## **Use Authorization**

In presenting this thesis in partial fulfillment of the requirements for an advanced degree
at Idaho State University, I agree that the Library shall make it freely available for inspection. I
further state that permission for extensive copying of my thesis for scholarly purposes may be
granted by the Dean of the Graduate School, Dean of my academic division, or by the University
Librarian. It is understood that any copying or publication of this thesis for financial gain shall
not be allowed without my written permission.

Signature			
-			
Date			

# Taiwan K-12 Teachers' Attitudes Toward Mental Health Counseling and Psychotherapy

By

Ailun Li

### A thesis

submitted in partial fulfillment

of the requirements for the degree of

Master of Science in the Department of Psychology

Idaho State University

May 2023

May 2023
To the Graduate Faculty:
The members of the committee appointed to examine the thesis of Ailun Li find it
satisfactory and recommend that it be accepted.
Joshua K. Swift, Ph.D.
Major Advisor
Shannon Lynch, Ph.D.
Committee Member
Howard Fan, Ph.D.
Graduate Faculty Representative

November 4, 2021

Joshua Swift Psychology MS 8112

RE: Study Number IRB-FY2022-69: Taiwan K-12 Teacher and College Student Attitudes Toward Mental Health Counseling

Dear Dr. Swift:

Thank you for your responses to a previous review of the study listed above. I agree that this study qualifies as exempt from review under the following guideline: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording). The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects. This letter is your approval, please, keep this document in a safe place.

Notify the HSC of any adverse events. Serious, unexpected adverse events must be reported in writing within 10 business days.

You are granted permission to conduct your study effective immediately. The study is not subject to renewal.

Please note that any changes to the study as approved must be promptly reported and approved. Some changes may be approved by expedited review; others require full board review. Contact Tom Bailey (208-282-2179; fax 208-282-4723; email: humsubj@isu.edu) if you have any questions or require further information.

Sincerely,

Ralph Baergen, PhD, MPH, CIP

Human Subjects Chair

王櫻芬計畫主持人您好,

您所提下列計畫,業經研究倫理審查委員會審查通過,核可證明書請您登入審查系統下載。

案件編號: 202111HS012

計畫名稱:臺灣幼兒園到高中教師及大學生對心理健康諮商的態度

審查系統網址: <a href="http://iapply.rec.ntnu.edu.tw">http://iapply.rec.ntnu.edu.tw</a>

如何下載核可證明:

請登入系統,點選身分「計畫主持人」→ 審查作業→計畫案追蹤查閱→查找本案編號及名稱 點入案件,再點選「查看」→「核可證明書」即可下載。

研究倫理審查委員會核予有效期限至 2022 年 07 月 31 日止。

#### 注意事項:

- 1. 知情同意文件請使用核准版本;或請依核可之免除知情同意程序執行。(自 2021 年 11 月 15 日起,審查通過計畫其核定文件無核准章,請計畫主持人務必使用最新版本的核准文件執行。核准文件下載:審查系統→計畫案追蹤查閱→表單)
- 2. 若為多年期計畫,於核可期限屆至前6週,請申請「持續審查」。
- 3. 計畫執行中,若需更改計畫內容、修訂文件、更換收案助理、延長執行期間,請申請「變更審查」。
- 4. 若研究執行當中發生不良反應、異常事件(如個資洩漏)、參與者身心傷害等狀況, 請務必通報。
- 5. 有效期限屆期後3個月內,請申請「結案審查」。
  - ※請依研究材料保存年限辦理銷燬,並存查銷燬記錄以備隨案稽核。
  - ※已簽署之知情同意書請保存至結案審查通過三年後銷燬。

### ※此為系統自動通知信,請勿直接回覆。※

國立臺灣師範大學研究倫理中心敬上

電話 02-7749-1903/ 信箱: ntnurec@gmail.com

## **Table of Contents**

Abstract	ix
Chapter I: Introduction	1
Mental Health Concerns Across the Globe	1
Mental Health Concerns in Taiwan	2
Mental Health Treatment-seeking	8
Predictors of Treatment Use and Treatment Engagement Globally	10
Preferences	18
Research on Psychotherapy Preferences in Taiwan	20
Aims of the Current Study and Hypotheses	21
Chapter II: Methodology	23
Participants	23
Procedures	24
Measures	26
Data Analyses Plan	30
Chapter III: Results	37
Research Aim 1	37
Research Aim 2	43
Research Aim 3	48

