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CONCEPTS INFLUENCING ATTITUDES AND BELIEFS TOWARD MENTAL HEALTH ISSUES IN A TEACHER EDUCATION PROGRAM

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Abstract. There is an expectation for in-service teachers, current teachers in the field, in primary and secondary schools to be skilled in teaching strategies and behavior management. There is a growing need for teachers also to be skilled in recognizing mental health concerns in their students. Schools are becoming acutely aware that in-service teachers are not adequately prepared in this area, and therein lies a dual responsibility to also prepare college students enrolled in teacher education programs, who will be referred to as pre-service teachers, with skills that will equip them to be supportive of students with mental health needs. This study sought to find out if there were common concepts or factors that would describe how willing a pre-service teacher would be to seek or recommend mental health services for a peer. There were 151 students enrolled in teacher education programs from one Midwestern university in the United States who volunteered to participate in this study. The research design was organized in multiple stages. The data collected were processed through an exploratory factor analysis and once the factors were found, a hierarchical multiple regression analysis was further completed to explore the relationship between such factors and the decision whether to seek or recommend mental health services. The results indicated that comfort, resistance, and environment were significant factors. The comfort factor has dominant influence over the participants' decision whether to seek or recommend mental health services. The task ahead for primary and secondary schools, and higher education institutions, is to create programs where comfort with students with mental health needs is increased, to increase awareness of the mental health resources available in the community, as well as to decrease the resistance factors.

Keywords: mental health issues, comfort, resistance, environment, pre-service teacher.

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The mental health needs of students in schools are pervasive. The amount of consistent time a teacher spends with their students can create an inherent role as a mental health team member for their students (Doll, Cummings, & Chapla, 2014; Weist et al., 2013). Teachers play a vital role in the identification of mental health concerns, as well as delivering interventions (Franklin, Kim, Ryan, Kelly, & Montgomery, 2012). According to the National Alliance on Mental Illness (n.d.) one in five children has, or will one day have, a serious mental illness. The academic achievement of children has been linked to their mental health (McLeod & Fettes, 2007) where, for example, adolescents suffering from depression report lower grades, reduced engagement in school, concentration difficulties and an overall negative attitude towards school (Humensky et al., 2010; Mistry, Benner, Tan, & Kim, 2009). This exacerbates poor relationships with peers and family, which increases the likelihood of dropping out of school at a national level (McLeod, Uemura, & Rohrman, 2012; Meldrum, Venn, & Kutcher, 2009; Volk, Craig, Boyce, & King, 2006). Signaling the need for schools to focus more on the mental health of their students, the state of Virginia in the United States recently created a plan to address much needed services. In their current plan, more funding would be given to the school resource officer program, the creation of a tip line to address students that are a danger to themselves or others, as well as students spending more time with counselors (Mattingly, 2018).

Given the pervasiveness of mental health issues in schools, to what degree are teachers prepared to meet this need? In Merz (2017), it was stated that "… in spite of the obvious need, I've received zero training in issues related to student mental health. And that's true for the vast majority of my teaching colleagues" (p. 14). Echoing this, Frauenholtz, Mendenhall, and Moon (2017) stated, "the current lack of knowledge regarding the mental health literacy of educators poses a challenge and potential limitation to the effectiveness of current efforts to intervene with children experiencing mental health distress" (p. 72). This is tragic, as the school itself offers frequent contact with children and families to identify issues, provide a bridge to accessing needed services and enhance

positive mental health messages (Allen-Meares, 2013). Highlighting how a lack of training for teachers further exacerbates the problem by likely creating a stigma of mental illness, Frauenholtz, Mendenhall, and Moon (2017) stated, "stigma was … a manifestation of limited knowledge of children's mental health among school staff, primarily through its influence on how mental health symptoms were interpreted and understood, or how children with mental health disorders were perceived" (p. 75–76).

In 2012, after the World Health Organization (WHO) recommended that schools promote mental health activities in this setting, Australia responded with a program in which teachers were responsible in delivering a curriculum of mental health promotion. Teacher questionnaire data were collected in response to their learning of the information. Even with a curriculum, teachers expressed roughly 50% of the time that they *Strongly Agree* to not feeling equipped in the area of self-efficacy (Askell-Williams & Lawson, 2013). As part of the work in addressing mental health needs in Ontario, Canada (which also reports one in five school-aged children experiencing mental illness) (Adelman & Taylor, 2000), they focused on the training of pre-service educators in a teacher education program. The goal of the focused efforts was to improve mental health literacy while reducing mental health stigma and increasing capacity building among pre-service teachers (Atkins & Rodger, 2016). There will be a distinction in the terminology of stigma versus stigma-related beliefs that is intentional. According to Krendl and Freeman (2017), their study concluded that stigma-related beliefs were the internal thoughts and attitudes towards mental health issues. Certain attitudes and beliefs were then associated with stigma, which are the actions or inactions towards others with mental health issues.

There have been studies that explored how help-seeking attitudes and behaviors were associated with one's mental health stigma. These studies have revealed that the higher the level of stigma correlated to lower help-seeking attitudes and behaviors (Cooper, Corrigan, & Watson, 2003). However, there is limited research on mental health stigma and how it impacts help seeking behaviors of college students enrolled in teacher education programs. More specifically, there is a lack of research on what factors might influence attitudes toward the belief of whether to seek or recommend mental health counseling services. In Australia,

roughly 58% of college students reported they suffered from mental health issues, and yet only 10% reported they sought help (Furnham et al., 2011; Reavley et al., 2012), whereas in the United States, about 50% of college students reported a mental health disorder (Blanco et al., 2009). We may be able to presume that that these statistics representing all college students would apply to those in teacher education programs. Hogan (2003) suggested that mental health stigma is the main factor that impedes their willingness to seek out services. Given the clear mental health needs of children in schools, and the lack of significant training to assist them, teachers are left to their pre-existing attitudes and beliefs around mental illness. The current literature suggests that improving the mental health literacy of in-service teachers will decrease the stigma associated with mental illness, but none has focused on what factors have an impact on pre-service teacher's willingness to seek or recommend mental health counseling services.

