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Suicide Risk Assessment: An Evaluation of Graduate Students with the Columbia-Suicide Severity Rating Scale

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Suicide Risk Assessment:

An Evaluation of Graduate Students with the Columbia-Suicide Severity Rating Scale

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Suicide Risk Assessment: An Evaluation of Graduate Students with the Columbia-Suicide

Severity Rating Scale (C-SSRS)

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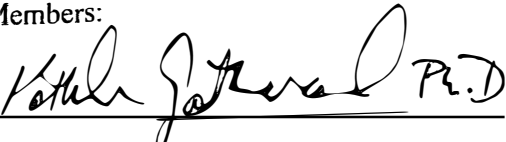As a Dissertation for the PsyD Degree

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Abstract

The critical need for more sensitive suicide screening is highlighted by the fact that 75% of individuals who complete suicide has seen a health care provider within the previous 3 months (Graves et al., 2018). Additionally, health care providers play a crucial role in identifying patients who are at risk, but they often are not adequately trained. The current research project investigated the effectiveness of a risk assessment training to increase doctoral students' general and applied knowledge in suicide risk assessment. The training was completed by a cohort of 23 first year doctoral students in the Graduate Psychology of Clinical Psychology at George Fox University. The participants were divided into three equal groups; Group A, Group B and Group C. Group A received the primary intervention training as well as four enhanced training interventions or "booster" session trainings. Group B only received the primary intervention training, and Group C did not receive any additional training. The three levels of participants completed a pre-test prior to and post-test to assess participants' knowledge immediately following the training session to assess the relative effectiveness of the primary training, primary

plus booster sessions, versus course content. None of the three groups showed an increase in their general knowledge over time, rather, the group means showed a decrease in general knowledge over the course of the intervention. However, change scores indicated that Group A, who received the most extensive training, increased in their skills in the application of knowledge over time in comparison to the two other groups. Results suggest that informational training and continuous applied training together may enhance clinical trainees' competency in suicide risk assessment.

Keywords: suicide assessment, training, knowledge, confidence, skills

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Chapter 1

Introduction

The high suicide death rate in the United States has prompted the Director for the Centers for Disease Control and Prevention (CDC), to issue a "wake-up call" to increase resources to address the ongoing crisis (Centers for Disease Control and Prevention [CDC], 2017. As rates of suicide continue to rise, it has become increasingly important for mental health professionals to gain expertise in identifying the factors placing people at risk for self-harm and suicidality. The following sections detail suicide epidemiology, summarize risk factors, and explore options for training programs to better equip psychologists-in-training to address this issue.

Suicide Epidemic

Suicide is the 10th leading cause of death in the United States and accounts for more than 800,000 deaths worldwide each year (Bolton, 2015). Suicide is an increasingly salient public health risk, as recent data show that more than 42,000 Americans died by suicide in 2014, at a rate of 13.4 deaths per every 100,000 individuals (Draoeau & McIntoosh, 2018. The risk for suicide for young people is particularly high, as suicide is the second leading cause of death for youth between the ages of 10 and 25 (CDC, 2017). It is estimated that 17% of high school students contemplate suicide, while up to 8% follow through with an attempt (CDC, 2017; Kann et al., 2018).

The clinical and public health need for expertise in suicide prevention is clear, as research has shown that early identification and intervention can significantly decrease the risk of suicide

completion (Arias, S. et al. 2017; Olfson et al., 2014.) The need for development of uniform,

evidence-based approaches for suicide risk assessment is crucial to establish competency models

of clinical training (Cramer et al., 2017).

Risk Factors: Static and Dynamic

Studies have documented a wide range of risk factors for suicide (Steele et al., 2018). The

prediction of suicide risk is complex and research has explored the interaction of both static and

stable predictors and dynamic variables that may specifically prompt the attempt. Static factors

such as mental health diagnoses including but not limited to, major depression and substance use

disorders and/or number of adverse childhood experiences increase the likelihood of a suicide

attempt (Suicide Prevention Resource Center 2017). In fact, over 75% of people completing

suicide have a significant mental illness, including bipolar disorder, schizophrenia, or major

depression (Fricchione et al., 2016). Another, particularly salient risk factor is the previous

suicide attempt or completion by a loved one. For example, Burrell et al. (2018) found

significant risk increase for suicidality in offspring of parents who had died by suicide.

In exploring other static, or stable factors, emerging data shows that members of the

LGBTQ+ community are at an increased risk for suicide (Hottes et al., 2016). The LGBTQ+

community has higher levels of depression, substance abuse, and suicidal behaviors compared to

the general population (Kann et al., 2018). For example, among high school students,

approximately 48% of youth identifying as LGBTQ+ had seriously considered suicide in

comparison to approximately 13% of youth identifying as heterosexual (Kann et al., 2018).

Furthermore, a study of more than 300 transgender persons in Virginia documented that 65% had

lifetime suicidal ideation (Xavier et al., 2017). Individuals who identify as bi-sexual rather than

as lesbian or gay, are even more at risk for SI (Xavier et al., 2017). Static factors including some

of the above variables have long been part of the algorithm created by actuarial science to explain some of the variance in suicide prediction.

More recent research has highlighted the role of dynamic risk factors in suicide risk assessment. Dynamic factors include situational variables that may serve as triggers for the suicide attempt. Factors include variables such as relationship distress or loss of relational well-being. Specifically, Steele et al. (2018) found relational problems were potent predictors of suicide in juveniles and Bannink et al. (2014) showed bullying correlates with mental health problems and suicidal ideation. Additional dynamic or situational predictors include the unexpected loss of a previously stable or protective factor, such as employment or health status or loss of relationship through divorce or death. The study of dynamic factors or "triggers" attempts to answer the question, "why today?" when the static risk factors have been historically present (Steeg et al. 2016).

As shown in the previous section, research in risk assessment has identified a complex combination of factors that predict suicide. The diverse interplay of static and dynamic factors highlights the importance of specialized training for mental health providers in order to significantly increase early identification and prevention.

Provider's Response to Epidemic

Working with members of suicidal populations can create anxiety among service providers across a variety of disciplines due to the high-risk nature of this population. Providers have a significant fear of suicidality in their patients for a number of reasons including liability, lack of resources or training and the importance of decision making when providing treatment for patients with high acuity. The anxiety a provider has from working with suicidal populations can lead to poor outcomes (Petrik et al. 2015).

Additional reasons for inadequate assessment or treatment of suicidality include avoidance of malpractice and inadequate training on suicide risk assessment and interventions (Jobes et al., 2018). An additional source of concern for providers is the fear of having suicidal patients "falling through the cracks" (Jobes et al., 2018).

Although the current best practice guidelines for suicide prevention universally recommend the assessment of risk factors, there is inconsistency regarding standards of risk categorization, safety planning, and means restriction (Bernert et al., 2014). Similarly, hospital settings can be an important intervention milieu for suicide prevention. However, medical staff are often under equipped and do not have adequate resources or training (LeCloux & Werth, 2018). Not surprising, La Guardia and colleagues (2019) found a decrease of provider optimism in working with suicidal patients versus other presenting problems.

