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WHAT HAS GATEKEEPER TRAINING GOT TO DO WITH IT? UNDERSTANDING EDUCATORS AND STUDENT LEADERS INITIAL BASELINE KNOWLEDGE AND COMFORT LEVEL OF QUESTION-PERSUADE-REFER (QPR) GATEKEEPER TRAINING

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What has Gatekeeper Training Got to Do With it?
Understanding educators and student leaders initial baseline knowledge and comfort level of Question-Persuade-Refer (QPR) gatekeeper training.

In today's climate, suicidality and mental health concerns are major issues facing many students, both within K-12 and in higher education. Especially in the midst of the Covid-19 pandemic, many students are experiencing drastically different environments and expectations than those of previous years. Many of these significant changes have led to, not only increased levels of isolation, but also an overwhelming impact on students' mental health (Browning et al., 2021).

Mental health prevalence, especially suicidality, is a rising concern facing many higher education settings. Research has determined the age range in which most young people experience a mental health or substance use disorder, is within the years associated with the college experience. Reavey and Jorm (2010), noted that typically the peak onset for mental health concerns is before the age of 24.

Suicidality rates, in particular, have been on the rise over the decades. Research conducted within the U.S. Center for Disease Control (Curtin & Heron, 2019) indicated a concerning rise in suicide within the youth population. According to their findings, persons ages 15-19 years old have experienced a 76% increase in suicidality rates from 2007-2017, as well as 36% increase from 2000 in those persons ages 20-23, with the greatest increase occurring between 2013-2017. More specifically, 2% of college students surveyed by the American College Health Association (2019), reported attempting suicide, while 13.3% noted considering suicide, within the year.

At Bloomsburg University of Pennsylvania, through support of the McDowell Institute, faculty, staff, students, and community partners are provided QPR training. The McDowell Institute was established in 2012 at Bloomsburg University to help aspiring and practicing educational professionals to develop strong ethical standards and skills to address non-academic barriers to learning, while emphasizing promotion and prevention activities to support healthy development and learning for all children. Mental health and suicidality is prevalent in the most vulnerable populations, especially those with complex life situations.

One of the methods that have been utilized to reduce the risk of suicidality among students, is the *Question, Persuade, and Refer Program*; also known as QPR. These trainings are a common approach for aiding suicidal youth, through the implementation of effective approaches and resources (Hangartner et al., 2019). QPR provides a vital step in assisting students who may be suffering from suicidal ideation. QPR trains other students, faculty, and staff in recognizing the warning signs of suicide crisis and how they can assist someone to seek further help. QPR suicide prevention is initiated through a gatekeeper training and consists of a

1–2-hour educational program, which trains persons to recognize a suicide crisis, question suicidal intent, listen to problems/concerns, and provide effective response methods.

Multiple studies have explored the effectiveness of QPR training; especially, when it comes to developing sufficient recognition, learning how to ask appropriate questions, and encouraging additional assistance. Aldrich et al. (2018), found that a majority of their study's participants were able to effectively recognize all warning signs discussed in the training, post training. Additionally, their survey found that these participants were more willing to ask others if they were suicidal and were more confident about resources to provide additional assistance. Similarly, Adams et al. (2018), reported that, not only was QPR training successful at improving knowledge, competency, and self-efficacy when it comes to suicide prevention skills, it can be increasingly important when student led. However, Adams et al. cautioned that the skills obtained in the training may have the tendency to decay over time; therefore, they recommended that student leaders be given a refresher training after their initial training, in order to sustain the knowledge and skills obtained.

