

EFFECTIVENESS OF SUICIDE PREVENTION SKILLS TRAINING ON THE WILLINGNESS TO INTERVENE AND THE SELF-EFFICACY AMONG YOUNG ADULT STUDENTS

Mubarak Mansoor and Kiran Bashir Ahmad (mubarak_kamlani@hotmail.com)
Institute of Professional Psychology, Bahria University Karachi Camp, Pakistan

ABSTRACT

Objectives: *Suicide has been a complex behavior which is considered to be one of a leading cause of preventable death among young adults if suicide ideation is identified at an early stage. Health organizations report that global suicide rates are declining except for young adults, therefore, this study aimed to measure effectiveness of suicide prevention skills training on the willingness to intervene against suicide and self-efficacy among young adult students.*

Design of the study: *A Quantitative Pretest-Posttest quasi experimental research design was used.*

Place and Duration of the study: *This study was conducted from Sep, 2020 till June, 2021 in different coaching centers of Karachi, Pakistan*

Sample and Method: *Furthermore, purposive sampling technique was used to recruit young adult students (N=25) with an age range of 18-24 years with mean age of 20.72 (SD=1.54). The data was collected through The Willingness to Intervene against Suicide Questionnaire, and General Self-Efficacy Scale.*

Results and Conclusion: *Results of study show significant moderate positive correlation between willingness to intervene against suicide and self-efficacy. Also, a significant improvement was found in the post intervention levels of willingness to intervene against suicide and self-efficacy among young adults with large effect size. This study has major implications for mental health and allied health care practitioners, and for policy makers in creating an informal safety net to prevent suicide by utilizing peer-to-peer support-based intervention.*

Keywords: *Suicide Prevention; Willingness to Intervene; Self-Efficacy; Young Adult Students; Peer Support*

INTRODUCTION

DSM 5 TR defines suicide as an act of intentionally causing one's own death (American Psychiatric Association, 2022). The cycle of suicide begins with stressors of life, that are triggered by numerous factors that lead to development of suicidal ideation followed by hopelessness, helplessness and intolerable psychological pain that may cause death (Baumeister, 1990; Shneidman, 1993). Suicide studies among adolescents and adults reports that major predictors of suicidal crisis are mental illness, trauma, aggression, stress and history of alcohol abuse (Centers for Disease Control and Prevention, 2017; Franklin et al., 2017; World Health Organization, 2021). These predictors lead to suicide ideations that is among key predictors of fatalities by suicide and have been studied extensively to measure suicidal crisis, moreover, people in suicidal crisis usually do not seek help due to the stigma and societal constructs that creates barriers for self-disclosure (CDC, 2017; WHO, 2021). Common elements springing this stigma include prevailing myths, fear of labeling, and social, cultural and religious persecution. These factor results in cognitive impairment; and with no protective factors or reach-ability in sight, a person steadily moves towards various acts of self-harm that may eventually result in suicide.

Suicide is considered to be a fourth leading cause of death among 15-29 years old (CDC, 2021; WHO, 2021). Leading health organizations of the world reports that rate of suicide has decreased globally in 2019 and 2020 but not for everyone because suicide rates are increasing in young adults. (CDC, 2021; WHO, 2021). The WHO reports increasing rates of death by suicide in Pakistan with numbers reaching 8.9 per 100,000 in 2019 (WHO, 2019) making this a significant concern that must be tackled sensitively and highlighted at different levels.

Despite global decline, death by suicide is increasing among young adults but majority do not seek help for suicidal crisis (CDC, 2017; WHO, 2021). Although numerous programs have been implemented for suicide prevention, but research with the young adult student continues to be insufficient. These programs usually focus on smaller groups such as counselors, teachers or people at risk, while ignoring a significantly imperative and larger population of young adults who are their peers or part of their social network (Funkhouser et al., 2017; Muehlenkamp & Hagan, 2019). It's a major concern that people at risk of suicide are most likely to seek help from informal networks such as friends and social circle of same age, family and the internet, instead of relevant mental health care professional. (Funkhouser et al., 2017; Muehlenkamp & Hagan, 2019; Otsuka, et

al., 2020) therefore it is necessary to shift the focus of preventive interventions to informal network such as peer support to bridge the gap between an individual in suicidal crisis and mental health care provider (Aldrich, 2018; Funkhouser et al., 2017; Muehlenkamp & Hagan, 2019).

The significance of social support is constant across several suicidologists and health organizations. Durkhiem (1951), Shniedman (1993), Joiner (2005), Baumeister (1990), WHO (2021) and CDC (2017) suggest that insufficient social support escalates risk of suicide. Moreover, lack of perceived support from peers and significant others is related to suicidal ideation and is a major risk factor as well. Peer support has been discovered to be compelling in numerous mental health issues, including suicidal crises (Aldrich, 2018; Funkhouser et al., 2017; Muehlenkamp & Hagan, 2019). A few examiners have highlighted low quality of peer support and linked it to depression, which is a notable indicator of suicidality (Mo et al., 2018).