Research Aim 451
Chapter IV: Discussion
Limitations62
Future Directions66
Conclusions and Clinical Implications68
References71
Appendix A100
Appendix B104
Appendix C
Appendix D108
Appendix E110
Appendix F112
Appendix G114
Appendix H115
Appendix I

# **List of Figures**

Figure 1	35
Figure 2	36
Figure 3	46
Figure 4	47

# **List of Tables**

Table 1	40
Table 2	41
Table 3	42
Table 4	49
Table 5	50
Table 6	52
Table 7	53

Taiwan K-12 Teachers' Attitudes Toward Mental Health Counseling and Psychotherapy

Thesis Abstract--Idaho State University (2023)

Previous research has suggested that K-12 teachers in Taiwan often experience high

psychological distress and low mental health treatment-seeking rates. The purpose of this study

was to understand Taiwanese K-12 teachers' attitudes towards mental health service. Data were

collected from 128 K-12 teachers, including measures of attitudes, public and self-stigma,

preferences, and intentions towards seeking treatment. Results indicated that participants

expressed significantly stronger intentions (p < .001) to seek help from a mental health

professional over other formal and informal treatment options. Self-stigma mediated the

relationship between public stigma and attitudes towards seeking professional help. K-12

teachers held the strongest preference for individual therapy compared with other intervention

formats. A significant difference in intentions to seek treatment based on the referral source was

also found (p < .001). The results of this study can provide guidance regarding methods for

advertising psychotherapy to K-12 teachers in Taiwan.

Key Words: psychotherapy, treatment-seeking, preference, attitude, intention

ix

# Taiwan K-12 Teachers' Attitudes Toward Mental Health Counseling and Psychotherapy Mental Health Concerns Across the Globe

Large scale population surveys and epidemiological studies have indicated that mental health concerns are commonly found throughout the world, with lifetime prevalence rates ranging from 10.7% to 48.6% (Charlson et al., 2019; Ginn & Horder, 2012; Kessler et al., 2009; Steel et al., 2014; Tomlinson & Lund, 2012). As a general estimate, the World Health Organization (WHO) has reported that approximately 1 billion people worldwide are affected by mental health disorders (WHO, 2020). Among all mental health disorders, anxiety disorders have been identified as being the most prevalent worldwide, affecting more than 200 million people every year (Our World in Data, 2021); however, very high rates of other disorders, such as major depressive disorder and substance use disorders, are also present. Although the research suggests that certain groups might be more vulnerable or susceptible to mental health concerns than others (e.g., females, homeless population, prisoners, sex workers), the research indicates that these types of problems can affect everyone, regardless of age, ethnicity, nationality, gender, socioeconomic status, and so on (Aldridge et al., 2018)

Not only are mental health concerns highly prevalent, but they have also been reported to be associated with a very high level of global disease burden (Murray et al., 2012; Prince et al., 2007; Rehm & Shield, 2019; Vigo et al., 2016). For example, 31.8% of long-term disability has been attributed to mental illnesses (Mathers & Loncar, 2006). Depressive and anxiety disorders, in particular, are ranked in the top ten leading causes of disease burden among people aged 10 to 24 years old (Collaborators, 2020). In total, mental health disorders rank fifth in terms of disability-adjusted life years (DALYs), costing a total of 125 million years worldwide (Global Health Data Exchange 2021). Although all mental health disorders come with a significant cost,

depression is associated with the highest cost in terms of DALYs (Whiteford et al., 2013). In addition, mental health disorders are correlated with high mortality rates (Walker et al., 2015). In one review, mental health disorders were estimated to cause nearly eight million deaths every year (Walker et al., 2015). That number equals 14.3% of the deaths that occur in a given year, including those due to old age, violence, and all other physical illnesses. Suicide, in particular, has been identified as one of the leading causes of death worldwide (Centers for Disease Control and Prevention 2019). Globally, approximately 800,000 people commit suicide each year (WHO, 2019). In the United States alone, one suicide happens every forty seconds (WHO, 2020).

