon. Scores of items that did not have a 100% consensus were averaged, and those averaged scores were then rounded (up or down) to the nearest whole number score.

Once the instrument was reviewed, it was used in a pilot study of 34 RAs who were then excluded from the final study. Data collected from the pilot study was analyzed. Specifically reliability tests were conducted. Cronbach’s alpha for the total items on the instrument was high ($\alpha = .909$). Reliability for each section is as follows: Efficacy, nine items, ($\alpha = .687$); Reluctance, 9 items, ($\alpha = .455$); Behaviors, 40 items, ($\alpha = .949$); Expectations, 10 items, ($\alpha = .846$); Confidence, 5 items, ($\alpha = .606$); Actions, 14 items, ($\alpha = .856$). These steps helped to establish validity and reliability.

Data Analysis
Using SPSS 21, statistical analyses were conducted. Descriptive statistics were used to answer the first research question. Multiple linear regressions were used to answer the second research question. Alpha was set at .05 for all research questions, N = 265.

RESULTS & DISCUSSION

Efficacy and Reluctance

The results of this study found that the majority of RAs reported that believed they had personal efficacy in dealing with students at risk for suicide and that they did not have personal reluctance in dealing with students at risk for suicide. The mean efficacy scale score, range 2.00-4.00, was 3.05. The 3.05 mean indicates that the average RA response for all 9 items was 3 or “agree,” indicating that most RAs agree with statements about RA efficacy in dealing with students at risk for suicide. However, two individual items from the efficacy scale showed lower scores indicating a lower level of agreement. Item number 2 in the Efficacy section stated; “I can recognize students contemplating suicide by the way they behave.” More than 25% of participants reported that they disagreed. Similarly, item 5 stated, “I feel comfortable discussing issues of suicide with students.” More than 30% of participants disagreed with this statement.

The mean reluctance scale score, range 1.00-2.88, was 1.82. The 1.82 mean indicates that the average RA response for all 9 items was close to 2 or “disagree.” Disagreeing with the items on the reluctance section indicates that students disagreed with statements about reluctance to work with students at risk for suicide. It appeared that RAs did not all agree about whether or not a student who is suicidal should be forced to seek treatment. Scores on item number 4 of the reluctance section, “If a student contemplating suicide refuses to seek assistance it should not be forced upon him/her,”
indicated that over 25% of the RAs agreed with this statement. Therefore, while the results suggest that RAs reported to be efficacious and not reluctant, these individual items show particular areas in which RAs were less certain of their efficacy and reluctance.

Knowledge of Suicide Indicators

Section three of the survey instrument asked RAs to rate the level of importance of resident behaviors when trying to determine if a student might be at risk for suicide. The responses of the RAs were then compared with the responses of the experts. Of particular interest were the items that the experts scored as extremely or quite important, for determining if a student is at risk for suicide that the RAs did not rate as important. See Table 1.

The American Association of Suicidology (AAS) suggests using the mnemonic device, IS PATH WARM, standing for suicidal Ideation, Substance abuse, Purposelessness, Anxiety, Trapped, Hopelessness, Withdrawal, Anger, Recklessness, and Mood change to determine level of suicide risk for an individual (www.suicidology.org). Some researchers have questioned the validity of these warning signs to “distinguish malingerers from nonmalingers” (Lester, McSwain, & Gunn, p. 403, 2011). However, these same researchers have agreed that the 10 warning signs set forth by the AAS may be a good tool for “identifying suicidal individuals and distinguishing them from non-suicidal individuals” (McSwain, Lester, & Gunn, p. 187, 2012). Five of the 10 symptoms, (specifically anxiety, withdrawing, mood change,
recklessness, and hopelessness) account for nine of the items that the RAs underrated on the survey instrument.