Critical Intersection

As suicide increases, the deficiency in training to provide evidenced-based risk assessment becomes even more apparent. A recent review of training practices in suicide risk assessment across multiple health disciplines highlighted deficits in training for medical residency, nursing, doctoral psychology and social work programs (LeCloux & Werth, 2018). Although the field is at a critical intersection where the level of comfort and training with assessment continues to lag behind the increasing prevalence, developing skills in risk assessment is "complex and stressful" (McLaughlin et al., 2014). Additionally, the negative stigma of suicide may create a hesitancy in health professionals and clients to talk candidly about their thoughts and experiences with regarding suicide (Ryan, Tindall & Strudwick, 2017).

The growing number of deaths by suicide has led to "national calls" for improvement in how risk screenings and assessments are completed (Sommers-Flanagan & Shaw, 2017). Given

the complexity of this high-risk population, mental health professionals can benefit from further

training to increase their competence (Rothes & Henriques, 2018).

Training in Evidenced-Based Assessment

Good assessment is the first step to effective treatment. Risk assessment can guide

individualized treatment plans (Large et al., 2017) and helps the provider to direct the individual

to the appropriate level of treatment. A program evaluation study conducted by Donald et al.

(2013, p. 91) found that participants who underwent training reported significantly "higher levels

of knowledge in relation to suicide prevention strategies" after a 3-month follow up. Risk

assessment training also leads to a decrease in provider anxiety, which ultimately results in better

services for at risk populations. LeCloux and Werth (2018) found that suicide-related trainings

designed for nurses and primary care providers both increased rates of suicide detection and

increased the providers' confidence, competence and willingness to treat patient suicidality.

Competency based suicide risk assessment training has been shown to improve community

mental health care providers suicide related knowledge and perceived risk assessment skills

(Guardia et al., 2019). Additionally, Donald et al. (2013) found that successful training needs to

be an ongoing process during which skills can be practiced and refined. Her findings suggest that

for a program to be effective it cannot be a single event, but rather continued training and

practice.

Taken together, the above results suggest that effective training is an essential part of the

larger response to suicide prevention.

Current Resources

Research has shown the need to improve training and competency in risk assessment

(Harris et al., 2017). There are a variety of evidence-based risk assessment tools available to the

clinician (Kreuze et al., 2018). However, the Columbia-Suicide Severity Rating Scale (C-SSRS)

is the most extensively researched and validated suicide screening instrument. The psychometric

strength of the C-SSRS is well-validated across demographic groups, cultures and over 15

languages (Columbia Lighthouse Project, 2018). The C-SSRS is unique in that it identifies the

static or stable factors as well as dynamic factors which may serve as warning signs for suicide

risk. Furthermore, the C-SSRS identifies potential protective factors that may mitigate the risk of

suicide and therefore can be incorporated into subsequent treatment plans. The C-SSRS has

recently been endorsed for population based screening by the Food and Drug Administration

(FDA) as well as the National Institute of Health as an effective assessment to measure suicidal

ideation and behavior (Interian, Chesin, Kline, Miller, St. Hill, Latorre . . . Stanley, 2018).The

C-SSRS attention to static, dynamic and protective factors as well as it's psychometric strength

suggest the value of using the measure as part of an evidenced based training in the assessment

of suicidality.

Purpose of This Study

The current study evaluated the effectiveness of a risk assessment training protocol to

increase the general and applied knowledge in first year doctoral students' ability to assess

suicidality. The purpose of the study was two-fold. First, the ability of a risk assessment training

to increase doctoral students' general and applied knowledge in completing a suicide risk

assessment was examined. Second, the research assessed the impact of incremental training

when students participated in a series of enhanced training or "booster" sessions was examined.

The group (Group A) receiving the training session and enhanced training (with four additional

60-minute practice sessions) and the group (Group B) receiving the training session without the

enhanced training were compared with a control group of students (Group C) who participated in

the defined course curriculum but did not receive the two-hour training or the enhanced sessions. As such, results provide information regarding the optimal training model for teaching skills in suicide risk assessment to first year doctoral students.

Hypothesis 1: Students in Groups A and B who participate in the training (Group A and B) will show increase in both general and applied knowledge in suicide risk assessment relative to the control group (Group C).

Hypothesis 2: Students receiving the enhanced training (Group A) will demonstrate greater increase in both general and applied knowledge in suicide risk assessment than students in the basic training or those students not receiving training.

Hypothesis 3: Students who participated in the two-hour training session (Group A and B) will maintain their knowledge over the four weeks between the post-test immediately after training and the post-test four weeks after training.

Chapter 2

Methods

Participants

The participants in this study were 22 graduate students who were all 18 years of age or older (Mean age = 25.8, *SD* = 2.63). All students were enrolled in the Clinical Foundations II course which occurred in the second semester of their first year of training in a doctoral psychology program. The participants were divided into equivalent groups of similar sizes according to earned degrees, gender and years of experience. It should be noted that although the groups were initially comparable in size, post-test group sizes reflect participant absences.

Of the participants, 13 are female and 9 are male. Seventeen of the participants identify as European American, 2 as African-American, 2 Asian-American and 1 mixed race participant.

Materials

Informed Consent

Participants completed an informed consent describing the study, including likelihood of risk and option to withdraw from the study without consequences (Appendix A).

Two-Hour Training Session in Suidide Risk Assessment

The two-hour training included: (a) Foundational knowledge in suicide, including relevant CDC/WHO definitions, risk and protective factors, (b) Training in the administration of the Columbia-Suicide Severity Rating Scale (C-SSRS) and, (c) Application of the C-SRRS in case study vignettes. See Appendix B

Columbia-Suicide Severity Rating Scale

Numerous studies support the psychometric properties of the Columbia-Suicide Severity Rating Scale (C-SSRS). The wide range of research attests to the protocol's divergent, convergent, predictive, and incremental validity, as well as to its sensitivity to change, internal consistency, inter-rater reliability, cross-cultural and multi-lingual application (Columbia Lighthouse Project, 2018). Additionally, the C-SSRS has been endorsed by the CDC, Joint Commission Accreditation and World Health Organization as the standard tool for risk The screener helps the clinician to identify whether someone is at risk for suicide, assess the severity and immediacy of that risk, and gauge the level of support that the person needs.

The psychometric strength of the C-SSRS is well-validated across demographic groups, cultures and over 15 languages (Columbia Lighthouse Project, 2018). The internal consistency of the intensity subscale is moderate, with a Cronbach's alpha of 0.73 (Posner et al., 2011). Further, strong predictive validity has been established for both *suicidal ideation* (95% CI 4.18-9.23, $p < 0.001$) and *suicidal behavior* (95% CI = 1.36-7.19, $p < 0.01$). Reliability for both *suicidal ideation* (ICC = .09, $p < 0.001$) and for *suicidal behavior* (K = 0.81, $p < 0.001$) has also been established.

The C-SSRS is also being utilized as an essential tool in the Columbia Lighthouse project. The mission of the Columbia Lighthouse Project (2018) is to light the way to ending suicide. They aim to make the C-SSRS protocol a worldwide tool in order to spread awareness and provide an easily accessible screening assessment. See Appendix C

Procedures

Before participating in the risk assessment training, all students were provided with the informed consent. The participants were then divided into equivalent groups according to earned

degrees, gender and years of experience. After equivalency was established, the groups were randomly assigned to one of the three conditions. Group A received the primary intervention training as well as four 60-minute enhanced training interventions or "booster" session trainings. Group B received the primary intervention training, and Group C did not receive any additional training.