Training students, in particular, on how to appropriately respond in situations in which a fellow peer reports suicidal ideations and/or intent can be highly beneficial in reducing risk on campuses. According to Czyz et al. (2013), not only do many college students believe their mental health concerns are not significant enough for professional help, some students noted a preference for relying on self-managing methods; such as, friends and family. By training fellow students, they are more likely to know how to appropriately respond in these potential situations; especially due to the fact that their support and assistance, in some instances, might be sought out more so than a professional setting. Additionally, Samulious et. al. (2019) encouraged disseminating QPR training to student leaders, in particular, such as RAs. It was noted that this

could better provide needed support to a larger number of students within the college community. Samulious et al. did, however, note concern that over time these learned skills may deteriorate. In turn, it was recommended that QPR training provide potential "booster" sessions in order to facilitate continued growth.

Methods

Participants

This study assesses the impact of QPR training on educational providers and student leaders. A total of 1172 people were trained in QPR and assessed on their initial baseline knowledge of recognizing suicide warning signs and providing appropriate support and resources. Among the 1172 participants, those who completed the pre-training survey were community partners working in K-12 schools or other similar education agencies; as well as, current student leaders in positions of social influence within a higher education setting. These student leader positions include residential advisors, orientation leaders, student athletes, fraternity and sorority life members, and peer academic tutors. Students pursuing a degree in social work, school counseling and K-12 teacher candidates were also trained in QPR and participated in this research study.

Measure

The QPR pre-training survey was utilized in order to obtain an understanding of participants baseline knowledge. The facets assessed in the survey were the following; the participants comfort level in recognizing warning signs of suicide, knowing how to ask someone about suicide, persuading someone to obtain help, knowing how to obtain help for someone, information about local resources, how they feel regarding whether asking someone about

suicide is appropriate, if they believe they would ask someone about suicidal thinking, and their level of understanding about suicide and prevention in general.

The pre-training survey consisted of 4 optional demographic questions. These questions included participants' age, gender (male or female), ethnicity (African American, Asian American, Caucasian, Latino/Hispanic, Native American, other), as well as highest grade completed (junior high, high school, trade/vocational school, 2 years of college, 4 years of college, and 5+ years of college). Participants were provided the anonymous paper survey to complete prior to the training beginning.

The following section consisted of 9 questions in total. Seven questions participants were asked to rate their knowledge of the areas on a 3-point scale (low, medium, high). These 7 questions included; facts concerning suicide, warning signs of suicide, how to ask someone about suicide, persuading someone to get help, how to help someone, information on local resources for help with suicide, and please rate your understanding about suicide and suicide prevention. Additionally, on 2 separate questions, participants would rate their comfort level on a separate 3-point scale (always, sometimes, never). These questions asked the participant if they felt that asking someone about suicide was appropriate and if they felt likely to ask someone if they are thinking about suicide.

Results

The total number of participants who completed the survey prior to the QPR training was 1172. The following demographics were analyzed utilizing One Way Anovas, in order to explore significance levels against the 3-point scale questions within the pre-training survey. One-way Analysis of Variance (ANOVA) tests of significance were performed separately for four

demographic characteristics: a.) race/ethnicity, b.) education level, c.) age, and d.) gender. For these analyses, ANOVA is the most appropriate statistical test of significance because there were more than two self-reported groups for each of these demographic characteristics except for gender. Further, the research warranted an examination of the differences among the groups in each of these demographic characteristics but not necessarily the response means of one group compared to the response mean of another group. Although no planned comparisons were identified, Bonneferri and Tukey post-hoc tests were also compiled to determine if any pairwise comparison was statistically significant. ANOVA was also performed to determine statistical significance of the difference between gender response means. Typically, a t- or z-test is warranted to test the statistical significance of the difference between two group means. However, an ANOVA is also an acceptable procedure and was used to be consistent with the inferential tests of significance employed for the other demographic characteristics.

Age

1063 participants were willing to complete the age demographic section. 196 participants noted an age of under 20 years old, 315 were ages 20-23, 275 were ages 23-36, and 277 were 37 years of age or older. The means, standard deviations, and One-Way Analysis of Variance of age are presented in Table 1.