#### **Mental Health Concerns in Taiwan**

Taiwan is an Asian island roughly the size of Maryland that is located in the South China Sea approximately 100 miles from the coast of mainland China. Its current population is just over 20 million people, of which 95% are Han Chinese. The primary language used in Taiwan is Mandarin, although many people also speak a Taiwanese dialect of Hokkien Chinese, Hakka Chinese, or one of 14 aboriginal languages. Taiwan has long been considered an economic booming location in the world (Sun & Fulginiti, 2007). In 2020, the gross domestic product (GDP) of Taiwan reached 660 billion U.S. dollars, making it the 21<sup>st</sup> largest economy in the world and 15<sup>th</sup> in terms of GDP per capita (Statista, 2021). Quick economic growth, although generally positive, can also have negative effects. For example, researchers have suggested that rapid economic development in Asian countries may cause negative impacts on people's mental health (Fu et al., 2013; Tseng et al., 2001). Taiwan seems to fit this pattern.

Mental health concerns seem to be highly prevalent in Taiwan. For instance, some estimates suggest that one in three people in Taiwan will experience a mental health disorder at some point in their life (Fu et al., 2013; Taiwan Ministry of Health and Welfare 2021).

Interestingly, the overall prevalence of probable common mental health disorders in Taiwan doubled from 1990 to 2010 (Fu et al., 2013). This significant increase was found across all sociodemographic and health groups, except for people who were over the age of 65 (Fu et al., 2013). Recently, the outbreak of the coronavirus disease 2019 (COVID-19) is also considered to be associated with an increased risk of mental health disorders in Taiwan, causing problems such as anxiety and depression (Chen et al., 2020; Feng et al., 2020; Wong et al., 2020). Associated with the increasing prevalence of mental health disorders, Taiwan experiences a very high rate of suicide and suicide attempts (Chuang & Huang, 2007; Yin et al., 2016; Zhang et al., 2010). Even though suicide has long been rated as one of the top ten leading causes of death in Taiwan, the suicide rates on the island have still increased over the last decade (Taipei Times, 2019).

Compared to the global average of deaths by suicide at 10.5 per 100,000 people (WHO, 2018), in Taiwan, the rate has been estimated to be about 16.8 per 100,000 (Kuo et al., 2012). Although there is some evidence that suicide rates in Taiwan may be dropping compared to the peak time, research does indicate a trend for rising suicide attempts over time (Lee, 2019).

Many factors may play a role in the high mental health prevalence rates in Taiwan. As previously mentioned, some have suggested that it may be linked to rapid economic development (Chuang & Huang, 2007; Yin et al., 2016; Zhang et al., 2010). Others have suggested that cultural influences may play a crucial role in aggravating mental health problems in Taiwan (Chu, 2012; Ma et al., 2010). Compared with Americans, Chinese people are more likely to inhibit negative emotions (Chu, 2012). Research suggests that excessively withholding negative emotions frequently results in mental health concerns (Consedine et al., 2002; Joseph et al., 1994; Watson & Pennebaker, 1989). Results from one study in Taiwan confirmed that a belief in emotional suppression was significantly correlated with mental health concerns, specifically

somatic symptoms, anxiety, and depression (Chu, 2012). Further, this study found that the more inclined an individual's attitude is towards emotional withholding, the more severe the mental health symptoms and dysfunction would be.

#### Mental Health Concerns of K-12 Teachers in Taiwan

Some occupations seem to be more stressful and more strongly associated with mental health concerns than others (Hilton et al., 2008). Teachers are one of these groups (Gray et al., 2017). Research suggests that K-12 teachers are more likely to experience anxiety, depression, and other stress-related health issues compared to the general population (Bauer et al., 2007; Borrelli et al., 2014; Kovess-Masféty et al., 2007; Madden-Szeszko, 2000). Although this is recognized as a global issue, a few studies have focused specifically on studying mental health concerns in K-12 teachers in Taiwan. The research that does exist suggests that stress and stressrelated problems are fairly common in K-12 teachers in Taiwan. For example, some studies suggest that 26% of teachers in Taiwan report that being a teacher is "very stressful," with the stress level increasing according to school size (Chou & Wang, 2013; Kuo, 2004; Kyriacou & Chien, 2004; Lee, 2002). In another study, work-related stress was identified as an essential predictor for depression tendency in K-12 teachers in Taiwan (Yu et al., 2010). Even though teachers in Taiwan do not always experience psychological symptoms, perceived occupational stress can have a negative impact on their overall mental health (Chung et al., 2013; Yu et al., 2012; Yu et al., 2018). In an attempt to categorize the mental health experiences of teachers in Taiwan, Yu et al. (2012) developed a nine-state model for teachers that included the conditions of floundering, languishing, struggling, hovering, sentimental, popular, striving, contented, and flourishing (2012). At the time of their study, they found that while only 1% of K-12 teachers in Taiwan were in a floundering state, 14.3% were in a languishing mental health state. In that