All three levels (or groups) of participants completed a pre-test prior to the training. Then Groups A and B received the two-hour training in suicide risk assessment which was taught by a content expert. The two-hour training occurred during the regularly scheduled course time, during which Group C did not receive the training at the time and was engaged in an alternate learning activity. Group A and Group B completed a post-test immediately following their C-SSRS training to assess the relative effectiveness of the two-hour risk assessment training. During the three weeks following the training, all groups participated in the Clinical Foundations course. In addition to the pre-determined course curriculum, Group A participated in weekly booster sessions for four weeks while Group B met to discuss a topic relevant to psychology. Group C did not participate in any activity beyond the defined course curriculum. Groups A and B completed the second post-test (their first post-test was immediately after the two-hour training) and Group C was administered their first post-test four weeks after the primary training.

The study explored the relative effectiveness of different levels of training on students' risk assessment competency as assessed by both *General* and *Applied Knowledge*. For the purposes of the current study, *General Knowledge* was conceptualized as assessing factual knowledge, including definition of key terms (suicide attempt, interrupted attempt, aborted attempt, see Appendix B) and facts and statistics about suicidality. This was measured by

questions 1 through 24, which consisted of "True" or "False" questions. *Applied Knowledge* was

conceptualized as the ability to clinically navigate additional information needed to determine

appropriate treatment. This was measured by items 25 and 26. On these items, participants were

provided with real life de identified cases (see Appendix B) requiring skills in making clinically

informed decisions and appropriate treatment planning.

Data Analysis

A three x two, repeated measures design was utilized to analyze the data. The first

independent variable is the type of training (Group A, two-hour training plus four booster

sessions in application of suicide risk assessment, Group B, two-hour training with three

conversations on a general topic in psychology and Group C, no specific training) in suicide risk

assessment. The second independent variable was time, which has three levels, a pre-test,

immediate post-test and delayed post-test. The dependent variables were the increase in general

and applied knowledge of suicide risk assessment. Data were analyzed using the SPSS statistical

program.

Chapter 3

Results

Descriptive Statistics

The means *General Knowledge* scores for Groups A, B, and C are displayed in Table 1. These scores are also shown graphically in Figure 1. It should be noted that *General Knowledge* scores decreased over time.

Table 1

Mean General Knowledge Scores for Three Groups Across Three Testing Times

Group	T1 *M*	*SD*	T2 *M*	*SD*	T3 *M*	*SD*	Across Times *M*	*SD*	*n*
A	15.5	0.55	16.33	1.75	13.17	2.04	15.00	1.25	6
B	15.5	1.91	14.25	.96	12.75	2.50	14.17	1.14	4
C	15.75	1.83			14.88	2.23	15.31	1.85	8
All	15.61	1.46	15.41	1.76	13.83	2.31	14.95	1.51	18

Figure 1. Mean general knowledge scores across three times for the three groups.

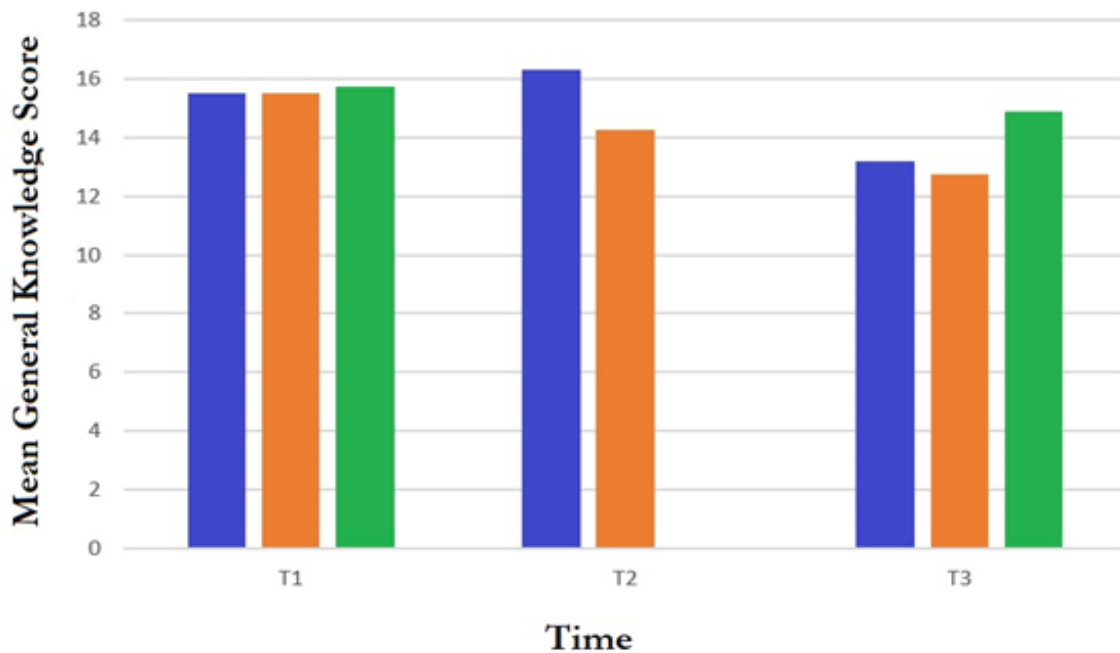The descriptive statistics for *Applied Knowledge* scores for Groups A, B, and C are displayed in Table 2. These scores are also shown graphically in Figure 2. As shown in the graph, the *Applied Knowledge* scores for Group A increased over time.

Table 2

Mean Applied Knowledge Scores for Three Groups Across Three Testing times

	T1		T2		T3		Across Times		n
Group	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	
A	1.83	1.33	2.33	1.63	4.17	1.17	2.78	0.91	6
B	2.00	0.82	0.75	1.50	2.75	2.22	1.83	1.14	4
C	2.13	1.13			3.00	1.41	2.56	1.08	8
All	2.00	1.08	2.08	1.49	3.33	1.57	2.47	1.04	18
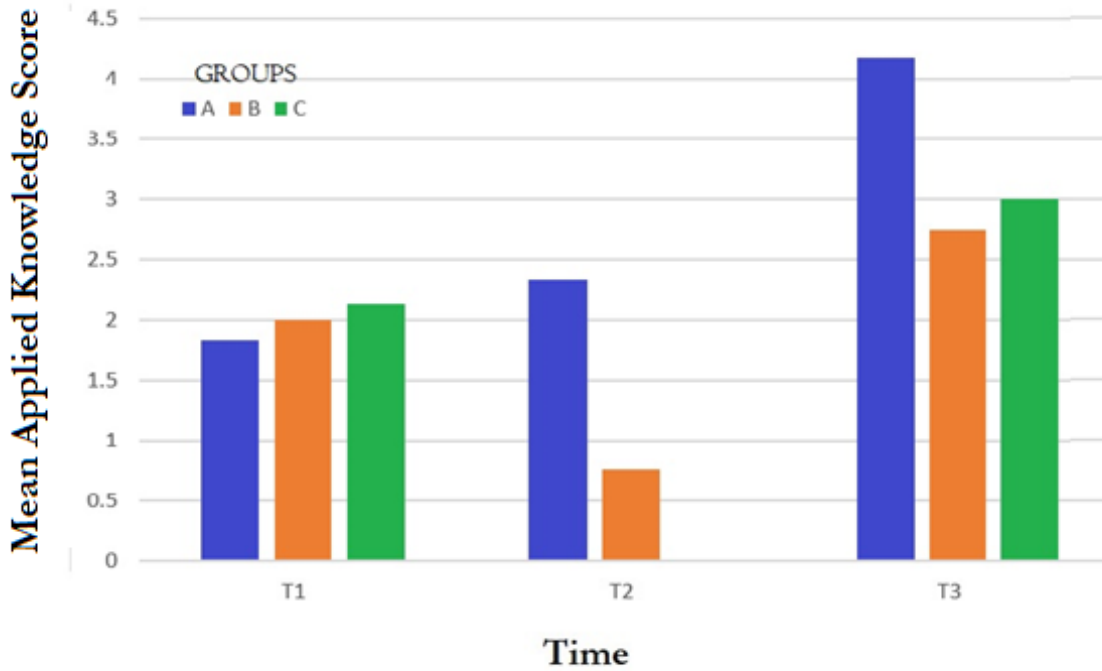
Figure 2. Mean applied knowledge scores across three times for the three groups.