If suicide ideation is identified at an early stage, prevention is likely possible with the presence of social support and a health care system. There are several protective factors that helps in prevention of suicide such as access to health care system, restricting harmful alcohol abuse and lethal means, responsible media reporting, interventions and gatekeeper training, dedicated helplines, social and community support (CDC 2017; WHO 2021).

Several systematic reviews, such as, Mo et al. (2018) and Holmes et al. (2021) suggest that gatekeeper training has the potential to strengthen peer based social support as a preventative measure against suicide that increases knowledge, intentions to help, and confidence in preventive behavior but they do not have significant long-term effects and they indicate a weak training effect with insignificant effects of training into actual preventive behavior. Also, Aldrich (2017) noted that numerous studies seems to mixed up gatekeeper's capability to identify a suicidal individual with their intention and capacity to respond to that individual which fails to understand the complexity of factors that may influence a decision to intervene in suicidal crisis. This helps us to identify the gap in the context of willingness to intervene and self-efficacy (Labouliere et al., 2021) which are considered very important variables in suicide prevention (Bottomley et al., 2019; Hill et al., 2020; Wolford-Clevenger et al., 2019) but together they are understudied (Aldrich, 2018).

Kuhlman et al. (2017) and Aldrich (2017, 2018) are among few researchers who have applied and re-examined suicide preventive behavior by

using Theory of Planned Behavior (Ajzen, 1987), which posits that an individual will have the intention to complete a certain behavior if they have positive attitudes toward the behavior, they believe that others will approve of or expect that they perform the behavior and perceive themselves as having the ability to easily perform the behavior that increases an individual's willing to intervene which is quality or state of being prepared to participate in something, to prevent or alter a result or course of events (Aldrich, 2014; Steeves et al., 2017). People generally possess capabilities to intervene in suicidal crisis, but they might not have a motivation for numerous reasons such as fear of stigmas and myths (Monteith et al., 2020), impact on their relationships (Cigularov et al., 2008), anxiety to anticipated interaction (Lehman et al., 1986) and lack of willingness (Aldrich, 2018; Bezerra et al., 2022).

Self-efficacy has been widely studied in suicide prevention (Holmes et al., 2021; Mo et al., 2018) which according to Bandura (1986) is an "individual's belief in their capacity to execute behaviors necessary to produce specific performance attainments". It is not concerned with knowledge; it revolves around perception of confidence and belief to complete certain task (Bandura, 1986). It is a significant predictor of self-confidence and without this; a person won't be able to successfully complete a task (Bandura, 1997). Burnette et al. (2015) posits that "self-efficacy to intervene", is the degree to which a person feels competent and comfortable to identify and facilitate a person in suicidal crisis that can be improved by gatekeeper training. Several studies indicate that (Gallo et al., 2019) increase in self-efficacy helps in improving intervening behavior which eventually leads to reduction in suicidal crisis (Holmes et al., 2021; Mo et al., 2018).

Among the global population, young adult students are most vulnerable to suicide (CDC, 2021; WHO, 2021). Literature indicates that prevention is possible but affected individuals don't seek help from formal network, therefore, it is necessary to shift our focus on informal network such as peer support to bridge the gap between a person in suicidal crisis and a health care professional, where willingness to intervene and self-efficacy can play a pivotal role in overcoming barriers in intervening behavior. Thus, the current study aims to measure effectiveness of these variables for improvements in suicide prevention efforts.

Theoretical Framework

The theoretical framework of present study was divided in two halves, where the first half contained four theories that contributed to the conceptualization of frustration and lack of inner resources coupled with unbearable psychological pain warranting the need for social support. The theories in first half included Psychache Theory of Suicide (Shneidman, 1993) Escape Theory of Suicide (Baumeister, 1990), Interpersonal Theory of Suicide (Joiner, 2005) and Sociological Theory of Suicide (Durkheim, 1951) and they all together point toward the significance and necessity of social support. In keeping with the ideas gleaned from literature review, it is evident that where social support is lacking, there is an inherent need to search for supportive factors in the environment and this is where peer support can be a preventative measure in identifying and supporting those with suicidal ideation. While this is meant to be an intermediary measure, in a country like Pakistan where there are less opportunities and stigma attached with seeking mental health, this may be first line of defense against suicide.

The second half of theoretical conglomeration focuses on cognitive and behavioral theories that outline individual choice and bid to action or inaction in caregiver or gatekeeper ideology. Hence the theories that were referred to in this parameter and led to the development of relevant hypotheses, included the Health Belief Model (Rosenstock, 1974); Social Cognition Model (Bandura, 1998), Theory of Planned Behavior (Ajzen, 1991) and Self-efficacy (Bandura, 1986) that together helped in developing the understanding of the willingness to intervene and self-efficacy in suicide prevention.