Table 1

Means, Standard Deviations, and One-Way Analysis of Variance in Age

	Facts Concerning Suicide Prevention			Warning signs of suicide			How to ask someone about suicide			Persuading someone to get help			How to get help for someone			Information about local resources for help with suicide			Do you feel that asking someone about suicide is appropriate			Do you feel likely to ask someone if they are thinking about suicide			Rate your level of understanding about suicide and prevention		
AGE CATEGORY	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
<20	196	1.81	0.555	196	2.14	0.599	196	1.48	0.644	196	1.88	0.583	196	2.01	0.648	196	1.62	0.687	196	2.08	0.391	196	1.99	0.526	196	1.91	0.488
20-22	315	1.84	0.585	315	2.15	0.586	315	1.44	0.765	315	1.76	0.802	315	2.02	0.665	315	1.67	0.681	315	2.12	0.488	315	1.93	0.568	315	1.91	0.566
23-36	275	1.92	0.611	275	2.18	0.561	275	1.73	0.775	275	1.88	0.690	275	2.04	0.716	275	1.63	0.672	275	2.24	0.491	275	2.02	0.616	275	1.93	0.638
>=37	277	1.86	0.604	277	1.98	0.595	277	1.69	0.711	277	1.8	0.654	277	1.86	0.65	277	1.49	0.612	277	2.28	0.495	277	2.09	0.557	277	1.85	0.550
Total	*1063*	*1.86*	*0.592*	*1063*	*2.11*	*0.589*	*1063*	*1.59*	*0.743*	*1063*	*1.82*	*0.700*	*1063*	*1.98*	*0.675*	*1063*	*1.61*	*0.665*	*1063*	*2.18*	*0.481*	*1063*	*2.01*	*0.573*	*1063*	*1.90*	*0.569*
1= LOW, 2=MEDIUM, 3=HIGH																											
1= NEVER, 2=SOMETIMES, 3=ALWAY																											

df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.
3	1.46	0.225	3	6.60	0.000	3	10.41	0.000	3	2.23	0.083	3	4.08	0.007	3	3.78	0.010	3	10.32	0.000	3	4.33	0.005	3	1.11	0.343

Gender

Within the 1172 pre-training survey participants, 1170 noted their gender (male or female). 266 participants noted a male gender and 904 participants reported a female gender. One respondent self-reported "Other", while an additional respondent self-reported " Non-Binary". Both of these additional self-reports were not included in the analysis. The means, standard deviations, and One-Way Analysis of Variance of gender are presented in Table 2.

Table 2

Means, Standard Deviations, and One-Way Analysis of Variance in Gender

	Facts Concerning Suicide Prevention			Warning signs of suicide			How to ask someone about suicide			Persuading someone to get help			How to get help for someone			Information about local resources for help with suicide			Do you feel that asking someone about suicide is appropriate			Do you feel likely to ask someone if they are thinking about suicide			Rate your level of understanding about suicide and prevention		
GENDER CATEGORY*	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Male	266	1.85	0.646	266	2.11	0.582	266	1.65	0.764	266	1.86	0.721	266	1.99	0.714	266	1.62	0.668	266	2.14	0.539	266	1.98	0.623	266	1.88	0.625
Female	904	1.87	0.575	904	2.10	0.594	904	1.58	0.738	904	1.83	0.693	904	1.98	0.665	904	1.60	0.669	904	2.21	0.471	904	2.03	0.559	904	1.90	0.557
Total	*1170*	*1.86*	*0.592*	*1170*	*2.10*	*0.591*	*1170*	*1.60*	*0.744*	*1170*	*1.84*	*0.699*	*1170*	*1.98*	*0.676*	*1170*	*1.61*	*0.669*	*1170*	*2.20*	*0.488*	*1170*	*2.02*	*0.574*	*1170*	*1.90*	*0.573*
1= LOW, 2=MEDIUM, 3=HIGH																											
1= NEVER, 2=SOMETIMES, 3=ALWAY																											
	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.	df	F	Signf.
	1	0.24	0.623	1	0.03	0.860	1	1.63	0.201	1	0.47	0.493	1	0.08	0.782	1	0.23	0.633	1	5.44	0.020	1	1.42	0.234	1	0.21	0.651