Table 3

Observed Power of the ANOVA Components.

Component	Dependent Variable	Observed Power	Sufficiency*
Time	General Knowledge	.99	yes
	Applied Knowledge	.96	yes
Group	General Knowledge	.15	no
	Applied Knowledge	.20	no
Interaction	General Knowledge	.68	no
	Applied Knowledge	.53	no

Note. Values of Power less than .80 are insufficient (Cohen, 1992)

Effect Size Analyses

The pattern of results for *General Knowledge* (Table 3) indicates a decline in performance over time and in all cases. The decline is less for the control groups (B and C) than for the treatment group (A). Due to the small sample size and resulting low Power, follow-up effect size analyses were conducted in order to assess the interactions of group and time for the two dependent variables. The effect size employed in this analysis is the Pre-Post Control design mean-difference calculation ($d$ppc), described by Morris (2008). The $d$ppc effect size reports the difference in pre-post change scores for the treatment and control groups. The formula for $d$ppc is shown in Figure 3 and represents the pre-post change for the treatment group minus the pre-post change for the control group divided by the pooled error.

Figure 3

Formula for d*ppc*

$$\Delta = \delta_T - \delta_C = \frac{(\mu_{T,post} - \mu_{T,pre}) - (\mu_{C,post} - \mu_{C,pre})}{\sigma}.$$

Figure 3. The formula for *d*ppc (Morris, 2008) represents the pre-post change for the treatment group minus the pre-post change for the control group divided by the pooled error.

The *d*ppc is interpreted using the same cut-off values as Cohen's *d'*; values between zero and .2 indicate no effect, values between .2 and .5 indicate a small effect, values between .5 and .8 indicate a moderate effect, and values which exceed .8 indicate a large effect. A positive effect size value results if the change score for the treatment group is larger while a negative value results if the control group has a larger change score.

Table 4 and Table 5 show the *d*ppc effect sizes for the three groups across three times for *General Knowledge* and *Applied Knowledge*, respectively. The pattern of *d*ppc results for *General Knowledge* (Table 4) indicates a decline in performance over time and in all cases. The decline is less for the control groups (B and C) than for the treatment group (A). The pattern of *d*ppc results for *Applied Knowledge* (Table 5) shows large changes in *Applied Knowledge* scores for Group A (which received *both* risk assessment training and booster sessions), performing better than either control groups B (which received risk assessment training but no booster sessions) or C (which received no additional training), when Time 1 and Time 3 are compared. Consistent with this pattern is the finding of no change from Time 1 to Time 3 when Groups B and C are compared.

Table 4

An Exploration of Interactions of Group and Time for General Knowledge: Effect Size

Groups	Times		
	T1 v T2	T2 v T3	T1 v T3
A v B	1.39	- .83	.21
A v C			-.77
B v C			-.85

Table 5

An Exploration of Interactions of Group and Time for Applied Knowledge: Effect Size

Groups	Times		
	T1 v T2	T2 v T3	T1 v T3
A v B	1.25	-.11 [a]	1.06 [a]
A v C			1.28 [a]
B v C			-.08

Note. [a] A limitation of *d*ppc3 is its tendency to underestimate the true effect size when the homogeneity of variance assumption was violated (Morris, 2008), as is the case in this analysis for Group A at T3.

Chapter 4

Discussion

The purpose of this study was to investigate the effectiveness of a suicide intervention training including the Columbia-Suicide Severity Rating Scale (C-SSRS), a suicidal ideation and behavior rating scale, on both the *General* and *Applied knowledge* of graduate students in their first year of training. The first hypothesis of this study was that graduate students who participated in enhanced training, including Group A, who received both risk assessment training and booster sessions, and Group B, who received the risk assessment training alone, would increase in both general and applied knowledge domains of suicide risk assessment relative to Group C who only received training as usual. Results did not fully support this hypothesis, as scores showed a decrease in *General Knowledge* across all three groups over time, with Group A having more *General Knowledge* decrease than Groups B and C. This result could reflect the learning theory of decay. It may also be possible that due to the influx of traditional graduate training and classes throughout the semester it was difficult for first year graduate students to retain the general knowledge they had been exposed to in the beginning of the semester. In contrast, participants as a whole had increases in *Applied Knowledge* over time, regardless of training conditions.

The second hypothesis, that graduate students receiving the enhanced training (Group A) would demonstrate greater increase in knowledge in suicide risk assessment than graduate students in either the basic training (Group B) or those without additional training (Group C),

was partially supported. Although Group A did not increase in their *General Knowledge* over time relative to the other two groups, effect sizes indicated that they increased in their *Applied Knowledge* skills over time, relative to participants in either Groups B or C. This suggests that the distributed practice provided by the booster sessions was effective in increasing applied treatment planning and intervention skills relative to training received by either Groups B or C. These findings suggest that informational training which is supplemented by continuous case applications may optimize competencies in suicide risk assessment. This finding is consistent with previous research that emphasizes the importance of maintenance of training (Donald et al., 2013).

Findings partially support the third hypothesis of this study that students who participated in the two-hour training session would maintain their general and applied knowledge over the four weeks between the post-test immediately after training and the post-test four weeks after training, relative to the other groups. Results indicated that Group A, who received the primary intervention as well as the booster training, did not retain their *General Knowledge*. However, they significantly improved their *Applied Knowledge* suggesting the students could more effectively make clinical decisions regarding the application of the assessment results to patient's required level of care. The distributed practice in applied training provided by the booster sessions was effective in increasing applied knowledge more so than Groups 2 and 3.

Limitations

The main limitation of this study was sample size. Although effect sizes indicate improvement in applied knowledge for participants receiving enriched training, an increased sample would allow for more extensive data analyses. Replication of this study in multiple cohort years and at different doctoral training sites would allow more generalizability of

findings. An additional limitation includes the use of a convenience sample of graduate students which limits generalizability.