One approach in addressing personal mental health stigma is to improve mental health literacy and access to resources. Beliefs and perceptions about mental health can stem from experiences, attitudes, and education (Jorm et al., 1997) as these areas can influence an educator's decision in how they respond to students' needs (Ajzen & Fishbein, 1980; Poulou & Norwich, 2002; Stanovich & Jordan, 1998). The study conducted by Krendl and Freeman (2017), asserts that there are two stigma-related beliefs that are associated with social desirability and controllability. The converse of this suggests there are stigma-related beliefs and attitudes towards mental health that associate the mental health issue as being socially undesirable and uncontrollable. For example, participants viewed depression and post-traumatic stress as high in socially desirable and controllable whereas they viewed paranoia, schizophrenia, and psychosis as socially undesirable and highly uncontrollable. Towler and Schneider (2005) go further with similar findings but added that along with social desirability, the level of threat or discomfort was associated with social stigma of the mental health issue. When a mental health issue was viewed as socially desirable and controllable, it was less threatening.

About half of our participants reported they were raised in rural areas. In a study by Robinson et al. (2012), their findings address the social structure of rural communities. Five themes emerged from their study: significant stigma towards mental health; practical challenges

hindering access to care; inadequate solutions; unresolved problems; and pursuit of own solutions. Under the theme of pursuing own solutions, the topic that participants highlighted was their perceptions of community ignorance because of the lack of educational opportunities about mental health issues. This topic garnered much discussion about how small rural communities need educational opportunities for medical providers, law enforcement, and community members. Some participants described more detail of the importance of school personnel being educated in mental health issues. A parent suggested that teachers and administrators should receive more in-service opportunities with a presenter and not simply be given a brochure to learn on their own. Several participants expressed that educational opportunities should happen at a younger age with children and an increase of resources. Another lens into rural communities was the perception that each neighboring community had resources but they were different than neighboring communities, so participants called for information sharing and organization of the local and neighboring community's resources. For our students, who were raised in rural areas and will most likely return to those communities to teach, understanding their experiences is important as we address their needs before they join the workforce in schools.

This study serves to understand what stigma-related beliefs and attitudes may impact one's mental health understanding and willingness to intervene with their students who have mental health needs. The participants in this study were enrolled in a variety of teacher education programs and will be referred to as *pre-service teachers*. After a review of the literature, some common concepts emerged. This study selected to explore the concepts of comfort, resistance, and environment.

Comfort

Hypothesis 1a. The perceived comfort factor of the pre-service teacher toward mental health issues has a positive correlation to the willingness to actively seek mental health counseling.

Hypothesis 1b. The perceived comfort factor of the pre-service teacher toward mental health issues has a positive correlation to the willingness to actively recommend mental health counseling to a peer.

Resistance

Hypothesis 2a. The perceived resistance factor of the pre-service teacher toward mental health issues has a negative correlation to the willingness to actively seek mental health counseling.

Hypothesis 2b. The perceived resistance factor of the pre-service teacher toward mental health issues has a negative correlation to the willingness to actively recommend mental health counseling to a peer.

Environment

Hypothesis 3a. The perceived environment factor of the pre-service teacher toward mental health issues has a positive correlation on the willingness to actively seek mental health counseling.

Hypothesis 3b. The perceived environment factor of the pre-service teacher toward mental health issues has a positive correlation on the willingness to actively recommend mental health counseling to a peer.

Research Design

Based on the review of pertinent literature, the concepts of comfort, resistance, and environment (and their relationship with the beliefs of whether the person is willing to actively seek mental health counseling or recommend mental health counseling to a peer), have been assembled into a visual model to facilitate our understanding (Figure 1). The concepts of comfort, resistance, and environment are believed to have an influence on the beliefs of whether the person is willing to actively seek or recommend mental health counseling. The links between these concepts and willingness to seek or recommend mental health counseling represent the hypotheses proposed in this study.

The research design was sequentially organized in multiple stages (Figure 2). In Stage 1, exploratory factor analysis (EFA) was conducted to identify the factors which influence pre-service teachers' beliefs of whether they are willing to actively seek or recommend mental health counseling. In Stage 2, a hierarchical multiple regression analysis with control variables was employed to further investigate the influence of the identified factors on the belief of whether they are willing to actively seek or recommend mental health counseling.

Figure 1. *Concepts which influencing the attitude of a willingness to seek or recommend mental health counseling.*

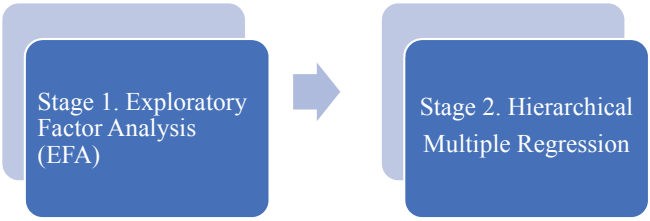

Figure 2. *Data analysis design*

Method

Participants

One hundred fifty-one students majoring in teacher education programs at a Midwestern public university in the United States participated

