

USING THE THEORY OF PLANNED BEHAVIOR TO PREDICT CLINICIAN'S
INTENTION TO USE CALM

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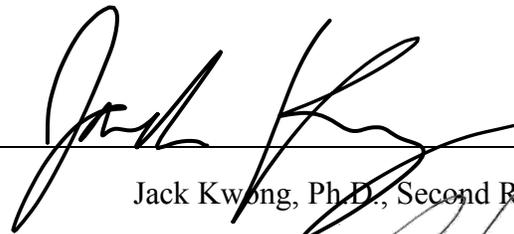
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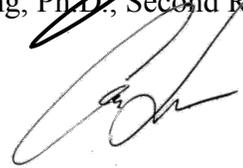
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Using the Theory of Planned Behavior to Predict Clinicians' Intention to use CALM

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Abstract

The problem of suicide continues to be on the rise in the United States, and as a result, research on preventative measures is also on the rise. Means reduction or reducing the access to methods of suicide for a suicidal client, has proven to be an effective way to prevent suicide. Counseling on Access to Lethal Means (CALM) takes the concept of means reduction and develops it into a tool that mental health clinicians can use to counsel clients experiencing a suicidal crisis. Additionally, the Theory of Planned Behavior (TPB) can be used to predict the intentions that an individual will participate in a certain behavior. As such, this study seeks to utilize TPB to determine whether it is possible to predict the intentions a clinician may have to use CALM after being trained in it. The components of TPB were measured in a sample of CALM trained clinicians in order to develop a predictive model. The predictive model determined that TBP does not predict intention to use CALM training in this sample. These results did not support the initial hypothesis meaning that TBD does not predict clinician's intention to use CALM training. Despite this participant scores indicate that they are highly motivated to use CALM which furthers the idea that it is an effective way to prevent suicide.

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Using the Theory of Planned Behavior to Predict Clinicians' Intention to use CALM

Suicide continues to loom as a threat to public health and is the tenth leading cause of death in the United States (Murphy, Xu, Kochanek, & Arias, 2018). The suicide rate in the US is on the rise and has increased steadily from a rate of 10.5 per 100,000 people in 1999 to a rate of 14.5 per 100,000 in 2017 (Centers for Disease Control and Prevention [CDC], 2018). For adolescents aged 10-19 years old, suicide is the second leading cause of death, preceded only by unintentional or accidental death (CDC, 2018). Variables like gender and geography are associated with higher rates of death by suicide. For example, males historically account for most deaths by suicide, and suicide rates tend to be higher in rural areas (CDC, 2018).

Approximately 50% of all suicides are completed with a firearm, making it the leading method of suicide among adolescents and adults (CDC, 2018). Of the total number of firearm deaths in the US, 61% were suicides, 37% were homicides, and 1% were unintentional (CDC, 2018). Firearms are the leading method of suicide in the US largely because they are the most lethal method and also very accessible. In fact, some researchers have attributed increases in suicide not from increased attempts but increased use of more lethal methods (Park, Cho, Kim, Yoo, & Hong, 2014).

The presence of a firearm in the home appears to be related to an increased risk of dying by suicide for residents. A Colorado study determined that of adolescents who died by suicide with a firearm, 67% used a firearm that they found in their home (Shah, Hoffman, Wake, & Marine, 2002). Another study indicates that participants with a firearm in their home were approximately seven times more likely to have a suicide plan that involves the firearm (Betz, Barber, Miller, 2011).

Means Reduction

Inversely, reducing access to firearms is related to reduced suicide risk. For example, storing a firearm and ammunition separately, essentially making a loaded firearm less accessible, leads to a reduced rate of fatal incidents involving firearms, including suicides (Grossman et al., 2005). This study reveals a

problem involving access to lethal means that is a threat to public health through its relationship to suicide and other fatal accidents. Additionally, this public health issue appears to be increasing in severity over time. Such problems leave researchers with the task of implementing solutions to this problem that will efficiently target the root of the increasing number of suicide deaths in the US.