Implications

The implications include the effectiveness of training to serve an at-risk population, and more specifically, the use of a distributed practice model which is organized around clinical vignettes and the potential utility for training to include an opportunity to process the experience with peers.

The findings of this research suggest that enriched training in suicide assessment including weekly opportunities to apply knowledge in clinical vignettes, may improve the clinical decision making relevant to suicide assessment. Effective training in risk assessment is particularly important in light of current research showing that 75% of individuals who complete suicide have seen a health care provider within three months of dying by suicide (Graves et al., 2018). Health care providers are burdened to play a crucial role in identifying patients who are at risk; however, they often are not adequately trained in assessment and intervention. The results of this study indicate that general training combined with distributed practice in case application may be an optimal way to train healthcare providers to build competence in working with patients experiencing suicidality.

Research shows that effective training needs to be an ongoing process, rather than a "one and done" (Donald et al., 2013). Current results support previous research indicating the necessity of "maintenance" training to ensure competency. For example, clinicians must demonstrate the clinical use of evidenced based practice to maintain board certification in psychology or privileges within a medical setting. Further, it is likely that applied knowledge is

even more relevant in risk assessment than general knowledge as the clinician has to navigate unique presentations.

In previous risk assessment trainings students have been taught in a traditional classroom setting with a professor. The difference in improved applied knowledge between Groups A and Groups B and C was likely influenced by Group A receiving training in a smaller group size with an advanced graduate student rather than a professor. The smaller group invited more opportunities for students to process the content as well as their internal responses to a potential patient's presentation of suicidality. The opportunity to discuss their potential concerns as well as the anticipated anxiety when a patient presents with suicidality may have allowed a different level of learning or internalization of information. Additionally, having the information presented by a familiar advanced student may have invited more vulnerability and engagement than in a traditional classroom setting. This smaller setting could encourage a more complex learning process which could lead to higher rates of retained information.

Suggestions for Future Research

The results of the study support the use of a training model that incorporates applied learning and distributed practice within a learning group that encourages interpersonal process. Future research may explore opportunities to extend this training model across disciplines and level of training. For example, it may also be beneficial to examine the impact of training for a more diverse group of healthcare providers including clinicians from counseling and social work programs, nursing and medical training programs. Additionally, it would be helpful to assess the impact of training on early and mid-career clinicians as well as graduate students. Another area of future research could be to compare the effectiveness of an online forum for the enriched training vs. the in-person training booster versus an in-person booster training session.

In sum, the results of this study suggest maintenance of training is optimal in maintaining knowledge and skills. In light of the ongoing suicide crisis (CDC, 2017), the importance of effectively equipping psychologists-in-training for competent assessment and risk management is clear. Current findings underscore the potential of ongoing training to increase clinician's competency in evaluating suicidal risk, adding to an ongoing body of research supporting the effectiveness of competency-based training (Cramer et al., 2017; Guardia et al., 2019; LeCloux & Werth, 2018). Further studies may continue to investigate optimal strategies for developing trainees' skills in suicide assessment within graduate training programs.

References

Arias, S., Boudreaux, E., Segal, D., Miller, I., Camargo, C., & Betz, M. (2017). Disparities in
Treatment of Older Adults with Suicide Risk in the Emergency Department. *Journal of
the American Geriatrics Society (JAGS)*, *65*(10), 2272–2277.
https://doi.org/10.1111/jgs.15011

Bannink, R., Broeren, S., Van de Looij-Jansen, P., De Waart, F., & Raat, H. (2014). Cyber and
traditional bullying victimization as a risk factor for mental health problems and suicidal
ideation in adolescents. *PLoS ONE, 9*(4), E94026.

Bernert, R. A., Hom, M. A., & Roberts, L.,W. (2014). A review of multidisciplinary clinical
practice guidelines in suicide prevention: toward an emerging standard in suicide risk
assessment and management, training and practice. *Acad Psychiatry, 38*(5):585–592.

Bolton, J. (2015). Suicide risk assessment in the emergency department: out of the darkness.
Depression and Anxiety, 32(2), 73-75.

Burrell, L., Mehlum, L., & Qin, P. (2018). Sudden parental death from external causes and risk
of suicide in the bereaved offspring: A national study. *Journal of Psychiatric Research,
96*, 49-56.

Centers for Disease Control and Prevention. (2017). *Web-based injury statistics query and
reporting system (WISQARS)* (Fatal Injury Reports, 1999–2015, for National, Regional,
and States [RESTRICTED]). National Center for Injury Prevention and Control.
http://webappa.cdc.gov/cgi-bin/broker.exe.

Center for Disease Control and Prevention. (2018). *Suicide rising across the US.*
https://www.cdc.gov/vitalsigns/suicide/

Columbia Lighthouse Project. (2018). http://cssrs.columbia.edu/documents/c-ssrs-supporting-

      evidence/

Cramer, R., Bryson, C., Eichorst, M., Keyes, L., & Ridge, B. (2017). Conceptualization and pilot

      testing of a core competency-based training workshop in suicide risk assessment and

      management: Notes from the field. *Journal of Clinical Psychology, 73*(3), 233-238.

Donald, M., Dower, J., & Bush, R. (2013). Evaluation of a suicide prevention training program

      for mental health services staff. *Community Mental Health Journal, 49*(1), 86-94.

Drapeau, Christopher & Mcintosh, John. (2018). USA Suicide: 2014 Official Final Data.

Fricchione Parise, V., Addeo, L., & Balletta, G. (2016). Suicide risk assessment and early

      recognition of risk factors. *European Psychiatry, 33*, S600.

Graves, J., Mackelprang, J., Van Natta, S., & Holliday, C. (2018). Suicide prevention training:

      policies for health care professionals across the United States as of October 2017.

      American Journal of Public Health, 108(6), 760-768.

Guardia, A., Cramer, R., Brubaker, M., & Long, M. (2019). Community mental health provider

      responses to a competency-based training in suicide risk assessment and prevention.

      Community Mental Health Journal, 55(2), 257-266.

Harris, K., Lello, O., & Willcox, C. (2017). Reevaluating suicidal behaviors: comparing

      assessment methods to improve risk evaluations. *Journal of Psychopathology and

      Behavioral Assessment, 39*(1), 128-139.

Hottes, T., Bogaert, L., Rhodes, A., Brennan, D., & Gesink, D. (2016). Lifetime prevalence of

      suicide attempts among sexual minority adults by study sampling strategies: A systematic

      review and meta-analysis. *American Journal of Public Health, 106*(5), E1-12.

Interian, A., Chesin, M., Kline, A., Miller, R., St. Hill, L., Latorre, M., . . . Stanley, B.. (2018).

  Use of the Columbia-Suicide Severity Rating Scale (C-SSRS) to Classify Suicidal

  Behaviors. *Archives of Suicide Research, 22*(2), 278-294.

Jobes, D., Gregorian, M., Colborn, V., Deleon, P.., Magaletta, P., & Patry, M. (2018). A stepped

  care approach to clinical suicide prevention. *Psychological Services, 15*(3), 243-250.

Kann, L., McManus, T., William H., Shanklin, S., Flint, K., Queen, B., Lowry, R., Chyen, D.,

  Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M., Brener, N.,

  Ethier, K.(2018). Youth risk behavior surveillance – United States, 2017. *Morbidity and*

  Mortality Weekly Report Surveillance Summary, 67(8), 1–114.