Table 1. *Participants, College, and University Demographics of Undergraduates*

	Research Participants n=151	*College of Education n=1,050*	*University n=4,146*
Females	85%	74%	59%
Males	15%	26%	41%
White/Caucasian	89%	87%	81%
Black/African American	0.7%	2.4%	2%
Latino	10%	8.3%	13%
Other	0.7%	2.4%	4%
First-Year	0.7%	19%	27%
Second-Year	13%	18%	22%
Third-Year	39%	26%	22%
Fourth-Year	45%	26%	27%
Fifth-Year	3%	Included with fourth-year	Included with fourth-year
Urban	15%	22%	No Data
Urban Clusters	33%	37%	No Data
Rural	51%	41%	No Data
First-Generation	22%	44%	44%

in a survey about their attitudes toward mental health and counseling. The participants included males (15%) and females (85%), which is not similar to the institution's demographics, where males are underrepresented by nearly thirty percent. The ethnic make-up of the participants was predominately White/Caucasian (89%) and also included Black/African American (0.7%), Latino (10%), and Other (0.7%), which was similar to the demographics of the institution's enrolled student populations. The participants represented first-year students generally aged 18–19 years old (0.7%), second-year students generally aged 19–20 years old (13%), third-year students generally aged 20–21 years old (39%), fourth-year students generally aged 21–22 years old (45%), and fifth-year students generally aged 22–23 years old (3%). These students represented being raised in communities that were Urbanized (15%) with a population of 50,000 or more, Urban Clusters (33%) with a population of 2,500–49,999, and Rural (51%) with a population of less than 2,500.

The participants also included the self-identified first-generation college students (21.9%) and non-first-generation college students (78.1%). The demographics of the survey participants are presented in Table 1.

Procedures

Participants were recruited through upper-level, on-campus courses in a college of education at the U.S. Midwestern public university, which include various departments and numerous education majors. Participants were invited to complete a confidential survey designed to study the dynamics of attitudes toward mental health issues as viewed by students enrolled in courses housed in teacher education programs. All participants were 18 years of age or older. University Human Subjects Research and Institutional Review Board approval were obtained before data collection began.

Data presented in this study were collected through a structured student mental health issues survey instrument. The survey instrument had been modified from its original use (Hof et al., 2013) for this study. The researchers modified the original Hof, Bishop, Dinsmore, Chasek, & Tillman, 2013 survey in two ways. The original survey was created with language specific to a different Midwest university and that specific language was removed and Nebraska was added in question 19. No other changes were made to the Likert scale questions. Two additional questions were added to reflect the researchers' interests, which were question 9, "Are you a first-generation college student defined as the first in your family of origin to attend any kind of post-high school education?" and question 10, "Are you aware of Trauma Informed resources in the community you came from as defined as resources to children and families who have been exposed to traumatic events?". The modified survey used in this study was designed in two parts. The first part included demographic data of participants such as gender, age, degree, race/ethnicity, year in studies, size of hometown, size of the community planning to teach, family household income, first-generation college student, and awareness of trauma-informed resources in the community. The second part included ten statements measuring factors affecting participants' beliefs of whether they were willing to actively seek mental health counseling or recommend mental health counseling to a peer. The second

part contained nine statements using a ten-point Likert scale (1= not willing/ strongly disagree, 10 = very willing/ strongly agree) and one statement using a yes or no response. (See Appendix A). Items 15, 16, and 17 of the survey which contain opposite statements were reverse coded for the purpose of the statistical analysis.

The data were analyzed using the exploratory factor analysis (EFA) to identify the factors influencing the beliefs of whether willing to actively seek or recommend mental health counseling and the data were further analyzed using hierarchical multiple regression analysis with control variables to investigate how the significant factors affect such beliefs.

Because our survey scale is multidimensional and includes both interval measurement (Likert scale format) and categorical answers (Yes or No format), McDonald's Omega and Guttman's Lambda 6 coefficients were employed to conduct reliability test. Compared with Cronbach's Alpha, McDonald's Omega and Guttman's Lambda are more suitable to evaluate the reliability of the multidimensional scale (Starkweather, 2012; Watkin, 2013; Dunn, Baguley, & Brunsden, 2014) and researchers have suggested reporting reliability moving from traditional Cronbach's Alpha to more accurate indices such as McDonald's Omega (Peters, 2014; Deng & Chan, 2017; Watkins, 2017). The McDonald's Omega and Guttman's Lambda 6 coefficients were obtained by running reliability test using JASP, a statistics package developed by a group of researchers at the University of Amsterdam. The preliminary McDonald's ω coefficient for the test was 0.737 and Guttman's $\lambda 6$ coefficient was 0.766 before factor analysis, both indicating an acceptable reliability.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were employed to test whether the use of factor analysis is appropriate and feasible. The KMO statistic of 0.645 was high. The approximate of Chi-Square was 230.778 with 28 degrees of freedom, which was significant at 0.000 level of significance. The results of the KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity showed the use of factor analysis in this study is appropriate and feasible.

ANALYSIS

Factor Analysis

Principal axis factoring was conducted to examine dynamic attitudes toward mental health issues. An eigenvalue of 1.0 was used to determine the number of factors which have a value greater than 1.0 being identified as significant factors (see Table 2). Three significant factors were identified

Table 2. *Summary of Exploratory Factor Analysis Results for Attitudes Toward Mental Health Issues Using Principal Axis Factoring Extraction Method*

Item	*Factor Loadings*		
	Factor 1: Comfort	*Factor 2: Resistance*	*Factor 3: Environment*
Comfortable dating someone who has a mental health issue	.763		
Comfortable sitting next to a peer who has a mental health issue	.557		
Have a relative who has a mental health issue	.544		
Difficult to trust someone with a mental health issue		.880	
Anxious and uncomfortable around someone who has a mental health issue		.616	
Mental health issue can effectively be treated by university counseling services			.764
Home state is more proactive towards mental health treatment compared to the rest of the United States			.531
Eigenvalues	2.468	1.434	1.270
Percentage of Variance	30.852%	17.920%	15.880%
Cumulative Percentage	30.852%	48.771%	64.651%

Note: Varimax rotation with Kaiser Normalization. Factor loadings < .5 were suppressed.

from the exploratory factor analysis and were presented in Table 2 using the Varimax rotation method with Kaiser Normalization.