The theoretical context thus leads to the determination of the proposed theoretical model of the study suggesting the following research hypotheses:

H₁: There will be a significant relationship between willingness to intervene against suicide and self-efficacy among young adult students.

H₂: There will be a significant improvement in willingness to intervene against suicide among young adult students post training.

H₃: There will be a significant improvement in self-efficacy among young adult students post training.

METHOD

Participants

For the present study, 25 participants were recruited (mean age, 20.72; SD=1.54) who were single, and inclusion criteria was students between the age of 18 to 24, studying in traditional academic institutions who were never trained in suicide prevention and were comfortable with the theme of training. Furthermore, they had to fall in minimal or mild range of PHQ-9, along with score of 0 or 1 on each item. Participants who didn't meet the inclusion criteria were excluded from the study.

Measures

Instruments used in this study were, demographic form, Patient Health Questionnaire (PHQ-9), The Willingness to Intervene against Suicide Questionnaire (Aldrich et al., 2014) and General Self-efficacy Scale (Schwarzer & Jerusalem, 1995). All the instruments were used with the permission of respective authors and informed consent was taken before the administration of Tests.

A demographic form,

It is comprised of information about gender, age, academic Qualification, Family structure etc.

Patient Health Questionnaire

Participants were screened through demographic form and Patient Health Questionnaire (PHQ-9), developed by Kroenke, et al. (2001). It's based on 9 items and can be effectively utilized to provide a diagnosis for depression with a sensitivity of 88% and a specificity of 88% for Major Depressive Disorder, and it also offers a descriptive interpretation of its severity level. Reliability and validity of the tool have indicated it has sound psychometric properties. A Cronbach's alpha of 0.89 and 0.86 (on two different populations) was found through reliability tests (Kroenke et al., 2001).

The willingness to intervene against suicide questionnaire

The willingness to intervene against suicide questionnaire (Aldrich et al., 2014) consists of 75 item and 4 subscales, rated on a 5-point Likert scale that

measures readiness and preparedness to intervene against suicide. Aldrich et al. (2014) reported strong reliability, ranging from .84 to .91, while Kuhlman (2017) also reported excellent reliability of 0.86 to 0.92.

General Self-efficacy Scale

General Self-efficacy Scale (Schwarzer & Jerusalem, 1995) consists of 10 item that measures strength of a person's beliefs in their own capabilities, which is rates on 4-point Likert scale. Its reliability was found to be between the ranges of 0.75 to 0.94 when measured across a variety of languages.

Procedure

In the first stage of the study, 25 participants were recruited through non-probability purposive technique. Participants were screened through demographic form and PHQ-9. After recruitment, pretest was administered followed by administration of suicide prevention skills training, which was conducted in person and then posttest was administered after 15 days of completion of training, followed by statistical analysis to test the hypotheses.

Suicide Prevention Skills Training outline

Two days Suicide prevention skill training was conducted with 25 students in a group setting. It was based on 3 resources; Preventing Suicide: A Global Imperative by WHO (2014), Preventing Suicide: A Technical Package of Policies, Programs, and Practices by CDC (2017) and American Indian Life Skills Development Curriculum, by Teresa (1996); furthermore, vignettes and scripts were created for mock behavioral training and role plays. Training methodologies included simulation activities, experiential learning, case studies, demonstrations, role plays and mock behavioral training that reinforced learning with auditory and visual senses with reflect-connect-apply method. Training consisted of six contact hours divided in two consecutive days. There were four modules in this training; the first two, Attitude and Subjective Norms tapped cognition, while, perceived behavioral control and self-efficacy, and intention were used to work through participants' initiative taking and sustainability of suicide preventative behavior.

Module 1: Attitude

The first module was focused on the attitude of participants with the objective to enhance their knowledge, to make them aware of suicidal ideation, to

Mansoor and Ahmad

make them aware of risk factors and protective factors and to make them realize importance of support and attitude for suicide prevention. The lesson plan included understanding suicide and seriousness of this issue, development of suicide ideation and learning risk and protective factors (include resources) through blind obstacle walk with and without support.

Module 2: Subjective Norms

The second module focused on the subjective norms of participants with the objective to understand myths and facts and their impact on the suicidal risk of an individual. The affirmation technique was utilized to motivate the participants and help them uplift others. The lesson plan included a group activity in which groups of five participants were randomly created and they had to analyze if the statement is a myth or a fact with justification or experiential examples from real life. After this lesson, they participated in a mirroring activity where all of them were standing in circle and they had to copy actions of one person from the group which made them experience and power of pressure, how it is created, sustained and how it can be changed followed by an affirmation activity.

Module 3: Perceived Behavioral Control and Self-Efficacy

The third module was focused on perceived behavioral control and self-efficacy of participants with the objective to educate them about the emotional and behavioral signs of suicide and make them aware of body language, using demonstrations and visual aids. The idea was to develop their understanding of do's and don'ts while communicating with a person at risk of suicide. A demonstration of body language was also included in the lesson plan to teach them how to communicate with a person at risk followed by the suicide intervention fact sheet which made them learn do's and don't's of the therapeutic process.