study, no teachers were identified as being in the struggling mental health state (Yu et al., 2012). One year later though, Chung et al. (2013) performed another study in Taiwan also using the nine-state model. They found that only 11.5% of the teachers were in one of the positive mental health states, while 21.4% of the teachers were in a languishing mental health state, experiencing low levels of subjective well-being and significant feelings of senselessness and emptiness (Chung et al., 2013). More recently, Yu et al. (2018) found that 0.1%, 9.8%, and 2.1% of K-12 teachers were in the struggling, floundering, and languishing mental health states, respectively. This represents an improvement from previous studies, but still suggests that many K-12 teachers in Taiwan are experiencing distress and mental health difficulties.

Cultural factors could play an important role in the mental health concerns among K-12 teachers in Taiwan. The people in Taiwan highly value education and entrance into top

Taiwanese high schools and universities is very competitive. Given this, parents in Taiwan often put a lot of pressure on schools and teachers in order to help their children earn spots in the best schools (Kyriacou & Chien, 2004; Murphy & Liu, 1998). Sometimes, parents even attribute students' failures to their teachers, blaming teachers for not doing enough to improve students' grades (Kyriacou & Chien, 2004; Murphy & Liu, 1998). The pressure from parents can cause significant amounts of stress for teachers (Chou &Wang, 2013). Students can also be another source of stress to teachers (Huang & Lai, 2015; Li, 2019). Research in Taiwan indicates that teachers' emotions are highly linked to student feedback. Positive feedback from students often brings happiness, while negative feedback can lead to depression and frustration for teachers (Huang & Lai, 2015; Li, 2019).

Apart from parental and student pressure in Taiwan, pressure is also frequently experienced from teachers themselves. Many teachers want their students to gain the highest

grades (Kyriacou & Chien, 2004; Murphy & Liu, 1998). The people of Taiwan highly value hard work (Han 2018). Due to their desire to succeed and their desire to help their students succeed, many teachers work overtime and continue working after they get home, including grading, preparing lessons, and even completing administrative tasks (Hung, 2011; Yang, 2001). The heavy workload can exacerbate negative mental health conditions, adding more stress to teachers' lives (Chou & Wang, 2013; Chung et al., 2013; Kuo, 2004; Kyriacou & Chien, 2004;). Further, high grades by students are often taken to represent hard work and strong teaching abilities to the teachers' peers and school administrators. Thus, teachers often strive to do everything they can to help their students get the best grades possible.

Taiwan's historic birth control policy may also add pressure on teachers. Facing an overpopulation potential, in the 1960s the government encouraged smaller family sizes (Ministry of the Interior, 2010). However, due to those historic efforts, fewer and fewer children have been born over the years and the population in Taiwan is still decreasing. Today, Taiwan has one of the lowest birth rates across the globe (Kohler et al., 2002). The decreased birth rate leads to a decreased number of students and classes, which creates a more competitive job environment for teachers. Factors associated with a teacher surplus and educational reforms can thus contribute to high stress levels in teachers (Hung, 2011; Lee et al., 2008; Wen, 2007).

Efforts to improve mental health concerns in K-12 teachers in Taiwan are needed since distress not only influences teachers' mental health, it has also been shown to also have a negative impact on their work performance and their students (Cheng & Ren, 2010; Chung et al., 2013; Harding et al., 2019; Oberle & Schonert-Reichl, 2016; Huang, 2013; Kuo, 1994; Li, 2019.) For example, research has indicated that K-12 teachers in Taiwan often experience burnout, which is highly correlated with their work-related stress levels (Kuo, 1994; Lee, 2007).