Ethnicity

Among those participants who chose to complete the race/ethnicity demographic section, 69 noted African American, 1028 reported Caucasian, 51 reported Hispanic/Latino, 5 reported two separate races/ethnicities (1, African American & Latino/Hispanic; 3, African American & Caucasian; 1, Caucasian & Asian American), 8 Asian, 1 Native American, and 6 reported Other. Due to limitations in the number of participants, those who reported Native American were not examined in the following analyses. The means, standard deviations, and One-Way Analysis of Variance of ethnicity are presented in Table 3.

Table 3

Means, Standard Deviations, and One-Way Analysis of Variance in Ethnicity

	Facts Concerning Suicide Prevention			Warning signs of suicide			How to ask someone about suicide			Persuading someone to get help			How to get help for someone			Information about local resources for help with suicide			Do you feel that asking someone about suicide is appropriate			Do you feel likely to ask someone if they are thinking about suicide			Rate your level of understanding about suicide and prevention		
ETHNIC CATEGORY*	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
African American	69	1.86	0.733	69	2.10	0.598	69	1.55	0.718	69	1.99	0.653	69	2.03	0.727	69	1.67	0.634	69	2.13	0.540	69	2.03	0.685	69	1.90	0.645
Caucasian	1028	1.88	0.585	1028	2.11	0.589	1028	1.61	0.748	1028	1.82	0.697	1028	1.97	0.673	1028	1.60	0.668	1028	2.21	0.487	1028	2.02	0.563	1028	1.90	0.564
Hispanic/Latino	51	1.65	0.559	51	2.00	0.632	51	1.49	0.731	51	1.88	0.711	51	2.18	0.590	51	1.69	0.761	51	2.10	0.458	51	1.98	0.616	51	1.86	0.633
Two Ethnicities/Race	5	1.8	0.447	5	2.00	0.707	5	1.80	0.447	5	1.80	0.447	5	2.20	0.837	5	2.00	0.707	5	2.00	0.000	5	1.60	0.548	5	2.20	0.447
Asian	8	1.75	0.463	8	1.75	0.463	8	1.50	0.756	8	1.63	0.744	8	1.88	0.641	8	1.38	0.518	8	2.13	0.354	8	2.00	0.535	8	1.63	0.518
Other	6	1.67	0.516	6	2.00	0.894	6	2.17	0.408	6	2.17	0.983	6	2.17	0.753	6	1.50	0.548	6	2.17	0.408	6	1.83	0.408	6	1.67	0.516
Total	*1167*	*1.86*	*0.593*	*1167*	*2.11*	*0.593*	*1167*	*1.60*	*0.744*	*1167*	*1.84*	*0.696*	*1167*	*1.98*	*0.674*	*1167*	*1.61*	*0.669*	*1167*	*2.19*	*0.487*	*1167*	*2.02*	*0.572*	*1167*	*1.90*	*0.571*
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	5	1.67	0.140	5	1.02	0.405	5	1.12	0.350	5	1.15	0.330	5	1.21	0.304	5	0.82	0.533	5	0.93	0.458	5	0.71	0.620	5	0.90	0.478

Education Level

1164 out of the 1172 pre-training survey participants reported their highest education level. 12 participants indicated Trade or Vocational School, 130 reported High School, 320 noted 2 years of College, 189 reported 4 years of College, and 413 indicated 5 or more years of College. One respondent self-reported “Junior High”, and therefore was excluded from analysis. The means, standard deviations, and One-Way Analysis of Variance of education level are presented in Table 4.