Module 4: Intention

The fourth module was focused on intention of participants with an objective to educate them about the plan of action after identifying an individual at risk and to practice communication skills with the suicidal person through two different role plays. The lesson plan included five steps to help someone at risk which are as following; (1) ask, (2) Keep them safe, (3) be there, (4) help them connect and (5) follow up. After learning these steps, two role plays were included in the lesson plan for practicing communication. The first script was

based on talking to a person with suicide ideation while the second script was based on telling someone that their friend or someone is at risk of suicide.

RESULTS

The following results show links between willingness to intervene against suicide and self-efficacy. For statistical analysis, authors examined the data collected from 25 participants with Statistical Package for the Social Sciences.

Table 2

Frequencies and Percentages of Demographic Variables of the sample (N=25)

Variables	<i>f</i>	%
Gender		
Female	13	52
Male	12	48
Academic qualification		
Intermediate	20	80
Undergraduate	5	20
Currently studying in		
Undergraduate	21	84
Graduate	4	16
Discipline of Study		
Management science	9	36
Medical	11	44
Computer Science	5	20
Structure of Family		
Nuclear	10	40
Joint	15	60
Age	<i>M</i>	<i>SD</i>
18-24 years	20.72	1.54

Table 3
Descriptive Statistics and Correlation for Study Variables of the study (N=25).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Pre_WIS	118.64	29.34	-											
2. Post_WIS	192	49.6	0.18	-										
3. Pre_AT	25.76	7.03	.99**	0.18	-									
4. Post_AT	44.16	12.72	0.21	.99**	0.21	-								
5. Pre_SN	27.36	6.5	.99**	0.15	.99**	0.18	-							
6. Post_SN	44.16	11.83	0.18	.99**	0.18	.98**	0.16	-						
7. Pre_PBC	31.96	8.4	.99**	0.17	.99**	0.2	.99**	0.17	-					
8. Post_PB C	49.36	12.85	0.16	.99**	0.16	.98**	0.13	.98**	0.15	-				
9. Pre_INT	33.56	7.5	.99**	0.2	.98**	0.23	.98**	0.2	.99**	0.19	-			
10. Post_INT	54.32	12.56	0.15	.99**	0.16	.98**	0.12	.96**	0.15	.98**	0.18	-		
11. Pre_SE	18.56	5.73	.50**	0.2	.52**	0.21	.51**	0.2	.51**	0.2	.47*	0.19	-	
12. Post_SE	25.68	7.58	0.33	.51**	0.35	.50*	0.32	.51**	0.34	.52**	0.32	.49*	.63*	-

* $p < .05$. ** $p < .01$.

Note: Pre = Pretest, Post = Posttest, WIS = Willingness to Intervene Questionnaire, AT = Attitude, SN = Subjective Norms, PBC = Perceived Behavioral Control, INT = Intention, SE = General Self-Efficacy

Table 3 shows moderate positive correlation between willingness to intervene against suicide and Self-efficacy of pre and post suicide prevention skills training with $r = 0.508^{**}$ and $r = 0.512^{**}$ respectively, which is statistically significant at p -value < 0.01 . Result from table 3 also shows significant positive correlation among subscales.

Table 4

Paired Sample t test Statistics of Willingness to Intervene against Suicide (N=25) in young adult students.

Scale	Pretest		Posttest		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
WIS	118.64	29.34	192	49.66	-6.93	0.001	1.38
AT	25.76	44.16	7.03	12.72	-7	0.001	1.39
SN	27.36	44.16	6.50	11.83	-6.7	0.001	1.34
PBC	31.96	49.36	8.40	12.85	-6.12	0.001	1.22
INT	33.56	54.32	7.5	12.56	-7.75	0.001	1.54

Note: WIS = Willingness to Intervene Questionnaire, AT = Attitude, SN = Subjective Norms, PBC = Perceived Behavioral Control, INT = Intention

Table 4 indicates significant improvement in willingness to intervene against suicide among participants post training. This improvement is statistically significant, $t(24) = 6.932$, $p < 0.01$ with large effect size of 1.368. Results from table 4 also show significant improvement among subscales of willingness to intervene against suicide.

Table 5

Paired Sample t test Statistics of Self-Efficacy (N=25) in young adult students

Scale	Pretest		Posttest		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
SE	18.56	5.73	25.68	7.58	-5.97	0.001	1.19

Note: SE = General Self-Efficacy

Table 5 shows significant improvement in self-efficacy post training. This improvement is statistically significant, $t(24) = 5.97$, $p < 0.01$ with large effect size of 1.195.