Associated with burnout, work related stress has been shown to lead to low levels of work engagement in Taiwanese K-12 teachers (Huang, 2013). Besides the negative impact on teachers' work performance, teachers' unhealthy mental states can also affect their students' well-being (Li, 2019; Oberle & Schonert-Reichl, 2016). Research outside of Taiwan suggests that stress contagion exists between teachers and students, such that a higher level of burnout and stress in teachers is associated with higher levels of stress for students (Oberle & Schonert-Reichl, 2016). Moreover, teachers' well-being (or lack thereof) and their experiences of depressive symptoms have been found to be correlated with their students' well-being and psychological distress (Harding et al., 2019). In Taiwan specifically, teachers' emotions have been shown to significantly impact students' emotions and academic performance (Li, 2019). Taken together, the research suggests that improving K-12 teachers' mental health conditions in Taiwan could have a number of benefits for teachers themselves as well as the broader society.

#### **Mental Health Treatment-seeking**

Fortunately, psychotherapy has been shown to be an effective treatment for mental health concerns (Barkham & Lambert 2021; Goldfried, 2013; Wampold, 2007). Over the years, the effectiveness of psychotherapy has been well-documented (Bolton et al., 2003; Coursey et al., 1995; Leichsenring & Rabung, 2011; Seligman, 1995; Shedler, 2012; Smith & Glass, 1977; Wampold, 2007) Psychotherapy has been shown to be effective for adults and children (Kazdin, 1991; Smith & Glass, 1977; Wampold, 2007). Its effectiveness has been demonstrated for a variety of mental health disorders (Bolton et al., 2003; Chambless & Ollendick, 2001; Cuijpers et al., 2011; Deacon & Abramowitz, 2004; Vocks et al., 2010; Wilson et al., 2010). The effects have also been documented in research settings, as well as applied naturalistic ones (Barkham et al., 2021). The existing research also indicates that on average, clients who receive

psychotherapy end treatment in a much better state than those with mental health problems who do not receive treatment (Cohen, 2013; Smith & Glass, 1977; Wampold, 2007). Further, psychotherapy has been shown to perform equally to or better than medication for most psychological problems (Kamenov et al., 2017; Seligman, 1995).

Although psychotherapy is considered an effective option for people with mental health concerns, most people with these concerns remain untreated (Andrews, Henderson et al., 2001; Andrews, Issakidis et al., 2001;Kohn et al., 2004; Tomlinson & Lund, 2012). For example, in the United States, the rate of utilization of psychotherapy has been found to range between 3.18% to 3.6% of the general population (Olfson & Marcus, 2010; Olfson et al., 2002). This is despite approximately 20% of the population being estimated to experience a mental health concern at any given time (Substance Abuse and Mentalh Health Services Administration, 2020). Recent data collected in United States suggested that among 51.5 million adults with mental health concerns, only 44.8% of them received any form of mental health treatment (Substance Abuse and Mentalh Health Services Administration, 2020). Further, it has been estimated that between 76% to 85% of people with mental health concerns who live in low- and middle-income countries do not get any type of professional mental health help (Farooq, 2013; Wang et al., 2007). This is even true for people with severe mental illness (Lora et al., 2012).

#### **Mental Health Treatment-seeking in Taiwan**

Similar to other areas of the world, rates of professional mental health help-seeking in Taiwan seems to be low (Chang, 2007a; Lin, 2014). Research suggests that people with mental health concerns in Taiwan tend to distance themselves from seeking psychological help (Chang, 2007a). For example, one study reported that only a small number of students in Taiwan utilize their schools' mental health services, even when they are freely available (Lin, 2014). As another

example, some reports suggest that only 20% of Taiwanese with depression symptoms seek out professional help (Yang. 2018). Overall, research indicates that people in Taiwan have a low acceptance for psychotherapy (Soong, 1998).

There may be many reasons for the low utilization rate of psychotherapy in Taiwan. As previously mentioned, Taiwanese people tend to be hesitant about sharing their emotions with others (Chu, 2012). In particular, people in Taiwan are especially cautious when talking about mental health. For example, one study found that only 5.7% of those surveyed had ever talked about mental health concerns with others, and only 12.3% would ever be willing to make such a disclosure at some point in the future (Han et al., 2015). Some have suggested that discrimination fears and misperceptions of mental health are the primary reasons why people with psychiatric disorders in Taiwan are less likely to admit their issues and accept the treatment (Chien et al., 2004).