Tompkins and Witt (2009) found that RA baseline knowledge of warning signs and intervention behaviors was 71.3 on a 100 point scale, compared to 78.3 for social work students (Jacobson, Osteen, Sharpe, & Pastoor, 2012) and 71.04 for secondary school staff (Wyman et al., 2008). However, these studies assessed gatekeeper knowledge about suicide warning signs and self-evaluation of knowledge. These studies did not provide a comprehensive list of possible suicide indicators. For example, the Wyman instrument, which has frequently been adapted and used in other gatekeeper studies, included a section on knowledge of suicide warning signs. However, the section was comprised of 14 questions, only six of which focused on risk factors (Jacobsen et al., 2012; Wyman et al., 2008). One of the items asked, “the number one contributing cause of suicide is,” and four options follow. Another question asked, “which of the following is not a possible warning sign of suicide,” and was also followed by choices. Taub et al. (2013) measured suicide knowledge in RAs by using a five item True-False questionnaire and also asking RAs to list warning signs of suicide; however, they did not measure beliefs about suicide indicators and their level of importance. Thus this study can help to target specific areas of RA suicide prevention training that need attention.

Expectations for access to confidential information

Another finding from the study that sheds light on an area of need for RA training is the expectation RAs reported for shared information. RAs who made referrals to the college counseling center had expectations that they should receive follow up information from both the college counseling center staff as well as the student referred. More than
half of the RAs (56%) surveyed wanted the counseling center staff to let the RA know if the student referred attended a counseling session, remained in counseling sessions, or ended counseling sessions. More than 80% of RAs surveyed also wanted the counseling center staff to give the RA advice about the student referred and to be told if there were particular behaviors the resident should be concerned about if observed in the student referred. The majority of RAs, however, did not have an expectation that the counseling center staff share the diagnosis of the student referred.

While results indicate that the RAs had expectations to receive information from the professional staff at the counseling center regarding the student they referred, results also indicated that RAs do not have the same expectations for information from the student they referred. Less than 50% of RAs expected the student they referred to the counseling center to tell the RA if the student made an appointment or what happened in the counseling session. Less than 20% of RAs expected the student referred to counseling to tell the students' roommate about counseling. However, close to 60% of RAs expected the student to tell the RA if the student stopped attending counseling sessions.

One interpretation of these results is that RAs had lower expectations for access to private or confidential information from their peers than they did from professionals. It is possible that RAs want access to this private or confidential information but believe it would be too intrusive to directly ask the student. It is also possible that RAs feel it would be less intrusive to obtain the information from a third party. Another way to interpret the results is that perhaps the RAs have higher levels of trust in the professional
staff than in their peers and therefore wish to access the information from what they consider a more trustworthy source.

Sharkin (1995) determined that college counseling staff members are at risk for alienating members of the campus community who have made referrals to the counseling center but are then denied access to information about the student referred. He said that higher levels of anger, confusion, and disgust were reported from faculty members who referred students to the college counseling center and were later denied any information from the counseling center staff about the student referred. In contrast, this study found very high levels of confidence among RAs in the college counseling center.

**Confidence in the college counseling center**

The mean confidence in the counseling center scale score, range 2.40-4.00 was 3.55. The mean score of 3.55 indicates that most RAs responded with a 3 “agree” or 4 “strongly agree” to positive statements about the college counseling center. This finding supports Reingle et al.’s (2010) qualitative finding that RAs reported potentially positive outcomes for referrals to the counseling center.

**Actions taken by RAs**

Of the 265 RAs who participated in the research study, only 34% of them (n= 99) dealt with a student at risk for suicide. The three most common actions that RAs reported taking when they identified a student at risk for suicide included encouraging the student to make an appointment at the college counseling center; reporting the information to the RA’s supervisor; and encouraging the student to talk with friends. One reason these findings are significant is that they suggest that RAs are taking appropriate steps when dealing with students in crisis. The policies of each university
included in the study for actions the RAs are supposed to take when they encounter a suicidal student included reporting the information to the supervisor and involving the counseling center. It is also interesting to note that the RAs in this study were also likely to encourage the student to talk with their parents and or their friends. It is significant that the RAs encouraged suicidal students to talk to friends because the literature does suggest that students are more likely to confide in peers than in professionals (Bean & Baber, 2011; Dadonna, 2011; Sharkin et al., 2003). The three least common actions that RAs reported taking when they had developed a concern that a student may be at risk for suicide included calling the police; accompanying the student to the counseling center on campus; and calling a crisis hotline with the student.