Kreuze E, Lamis DA. A Review of Psychometrically Tested Instruments Assessing Suicide Risk

  in Adults. *OMEGA - Journal of Death and Dying*. 2018;77(1):36-90.

  doi:10.1177/0030222816688151

La Guardia, A., Cramer, R., Brubaker, M., & Long, M. (2019). Community mental health

  provider responses to a competency-based training in suicide risk assessment and

  prevention. *Community Mental Health Journal, 55*(2), 257-266.

Large, M., Galletly, C., Myles, N., Ryan, C., & Myles, H. (2017). Known unknowns and

  unknown unknowns in suicide risk assessment: Evidence from meta-analyses of aleatory

  and epistemic uncertainty. *BJPsych Bulletin, 41*(3), 160-163.

LeCloux, M., & Werth, J. (2018). The development of a brief suicide screening and risk

  assessment training webinar for rural primary care practices. *Journal of Rural Mental*

  Health, 42(1), 60-66.

McLaughlin, S., Bailey, D., Bonner, G., & Canning, C. (2014). Improving confidence in suicide

  risk assessment. *Nursing Times, 110*(27), 16.

Morris, S. B. (2008). Estimating effect sizes from pretest-posttest-control group designs.

    Organizational Research Methods, 11(2), 364-386.

    http://doi.org/10.1177/1094428106291059

Olfson, M., Marcus, S., & Bridge, J. (2014). Focusing suicide prevention on periods of high risk.

    JAMA, 311(11), 1107-8.

Petrik, M., Gutierrez, P., Berlin, J., & Saunders, S. (2015). Barriers and facilitators of suicide

    risk assessment in emergency departments: A qualitative study of provider perspectives.

    General Hospital Psychiatry, 37(6), 581-586.

Posner K, Brown G., Stanley B., Brent D., Yershova K., Oquendo M., Currier G., Melvin G.,

    Greenhill L., Shen S., & Mann, J. (2011). The Columbia-Suicide Severity Rating Scale:

    initial validity and internal consistency findings from three multisite studies with

    adolescents and adults. *American Journal of Psychiatry, 168*(12): 1266-77.

Ream, G. (2019). What's unique about lesbian, gay, bisexual, and transgender (LGBT) youth and

    young adult suicides? Findings from the national violent death reporting system. *Journal

    of Adolescent Health, 64*(5), 602-607.

Rothes & Henriques. (2018). Health professionals facing suicidal patients: What are their clinical

    practices? *International Journal of Environmental Research and Public Health*, *15*(6),

    1210. https://doi.org/10.3390/ijerph15061210

Ryan, K., Tindall, C., & Strudwick,. (2017). Enhancing Key Competencies of Health

    Professionals in the Assessment and Care of Adults at Risk of Suicide Through

    Education and Technology. *Clinical Nurse Specialist, 31*(5), 268-275.

Schembari, B., Jobes, D., & Horgan, R. (2016). Successful treatment of suicidal risk crisis, *The

    Journal of Crisis Intervention and Suicide Prevention, 37*(3), 218-223.

Sommers-Flanagan, J., & Shaw, S. L. (2017). Suicide risk assessment: What psychologists

should know. *Professional Psychology: Research and Practice, 48*(2), 98–106.

https://doi-org.georgefox.idm.oclc.org/10.1037/pro0000106

Steeg, S.,Haigh, M., Webb, R., Kapur, N., Awenat, Y., Gooding, P., Pratt, D.& Cooper, J.

(2015). The exacerbating influence of hopelessness on other known risk factors for repeat

self-harm and suicide. *Journal of Affective Disorders*, *190*, 522–528.

https://doi.org/10.1016/j.jad.2015.09.050

Steele, I., Thrower, N., Noroian, P., & Saleh, F. (2018). Understanding suicide across the

lifespan: A United States perspective of suicide risk factors, assessment & management,

Journal of Forensic Sciences, 63(1), 162-171.

Suicide Prevention Resource Center. (2017). *Adverse Childhood Experiences and Suicide*

Attempts. https://www.sprc.org/news/adverse-childhood-experiences-suicide-attempts

Xavier, J., Honnold, J. A., Bradford, J. (2007). The health, health-related needs, and lifecourse

experiences of transgender Virginians. Richmond, VA: Virginia Department of Health.

Appendix A

Informed Consent

CONSENT TO ALLOW USE OF DE-IDENTIFIED INFORMATION

You are invited to participate in a research study, designed to assess the impact of the Columbia-Suicide Severity Rating Scale (C-SSRS) training on participants' knowledge, skills, and confidence toward the assessment of individuals with suicidality.

INFORMATION
If you agree to participate, your responses and demographic information will be de-identified and aggregated to assess the effectiveness of the C-SSRS training. If you would like additional information, please contact Savannah Hamilton, MA (shamilton12@georgefox.edu) or Mary Peterson, PhD (mpeterso@georgefox.edu)

BENEFITS
Your participation in this research will allow you to receive comprehensive training on the C-SSRS, the most well-validated measure for the assessment of suicidality. We hope that the information we learn will improve future trainings.

RISKS
There are no physical risks associated with this consent. You may feel some emotional discomfort when the sensitive topic of suicidality, this is a typical response and we will take breaks and have opportunities for debriefing during the training. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. You are free to decline consent and will not experience any consequences.

CONFIDENTIALITY
Individual participants will not be identified. Please do not write your name or any other identifiable information anywhere on the surveys. We will not use your personal information in any reports about this study, such as journal articles or presentations.

STATEMENT OF CONSENT
Your signature below provides consent for your responses to be included in the data analysis.

_____ Date_____

Appendix B

C-SSRS Assessment

Four digit code that is unique to you (you will need to remember this for the post test)
_____

The following assessment is divided into three sections

  I. Theoretical Overview
  II. Training in model, administrative and interpretations of the C-SSRS Screener
III. Vignettes, Identification, scoring & interpretation

I. General information about suicide
1. Match the incidence of suicide for the populations below
            a. Children   2nd
            b. Adolescents   3rd
            c. Adults   4th

2.. Suicide is a preventable public heath problem. T   F
3. More people die by suicide than accident or injury. T   F
4. Females die by suicide more often than males. T   F
5. Relationships impact a person's desire for suicide. T   F
6. The majority of people who die by suicide see their PCP in the prior year. T   F
7. Hopelessness is only a minor risk factor for suicide. T   F
8. People who talk about suicide don't kill themselves. T   F
9. Asking someone about their suicidal ideation or intent will give them an idea to do it. F   T
10. Most suicidal people are undecided about it. T   F
11. People who have a close relative or friend who died by suicide are at lower risk for suicide themselves because they know what pain it would cause to others. F   T
12. All pts who make suicidal comments should be sent to the emergency room to be evaluated. T   F
13. It is best practice to develop a No-Harm contract. T   F
14. What is an average length of acute inpatient hospital stay?
       a. 34-42 days
       b. 20-26 days
       c. 14-19 days
       d. 6-10 days
       e. 1-5 days
15. Cutting should always be considered a suicidal behavior. T   F

II.   Definitions used by C-SSRS Screener (developed by the CDC/WHO).
Please provide short definitions of the terms used in C-SSRS (according to CDC guidelines).