The concept of preventing access to most lethal methods to individuals in a crisis, often referred to as lethal means reduction, is not new. Large-scale examples of it have been implemented resulting in great success. For example, Sri Lanka had one of the highest suicide rates in the world in the early 1990s. Most suicide deaths occurred as a result of pesticide ingestion, a highly accessible and lethal method in this largely agrarian country. In the 1990's the country began to regulate these pesticides, leading to a very significant reduction in the suicide rate from 1995 to 2005 (Pearson et al., 2013). An additional study suggesting that means reduction is a successful strategy comes from the Israeli Defense Force (Lubin et al., 2010). The policy change applied in 2006 restricted firearm access would be restricted to soldiers during the weekends. The suicide rate dropped from an average of 28 suicides per year before the policy change to an average of 16.5 suicides per year, an overall 40% decrease.

Means reduction is thought to work to prevent suicide through several mechanisms. First, means reduction may prevent suicide because the window in which someone would attempt suicide is often brief. In a 2009 study, it was discovered that approximately 70% of the participants indicated that 10 minutes, or less, elapsed between their decision to follow through with suicide and their attempt (Deisenhammer., 2009). The same study discovered that 50% of participants reported that 10 minutes or less passed between their first *thoughts* of suicide and their attempt. This research suggests that reducing the access to the most lethal means, within this short span of time, that a person might use to die by suicide might also reduce the likelihood of the person dying by suicide. Second, means vary by lethality and accessibility; therefore, if access to the most lethal means are reduced or made less accessible within this limited window, the likelihood of a person in a suicidal crisis dying by suicide decreases. Third, means substitution, or the idea that someone will use a different method if prevented from using their

preferred method, is relatively uncommon as 89% of individuals who are prevented from using their preferred method will not go on to die by suicide (Daigle, 2005). Taken together, these studies help support the idea that means reduction is a safe and effective way to prevent suicide in those experiencing a suicidal crisis.

Means reduction has also proven to be successful at on a smaller scale specifically, at the clinical level. In the clinical context means reduction is often implemented in the form of Counseling on Access to Lethal Means (CALM). CALM is a suicide prevention method that primarily focuses on reducing access to means a person experiencing a suicidal crisis might use in a suicide attempt. CALM training teaches trainees how to effectively help someone who is experiencing a suicidal crisis and limit their access to the most lethal and readily available means of completing suicide (Sale et al., 2018). Research on CALM provides evidence of its efficacy. A 2016 study evaluated the effectiveness of CALM training amongst mental health providers and found that after a three month follow up, 74% of CALM trainees had spoken to patients about access to lethal means of suicide. This was an increase from the initial 54% prior to training (Sale et al, 2018). Studies such as these demonstrate how CALM, and lethal means reduction as a whole, work to prevent suicide fatalities. Additionally, these studies allow us to see that when taught a suicide prevention program, such as CALM, trainees are largely willing to use it in practice to help prevent fatal suicide attempts amongst patients.

Suicide Prevention among Adolescents

Schools serve as an important access point to prevent suicide in adolescents because at risk children can easily be identified thorough mental health screenings and then quickly given assessment and intervention if necessary (Mirick, Berkowitz, Bridger, & McCauley, 2018). Using a multitiered systems of support (MTSS) framework, school-based suicide prevention programs are classified into one of three tiers. Tiers one and two involve tend to involve gatekeeper trainings and specific interventions for children and adolescents considered to be at risk. For example, a Tier 1 intervention might involve universal trainings on suicide warning signs for both students and school faculty. Tier 2 interventions

target students with known risk factors and could involve identifying at-risk students and implementing some sort of group therapy. Tier 3 interventions involve students with indicated risk and can include crisis response interventions such as CALM. (Schorr, Van Sant, & Jameson, 2017). CALM represents an important addition to existing tier 3 interventions because it supplements existing interventions by adding a focus on reducing access to lethal means to reduce a student's overall risk of dying by suicide. Basing suicide prevention programs like CALM, that are specifically catered towards adolescents, in schools provides clinicians with the greatest access point to help prevent deaths by suicide in this population.

Though little is known about the effectiveness of training school personnel to use CALM with students and their families, prior research points in a promising direction. Results from a study evaluating outcomes of CALM training in general mental health providers indicated most participants utilized means reduction post-training (Johnson, Frank, Ciocca, & Barber, 2011). In a post-evaluation to the CALM training, approximately 65% of trainees indicated that they had counseled patients and their families on lethal means access.

Another study evaluated how clinicians trained in just CALM as compare to clinicians trained in CALM as well as QPR. Clinicians trained in just CALM had the greatest gain in confidence in regard to asking clients about means reduction. This group also demonstrated a greater increase in knowledge from the baseline measure (Sale et al., 2018). Due to the fact that this study evaluated mental health providers and not school personnel it is unknown whether or not the results would be different in a school population.