DISCUSSION

The present study measured effectiveness of suicide prevention skills training on the willingness to intervene against suicide and self-efficacy of young adult students. First hypothesis is accepted as result (See Table 3) shows significant moderate positive correlation between willingness to intervene against suicide and self-efficacy. These results corroborate findings of previous studies (Bezerra et al., 2022; Labouliere et al., 2021) that proposed and supported relationship of willingness and self-efficacy. Both of these variables have strong theoretical foundations (Ajzen, 1987; Bandura, 1986) but they are rarely studied together. For attainment of behavior, a person shall be prepared with sufficient resources (knowledge and skills) to meet the demand of situation along with a belief that a certain behavior can be produced (Ajzen, 1987; Bandura, 1986). It helps to understand how one's trust in capacity prompts likeliness and preparedness to take part in certain behavior and endure even in the midst of trouble or obscure results. Bandura (1977; 1997) posits that individual decisions about one's abilities, observational learning, input and capacity to control physiological manifestations can influence inspiration and probability of behavior and these elements were tapped by this training. Furthermore, systematic reviews (Holmes et al., 2021; Mo et al., 2018) also support relationship of willingness to intervene and self-efficacy which majority of suicide prevention programs rarely addressed together.

Suicide prevention skills training was constructed in a way that first two modules addressed willingness to intervene and cognitive changes, whereas last two modules addressed self-efficacy and behavioral changes. Attitude and subjective norms were covered in first and second module which laid the foundation of changes in behavior with a believe that their behavior will be valued and they can manage perceived social pressure.

Social support in context of pro social behavior and social desirability is integrated in culture of Pakistan where people live in a family system with deep ties in norms and values with perceived obligation to help others (Tabassum & Khalid, 2016) but suicide prevention isn't encouraged among Muslim countries (Leach, 2006; Rubin & Yasien, 2004). Changes in attitude were observed after first module but participants were hesitant to initiate help which they reflected as fear of stigmas and myths that were covered in second module. Pro-social behavior is a behavior to help others without selfish demands in keeping with norms of helping others (Eisenberg & Fabes,1998); this objective was achieved

with attitudes and subjective norms which resulted in valued behavior and reduced social pressure while learning to manage it.

Third and fourth module also played a significant role as participants found role-plays and demonstration to be most effective form of learning. Participants reflected that experiential learning made them aware of their mistakes decreased their anxiety, unknown fear and hesitation when they practiced to talk with a person in suicidal crisis. Gallo et al. (2019), Pisani et al. (2020) and Rieff et al. (2019) also found similar results in which experiential learning and emotional processing techniques such as demonstration, role-plays, mock counseling training increased participant's willingness to intervene and self-efficacy, along with improved comfort, counseling abilities, execution and decreasing anxiety.

Second hypothesis of the study (See Table 4) shows significant improvement in post levels of willingness to intervene against suicide with large effect size. These results corroborate findings of previous studies (Bezerra et al., 2022; Kuhlman et al., 2017; Monteith et al., 2020; Rieff et al., 2019) that resulted in improvements in willingness to intervene. As discussed earlier, pro-social behavior is integrated in Pakistan's culture but consequences related to suicide don't allow a person to help someone at risk, that's why suicide prevention skills training focused on changes at the cognitive and behavioral level so that their willingness to intervene can be improved.

In qualitative analysis, participants reflected on this training as an awakening and empowering experience; they shared that they used to feel helplessness due to fear of consequences instilled by society through stigmas and myths. Cognitive component of suicide prevention skills training was constructed to clear misconceptions, de-stigmatize, increase knowledge and awareness, and value their intervening behavior and to reduce and manage social pressure which eventually improved their willingness to intervene as results of Monteith et al. (2020) suggested.

Participants repeatedly shared that experiential learning had a significant impact on their cognition and behavior because they were not just listening to a lecture or presentation, but instead, they were fully immersed into a novel experience where they were feeling and learning to process and regulate their emotions which helped them to overcome their fears, hesitation and anxiety in anticipated confrontation with a person in suicidal crisis. As example shared by participants that learning emotional and behavior signs of suicide with

Mansoor and Ahmad

expressions and body language, learning and practicing how to communicate and talk to someone with suicide ideation with techniques such as body language, demonstration and role-play made them confront and overcome their fears. Participants were also influenced by mirror and affirmation activities which made them realize that anyone can bring change and impact social norms with the help of informal network and social media. Moreover, role-play scripts were specifically created in Urdu language, which helped them connect, feel and relate more as it is the national language of Pakistan. Effectiveness of script and relevant terminology is supported by study of Gallo et al. (2019) and Reeves et al. (2004).