**Predicting Efficacy and Reluctance**

Simple regression models were used to examine whether RA beliefs about suicide indicators predicted RA efficacy and RA reluctance in dealing with residents who may be at risk for suicide. The direction of the differences was computed as RA rating minus Expert rating. For each behavior that the expert rated as “Not Important,” “Somewhat Important,” “Quite Important,” and “Extremely Important,” the sum was computed to provide four separate categories. Individual simple regression models were then conducted for each sum of the differences between the RA and expert rating as Not Important, Somewhat Important, Quite Important, and Extremely Important. A significance level of .05 was used to indicate if the RA beliefs about suicide indicators predicted RA efficacy or predicted RA reluctance.

Table 2 provides the results for each simple regression model predicting RA efficacy or RA reluctance from the RA beliefs about suicide indicators. A few significant
(p < .05) associations were found. RA beliefs about behaviors rated as “Quite Important” and “Extremely Important” were significant for predicting RA efficacy in dealing with residents who may be at risk for suicide. The results showed a positive association between the RA rating of behavior and RA efficacy. For every additional belief indicator that the RA rated as “Quite Important,” the RA efficacy scale score increased by 0.012 and for every additional belief indicator that the RA rated as “Extremely Important,” the RA efficacy scale score increased by 0.023.

An RA rating of behaviors as “Extremely Important” is significant for predicting RA reluctance in dealing with residents who may be at risk for suicide. The results in Table 3 show a negative association between the RA belief predictor and RA reluctance. For every additional belief indicator that the RA rated as “Extremely Important,” the RA reluctance scale score decreased by 0.022. These results indicate that when the RAs beliefs about actions that are quite important and extremely important match the experts rating that the beliefs predict RA efficacy. Similarly, RA reluctance can be predicted by RA beliefs about behaviors rated as “Extremely Important” by the experts.

Table 2 here
Table 3 here

To date, other studies have not examined predicting efficacy and reluctance based on knowledge of suicide risk factors. In the past, studies have focused more globally on the overall impact of specific suicide prevention training programs on scales of efficacy, reluctance, and knowledge. In a study of non-clinical gatekeepers, Matthieu, Cross, Batres, Flora, and Knox (2008) found that post training, staff reported greater awareness and knowledge of the risk factors of suicide and greater efficacy. In a study on secondary
school staff, results indicated that training had a significant impact on increasing
knowledge and efficacy but not reluctance (Wyman et al., 2008). Similarly in their study
of the impact of QPR suicide prevention training on RAs, Tompkins and Witt (2009)
found a statistically significant difference in the pre-test and follow-up on knowledge and
efficacy scores but not reluctance scores.

Implications

Findings from this study have implications for college counseling centers, RA
training, and student affairs staff. Findings from this study indicate that RAs have high
levels of confidence in their college counseling centers. The findings suggest that if an
RA identified a student who may be at risk for suicide, the RA suggested the student
make an appointment at the counseling center. Thus the counseling centers need to have
a system in place to handle the referrals from the RAs so that potentially suicidal students
do not have to wait to make an appointment.

Further, college counseling centers should be clear about topics of confidentiality
and information sharing with resident assistants. This study found that RAs have high
expectations for receiving information from the counseling center staff about the students
RAs have referred. Given the current confidentiality laws, the counseling centers should
consider finding ways to be supportive of resident assistants while not compromising the
confidentiality of the student whom the RA referred for treatment. Since RAs reported
that they wanted to be made aware of behaviors that may be cause for concern in the
student referred, the counseling center staff could provide continuous training to the RAs
based on common client issues. Further, the counseling center staff could emphasize that
the RAs always have a right to call the counseling center and provide information to the
counseling center staff about a student they referred. The counseling center staff can receive information about a student, regardless of whether or not the student is currently in treatment, without compromising a client’s confidentiality. Another possibility is for the counseling center staff to ask the students who were referred for their permission to alert the referral source that the student did attend the counseling session. These suggestions and implications for college counseling centers are in line with those from similar studies (Birky, Sharkin, Marin & Scappaticci, 1998, McLeon et al., 1985).

The findings from this study contribute to the limited empirical data available on the effectiveness of suicide prevention training programs with resident assistants and the even more limited data on RA training programs. The findings from this study endorse not only the need for suicide prevention training for resident assistants, but also specifically endorse the need to focus on observable behaviors and warning signs of suicide in training programs.