Table 4

Means, Standard Deviations, and One-Way Analysis of Variance in Education Level

	Facts Concerning Suicide Prevention			Warning signs of suicide			How to ask someone about suicide			Persuading someone to get help			How to get help for someone			Information about local resources for help with suicide			Do you feel that asking someone about suicide is appropriate			Do you feel likely to ask someone if they are thinking about suicide			Rate your level of understanding about suicide and prevention		
EDUCATION LEVEL CATEGORY*	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
High School	230	1.77	0.562	230	2.08	0.608	230	1.51	0.666	230	1.81	0.604	230	1.94	0.658	230	1.62	0.693	230	2.13	0.408	230	1.97	0.536	230	1.90	0.527
rade/vocational School	12	1.50	0.522	12	1.58	0.515	12	1.42	0.669	12	1.92	0.669	12	1.58	0.669	12	1.42	0.669	12	2.25	0.452	12	2.08	0.289	12	1.75	0.622
2 years of college	320	1.82	0.595	320	2.12	0.588	320	1.41	0.733	320	1.78	0.785	320	2.01	0.672	320	1.65	0.660	320	2.10	0.468	320	1.94	0.546	320	1.90	0.570
4 years of college	189	1.88	0.562	189	2.15	0.577	189	1.63	0.778	189	1.82	0.660	189	1.97	0.699	189	1.55	0.687	189	2.20	0.507	189	2.00	0.593	189	1.91	0.553
5+ years of college	413	1.95	0.621	413	2.12	0.600	413	1.79	0.737	413	1.90	0.689	413	2.01	0.681	413	1.61	0.662	413	2.31	0.518	413	2.11	0.602	413	1.91	0.614
Total	*1164*	*1.86*	*0.596*	*1164*	*2.11*	*0.596*	*1164*	*1.60*	*0.745*	*1164*	*1.84*	*0.697*	*1164*	*1.98*	*0.677*	*1164*	*1.61*	*0.672*	*1164*	*2.20*	*0.490*	*1164*	*2.02*	*0.574*	*1164*	*1.90*	*0.575*
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	4	4.94	0.001	4	2.82	0.024	4	14.01	0.000	4	1.47	0.208	4	1.59	0.174	4	0.88	0.474	4	10.49	0.000	4	4.42	0.010	4	0.23	0.920

Not Significant
Significant $p < 0.05$
Significant $p < 0.01$
Significant $p < 0.001$

Discussion

Through our conducted analyses, we were able to determine the impact of individual demographic factors on the participants 9 pre-QPR training survey questions, which focused on examining baseline levels of knowledge, comfort, and skills related to suicide prevention. This understanding will allow for QPR trainers to have a better sense of potential underlying knowledge within a particular participant base, including potentially which facets of the training may require a stronger focus.

Based upon the One-Way Anova analyses conducted, it was determined that participants reported age significantly impacted their response to 6 out of the 9 baseline questions. Age was found to significantly impact whether participants believed they understood the warning signs of suicide, knew how to ask someone about suicide, understood how to obtain help, were aware of local resources, felt it was appropriate to ask someone about suicide, and how likely they are to ask someone if they are thinking about suicide. Additionally, it was indicated that older

participants were also more likely to believe it was appropriate to ask someone about suicide, when compared with younger participants.

Utilizing the analysis process there was found to be no significant difference among reported ethnicity and the way in which participants responded to the survey questions; however, it was indicated that the Caucasian participants were more likely to believe it was appropriate to ask someone about suicide, compared to other participant demographic groups. Similarly, African American participants indicated they were more likely to ask someone if they were thinking about suicide.

There was only one question item that was found to show a significant difference among those who reported male or female gender. According to the results, gender was determined to have a significant impact on whether participants thought it was appropriate to ask someone about suicide. With a $p < 0.05$, more male participants felt it was appropriate to ask someone about suicide as compared to the female participants.