Suicidal Ideation
1. How is the "wish to be dead?" different than "suicidal thoughts?"
2. Suicidal intent

Suicidal Behaviors
1. Preparatory behaviors
2. Suicide attempt
3. Interrupted attempt
4. Aborted attempt
5. Why is the link between intent and attempt essential?

Case Vignettes

1. 17 year old Native American female referred from a detoxification center for an evaluation of suicide risk. Patient lacerated her wrist with a piece of glass while intoxicated, now regrets the attempt and denies being suicidal. Has been depressed for approximately one month but there are no vegetative signs of depression. Self esteem is impaired, however, patient recently lost boyfriend and has difficulties coping with it; did not finish school and is unable to provide for herself. There was one previous suicide attempt exactly one year ago (cut wrist); this attempt also occurred following the loss of a boyfriend. Patient is dependent on alcohol and marijuana and has had chemical dependency treatment in the past. She also received one month of counseling following the previous suicide attempt. Diagnostic impression: atypical depression.

   What are addition questions or information you would need to know? What are appropriate next steps for the patient's treatment?

1. 65 year old European American male brought in to the emergency room by police. Pt had gotten into a physical altercation with his son and stated "You don't care about me and I'm going to kill myself!" Pt's wife witnessed the fight and called the police who then brought pt to the ED. Pt endorsed sxs of depressed mood, irritability, isolation and worthlessness. When asked about ideation and intent pt responded "If Jesus came and took me right now I would be happy and OK about it." Pt and pt's family denied hx of self harm and/or suicide attempts. The pt's wife reported there is a gun in the house but she is not sure where it is.

   What are addition questions or information you would need to know? What are appropriate next steps for the patient's treatment?

1. 17 year old Latina female high school student part time employed. Brought to the hospital to talk with behavioral health to safety plan. Pt reported significant hx of depression and suicidal ideation. Pt presents as withdrawn, irritable and present with very flat affect. Pt denies hx of suicidal attempts. When asked about self harm pt stated "I don't feel comfortable talking about that…I don't know." When asked if she can commit to safety pt reported "I don't know, I can't predict the future. I don't know what I will be feeling later on." When asked to rate her suicidal ideation on a scale of 0-10 pt reported it was a 10. Pt lives with her mother who is supportive of the pt's health and safety.

What are addition questions or information you would need to know? What are appropriate next steps for the patient's treatment?

1. Pt is a 16 year old African American female. She presents with low mood and irritability. Pt was brought into the ed by her mom after swallowing "6-7" muscle relaxers. Pt stated she was trying to "get high" with her friend. Pt reported the pills weren't working so she kept takin more and more. She had been hospitalized a year ago from an attempted overdose where she took 7 ibuprofen with an attempt to end her life. Pt is becoming extremely angry in the ED telling medical staff "if you touch me I will kill myself." Pt rated her level of suicidal ideation as a 7/10.

   What are addition questions or information you would need to know? What are appropriate next steps for the patient's treatment?

Appendix C

Columbia-Suicide Severity Rating Scale

Screen Version - Recent

SUICIDE IDEATION DEFINITIONS AND PROMPTS		
Ask questions that are bolded and <u>underlined</u>.		
Ask Questions 1 and 2		
1) ***<u>Have you wished you were dead or wished you could go to sleep and not wake up?</u>***		
2) ***<u>Have you actually had any thoughts of killing yourself?</u>***		
If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6.		
3) ***<u>Have you been thinking about how you might do this?</u>*** E.g. "*I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do it….and I would never go through with it.*"		
4) ***<u>Have you had these thoughts and had some intention of acting on them?</u>*** As opposed to "*I have the thoughts but I definitely will not do anything about them.*"		
5) ***<u>Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?</u>***		

6) ***<u>Have you ever done anything, started to do anything, or prepared to do anything to end your life?</u>***		
Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc. **If YES, ask: *<u>Was this within the past three months?</u>***		

Low Risk
Moderate Risk
High Risk

Appendix D

Curriculum Vitae

Savannah Leigh Hamilton

Shamilton12@georgefox.edu

EDUCATION

Doctoral Candidate (PsyD), Graduate School of Clinical Psychology	2016-Current
George Fox University, Newberg, OR	
M.A. Clinical Psychology	2016-2018
George Fox University, Newberg, OR	
Bachelor of Arts in Psychology	2012-2016
George Fox University, Newberg, OR	

ACADEMIC AWARDS

George Fox University Dean's List	Spring 2015
George Fox University Dean's List	Fall 2015
Stetson University Honor Roll	Fall 2012
NHS Honor Roll	2008-2012

CLINICAL EXPERIENCE

Providence Newberg Medical Center, Newberg, OR 2018-Current
    Behavioral Health Consultant
- BHC Duties – Case consultation, patient warm handoffs, individual therapy, treatment.

Newberg High School and Catalyst High School 2018-Current
    Behavioral Health Therapist
- Provided short-term and long-term therapy to students.
- Worked within multi-system collaboration between PMG and school district.
- Program Development.
- Crisis work with at risk student populations.

    Behavioral Health Crisis Consultation Team 2018-Current
    Behavioral Health Consultant
- BHC Duties - Risk assessment (psychosis, suicidality, and homicidality), case management, and consultation with patient, family, medical staff, law enforcement, and inpatient care coordinators.

George Fox University Behavioral Health Clinic, Newberg, OR   2017-2018
    Behavioral Health Therapist
- Provided short-term and long-term therapy
- Administer cognitive, achievement and personality assessments.
- Trained in electronic record keeping

George Fox University, Newberg, OR   2016-2017
    Pre-Practicum Therapist
- Developed and practiced Client-Centered Therapeutic skills.
- Trained in electronic record keeping.
- Oversaw scheduling and rooming of clients.

Yamhill Carlton Intermediate School, Yamhill, OR   2015-2016
    School Therapist Assistant
- Co-lead weekly groups with school therapist for adolescent female students.
- Completed classroom observations to gather data for students Individualized Education Plans.
- Collected data with graduate PsyD students.

TEACHING EXPERIENCE

"Substance Use and Suicidality: Coping, Escape and Inhibition"   2019
    Guest Lecturer, Graduate School of Clinical Psychology
    George Fox University, Newberg, OR
    Behavioral Health Crisis Team
- Created and presented lecture to Crisis Consultation Team of approximately 40 team members at George Fox University

"Suicide Risk Assessment: An Evaluation of Graduate Students   2019
with the Columbia-Suicide Severity Rating Scale (C-SSRS)"
    CSSRS Trainer
    George Fox University, Newberg, OR
- Assisted in CSSRS risk assessment training to first year PsyD students.
- Led weekly training sessions for first year PsyD students

PROGRAM DEVELOPMENT

Hamilton, S. Peterson, M., Gathercoal, K., Foster, L., Andrews, G. (2019). Suicide Risk Assessment: An Evaluation of Graduate Students with the Columbia-Suicide Severity Rating Scale (C-SSRS).
- Evaluated effectiveness of CSSRS as a tool for training clinicians in risk assessment and intervention.

Yundt, G., **Hamilton, S**., Paxton, J., Wenger, A. (2019). Congregation Well Being.