Items which indicate the dynamic attitudes toward mental health issues were arranged into three factors based on the size of the factor loading from the statistical analysis (see Table 2). The first factor consisted of three items ("comfortable dating someone who has a mental health issue", "comfortable sitting next to a peer who has a mental health issue", and "have a relative who has a mental health issue") and was named the comfort factor. The second factor was identified with two items ("difficult to trust someone who has a mental health issue" and "anxious and uncomfortable around someone who has a mental health issue") and was labeled as the resistance factor. The third factor was also loaded with two items ("effective university counseling services" and "home state with a proactive environment towards mental health treatment") and was named as the environment factor. Another item ("mental health issue prevents students from performing their normal academic responsibilities") had a very low factor loading and was not identified as a significant factor thus was suppressed from the factor loading table (factor loadings <.5). The results of the factor analysis clearly showed that there are three significant factors (Eigenvalue>1 and 64.651% cumulative total variance explained) from the pre-service teacher's attitudes toward mental health issues (e.g., comfort, resistance, and environment) which might influence their beliefs of whether they are willing to actively seek mental health counseling or willing to actively recommend mental health counseling to a peer.

Regression Analysis

Before heading to regression analysis, A Pearson product-moment correlation coefficient was computed to test the inter-correlations between the three factors and the relationship between the willingness to actively seek mental health counseling or to recommend mental health counseling to a peer. Reliability test was reported again to include the three factors (comfort, resistance, and environment) after the factor analysis.

Pearson's Correlation Coefficient results are shown in Tables 3 and 4. There was a weak positive inter-correlation between the comfort and the resistance factors (0.106) but not statistically significant at the 0.05 level (p value = 0.195). It showed almost no correlation between the comfort and the environment factors (0.003) and not statistically significant

(p value = 0.970). It also showed there was a very weak negative inter-correlation (-0.055) between the resistance and environment factor but not statistically significant either (p value = 0.501). However, there was a moderate-to-strong positive inter-correlation (0.542) between the willingness to actively seek mental health counseling and the willingness to actively recommend mental health couseling to a peer. Increases in the willingness to actively seek counseling were positively correlated with the willingness to actively recommend counseling to peers. This correlation was statistically significant at the 0.01 level (p value = 0.000), as shown in Table 4. After the exploratory factor analysis, McDonald's ω coefficient for the test which including the three factors was improved to 0.795 and Guttman's $\lambda 6$ coefficient was also improved to 0.952, with McDonald's ω indicating a good and Guttman's $\lambda 6$ indicating an excellent reliability.

A hierarchical multiple regression analysis with control variables was performed to determine the influence of the three identified factors (comfort, resistance, and environment) on the beliefs of whether pre-service teachers are willing to actively seek or recommend mental health counseling. The independent variables are the comfort, resistance, and environment factors, whose values are calculated through the factor analysis's regression score option. The dependent variables are the items from the survey (willing to seek mental health counseling and willing to recommend mental health counseling to a peer). Participant gender, age, year of studies, and whether or not self-identified as a first-generation college student are control variables in the regression model as they may affect attitudes toward the willingness to actively seek mental health counseling and to actively recommend mental health counseling to others. Subsequent hierarchical multiple regression and stepwise regression analysis were conducted to determine whether there is an interaction associated between independent variables (comfort, resistance, and environment factors) and dependent variables (willing to seek counseling and willing to recommend counseling) with aforementioned control variables. The results are shown in Tables 5–8.

For the regression analysis, the completed 151 responses were analyzed. The overall models were statistically significant: $F = 6.576$, and $p = 0.000$ (Willing to Seek Counseling) and $F = 5.621$ and $p = 0.001$ (Willing to Recommend Counseling). The results indicated that comfort, resistance, and environment factors are the significant factors influencing the

Table 3. *Pearson Product-Moment Correlations of Comfort, Resistance, and Environment Factors*

	Comfort	*Resistance*	*Environment*
Comfort	1		
Resistance	.106	1	
Environment	.003	-.055	1

n = 151. *Sig. (2-tailed) p<.05.

Table 4. *Pearson Product-Moment Correlations between the Willingness to Seek Mental Health Counseling and the Willingness to Recommend Mental Health Counseling to a Peer*

	Willing to Seek	*Willing to Recommend*
Willing to Seek	1	
Willing to Recommend	.542**	1

n = 151. **Sig. (2-tailed) p<.001.

overall beliefs of pre-service teachers and their willingness to actively seek mental health counseling or willingness to actively recommend mental health counseling to a peer with gender, age, year in studies, and first-generation college student as control variables. The R-square was used to measure the usefulness of the model, which indicated how useful the explanatory factors (independent variables) are in predicting the response (dependent) variables with control variables. In the full models, the R-square of 0.144 (Willing to Seek Counseling) and 0.143 (Willing to Recommend Counseling) indicated acceptable results. In the stepwise regression models, the R-square of 0.125 (Willing to Seek Counseling)

and 0.120 (Willing to Recommend Counseling) also indicated acceptable results.