These results suggest that there may be similar outcomes when implemented in a school setting, but school personnel may not be comfortable discussing firearms and means reduction with students experiencing a suicidal crisis. This would affect their confidence level in their ability to successfully use CALM when working with a student experiencing a suicidal crisis. Also, school-based clinicians may be expected to work with their clients in ways that other clinicians are not. For example, school-based clinicians may have to involve the client's family in treatment as the client would likely be a minor. This

could possibly make implementing CALM measures difficult because the clinician is reliant on the involvement of caregivers to carry out means reduction for the client as the clients are often minors.

Understanding factors that predict intent to use CALM can enable program trainers to be more effective. For example, in the study previously mentioned trainers who had a high confidence level in discussing lethal means reduction with patients often went on to continue using their CALM training later on (Sale et al., 2018). Though not specific to CALM, a study that evaluating gatekeepers who were trained in suicide prevention using the Gatekeeper Behavior Scale discovered that gatekeepers who report higher levels of self-efficacy (or confidence in their ability to use the training), likelihood to use the training, and preparedness to use the training were more likely to still be using the training at a three month follow up (Albright, Davidson, Goldman, Shockle, & Timmons-Mitchell, 2016). These factors, as well as the specific attitudes and attributes associated with them can go on to predict those who will be more effective clinicians.

The Theory of Planned Behavior

The theory of planned behavior (TPB) has been demonstrated to predict the likelihood of a person participating in a variety of future behaviors. For example, TPB has been used to predict the related treatment decisions caregivers make when it comes to their child's mental health care (Chang, et al, 2019). Essentially, various scales to measure attitudes, subjective norms, perceived behavioral control, and behavioral intention towards mental health care were computed. Participants, which included 36 caregivers, completed the questionnaires which allowed intent to make certain mental health care decisions to be computed. As such, maybe it could predict the likelihood that a clinician who has been taught CALM will utilize it. The theory states that a person's attitudes, subjective norms, and perceived control regarding a certain behavior will go on to predict a person's intention of completing the behavior. The persons intentions will then go on to predict the likelihood of the person completing the behavior. For example, a student wanting to study for a test: if the student had a positive attitude regarding their ability to do well on the test/study, they believe it is socially acceptable and that people important to them would

encourage them to study, and that studying would improve their grade, they will most likely have high intentions of studying. Additionally, someone considering drinking and driving can have their behavior predicted by this theory. If the person has strong attitudes/beliefs that drinking, and driving is wrong, they realize it is socially unacceptable, and they feel as though they have the ability to not do this then, the theory posits that the person will have low intentions of performing this behavior and therefore, will probably not do it.

A study using a sample of caseworkers who work with aging populations showed how components of TPB can be applied to determine a caseworker's attitudes and beliefs regarding the CALM training (Slovak, Pope, Giger, & Kheibari, 2019). The beliefs and attitudes the participants had about the CALM training as a whole were evaluated and revealed that overall, the participants perceived the CALM trainings as important and valuable. Items included statements inquiring how useful CALM might be when working with a client and if they plan to use their training. After a 3-month follow up, statistical analyses of the items assessing beliefs and attitudes suggest that there was an overall increase in agreement with each item.

Similarly, the TPB can help us determine whether or not gatekeepers, or people in the position to assist someone experiencing a suicidal crisis, will follow through with the behaviors involved in conducting means reduction counseling. Previous studies have shown that attributes of a trainee can go on to predict the likelihood that they utilize the training they received (Albright et al., 2016). A study examining gatekeepers trained in methods to prevent suicide on college campuses showed that compared to the control groups, trained gatekeepers reported higher levels of: self-efficacy, perceived knowledge, and evaluative/affective attitudes. The trainees who reported higher levels of these attributes, which are components of TPB, went on to be more likely to utilize their training (Kuhlman, Walch, Bauer, & Glenn, 2017). Another study conducted with mental health providers found that providers who have higher confidence in their abilities or higher self-efficacy tended to feel more confident in their capacity to implement evidence-based suicide prevention skills (LoParo, Florez, Valentine, Lamis, 2019). These

studies help demonstrate how certain factors like self-efficacy or confidence can contribute to a clinician's likelihood of performing a certain behavior.