- Developed survey consisting of: Demographics, PHQ-4, Spiritual Wellbeing Scale and Qualitative questions.
- Purpose of study to understand emotional and spiritual well being of the congregation at Grace City Church

RESEARCH

Hamilton, S. Peterson, M., Gathercoal, K., Foster, L., Andrews, G. (2019). Suicide Risk Assessment: An Evaluation of Graduate Students with the Columbia-Suicide Severity Rating Scale (C-SSRS) Doctoral dissertation, defended June 2020.

PRESENTATIONS AND PUBLICATIONS

Ramirez, S., Grace, E., Paxton, J., **Hamilton, S**., Peterson, M. (2019). Improving Self-Efficacy Through an Interdisciplinary Persistent Pain Program. Poster presentation at 2019 American Psychological Association.

Larsen, C., Owen, E., **Hamilton, S**., Grace, E., Peterson, M., Jones, C. (2019). Behavioral Health Crisis Intervention for Adolescent Emergency Department Patients. Poster presentation at 2019 American Psychological Association.

Shaheed, J., Harberts, J., **Hamilton, S**., Peterson, M. (2019). Healthy Life Choice: Using the school-based program to facilitate changes. Poster presentation at 2019 American Psychological Association.

Hamilton, S., Jasper, L., Tuning, C., Hamilton, E. (2016, May). Healthy Lifestyle Choices matter for rural youth: Pre-post analysis of a school-based intervention. Poster presented at the 2016 Oregon Psychological Association Conference.

Davis, S., Hamilton, E., Cooper, T., Hansen, H., **Hamilton, S**., & Roshak, J. (2014, May). Assessing the effectiveness of S.E.L.F. Group curriculum in a Rural School-Based Behavioral Health Setting. Poster presentation at the 2014 Oregon Psychological Association Conference. This research won the award of "Competency in Education and Systems".

Hamilton, S., Sherreitt, C., Ho, A. (2014, December). Similar Interests and Personalities in College Undergraduate Friendships. Poster presentation. George Fox University. Analyzed factors associated with college friendships.

Miller, K., Hamilton, E., Davis, S., Speck, C., & **Hamilton, S.** (2014, May). The Effects of Computer-Assisted CBT for Rural Elementary Children with Anxiety. Poster presentation at 2014 Oregon Psychological Association Conference. Researched influence of the effects of CBT in rural elementary schools.

VOLUNTEER SERVICE

Night Strike 2015
Cleaning. Serving the homeless community of Portland

NHS UNICEF Volunteer 2011-2012
Fundraising for the advocacy and education of children.

Young Life Leader 2012-2014
Working with adolescents. Completed trainings to work with children.

Bonner Scholar 2012
Completed 140 hours of community service.
Including tutoring disadvantaged school systems.
Volunteering a local community health clinic.
Supervised by doctoral level professor weekly

Neighbor to Neighbor 2010-2011
Working primarily with geriatric population.
Yard work and house cleaning.

Hunger Outreach to Portland Homeless 2010
Serving the homeless.
Soup kitchen and donation collection.

Cross Cultural Experience, Egypt 2007
Doctoral level supervision.
Culminated in travel to Egypt and
Opportunity to work with children
Of the Garbage City Orphanage.

PROFESSIONAL AFFILIATIONS

American Psychological Association (APA) 2016-Current
Oregon Psychological Association (OPA) 2016-Current

CERTIFICATIONS

Gender and Sexuality

Principles of Group Psychotherapy

PROFESSIONAL TRAININGS AND WORKSHOPS

Forster, C. (2019). Competencies in Intercultural Communication.

Worthington, E., (2019). Promoting Forgiveness.

Safri, D. & Millkey, A. (2019). Opportunities in Forensic Psychology.

Pengelly, S. (2018). Old Pain in New Brains: Psychology of Chronic Pain.

McMinn, L. & McMinn, M. (2018). Spiritual Formation and the Life of a Psychologist.
Vogel, M. (2018). Integration and Ekklesia.

Taloyo, C. (2018). History and Application of Interpersonal Psychotherapy.

Hayes, S., Walser, R., & Wilson, K. (2018). Acceptance and Commitment Therapy Bootcamp

Sordal, J. (2017). Telehealth in Integrated Care Settings.

Gil-Kashiwabara, E. (2017). Community Based Participatory Research and Tribal Participatory Research.

Wharford, P. (2017). Domestic Violence, Law Enforcement, and Abuse.

Johnson, S. (2017). LGBTQ+ Awareness and Humility, Portland's SMRK Outreach.

Brown, S. (2017). Native American Culture and Awareness.

Bourg, W. (2016). Divorce and the Family System.

Kuhnhausen, B. (2016). Sacredness, Naming, and Healing: Lanterns Along the Way

ASSESSMENT AND POPULATION SCREENERS

Previously Administered or Completed Competency

16 Personality Factors Questionnaire (16PF)

Adaptive Behavior Assessment System, Second Edition (ABAS-II)

Beck Anxiety Inventory (BAI)

Beck Depression Inventory (BDI)

Behavior Assessment System for Children, Third Edition (BASC-3)

Booklet Categories Test (BCT)

Boston Naming Test (BNT)

California Verbal Learning Test (CVLT)

Collaborative Assessment and Management of Suicidality (CAMS)

Colombia-Suicide Severity Rating Scale (C-SSRS)

Connors Adult ADHD Rating Scales-Observer and Self Report

Connors Continuous Performance Test-2

CRAFFT Screening Test

Delis-Kaplan Executive Function System (D-KEFS)

Developmental Neuropsychological Assessment (NEPSY)

Family Adaptability and Cohesion Evaluation Scales, IV (FACES IV)

Generalized Anxiety Disorder, Seventh Addition (GAD-7)

Geriatric Depression Scale

Grooved Pegboard Test (GPT)

Millon Clinical Multiaxial Inventory-III (MCMI-III)

Mini-Mental State Examination, 2nd Edition (MMSE-II)

Minnesota Multiphasic Personality Inventory-II (MMPI-II)

Minnesota Multiphasic Personality Inventory-II, Restructured Format (MMPI-II-RF)

Montreal Cognitive Assessment (MoCA)

Outcome Rating Scale (ORS)

Patient Health Questionnaire (PHQ-9)

Personality Assessment Inventory (PAI)

Patient Activation Measure

Repeatable Battery for the Assessment of Neuropsychological Status (RBANDS)

Rey-Osterrieth Complex Figure (Rey-O)

Roberts Apperception Test for Children, Second Edition (Roberts-2)

Saint Louis University Mental Status (SLUMS)

Session Rating Scale (SRS)

Stroop Color and Word Test

Tactual Performance Test (TPT)

Test of Memory Malingering (TOMM)

Wechsler Adult Intelligence Scale, Fourth Edition (WAIS-IV)

Wechsler Individual Achievement Test, Third Edition (WIAT-III)

Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV)

Wechsler Memory Scale (WMS)

Wide Range Assessment of Memory and Learning, Second Edition (WRAML-II)

Wide Range Achievement Test, Fourth Edition (WRAT-IV)

Wide Range Intelligence Test (WRIT)

Wisconsin Card Sorting Test (WCST)

Woodcock-Johnson Tests of Cognitive Ability

Woodcock-Johnson Test of Achievement

REFERENCES

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