Among the three factors, the comfort factor had an apparent positive association with the belief of whether the pre-service teacher is willing to actively seek mental health counseling in both the full model (β = 0.990, $p = 0.000$, Table 5) and in the stepwise model (β = 0.996, $p = 0.000$, Table 6). The comfort factor also had an apparent positive association with the belief of willing to actively recommend mental health counseling to a peer in both the full model (β = 0.789, $p = 0.001$, Table 7) and in the stepwise model (β = 0.803, $p = 0.000$, Table 8). Thus, **Hypotheses 1a** and **1b** were directly supported. None of the rest of the factors (resistance and environment) and control variables (gender, age, year of studies, and first-generation college student) seemed to have a significant

Table 5. *Regression Analysis Results for the Willingness to Seek Mental Health Counseling Services*

	Unstandardized Coefficients β	*Standard Error*	*Standardized Coefficients β*	*t*	*Significance*
(Constant)	3.082	2.239		1.377	.171
Gender	.343	.582	.046	.590	.556
Age	.066	.092	.061	.718	.474
Year of Studies	.145	.273	.044	.529	.598
First Generation	.443	.498	.070	.889	.375
Comfort	.990	.246	.319	4.032	.000
Resistance	.189	.237	.065	.816	.416
Environment	.426	.260	.130	1.638	.104

Table 6. *Stepwise Regression Analysis Results for the Willingness to Seek Mental Health Counseling Services*

	Unstandardized Coefficients β	*Standard Error*	*Standardized Coefficients β*	*t*	*Significance*
(Constant)	3.304	2.230		1.481	.141
Gender	.487	.578	.066	.842	.401
Age	.034	.090	.031	.380	.704
Year of Studies	.176	.274	.053	.642	.522
First Generation	.517	.498	.082	1.039	.301
Comfort	.996	.246	.321	4.056	.000

association with either the willingness to actively seek mental health counseling or to recommend mental health counseling to others. **Hypotheses 2a**, **2b, 3a, and 3b** were rejected. Thus, the comfort factor was the only and dominant factor influencing the beliefs of whether the pre-service teacher is willing to actively seek mental health counseling or to actively recommend mental health counseling to a peer. Future study may be needed to look into the resistance and environment factors for further in-depth analysis.

Out of 151 returned surveys, 118 participants (78.1%) indicated that they are willing to actively seek mental health counseling if necessary. One hundred thirty-nine participants (92.1%) indicated that they are willing to actively recommend mental health counseling services to a peer if necessary. Forty-five participants (29.8%) are aware of Trauma Informed resources in the community where the participant came from as defined as resources to children and families who have been exposed to

Table 7. *Regression Analysis Results for the Willingness to Recommend Mental Health Counseling Services to a Peer*

	Unstandardized Coefficients β	*Standard Error*	*Standardized Coefficients β*	*t*	*Significance*
(Constant)	4.359	2.027		2.151	.033
Gender	.014	.526	.002	.027	.978
Age	.088	.083	.089	1.056	.293
Year of Studies	.243	.247	.081	.980	.329
First Generation	.691	.451	.121	1.531	.128
Comfort	.789	.222	.281	3.547	.001
Resistance	.262	.210	.099	1.246	.215
Environment	.371	.236	.125	1.574	.118

traumatic events. One hundred six (70.2%) participants are not aware of such resources available in the community.

These results indicated that comfort, resistance, and environment are the significant concepts that describe attitudes toward mental health issues. This influences the beliefs of pre-service teachers and describes their willingness to actively seek mental health counseling, or their willingness to actively recommend mental health counseling to their peers. It was found that the comfort factor had a direct positive correlation on predicting whether those majoring in teacher education are willing to actively seek mental health counseling or willing to actively recommend mental health counseling to their peers. This research did not find a direct correlation between resistance and environment factors on

Table 8. *Stepwise Regression Analysis Results for the Willingness to Recommend Mental Health Counseling Services to a Peer*

	Unstandardized Coefficients β	*Standard Error*	*Standardized Coefficients β*	*t*	*Significance*
(Constant)	4.669	2.023		2.308	.022
Gender	.151	.524	.023	.289	.773
Age	.054	.082	.055	.657	.512
Year of Studies	.272	.248	.090	1.093	.276
First Generation	.754	.452	.132	1.668	.097
Comfort	.803	.223	.286	3.603	.000

the belief of the teacher education major and their willingness to seek mental health counseling or willing to recommend to others. However, it pointed to a future direction for such study.

DISCUSSION

Given the limited extent of literature on this topic, our findings begin an understanding of dynamic attitudes toward mental health stigma of pre-service teachers and how that impacts their willingness to seek or recommend mental health counseling services. There were significant findings that addressed the pre-service teachers' attitudes and beliefs on mental illness (comfort, resistence, and environment). We will also discuss the implications of the findings for practioners and researchers.

Comfort

The comfort concept was attributed to the questions in the survey to one feeling comfortable dating someone with a mental health concern, sitting next to a peer with a mental health concern, or having a relative with a mental health concern. Said differently, what level is the person comfortable in casual, romantic or familial interactions with others who suffer from mental health issues and to what degree are they open to engaging in deepened relationships.

Resistance

The resistance factor was identified through questions in the survey of participants feeling anxious and/or uncomfortable around people with mental health concerns or if they found people with mental health concerns being difficult to trust. In other words, does the individual remain, or feel that they must remain, guarded around individuals with mental illness.

Environment

For the participants in this study, survey questions associated with this concept were a belief that their university's counseling services can effectively treat students, and a belief that their home state is proactively treating mental health compared with the rest of the United States. The participants in this study are generally from their home state, and plan to work in a comparably sized community as the one in which they were raised. For higher education institutions, it is important to understand this demographic, and how to be responsive as it relates to preparing preservice teachers to teach in school districts with an understanding of the mental health needs of the students in those districts, and the resources that are available. This concept captured participant attitudes and beliefs about the ability of existing services to effectively treat mental illness and the openness of their community towards the plight of those with mental health issues.