Findings of third hypothesis of the study (See Table 5) indicate significant improvement in self-efficacy after training that is statistically significant with large effect size. These results corroborate findings of previous studies (Kuhlman, 2017; Pisani et al., 2020; Taylor et al., 2019) that resulted in significant increase in self-efficacy. In systematic review by Holmes et al., (2021), they found that self-efficacy was significantly increased in majority of the studies. As discussed, self-efficacy is a belief in abilities to perform a behavior that is essential to yield particular performance (Bandura, 1986) but it doesn't stop at producing require behavior; it goes beyond that behavior such as having a belief in required capacity and success of it. Individual's evaluation of self-efficacy is based on numerous internal processes (believes, feelings, capacities, eagerness, readiness, preparedness and assessed self-examination), which are affected by external processes (experience, training, feedback and supervision). These processes and factors are independent yet interrelated and intertwined like a framework that drives a behavior (Elliott et al., 2018).

Self-efficacy may empower people in suicide prevention behavior which is supported by study of Siau et al. (2021) that posits that self-efficacy in suicide prevention is most influential predictor of a positive attitude toward people in suicidal crisis as people with higher self-efficacy may have a higher likelihood to intervene, on the other hand, lower self-efficacy may lead to a sense of powerlessness against suicide, which makes them hesitant to help people at suicidal risk.

According to Bandura (1997), students with high self-efficacy are likely to challenge themselves with difficult tasks and recover faster from a setback. While students with low self-efficacy usually withdraw from challenging tasks because they perceive them as threats. It is possible that an area specific type of self-efficacy may impact students' readiness and preparedness to take a stand,

because if they don't believe in their own abilities to effectively intervene, they are very unlikely to act as well (Thornberg & Jungert, 2013).

Conclusion

This study measured effectiveness of suicide prevention skills training on the willingness to intervene against suicide and self-efficacy among young adult students. Three hypotheses were tested and all of them were accepted as results indicated significant moderate positive correlation between the willingness to intervene against suicide and self-efficacy, and significant post training improvement in willingness to intervene against suicide and self-efficacy with large effect size. These findings provide evidence for effectiveness of suicide prevention skills training in improving willingness to intervene and self-efficacy for advancements in suicide prevention efforts. Furthermore, it establishes the novel relationship between willingness and self-efficacy for effective suicide preventive strategies along with grounds for future trainings and implementation of the suicide prevention skills training on a larger scale.

Limitations and Recommendations

Future directions indicate working with a larger and diverse sample in order to ascertain effectiveness and to generalize the results. This research is limited in exclusion of private and distance learning based young adult students and does not account for the longitudinal effects of training on actual behavior.

This study has major *implications* in primary, secondary and tertiary prevention in clinical and social domains related to community and social welfare; as it provides evidence for indirect safety net and first line of defense to manage suicidal crisis. In least developed countries this study can be significantly beneficial as immediate access to a mental health service is usually limited. Policy makers can take note of its effectiveness and usage in the development of life skill and self-help manuals along with healthier peer to peer support-based intervention to create an indirect safety net against suicidal crisis to save precious lives.

REFERENCES

- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, 20, 1–63. Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60411-6](https://doi.org/10.1016/S0065-2601(08)60411-6)
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
- Aldrich, R. S., Harrington, N. G., & Cerel, J. (2014). The Willingness to Intervene Against Suicide Questionnaire. *Death Studies*, 38, 100–108. <https://doi.org/10.1080=07481187.2012.738763>
- Aldrich, R. S. (2017). Suicide prevention: College students' intention to intervene. *Archives of Suicide Research*, 21(3), 403-412. <http://doi.org/10.1080/13811118.2016.1211041>
- Aldrich, R. S. (2018). A closer look: College students' exposure to suicide and intention to intervene. *Mental Health & Prevention*, 11, 1–7. <https://doi.org/10.1016/j.mhp.2018.04.001>
- American Psychiatric Association. (2022). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)*, Washington DC: Author <https://doi.org/10.1176/appi.books.9780890425787>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and company.
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology & Health*, 13(4), 623–649. <https://doi.org/10.1080/08870449808407422>