In Taiwan, of those who are willing to talk to others about mental health concerns, many do not seek professional mental health help. Research suggests that most with mental health concerns intend to rely on self-therapy or alternative therapy (i.e., yoga, foot massage, tui na) instead of seeking psychotherapy (Pan et al., 2005; Yang, 1992). This is despite the research documenting the superior efficacy of psychotherapy to these other approaches (Barkham et al., 2021; Lambert, 2013). Given the lack of empirical evidence supporting the use of these type of interventions for mental health concerns, individuals who seek these treatments instead of psychotherapy or other professional forms of mental health help could still be considered as unor under-treated (Chien et al., 2004).

#### **Predictors of Treatment Use and Treatment Engagement Globally**

A Theory of Planned Behavior is one model that is often used to explain individuals' decisions to take actions, including the action of mental health treatment-seeking (Ajzen, 1985). According to the Theory of Planned Behavior and its predecessor, Theory of Reasoned Action, most actions that an individual takes are driven by intentions and perceived behavioral control (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Intentions, in turn, are thought to be influenced by other factors such as attitudes toward the behavior and subjective norms (i.e., others' expectations about executing the behavior) (Ajzen & Fishbein, 1980). This model has been widely accepted to describe mental health treatment seeking. For instance, when someone has positive attitudes, they develop stronger intentions to seek treatment. When strong intentions are presented with some level of perceived behavioral control (available resources), individuals are more likely to seek help.

#### **Intentions to Seek Treatment**

Intentions are broadly defined as a will that one has to execute certain actions (American Psychological Association, 2021). Specific to mental health, intentions represent a person's willingness to seek professional mental health help when they experience a psychological need. Several different measures of mental health treatment seeking intentions exist in the literature; however, the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005) seems to be the most commonly used one. Using this measure, individuals are asked to rate their likelihood (ranging from "extremely unlikely" to "extremely likely") for seeking help from different resources (e.g., self, family, friends, psychologist/counselor) if they were to experience a mental health concern. Thus, while overall intentions for help-seeking can be found by summing the responses across the whole measure, intentions for particular categories of services (e.g.,

professionals) or specific individual services (e.g., psychotherapy) can be found by considering ratings on only individual or a select subset of items.

According to a meta-analysis that included data from 18 studies conducted in the United States, help-seeking intentions were found to be significantly associated with the anticipated utility of services (Li et al., 2014). Several studies have also suggested that help-seeking intentions are significantly correlated with actual help-seeking behavior (Ciarrochi & Deane, 2001; Deane et al., 2001; Gross & McMullen, 1983; Morgan et al., 2003; Nagai, 2015; Wilson et al., 2007); however, the results have been somewhat mixed depending on the location in which the study was conducted. For example, low help-seeking intentions in the United States and Canada have been found to be associated with a lower likelihood of treatment-seeking (Morgan et al., 2003; Wilson et al., 2007). However, research conducted in Australia reports only a weak relationship between help-seeking intentions and treatment-seeking behaviors (Deane et al., 2001). Further, a recent study conducted with a South Korean population reported that even when participants reported some help-seeking intentions, they were still reluctant to perform actual treatment-seeking behaviors (Lee & Shin, 2020).

#### **Attitudes Toward Treatment-seeking**

One of the most consistent predictors of mental health help-seeking intentions and actual help-seeking behaviors in the literature are attitudes toward treatment-seeking (Adler et al., 2015; Buser, 2009). An attitude is broadly defined as an emotion, an evaluation, or a feeling towards a targeted object (American Psychological Association, 2021). Attitudes can range from positive to negative and are thought to include affective, behavioral, and cognitive components (Eagly & Chaiken, 1993; Rosenberg et al., 1960). The affective component represents the attitude of feeling, the behavioral component represents the impact of attitudes on behaviors, and the

cognitive component represents beliefs and knowledge that people possess (Rosenberg et al., 1960). Several different measures of people's attitudes toward mental health treatment-seeking exist, most relying on a self-report format. The most commonly used measure of attitudes in the literature is the Attitudes Toward Seeking Professional Psychological Help scale (ATSPPH; Fischer & Turner, 1970) which assesses openness to seeking help, the value one places on help-seeking, and the perceived need.