Similarly, it is thought that these outcomes could apply to clinicians and gatekeepers who are trained in CALM. The factors that would make up this model are as follows: Belief that lethal means reduction (especially regarding firearms) is important in reducing suicides, belief that it is socially acceptable to not only talk about suicide to patients but also to talk about limiting access to lethal means, and perception that the patients and their families will follow through with the clinician's suggestions regarding lethal means reduction. It is hypothesized that these factors will lead to an increased likelihood of a clinician using CALM training. Each of these general factors will go on to individually predict a person's intention to use CALM, which will then culminate into the overall likelihood of them actually using the training.

Method

Participants

The participants in this study were 152 school-based clinicians. Of the participants who completed the questionnaires, 80.9% were female. Most of the participants had advanced education degrees, with 74.3% having a master's degree, 19.7% having a bachelor's degree, 2% having an associate degree, 2.6% having a doctorate degree, and 1.3% having a high school diploma. The professions of this sample included: 32.2% counselors, 15.1% social workers, 13.8% contract mental health providers, 5.3% nurses, and 27% were a mix of school faculty and associates. Over half the participants reported having a firearm in their home (52.7%) and 35.3% reported personally owning a firearm.

The majority of participants worked as a clinician in some capacity within the school system. However, some participants had very little clinical experience or relationship to clinical practice. When asked how many unique students participants see for social, mental, or emotional problems 25.2% reported that they see between 11-20 students, 19.4% reported 21-30 students, 19.4% 1-5 students 13.3%

40+ students, 12.2% 6-10 students, 4.3% 31-40 students, and 6.5% <1 student. When asked whether one or more students had attempted suicide during their time at their school 66.7% of participants reported in the affirmative, and 13.5% reported that one or more students had died by suicide.

Measures

Measures of TPB components. The components of the TPB include attitudes, subjective norms, and perceived control. Each of these components were measured with three subscales. The questions were measured on a five-point Likert type scale that ranged from strongly disagree to strongly agree. Cronbach's alpha for the scales were initially poor, which resulted in a single item in each of the scales, except the subjective norm scale, to be excluded. For the attitudes scale, item three was excluded and for control item three was excluded. Because the resulting subscales contained only two items each, a bivariate analysis was performed on the altered two item scales to determine their reliability. Pearson's r for the attitude, subjective norm, and perceived control scales were respectively .435, .439, and .369, indicating that the items on each scale have a moderate relationship with each other.

Measures of TPB intention. Scores on the TPB scales were then compared to scores on a post-test Likert-type scale that assessed intention to utilize means reduction in the future. This scale was comprised of four distinct items related directly to CALM and the concept of means reduction in addition to other items that assessed how the participants perceived the training. These items ranged from strongly disagree to strongly agree and were exclusively related to intention to use CALM in the future. For example, one of the items inquires about how motivated the participants will be to discuss firearm storage with clients in the future. Another asked about how motivated the participant would be to discuss removing firearms from the home of an acutely suicidal student. Cronbach's Alpha was .871 for this scale, indicating high internal reliability.

Procedure

CALM training. The CALM trainings were conducted over the course of a year and were given by licensed psychologists at various locations across North Carolina. Each training lasted approximately three hours and consisted of background statistics regarding suicide, rationale for means reduction, case studies, and role plays. Participants were encouraged to act out role plays in small groups as well as actively participate in discussion of case studies. Time was allowed at the end of the training for any additional questions or comments the participants had.

Evaluation procedure. Participants were asked to complete a pre-training evaluation before participating in the CALM training. The evaluation assessed basic demographic information, existing knowledge about suicide, attitudes towards means reduction, confidence in working with students and families given certain circumstances, and top priorities when working with a suicidal student. After completing the pre-training evaluation participants were trained in CALM and then instructed to complete the post-training evaluation. The post-training evaluation, complete immediately after the training, was essentially a copy of the pre-training evaluation but also include questions that specifically assessed participants perceptions and attitudes towards the CALM training as a whole.

Analyses

To test the relationships between scores on TPB measures and the future intention to use means reduction/CALM measures, a simultaneous multiple linear regression was performed. Before performing the linear regression descriptive statistics (mean and standard deviation) of the variables were calculated as well as bivariate correlations to determine the relationships between each variable. The predictors for these tests included scales that measured attitudes, subjective norms, and perceived behavioral control. The item mean of these predictors were then compared to the item means on the behavioral intent scale. The statistic R^2 , ranging from 0 to 1, will be computed to determine the total amount of variability the predictors account for within the behavioral intent measure. A higher R^2 will indicate that the TPB

predictors account for most of the variability within the behavioral intent measure. Beta will determine how much variability each predictor independently accounted for in regard to the behavioral intent measure and p will determine its significance.