- Baumeister R. F. (1990). Suicide as escape from self. *Psychological review*, 97(1), 90–113. <https://doi.org/10.1037/0033-295x.97.1.90>
- Bezerra, V.A., Camino, C.P., Galvao, L.K. et al., (2022). Predictive Variables of Young People’s Willingness to Help People at Risk of Suicide. *Trends in Psychology*, 30, 186–205. <https://doi.org/10.1007/s43076-021-00108-9>
- Burnette, C., Ramchand, R., & Ayer, L. (2015). Gatekeeper Training for Suicide Prevention: A Theoretical Model and Review of the Empirical Literature. *Rand health quarterly*, 5(1), 16. https://www.rand.org/pubs/research_reports/RR1002.html
- Bottomley, J. S., Abrutyn, S., Smigelsky, M. A., & Neimeyer, R. A. (2019). Exposure to nonfatal suicidal behavior: Examining pathways to suicide risk using the interpersonal-psychological theory of suicide (IPTS). *Journal of Loss and Trauma International: Perspectives on Stress & Coping*, 24(3), 261–278. <https://doi.org/10.1080/15325024.2019.1565107>
- Centers for Disease Control and Prevention. (2017). *Preventing Suicide: A Technical Package of Policies, Programs, and Practices*. <https://www.cdc.gov/violenceprevention/pdf/suicidetechnicalpackage.pdf>
- Cigularov, K., Chen, P. Y., Thurber, B. W., & Stallones, L. (2008). What prevents adolescents from seeking help after a suicide education program? *Suicide & life-threatening behavior*, 38(1), 74–86. <https://doi.org/10.1521/suli.2008.38.1.74>
- Durkheim, E. (1951). *Suicide: A study in Sociology*. New York, NY: Free Press.
- Eisenberg, N., & Fabes, R. A. (1998). *Prosocial development*. In W. Damon & N. Eisenberg (Ed.), *Handbook of child psychology: Social, emotional, and personality development* (pg. 701–778). John Wiley & Sons, Inc.
- Elliott, G. M., Audsley, R. W., Runck, L., Pechek, A. A., de Raet, A., Valdez, A., & Wilde, B. J. (2018). The Development of Self-Efficacy to Work with Suicidal Clients. *The Qualitative Report*, 23(12), 3004-3018. <https://nsuworks.nova.edu/tqr/vol23/iss12/9>
- Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., Huang, X., Musacchio, K. M., Jaroszewski, A. C., Chang, B. P., & Nock, M. K. (2017). Risk factors for suicidal thoughts and behaviors: A meta-analysis

Mansoor and Ahmad

of 50 years of research. *Psychological bulletin*, 143(2), 187–232.
<https://doi.org/10.1037/bul0000084>

Funkhouser, C. J., Zakriski, A. L., & Spoltore, J. D. (2017). Evaluating peer-peer depression outreach: College students helping peers approach and respond to students in crisis. *Journal of Psychological Research*, 22(1), 19–28.
<https://doi.org/10.24839/2325-7342.JN22.1.19>

Gallo, L. L., Doumas, D. M., Moro, R., Midgett, A., & Porchia, S. (2019). Evaluation of a Youth Suicide Prevention Course: Increasing Counseling Students' Knowledge, Skills, and Self-Efficacy. *The Journal of Counselor Preparation and Supervision*, 12(3). <https://repository.wcsu.edu/jcps/vol12/iss3/9>

Hill, N. T. M., Robinson, J., Pirkis, J., Andriessen, K., Kryszynska, K., & Payne, A. (2020). Association of suicidal behavior with exposure to suicide and suicide attempt: A systematic review and multilevel meta-analysis. *PLOS Medicine*, 17(3), 1–27. <https://doi.org/10.1371/journal.pmed.1003074>

Holmes, G., Clacy, A., Hermens, D. F., & Lagopoulos, J. (2021). The Long-Term Efficacy of Suicide Prevention Gatekeeper Training: A Systematic Review. *Archives of suicide research: official journal of the International Academy for Suicide Research*, 25(2), 177–207. <https://doi.org/10.1080/13811118.2019.1690608>

Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>

Kuhlman, S., Walch, S. E., Bauer, K. N., & Glenn, A. D. (2017). Intention to Enact and Enactment of Gatekeeper Behaviors for Suicide Prevention: an Application of the Theory of Planned Behavior. *Prevention science: the official journal of the Society for Prevention Research*, 18(6), 704–715.
<https://doi.org/10.1007/s11121-017-0786-0>

Leach, M. M. (2006). *Haworth Series in Clinical Psychotherapy*. Cultural diversity and suicide: Ethnic, religious, gender, and sexual orientation

perspectives. Haworth Press, New York. <http://psycnet.apa.org/record/2006-21976-000>