As mentioned earlier, people's attitudes towards mental health concerns and treatment-seeking are thought to have an impact on treatment-seeking intentions and behavior (Adler et al., 2015; Buser, 2009). Unfortunately, negative attitudes toward mental health treatment-seeking have been observed across the globe (Mojaverian et al., 2013; Schnyder et al., 2017; Vogel et al., 2017) and attitudinal barriers are considered a common reason for people to avoid seeking treatment (Adler et al., 2015; Andrade et al., 2014; Bruwer et al., 2011; Rice et al., 2020; Schuler et al., 2015; Tomczyk et al., 2020). For example, research conducted in high-income countries, such as Germany, Israel, and Japan, suggests that the majority of the population possess negative attitudes towards seeking treatment even if there is a specific mental health need (Andrade et al., 2014). In low-income countries, such as Iraq, Columbia, and South Africa, research indicates that negative attitudes are even more pervasive (Andrade et al., 2014).

#### **Stigma Toward Treatment-seeking**

Negative attitudes toward mental health treatment-seeking are largely thought to be explained by the presence of stigma (Corrigan & Bink, 2005). Mental health stigma is defined as negative views that people hold against those with mental health concerns (Sickel et al., 2014). This can show up as stigma for having a mental health concern (a topic outside of the scope of this project) or stigma for seeking out help for a mental health concern (a topic central to the

scope of this project). Two main types of stigma for treatment-seeking have been identified in the literature: public stigma and self-stigma (Vogel et al., 2009; Vogel et al., 2006). Public stigma refers to negative attitudes and beliefs that are seen in the general population towards people who seek out professional help for mental health concerns (Corrigan & Penn, 1999). Public stigma can lead to discriminatory behaviors, and when perceived by those who seek treatment, poor self-efficacy and negative attitudes toward treatment-seeking (Pedersen & Paves, 2014). Self-stigma is defined as negative attitudes that one has about oneself for seeking treatment for a mental health concern (Corrigan & Rao, 2012). Self-stigma is thought to result from an internalization of public stigma, and may result in self-discrimination, self-isolation, low self-esteem, and reduced self-efficacy; all of which eventually decrease the likelihood of seeking mental health treatment (Britt et al., 2015; Corrigan & Rao, 2012).

Public stigma and self-stigma are most frequently assessed in the literature with self-report measures developed by David Vogel, including the Self-Stigma of Seeking Help scale (SSOSH; Vogel et al., 2006) and the Perception of Stigmatization of Others for Seeking Help scale (PSOSH; Vogel et al., 2009). On the SSOSH, individuals are asked to rate the degree to which they would agree with negative thoughts and feelings about themselves if they were to seek out treatment (e.g., feel inferior, feel inadequate, lower self-confidence). On the PSOSH individuals are asked to rate the degree to which they believe other people will experience them negatively if they seek out mental health help (e.g., think bad things of you, react negatively to you).

The existing research on stigma related to mental health treatment-seeking is robust. Specifically, stigma towards mental health treatment-seeking has been found to have a direct impact on treatment-seeking behaviors (Satcher, 2000; Sickel et al., 2014). Greater perceived

stigma is associated with both more negative views about treatment-seeking and less frequent treatment-seeking behavior (Barney et al., 2006; Conner et al., 2010; Franz et al., 2010; Jennings et al., 2015; Vogel et al., 2009).

Further, the existing research suggests that stigma toward mental health treatment-seeking should been recognized as a global concern (Ciftci et al., 2013; Crabb et al., 2012; Lauber & Rössler, 2007; Thornicroft et al., 2016; Yu et al., 2018; Zewdu et al., 2019). In one multi-national study, findings supported the claim that perceived stigmas are negatively associated with attitude towards seeking treatment across countries (Vogel et al., 2017). Mental health and mental health treatment seeking stigma are particularly present in Asian countries. For instance, compared with Western countries, people with mental health concerns in Asian countries are more likely to be stigmatized (Lauber & Rössler, 2007; Pang et al., 2017). They are often viewed as aggressive and dangerous to others, and a shame to their families (Lauber & Rössler, 2007). Due to this type of stigmatization, they are more likely to keep their concerns hidden, rather than seek professional mental health help (Lauber & Rössler, 2007). Indeed, some research suggests that for Chinese people in particular, stigma is one of the main barriers that prevents people from seeking professional help (Yu et al., 2018).