While other studies have been able to show the impact of suicide prevention training on some similar measures (efficacy, reluctance, behaviors), this study is the only one that examined ways to predict an RA’s efficacy and reluctance levels in working with potentially suicidal students. Since the study found that the RA efficacy scores increased when the RAs knew which behaviors were “quite important” or “extremely important” and reluctance scores decreased when RAs knew which behaviors were “extremely important” in determining whether or not a student is at risk for suicide, then RA training programs should focus on those warning signs.

Given that this study found one of the most frequent actions RAs took when they identified a student at risk for suicide was to report it to their supervisor, then staff
working in residential life or student affairs as supervisors for RAs need to be knowledgeable about the policies and procedures for potentially suicidal students on campus. However, this assumes there are policies and procedures on campus for staff to follow. An obvious recommendation then becomes the need to have a clear procedure for managing potentially suicidal students. Further, student affairs administrators would be wise to have an “on call” system not just for RAs when they are working but for the supervisors of the RAs and perhaps the counseling center staff as well.

While RAs are often undergraduate students, residential life professional staff members typically are full time employees of the college or university and may or may not have a background in mental health counseling. Thus it is important for student affairs administrators to make training programs, professional development opportunities, and consultations with the counseling center on campus available to residential life professional staff. Further, while the residential life professional staff and other student affairs staff likely do not have as much contact with students as the RAs do, it might still be beneficial for professional staff members to receive training in suicide warning signs based on the results of this study.

Limitations and Areas of Future Research

In interpreting the results of this study, limitations should be considered. These limitations are related to the participant selection, generalizability, and instrumentation. Participants for this study were recruited from five institutions where one of the researchers had a natural connection with an employee in the student affairs department. Under these circumstances, the RAs might have felt pressure when the researcher was introduced as a friend of the student affairs administrator, to perform on the instrument.
Further, because the possibility to participate in the study was limited to RAs at these select private institutions, it is possible that the five institutions were not representative of all universities and all RAs.

A limitation to this study is the instrument that was used. Since there was no existing instrument that measured all that was desired to be measured in this exploratory study, the instrument was created specifically for use in this study. While the instrument items were created based on current literature and best practices, researcher bias for the item development is a possibility. Steps were taken to increase the reliability and validity of the instrument; however, it is still important to cite the instrument as a limitation. Finally, as with many survey instruments, the data collected and recorded were all self-reported.

Areas for future research include inviting RAs from public institutions to participate. Expanding this study to include RAs from public institutions would contribute to the generalizability of the results. Comparing the results of the public institutions to that of the private institutions used in this study could complement the study conducted by Elleven, Allen, and Wircenski (2001) on the training practice differences for RAs at public and private universities.

Additionally, utilizing a different research design, for example, a pre and post test design in which the intervention simply involved training the RAs on suicide warning signs could help to expand on the findings from this study. The results of such a study could contribute to the finding from this study that knowing the most critical warning signs of suicide not only increased RAs comfort level with working with students at risk for suicide but can actually predict their comfort level.
Another area of possible research includes taking the proper steps to validate the instrument used in this study. Administering the survey instrument to RAs at other institutions could help to achieve this purpose. Further, once the instrument's psychometric properties have proven to be sound, then the instrument could be used not just with RAs but also with faculty and staff members at colleges and universities. This would greatly contribute to the limited literature on gatekeepers at colleges and universities.

Another area of focus for further research includes expectations from other referral sources on campus for obtaining confidential information from the counseling center staff. This would be critical information for informing staff trainings and for evidence to support public policy in information sharing on college campuses.

Summary

The purpose of this study was to gain an understanding of Resident Assistants’ perceptions of their comfort level in working with students who may be at risk for suicide, Resident Assistants’ ability to recognize students who may be at risk for suicide, the actions Resident Assistants take when working with students who may be at risk for suicide, and to clarify RA expectations for follow up information after they have referred a student who may be at risk for suicide to the college counseling center. The study found that RAs report they are comfortable working with students at risk for suicide; however, the study also found that RAs ability to recognize students who may be at risk for suicide depends on whether or not the student has been trained to know the most critical warning signs of suicide. The study also found that the most common actions that RAs take when working with a student at risk for suicide are: encouraging the student to
make an appointment at the college counseling center, reporting the information to the RAs' supervisor, and encouraging the student to talk with friends. Further, the study found that RAs have expectations to obtain information from the counseling center staff about students they referred there. Finally, the study determined that RAs who were able to identify the most critical warning signs of suicide were more efficacious and less reluctant to work with potentially suicidal students than those who did not.