Lastly, analyses conducted determined there to be a significant difference among highest education level attainment and responses on 5 out of the 9 baseline survey questions. Educational level was found to impact participants knowledge of "facts regarding suicide," understanding of warning signs of suicide, ability to ask someone about suicide, believing it is appropriate to ask someone about suicide, and how likely they are to ask someone if they are thinking about suicide.

With the large n of 1172, researchers anticipated seeing a statistically significant difference between responses. Even though smaller significant differences occurred, such as higher education levels having a greater understanding of the warning signs of suicide, and older

individuals knowing information about local resources for help with suicide; large generalizations between demographics cannot be determined.

Limitations

Multiple limitations exist in regards to this study, such as limitations - short term data/lack of longitudinal data, potential exclusions, initial participant knowledge. But these limitations can be addressed with critical evaluation and retooling of the survey's questionnaire. The pre-training survey consisted of 4 optional demographic questions. These questions included participants' age, gender (male or female), ethnicity (African American, Asian American, Caucasian, Latino/Hispanic, Native American, other), as well as highest grade completed. Participants were provided the anonymous paper survey to complete prior to the training beginning.

A total of 1172 people were trained in QPR and assessed on their initial baseline knowledge of recognizing suicide warning signs and providing appropriate support and resources. Even though 1172 is a larger n, one limitation of the study was the limited diversity of the demographics represented. This limitation may be a result of the regional location of the training, central Pennsylvania, or indicative of a greater commentary of the diversity of the k-12 educators in the region and the student leaders.

The set-up of the demographic questions section is problematic and unintentionally exclusive to participants. Not only were demographic questions optional, but they also were limiting. The gender question only included male and female genders; unintentionally excluding non-binary and gender fluid participants. This may lead to inaccurate responses as participants may struggle on how to identify. Additionally, it may lead to false information as participants

are required to choose or may not feel safe and validated to respond. The survey tool should be amended to include other options or an open-ended response option so participants are able to articulate their own gender identity.

Limitations exist with the ethnicity component of the participant survey. Within the ethnicity section of the survey, participants were told to only choose one. This is problematic as many people identify as multiple racial identities. Furthermore, participants were not provided with the opportunity to check multi-racial or to self-articulate their identity. In regards to the data, a limitation of this study is that the ANOVA did not examine those who noted other or Native American or separate those who are of 2 races/ethnicities.

An additional limitation of this survey is the subjective responses on the questions (low, med, high). Participants may interpret questions differently and thus the responses for each participant will be based on their interpretation of the information.

Conclusion

This research examined 1172 QPR trained individuals and assessed their initial baseline knowledge of recognizing suicide warning signs and providing appropriate support and resources. Age and education level proved to be significant indicators of having a baseline knowledge and ability to support people experiencing suicidal crises. The significance of these observations makes it so future programs could be tailored according to demographics, such as age and education level. This maintains QPR training relevance, allowing it to evolve through specific customization. The longevity of a program is strengthened by its continued development, prioritizing the important information so the material remains impactful. Suggested

future research would be the assessment of extraneous variables such as manipulation of who provides the training, allowing observation of the best method of administering the material.

Further research needs to be done on the comparison of pre-training and post-training effectiveness of the QPR training. This survey discusses the need for post survey data analysis and longer-term data survey. A longitudinal examination of information retainment through multiple posttest check ins, would be the next step in the continuation of this study. This continued observation is able to track the effectiveness and longevity of the administered information, so to gauge when refresher courses are necessary.

With the large n of 1172, it was anticipated to see a statistically significant difference between responses. Even though smaller significant differences occurred, such as differing understanding of warning signs of suicide between education level attainment and differing responses between ages about knowing information about local resources for help with suicide; large generalizations between demographics cannot be determined. To provide greater significance, continued analysis of the program through multiple post surveys would provide ample longitudinal data. This would overcome some of the aforementioned limitations, and further the development of QPR training programs.

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