Results

The descriptive statistics for each of the three predictor variables and the behavioral intention variable are listed in Table 1. These descriptive statistics reveal that on average, the responses to each item were concentrated on the higher end of each scale with limited variability. Attitudes had the highest average response on its items with the least variability ($M = 4.80, SD = 0.43$), while perceived behavioral control had the lowest average response on its items with the most variability ($M=3.37, SD=0.70$).

The bivariate correlations between the variables indicated that there were weak but significant relationships between the following variables: Perceived behavioral control and behavioral intent, subjective norms and behavioral intent, subjective norms and attitudes, subjective norms and perceived behavioral control. This indicates how much each measure related to each other. For example, a significant relationship between perceived behavioral control and behavioral intent means that changes in scores in one measure can predict the other— though in this case it only does so weakly. Due to the fact that there were not many significant correlations, and those that were significant were weak, it appears as though these measures do not relate or predict each other well.

The results of the multiple linear regression indicated that this model was not a significant predictor of behavioral intent, $F(3, 142)=2.25, p=.06, R^2=.05$, meaning that attitudes, subjective norms, and perceived behavioral control only accounts for approximately 5% of the variability in the behavioral intent measure.

The beta values for each variable indicate how much each variable contributed to the overall variability of the model. Perceived behavioral control accounted for the most variability ($\beta=.15, p=.09$) in

this model and attitudes accounted for the least ($\beta=-.041, p=.63$). Subjective norms fell in the middle ($\beta=.13, p=.148$).

Discussion

Contrary to the hypothesis, measures of behavioral intent, subjective norms, and attitudes did not predict intention to utilize means reduction. Essentially, because participants rated each item on each measure so highly, there was very little variability in this model thus causing poor predictability. Despite the poor predictability of this model, the higher scores on each of the measures can be interpreted as meaning that participants all felt highly motivated to participate in means reduction or CALM after participating in the trainings. This furthers the idea that CALM is an effective way to prevent suicide since the trained clinicians demonstrated high intent to utilize the skills learned in the CALM trainings. The trainings still have valuable clinical applications even if clinicians' intentions to use CALM do not fit into a predictive model using TPB. This is consistent with past literature evaluating the efficacy of CALM because if all of the participants are highly motivated to utilize CALM, it is likely that they will actually use it with clients—in accordance with TPB. Previous research indicates that over half of the clinicians who are trained in CALM inquire about means reduction with their patients at a three-month follow-up (Sale et al, 2018). Thus, leading to the conclusion that the CALM trainings are leaving clinicians with skills that are utilized long after the trainings have passed.

However, it is possible that these results arose due to flaws in the methods and not necessarily the original idea that clinicians' intentions to use CALM can be predicted with TPB. Such flaws include scale restriction, demand characteristics, and acquiescence. The problem of scale restriction essentially means that the participants tended to all respond similarly due to the scale being too limited. In this case, it meant that most participants answered, “strongly agree”—also referred to as a ceiling effect. This leads to a model of poor predictive value because there is very little variability in responses to each item. A future replication could expand the scale and perhaps produce greater variability in the participants

responses, and lead to an improved predictive model. Although range restriction is not synonymous with the ceiling effect it is possible that the range restriction increased the intensity of the ceiling effect.

The ceiling effect present in the responses could also be explained by the presence of a demand characteristic. This essentially means that the participants could have been impacted by the expectations they perceived the trainers as having. Also, the participants' responses to the scales could have been impacted by the presence of the trainers in the room while they were answering the pre and posttests. It is possible that the physical presence of the trainers in the same room as the participants put pressure on the participants to respond in a way that favored the trainers. In this case the pressure would have theoretically led participants to respond to items in ways that affirmed the meaningfulness of CALM.

Also, there appeared to be an acquiescence bias present as evidence of this was found in the reverse-coded items where it was anticipated that the participants would have answered more towards "strongly-disagree". This essentially means that some participants may have not read all items thoroughly and instead answered "strongly-agree". This tends to happen if the participants feel rushed or if there are a lot of items on the questionnaire. As mentioned, reverse coded items tend to catch acquiescence because it reverses how the question should be answered.