Implications for practitioners

The foundation of mental health literacy is rooted in knowledge by way of attitudes, beliefs, and skills (Jorm et al., 1997) which informs the actionable

steps from our findings. This study can be helpful for both primary and secondary school systems and higher education institutions. While there is a burden on current teachers to work in various roles with students and their mental health needs, there is also a burden on administrators to support their teachers and the additional work that is required to meet the needs of the students. Administrators in school systems can use the findings from this study to begin to create an environment of acceptance of students with mental health needs. This can be accomplished at the hiring phase by creating questions for potential hires at teacher interviews that would seek to identify the level of an applicant's comfort, resistance and environmental concepts discussed above toward mental illness, and hence gauge their ability to work with students with mental health needs. Hiring teachers who can identify behaviors, use a variety of instructional strategies, and advocate for students with mental health needs is vital to creating an environment of acceptance for mental health issues.

The results of this study could also assist administrators in school systems to use the attached assessment instrument (appendix a) to gauge the comfort, resistance, and environmental concepts discussed above of currently employed teachers and aid in the development of interventions to enhance their attitudes and beliefs of mental illness through targeted interventions. These targeted interventions could come in the form of mandatory school-wide education via readings or computer assisted platforms, guest speakers at a school-wide training day, or adopting a school-wide shared mission statement on mental illness, to name a few.

This study impacts how schools of education in higher education institutions respond to the growing needs of preschool through secondary schools and how to best prepare pre-service teachers through course work. Georg von Krogh (1998) suggested that care is fundamental in the creation of knowledge. The idea that pre-service teachers will learn the *how to* work in an environment with students with mental health needs without any interactions could be difficult. The results of this study support the idea of creating spaces and experiences where pre-service teachers can feel more comfortable, as this was a factor in our results. One way to build care is to also build empathy. Another item within the comfort factor was having a relative that had a mental health concern. This comfort factor can come in the form of higher education institutions requiring courses in counseling along with creating courses where there are guest

speakers who share their stories as well as meaningful field experiences where pre-service teachers work with students with metal health needs where they can apply theory into practice.

This study has illuminated the need for responsivity from higher education institutions in how they respond to the growing need of mental health literacy of pre-service teachers and the self-care strategies that pre-service teachers can employ once they become in-service teachers. There is a high rate of turnover during year five in teaching where 41% have left the profession (Ingersoll, Merrill, & Stuckey, 2014). The leading reason teachers leave the profession is stress and burnout (Ellis & Riel, 2014; Johnson et al., 2005). Knowing these risk factors, higher education institutions can be responsive to pre-service teachers by equipping them with the necessary self-care tools.

Limitations And Future Directions For Research

While interpreting the results of this study caution should be exercised as there are some limitations. First, all of the participants were enrolled in one Midwestern university in the United States. Second, the majority of the participants were from one ethnic background (Caucasian), and eighty-four percent were raised in communities with populations of 59,999 or less. Next, most of the participants grew up and plan to work near the same geographical area. Finally, it should also be noted that the survey instrument was a self-report design.

In terms of future research, this study created a conceptual framework that is the first of its kind in the area of teacher education exploring the attitudes and beliefs on mental illness among this population. Three significant concepts emerged (comfort, resistance, and environment) from the research. Because this research is so new to this population, these concepts should be explored further to ensure they accurately encompass the attitudes and beliefs on mental illness. The duplication of this study could be used to confirm our findings, disprove them, or find new emergent concepts and their relationships. Second, the geographical area of participants should be widened to include other states, regions, and countries beyond the US. Varying the demographics could pose an interesting study into higher education institutions with more of a diversity background such as HBCUs (Historically Black Colleges and Universities) as well as Hispanic-serving institutions. Next, researchers should examine

an area where the research is limited and perhaps non-existent as to what factors can predict the behavior of pre-service teachers recommending mental health counseling services for their future students. Deepening understanding of how to move from mental health literacy to advocacy behavior would be valuable. This has long-term implications as there is growing pressure for schools to care for students who have mental health needs. Ultimately, schools want teachers who view the solution to atypical behaviors from an intervention approach. Often, the response to atypical behaviors in schools is to address them from a disciplinary framework. Finally, future research could explore the attitudes and beliefs of current teachers to determine differences in their openness to mental illness to those of student teachers.

REFERENCES

Adelman, H. S., & Taylor, L. (2000). Promoting mental health in schools in the midst of school reform. *Journal of School Health, 70*(5), 171–178.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.

Allen-Meares, P. (2013). School social work. In C. Franklin & L.E. Davis (Eds.-in-Chief), *Encyclopedia of social work* (20th ed., Vol. 4, pp 3-7). Washington, DC, and New York: NASW Press and Oxford University Press.

Askell-Williams, H., and Lawson, M.J. (2013). Teachers' knowledge and confidence for promoting positive mental health in primary school communities. *Asia-Pacific Journal of Teacher Education*, 41(2), 126-143.

Atkins, M., & Rodger, S. (2016) Pre-service Teacher Education for Mental Health and Inclusion in Schools. *Exceptionality Education International*, 26, 93-118.

Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S.-M., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions. *Archives of General Psychiatry, 65,* 1429–1437.

Cooper, A. E., Corrigan, P. W., & Watson, A. C. (2003). Mental illness stigma and care-seeking. *Journal of Nervous and Mental Disease, 191*, 339-341.

Deng, L., & Chan, W. (2017). Testing the difference between reliability coefficients alpha and omega. *Educational and psychological measurement*, *77*(2), 185-203.