The results of this study help inform RA training, student affairs policy, and counseling center staff interactions with residential life staff. Future research with RAs from public institutions is recommended.
### Table 1

*Items Rated Extremely & Quite Important by Experts with RA Level of Agreement*

<table>
<thead>
<tr>
<th>Item Number and Behavior</th>
<th>N</th>
<th>RA M</th>
<th>Expert</th>
<th>Match % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Student does not appear to have any friends.</td>
<td>265</td>
<td>3.15</td>
<td>4</td>
<td>32.1 (85)</td>
</tr>
<tr>
<td>14. Student talks about death.</td>
<td>265</td>
<td>3.31</td>
<td>4</td>
<td>50.2 (133)</td>
</tr>
<tr>
<td>16. Student makes a statement about hopelessness.</td>
<td>265</td>
<td>3.39</td>
<td>4</td>
<td>50.6 (134)</td>
</tr>
<tr>
<td>27. Student displays noticeable or unpredictable mood change.</td>
<td>265</td>
<td>3.10</td>
<td>4</td>
<td>27.9 (74)</td>
</tr>
<tr>
<td>30. Student gives away possessions.</td>
<td>265</td>
<td>3.37</td>
<td>4</td>
<td>56.6 (150)</td>
</tr>
<tr>
<td>36. Student exhibits a sudden change in behavior.</td>
<td>265</td>
<td>2.86</td>
<td>4</td>
<td>17.7 (47)</td>
</tr>
<tr>
<td>3. Student takes unnecessary risks.</td>
<td>265</td>
<td>2.86</td>
<td>3</td>
<td>44.9 (119)</td>
</tr>
<tr>
<td>23. Student appears anxious or agitated</td>
<td>265</td>
<td>2.76</td>
<td>3</td>
<td>50.6 (134)</td>
</tr>
<tr>
<td>39. Other residents complain about student’s odd behavior</td>
<td>264</td>
<td>2.89</td>
<td>3</td>
<td>45.8 (121)</td>
</tr>
</tbody>
</table>

### Table 2

*Predicting RA Efficacy*

<table>
<thead>
<tr>
<th>Rating</th>
<th>Intercept</th>
<th>Slope</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Important</td>
<td>3.055</td>
<td>-0.001</td>
<td>0.869</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>3.036</td>
<td>0.003</td>
<td>0.576</td>
</tr>
<tr>
<td>Quite Important</td>
<td>3.046</td>
<td>0.012</td>
<td>0.016*</td>
</tr>
<tr>
<td>Extremely Important</td>
<td>3.177</td>
<td>0.023</td>
<td>0.002*</td>
</tr>
</tbody>
</table>

*Significant at $p < .05$
Table 3

_Predicting RA Reluctance_

<table>
<thead>
<tr>
<th>Rating</th>
<th>Intercept</th>
<th>Slope</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Important</td>
<td>1.817</td>
<td>0.002</td>
<td>0.730</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>1.837</td>
<td>-0.003</td>
<td>0.529</td>
</tr>
<tr>
<td>Quite Important</td>
<td>1.826</td>
<td>-0.005</td>
<td>0.250</td>
</tr>
<tr>
<td>Extremely Important</td>
<td>1.704</td>
<td>-0.022</td>
<td>&lt;0.0001*</td>
</tr>
</tbody>
</table>

*Significant at *p* < .05
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Appendix A: Cover Letter

Dear Resident Assistant:

Please consider completing the survey form that will be distributed to you for a study related to your interactions with students who may be at risk for suicide.

You are being asked to complete this anonymous survey, but you are not required to do so. If you do complete the survey, no one will know your individual responses and you will not be identified as having participated in this study.

If you choose to complete the survey, do not put your name, identification number, or any other identifying information on the survey. Respond to each item, place your completed survey in the box provided. If you chose not to complete the survey, place the blank survey in the provided box.

Thank you for your time.