- Labouliere, C. D., Green, K. L., Vasan, P., Cummings, A., Layman, D., Kammer, J., Rahman, M., Brown, G. K., Finnerty, M., & Stanley, B. (2021). Is the outpatient mental health workforce ready to save lives? Suicide prevention training, knowledge, self-efficacy, and clinical practices prior to the implementation of a statewide suicide prevention initiative. *Suicide & Life-Threatening Behavior, 51*(2), 325–333. <https://doi.org/10.1111/sltb.12708>
- Lehman, D. R., Ellard, J. H., & Wortman, C. B. (1986). Social support for the bereaved: Recipients' and providers' perspectives on what is helpful. *Journal of Consulting and Clinical Psychology, 54*(4), 438–446. <https://doi.org/10.1037/0022-006X.54.4.438>
- Mo, P. K. H., Xin, M. Q., & Ko, T. T. (2018). School-based gatekeeper training programmes in enhancing gatekeepers' cognitions and behaviours for adolescent suicide prevention: a systematic review. *Child and Adolescent Psychiatry and Mental Health, 12*, 29. <https://doi.org/10.1186/s13034-018-0233-4>
- Monteith, L. L., Smith, N. B., Holliday, R., Dorsey Holliman, B. A., LoFaro, C. T., & Mohatt, N. V. (2020). "We're Afraid to Say Suicide": Stigma as a Barrier to Implementing a Community-Based Suicide Prevention Program for Rural Veterans. *The Journal of Nervous and Mental Disease, 208*(5), 371–376. <https://doi.org/10.1097/NMD.0000000000001139>
- Muehlenkamp, J. J., & Hagan, C. R. (2019). Factors predicting intent to intervene with a potentially suicidal peer. *Archives of Suicide Research, 23*(1), 1–29. <https://doi.org/10.1080/13811118.2019.1635933>
- Otsuka, H., Anamizu, S., Fujiwara, S., Ito, R., Enomoto, M., Furukawa, M., & Takano, A. (2020). Japanese young adults' attitudes toward suicide and its influencing factors. *Asian Journal of Psychiatry, 47*, 101831. <https://doi.org/10.1016/j.ajp.2019.10.011>
- Pisani, A. R., Cross, W. F., West, J. C., Crean, H. F., & Caine, E. D. (2021). Brief Video-Based Suicide Prevention Training for Primary Care. *Family medicine, 53*(2), 104–110. <https://doi.org/10.22454/FamMed.2021.367209>

Mansoor and Ahmad

- Reeves, A., Bowl, R., Wheeler, S., & Guthrie, E. (2004) The hardest words: Exploring the dialogue of suicide in the counselling process — A discourse analysis, *Counselling and Psychotherapy Research*, 4,1, 62-71, <https://doi.org/10.1080/14733140412331384068>
- Reiff, M., Kumar, M., Bvunzawabaya, B., Madabhushi, S., Spiegel, A., Bolnick, B., & Magen, R. (2019) I CARE: Development and Evaluation of a Campus Gatekeeper Training Program for Mental Health Promotion and Suicide Prevention, *Journal of College Student Psychotherapy*, 33,2, 107-130, <https://doi.org/10.1080/87568225.2018.1433570>
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, 2(4), 328–335. <https://doi.org/10.1177/109019817400200403>
- Rubin, S. S., & Yasien-Esmael, H. (2004). Loss and Bereavement among Israel's Muslims: Acceptance of God's Will, Grief, and the Relationship to the Deceased. *OMEGA - Journal of Death and Dying*, 49(2), 149–162. <https://doi.org/10.2190/5UNJ-BNBF-6PVT-L4RE>
- Schwarzer, R., & Jerusalem, M. (1995). *Generalized Self-Efficacy scale*. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON. <http://dx.doi.org/10.13072/midss.488>
- Shneidman, E. S. (1993). Suicide as psychache. *The Journal of Nervous and Mental Disease*, 181(3), 145–147. <https://doi.org/10.1097/00005053-199303000-00001>
- Siau, C. S., Chan, C., Wee, L. H., Wahab, S., Visvalingam, U., Chen, W. S., Yeoh, S. H., Tee, J. N., Yeap, L., & Ibrahim, N. (2021). Depression and Anxiety Predict Healthcare Workers' Understanding of and Willingness to Help Suicide Attempt Patients. *Omega*, 302228211021746. Advance online publication. <https://doi.org/10.1177/00302228211021746>
- Steeves, R. M., Metallo, S. A., Byrd, S. M., Erickson, M. R., & Gresham, F. M. (2017). Crisis Preparedness in Schools: Evaluating Staff Perspectives and Providing Recommendations for Best Practice. *Psychology in the Schools*, 54(6), 563-580. <https://doi.org/doi.org/10.1002/pits.22017>

- Tabassum, R., & Khalid, R. (2016). Altruism in Pakistan. *Journal of Humanities and Social Sciences*, 21, (1) Ver. IV, PP 58-60. <https://doi.org/10.9790/0837-21155860>
- Teresa, D, L. (1996). *American Indian Life Skills Development Curriculum*. University of Wisconsin Press. <https://www.sprc.org/resources-programs/american-indian-life-skills-developmentzuni-life-skills-development>
- Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence*, 36(3), 475–483. <https://doi.org/10.1016/j.adolescence.2013.02.003>
- World Health Organization. (2014) *Preventing suicide: a global imperative*. https://www.who.int/mental_health/suicide-prevention/world_report_2014/en/
- World Health Organization. (2019). *Suicide worldwide in 2019: global health estimates*. Geneva. <https://www.who.int/publications-detail-redirect/9789240026643>
- World Health Organization. (2021). *Live life: an implementation guide for suicide prevention in countries*. Geneva. <https://www.who.int/publications-detail-redirect/9789240026629>
- Wolford-Clevenger, C., Kuhlman, S., Elledge, L. C., Smith, P. N., & Stuart, G. L. (2019). A preliminary validation of the suicidal behavior exposure scale. *Psychology of Violence*, 9(4), 442–450. <https://doi.org/10.1037/vio0000170>