Doll, B., Cummings, J. A., & Chapla, B. A. (2014). Best practices in population-based school mental health services, In P. Harrison & A. Thomas (Eds.), *Best practices in school psychology: Systems level services* (pp. 149–163). Bethesda, MD: National Association of School Psychologists.

Dunn, T. J., Baguley, T., & Brunsden, V. (2014). From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology*, *105*(3), 399-412.

Eisenberg, D., Downs, M., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review, 66*(5), 5220541.

Ellis, M., & Riel, R. (2014). Work-life balance: Teachers identify four key areas. *Perspectives, 15*. Retrieved December, 2018 from http://perspectives.ctf-fce.ca/en/article/3051/

Franklin, C. G., Kim, J. S., Ryan, T. N., Kelly, M. S., & Montgomery, K. L. (2012). Teacher involvement in school mental health interventions: A systematic review. *Children and Youth Services Review, 34*(5), 973–982.

Frauenholtz, S., Mendenhall, A.N., & Moon, J. (2017). Role of school employees' in mental health knowledge in interdisciplinary collaborations to support the academic success of students experiencing mental health distress. *Children & Schools, 39*(2), 71–79.

Furnham, A., Cook, R., Martin, N., & Batey, M. (2011). Mental health literacy among university students. *Journal of Public Mental Health*, *10*(4), 198–210.

Griffiths, K.M., Christensen, H., Jorm, A.F., Evans, K., & Groves, C. (2004). Effect of Web-based depression literacy and cognitive-behavioural therapy interventions on stigmatising attitudes to depression: Randomised controlled trial. *British Journal of Psychiatry*, *185*, 342–349.

Hof, K., Bishop, M., Hof, D., Dinsmore, J., Chasek, C., & Tillman, D. (2013). Mental Health Stigma: Impact and Interventions, In G. R. Walz, J. C. Bleuer, R. K. Yep (Eds.), *VISTAS 2013*.

Hogan, M. F. (2003). New Freedom Commission Report: The President's New Freedom Commission: Recommendations to transform mental health care in America. *Psychiatric Services, 54,* 1467.

Humensky, J., Kuwabara, S.A., Fogel, J., Wells, C., Goodwin, B., & Van Voorhees, B. W. (2010). Adolescents with depressive symptoms and their challenges with learning in school. *Journal of Nursing, 26*, 377–392.

Ingersoll, R., Merrill, E., Stuckey, D., & Collins, G. (2018). *Seven trends: The transformation of the teaching force – Updated October 2018*. CPRE Report. Philadelphia, PA: Consortium for Policy Research in Education, University of Pennsylvania. Retrieved on December, 2018 from https://repository.upenn.edu/cgi/viewcontent.cgi?article=1109&context=cpre_researchreports

Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology, 20,* 178–187. doi:10.1108/02683940510579803

Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist, 67*(3), 231–243.

Jorm, A. F., Korten, A. E., Jacomb, P. A., et al (1997). Mental health literacy: a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166, 182–186.

Krogh, G. von. (1998). Care in Knowledge Creation. *California Management Review*, *40*(3), 133–153. https://doi.org/10.2307/41165947

Mattingly, J. (2018). *More School Resource Officers and Mental Health Resources: Virginia School Safety Committee Signs Off on Recommendations.* Retrieved December 10, 2018 from https://www.richmond.com/news/virginia/more-school-resource-officers-and-mental-health-resources-virginia-school/article_caeb6e06-12cd-5990-8ffe-f81239b2b36e.html

McLeod, J.D., & Fettes, D. L. (2007). Trajectories of failure: The educational careers of children with mental health problems. *American Journal of Sociology, 112,* 653–661.

McLeod, J. D., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, behavior problems, and academic achievement. *Journal of Health and Social Behavior, 53*(4), 482–497.

Meldrum, L., Venn, D., & Kutcher, S. (2009). Mental health in schools: How teachers have the power to make a difference. *Health & Learning Magazine, 8*, 3–5.

Merz. (2017). Who in your class needs help? *Educational Leadership, 75* (4) 12–17.

Mistry, R.S., Benner, A.D., Tan, C.S., & Kim, S. (2009). Family economic stress and academic well-being among Chinese-American youth: The influence of adolescents' perceptions of economic strain. *Journal of Family Psychology, 23*, 279–290.

National Alliance on Mental Illness (2014.). *Mental Health Facts – Children & Teens*. Retrieved September 5, 2018 from https://www.nami.org/getattachment/Learn-More/Mental-Health-by-the-Numbers/childrenmhfacts.pdf

Peters, G.-J. Y. (2014). The alpha and the omega of scale reliability and validity: Why and how to abandon Cronbach's alpha and the route towards more comprehensive assessment of scale quality. *European Health Psychologist, 16*(2), 56-69. doi:10.31234/osf.io/h47fv

Poulou, M., & Norwich, B. (2002). Cognitive, emotional and behavioural responses to students with emotional and behavioural difficulties: A model of decision-making. *British Educational Research Journal, 28*(1), 111–138.

Reavley, N. J., McCann, T. V., & Jorm, A. F. (2012). Mental health literacy in higher education students. *Early Intervention in Psychiatry*, *6*(1), 45–52.

Santor, D., Short, K. H., & Ferguson, B. (2009). *Taking mental health to school: A policy-oriented paper on school-based mental health for Ontario*. Ottawa, ON: Provincial Centre of Excellence for Child and Youth Mental Health, Children's Hospital of Eastern Ontario.

Stanovich, P. J., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *The Elementary School Journal, 98*, 221–238.