The presence of a possible demand characteristic and response biases grants many areas for improvement in a future replication. To minimize issues involving demand characteristics and response biases, trainers could leave the room during testing and also allow for ample time to complete the questionnaires. To address acquiescence, trainers could also allow ample time for participants to complete the questionnaires in addition to motivating the participants to answer the items both truthfully and thoughtfully. To mitigate the impact of these issues even further, all questionnaires could be done on the participants' own time as opposed to at the training site. For example, the pre-test could be emailed to the participants a number of days before the training and the post-test emailed to them immediately after the training. However, doing so would likely reduce the number of participants who opt to complete the pre-

and post-tests due to the absence of the demand characteristic. Essentially, attempts to reduce certain biases or problems with these methods will likely result in other problems that would impact the results.

Using TPB to predict clinicians' intention to utilize CALM proved to be of little predictive value. Meaning, there could potentially be more opportunity to modify the methods of this study in a future replication, so that TPB could be utilized to predict clinicians' intentions to use means reduction. For example, the scales used for this model could be widened with the hope that doing so would produce more variability. Or, using Likert type scales to measure attitudes, subjective norms, and perceived behavioral control could be done away with completely. Instead, free response items assessing each component of the TPB could be used and then coded into varying levels. For example, a previous study assessing the beliefs and attitudes of caseworkers after a CALM training used open ended survey items to determine if the caseworkers had actually used their training with clients (Slovak, Pope, Giger, & Kheibari, 2019). The responses were categorized by theme, which could then be transferred into analyzable data. Furthermore, a future replication could include data on whether clinicians actually followed through with using means reduction with clients. This would complete the TPB as level of intention is supposed to predict behavior. However, it is also possible that, despite flaws in the methods, TPB does not predict a clinician's intention to utilize means reduction.

The results of this study also support the idea that as mental health providers most clinicians will be interested in utilizing CALM skills. In fact, it is the job of a clinician to engage in practices that could improve the livelihood and well-being of their clients. This suggests it should be anticipated in future studies that clinicians will most likely be highly motivated to engage in behaviors that would improve the well-being of their clients. Perhaps less focus should be placed on whether means reduction will be used, and more focus placed on how it is used. In addition to evaluating how well clinicians implement means reduction skills perhaps, more attention should be dedicated to how much success these clinicians experience when implementing CALM with their clients. Therefore, future studies may find different results by focusing on the actual behaviors of the clinicians trained in means reduction and their clients

who receive it. Evaluating the behaviors of clinicians who use the training and their clients who have received it could help uncover the best or most effective practices for using CALM— or conversely, the least effective strategies for implementing the trainings. It is likely that CALM trained clinicians will implement means reduction in ways that differ and result in varying degrees of success. Additionally, future studies could focus on a client's intention to follow through with means reduction after receiving CALM from their mental health clinician. Previous studies have used TPB to predict intention to make certain mental health care decisions in the past (Chang et al, 2019).

Disseminating CALM trainings amongst school-based clinicians will hopefully lead to a new standard of not only how students in a suicidal crisis are treated but also, of how society thinks of suicide. As previously mentioned, analyzing the data from follow-ups with the participants would grant insight into how effective the trainings are inspiring long-term use of CALM. If revealed to be withstanding and effective maybe the trainings could be expanded to other settings in an attempt to reach other demographics. For example, clinicians based in rehabilitation centers, nursing homes, retirement facilities, prisons, Department of Social Services, and Child Protective Services could all benefit from means reduction when working with their populations.

As the threat suicide poses to public health increases in the United States it becomes of more importance that researchers and clinicians alike invest resources into implementing evidence-based solutions— quickly and deliberately. The concept of means reduction is an example of one of these solutions and CALM trainings work to provide clinicians with the tools to apply this concept in practice. Beyond this perhaps training and educating clinicians in concept means reduction and the facts surrounding the phenomenon of suicide will change the ways in which society as a whole views suicide.

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Tables

Table 1			
<i>Descriptive Statistics</i>			
<u>Variable</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Behavioral Intent	4.65	.49	146
Perceived Behavioral Control	3.37	.70	146
Attitudes	4.80	.43	146
Subjective Norms	4.07	.60	146

Table 2			
<i>Bivariate Correlations</i>			
	1	2	3
1. Intent			
2. Attitudes	.026		
3. Control	.178*	.125	
4. Subjective Norms	.170*	.258**	.341**

*Correlation is significant is the .05 level

**Correlation is significant at the .01 level