Sincerely,

Theodore P. Remley, Jr., JD, PhD, LPC, NCC
Professor and Batten Endowed Chair in Counseling
Responsible Project Investigator

Katherine M. Bender, MS, NCC
Counseling Ph.D. Candidate
Investigator
Appendix B: Survey Instrument

Section I:
Please rate your level of agreement with each statement below.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am aware of the warning signs of suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I can recognize students contemplating suicide by the way they behave.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>My college encourages me to ask other students about thoughts of suicide when I have a concern.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>I do not have sufficient training to assist students who are contemplating suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I feel comfortable discussing issues of suicide with students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>I don't have the necessary skills to discuss issues of suicide with a fellow student.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>I do not know most students well enough to question them about suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>I know the steps my college needs me to take to help keep a student safe from suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I can talk with a student about how to seek help related to thoughts of suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Section II:
Please rate your level of agreement with each statement below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a student experiencing thoughts of suicide does not discuss these thoughts with anyone, there is very little that I can do to help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Resident advisors should not discuss suicide with students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. If a student contemplating suicide does not seek assistance, there is nothing I can do to help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. If a student contemplating suicide refuses to seek assistance it should not be forced upon him/her.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. A suicide prevention program at my college will give students inadvertent ideas about suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. A suicide prevention program at my college will send a message to students that help is available.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I cannot understand why a student would contemplate suicide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. It is important for resident advisors to report identified cases of suicidal students to a supervisor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I worry that reporting a student at risk for suicide might cause more problems for the student.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Section III:
You are trying to decide whether a particular student/resident is at risk for suicide.
To what degree do you believe the following behaviors are important as indicators that a student/resident is at risk for suicide?
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Not important</th>
<th>Somewhat important</th>
<th>Quite important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student exhibits poor physical hygiene</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Student abuses substances (alcohol and/or drugs)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Other residents complain about student's odd behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Student has access to a weapon</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Student reports getting along with roommate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Student reports being seriously depressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Student does not appear to have any friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Student demonstrates disturbed sleeping patterns: (e.g., student never sleeps, student sleeps for more than half of the day)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Student reports a romantic relationship just ended</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Student recently joined an intramural sports team</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Student identifies as gay, lesbian, bisexual, or transgender</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Student was recently involved in a physical altercation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Student was just initiated into a sorority or fraternity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>Student talks about death</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Student's room is</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not important</td>
<td>Somewhat important</td>
<td>Quite important</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---------------</td>
<td>-------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>16. Student makes a statement about hopelessness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>17. Student recently changed major due to a new career path</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>18. Student reports having a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>19. Student reports financial problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>20. Student is known to engage in disordered or extreme eating (i.e. anorexia, bulimia, binge eating)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>21. Student reports recently beginning a new romantic relationship</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>22. Student demonstrates low self-esteem</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>23. Student takes unnecessary risks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>24. Student exhibits unpredictable anger or aggression</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>25. Student experienced a sexual assault</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>26. Student reports recently earning a scholarship</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>27. Student displays noticeable or unpredictable mood change</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>28. Student makes a statement about contemplating suicide</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>29. Student just returned from a vacation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>30. Student gives away possessions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>31. Student reports failing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
classes
32. Student complains about being stressed 1 2 3 4
33. Student reports a history of suicide attempts 1 2 3 4
34. Student reports family conflict 1 2 3 4
35. Student appears optimistic 1 2 3 4
36. Student exhibits a sudden change in behavior 1 2 3 4
37. Student makes a post on Facebook, or other social media outlet, about being distressed or upset 1 2 3 4
38. Student does not leave the dorm room 1 2 3 4
39. Student appears anxious or agitated 1 2 3 4
40. Student is very involved in a religious organization 1 2 3 4

Section IV:
Please rate your level of agreement with the following procedures when you have referred a student/resident to the college counseling center for any reason or if you were to refer a student/resident to the college counseling center for any reason.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ideally, I would like the counseling center staff to tell me if the student I referred for counseling attended a session at the counseling center.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Ideally, I would like the counseling center staff to tell me whether the student I referred remains in regular counseling sessions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Ideally, I would like the</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
counseling center staff to share the diagnosis of the student I referred for counseling.

4. Ideally, I would like the counseling center staff to tell me about any behaviors I should be concerned about in the student I referred.

5. I want the counseling center staff to give me advice about the student I referred there.

6. Ideally, I would like the counseling center staff to inform me if the student I referred stops attending counseling sessions for any reason.