Starkweather, J. (2012). Step out of the past: Stop using coefficient alpha; there are better ways to calculate reliability. *University of North Texas Research and*

statistical support. [PDF file]. Retrieved from https://it.unt.edu/sites/default/files/omega_jds_jun2012.pdf

Volk, A., Craig, W., Boyce, W., & King, M. (2006). Perceptions of parents, mental health, and school amongst Canadian adolescents from the provinces and the northern territories. *Canadian Journal of School Psychology, 21*, 33–46.

Watkins, M. W. (2013). Omega [computer software]. *& Psych Associates*.

Watkins, M. W. (2017). The reliability of multidimensional neuropsychological measures: From alpha to omega. *The Clinical Neuropsychologist*, *31*(6-7), 1113–1126.

Weist, M. D., Lever, N. A., Bradshaw, C. P., & Owens, J. S. (2013). *Handbook of school mental health: Research training, practice and policy.* New York, NY: Springer.

VEIKSNIAI, LEMIANTYS BŪSIMŲ MOKYTOJŲ NUOSTATAS IR ĮSITIKINIMUS PSICHIKOS SVEIKATOS ATŽVILGIU

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Santrauka. Tikimasi, kad pradinėje ar vidurinėje mokykloje dirbantis dalyko mokytojas yra išmokęs ir įgudęs taikyti įvairias mokymo strategijas ir susidoroti su bet kokiu vaikų elgesiu. Tačiau vis labiau didėja poreikis mokytojams įgyti gebėjimų atpažinti mokinių psichikos sutrikimus. Mokyklos ima pripažinti, kad mokytojų kvalifikacijos kėlimas šioje srityje yra nepakankamas, todėl tam tikra atsakomybė tenka ir universitetams bei kolegijomis, kurie turėtų parengti būsimus mokytojus suteikti paramą psichikos sveikatos problemų turintiems mokiniams. Šis tyrimas skirtas išsiaiškinti bendrus veiksnius, kurie nusakytų būsimų mokytojų norą ieškoti ar rekomenduoti psichikos sveikatos specialisto pagalbą kolegai. 151 studentas, dalyvaujantis mokytojų rengimo programoje viename iš Vidurio Vakarų universitetų JAV, savanoriškai sutiko dalyvauti tyrime. Tyrimo duomenų analizė atlikta keliais etapais. Atlikta surinktų duomenų tiriančioji faktorinė analizė, toliau naudojant išskirtus faktorius taikyta hierarchinė regresinė analizė, skirta ištirti ryšius tarp faktorių bei sprendimo siekti ar rekomenduoti psichikos sveikatos paslaugas. Rezultatai atskleidė, kad komfortas, pasipriešinimas ir aplinka yra svarbiausi veiksniai. Komforto lygis buvo stipriausiai susijęs su sprendimu ieškoti ar rekomenduoti psichikos sveikatos paslaugas. Svarbi užduotis laukia pradinių ir vidurinių mokyklų bei aukštojo mokslo institucijų sukurti programas, kurias taikant didėtų mokinių ar studentų, turinčių psichikos sveikatos sutrikimų, komfortas, suteiktų žinių, kokios psichikos sveikatos priežiūros paslaugos prieinamos bendruomenei, taip pat mažintų pasipriešinimo veiksnius.

Reikšminiai žodžiai: psichikos sveikata, komfortas, pasipriešinimas, aplinka, būsimi mokytojai.

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APPENDIX A: SURVEY INSTRUMENT

1. What gender do you identify as?

Male Female Transgender Rather Not Say

2. What is your age? _____

3. What degree are you currently working towards?

Undergraduate Graduate

4. What is your race/ethnicity?

Asian or Pacific Islander
Black/African American
Hispanic/Latino
American Indian/Native American
White/Caucasian
Other _____

5. What year of your studies are you in?

First year of bachelor studies
Second year of bachelor studies
Third year of bachelor studies
Fourth year of bachelor studies
Fifth year or graduate student

6. What is the size of your hometown?

Urbanized Areas 50,000 or more
Urban Clusters 2,500–49,999
Rural 2,499 and less

7. What size of community do you plan to teach in?

Urbanized Areas 50,000 or more
Urban Clusters 2,500–49,999
Rural 2,499 and less
I do not plan on teaching

8. What do you identify as your family's household income?

$60,000 or more
$50,000 to $59,999
$45,000–$49,999
Less than $45,000
Don't know

9. Are you a first-generation college student defined as the first in your family of origin to attend any kind of post-high school education?

Yes No

10. Are you aware of Trauma Informed resources in the community you came from as defined as resources to children and families who has been exposed to traumatic events?

Yes No

11. I am willing to seek mental health counseling?

Not Willing 1--3---5---7---10 Very Willing

12. I would be willing to recommend mental health counseling to a peer.

Not Willing 1--3---5---7---10 Very Willing

13. I feel comfortable sitting next to a peer in class who has a mental illness.

Disagree 1--3---5---7---10 Agree

14. I would feel comfortable dating someone who has a mental illness.

Disagree 1--3---5---7---10 Agree

15. I feel anxious and uncomfortable around someone who has a mental illness.

Disagree 1--3---5---7---10 Agree

16. I would find it difficult to trust someone with a mental illness.

Disagree 1--3---5---7---10 Agree

17. Mental illnesses prevent students from performing their normal academic responsibilities.

Disagree 1--3---5---7---10 Agree

18. I believe students with mental illness can effectively be treated by university counseling services

Disagree 1--3---5---7---10 Agree

19. I believe Nebraska is more proactive towards mental health treatment compared to the rest of the United States.

Disagree 1--3---5---7---10 Agree

20. Yes___ No ___ I have a relative who has mental illness.