7. Ideally, I would like the student I referred for counseling to tell me if/when the student makes an appointment at the counseling center.

8. Ideally, I would like the student I referred for counseling to tell me what happens in the counseling sessions.

9. Ideally, I would like the student I referred for counseling to tell me if counseling sessions ended for any reason.

10. Ideally, I would like the student I referred for counseling to tell the student's roommate if they are attending counseling sessions.

Section V:
Please rate your level of agreement with each statement below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I believed a student was suicidal, I am likely to refer the student to the college counseling center.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I have confidence that the</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
The college counseling center will help potentially suicidal residents who have been referred there.

3. I understand what would happen at the college counseling center if I were to refer a potentially suicidal student there.

4. I believe that the college counseling center staff will be concerned about the safety of potentially suicidal students I refer there.

5. I would tell other RAs that the best option is to refer potentially suicidal students to the college counseling center.

### Section VI:
If you have developed a concern about a resident being at risk for suicide, approximately how many times have you done the following? If you have never developed a concern about a resident who may be at risk for suicide, mark N/A.

<table>
<thead>
<tr>
<th>Activity</th>
<th>N/A</th>
<th>0 times</th>
<th>1 time</th>
<th>2 times</th>
<th>3 + times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encouraged the student to make an appointment at the counseling center on campus</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Accompanied the student to the counseling center on campus</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Directed the student to call a crisis hotline</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Called a crisis hotline with the student</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Called campus security</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Accompanied the student to a local hospital</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Called the campus counseling center</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Called the police</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. No action</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. Reported the information to my supervisor</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
11. Asked the student for a verbal or written promise to not hurt or kill self
   N/A  0  1  2  3
12. Encouraged the student to call the student's parents
   N/A  0  1  2  3
13. Encouraged the student to talk with friends
   N/A  0  1  2  3
14. OTHER: please indicate.
   N/A  0  1  2  3

Section VII:

1. Have you had any suicide prevention training?  ____NO  ____YES

If yes, approximately how many hours of training have you had? _______

2. Have you had any training regarding general mental health?  ____NO  ____YES

If yes, approximately how many hours of training have you had? _______

3. Below, please make comments about your experience working with students who may be at risk for suicide; however, please remember to maintain confidentiality

4. Age: _______

5. Sex:  ____Female  ____Male  ____Transgender

6. Race/Ethnicity:  ____ White
                  ____ African American/Black
                  ____ Hispanic/Latino(a)
                  ____ Asian American
                  ____ American Indian/Alaskan Native
_____ Bi/Multiethnic
_____ Other not specified

7. Year in college: _____ 1st year _____ 2nd year _____ 3rd year _____ 4th year
   _____ 5th year _____ Graduate student _____ OTHER

8. Number of years and months as an RA: _____ years and _____ months

9. Major: ___________________________
VITAE

Upon graduating from Georgetown University as an English and Theology major in May of 2000, Katherine (Kate) M. Bender began teaching at an independent Catholic secondary school for girls in Philadelphia. Mentoring students contributed to her decision to pursue a degree in community counseling with a focus on women’s issues.

Kate earned her Master’s degree in community counseling from the University of Scranton in 2008, where she was named an outstanding graduate. While completing an internship providing individual counseling to undergraduate students, she realized she wanted to work in a college counseling center.

She began working as a full time mental health counselor for college students in Daytona Beach, Florida. Recognizing that advocating for students with mental health issues in higher education would likely require a Ph.D., Kate began her doctoral work at Old Dominion University (ODU) in January of 2011. During her time at ODU, Kate worked as a graduate teaching assistant and taught classes in both the human services and special education departments. She also collaborated with other ODU doctoral students and faculty to coordinate an intimate partner violence prevention program at ODU. In addition, Kate worked as an editorial assistant for two refereed counseling journals.

She joined the Dave Nee Foundation; a New York City based nonprofit organization with a mission to raise awareness about depression and suicide prevention in the legal community, as a programming consultant in September of 2012. In this role Kate coordinates the Uncommon Counsel program. Her work with the foundation is an excellent way to continue to provide outreach services and to raise awareness about depression, anxiety, and suicide prevention for students in colleges and universities.