### Relationships between Public Stigma, Self-Stigma, Attitudes, and Intentions

Although stigma, attitudes, and intentions have all been found to individually predict help-seeking behavior, these variables have also been found to be related to each other. For example, public stigma, self-stigma, and attitudes have all been identified as prominent predictors for help-seeking intentions (Vogel et al., 2007; Wade et al., 2015). The presence of stigma, including both public stigma and self-stigma, have been found to be associated with lower help-seeking intentions, often due to embarrassment and a worry of others' negative

reactions (Barney et al., 2006). Consistent with the Theory of Planned Behavior, attitudes have also been found to be significantly associated with help-seeking intentions (Fishbein & Ajzen, 1975; Li et al., 2014). Previous studies have found that people with positive help-seeking attitudes are more likely to also possess positive help-seeking intentions, while negative attitudes are associated with lower help-seeking intentions (Mackenzie et al., 2006; Reynders et al., 2014; Seyfi et al., 2013).

While research has shown that both stigma and attitudes can predict help-seeking intentions, a body of research has also sought to identify the specific nature of the relationships between them. This research suggests that both public and self-stigma are inversely correlated with help-seeking attitudes – the higher the perception of stigma, the more negative the attitudes (Fripp & Carlson, 2017; Mak et al., 2014; Vogel et al., 2006). The relationship between these variables has been found to be mediational in nature. That is, the relationship between public stigma and attitudes is partially mediated by the presence of self-stigma (Vogel et al., 2007; Vogel et al., 2010; Vogel et al., 2017). In turn, the relationship between public stigma and intentions has been found to be mediated by both self-stigma and attitudes (Vally et al., 2018; Vogel et al., 2007).

Although the mediational relationships between these variables is demonstrated with correlational data, the theory behind them suggests that negative opinions about treatment seeking exist (high public stigma). These negative opinions are then perceived by individuals who might be considering mental health help. They then internalize the negative opinions (self-stigma) which results in negative attitudes toward treatment seeking. Due to the negative attitudes, lower intentions to actually seek help are observed. In contrast, if positive public opinions about treatment seeking are present (low public stigma), one will also develop positive

views of oneself for considering treatment seeking (low self-stigma), and in turn will have positive attitudes toward psychological help and stronger intentions to seek it when there is a mental health need.

### Research on Help-Seeking Intentions, Attitudes, and Stigma in Taiwan

To date, only a few studies have examined the presence of help-seeking stigma, attitudes, and intentions in Taiwan. A few studies have examined the presence of stigma toward mental health concerns in general. In one of these studies, Yen et al. (2005) examined the relationship between depression severity and the presence of self-stigma in a sample of 247 adult participants who were diagnosed with a depressive disorder. They found that individuals with higher levels of depression and lower levels of education were more likely to experience higher levels of selfstigma. In contrast, self-stigma scores were not significantly associated with participant age, gender, or social status. In another study, Zhuang et al. (2017) compared levels of stigma for schizophrenia and depression between participants in Taiwan, Australia, and Japan. Participants in Taiwan had more difficulty identifying depression and schizophrenia compared to participants in the other countries, they were similar to participants in the countries in the level of stigma they experienced related to schizophrenia but were lower in their levels of stigma related to depression compared to participants in Japan. Although these studies demonstrate that stigma for mental health concerns does exist in Taiwan, the focus of these studies was specifically on stigma for seeking professional mental health treatment (which is the focus of the current study).

In one study that did focus specifically on treatment-seeking, Chang (2007b) examined the relationship between help-seeking attitudes and mental health distress. In that study, 961 first-year students enrolled in a private university in Southern Taiwan were asked to complete the ATSPPH-SF (Fischer & Farina, 1995) along with the Beck Depression Inventory-II (BDI-II

Beck et al., 1996) and the Beck Anxiety Inventory (BAI; Beck & Steer, 1990). They found that while BDI-II scores were significantly associated with ATSPPH-SF scores, BAI scores were not. For depression specifically, higher depression severity was associated with more negative attitudes toward mental health treatment-seeking. Interestingly, female participants were found to hold more favorable attitudes towards seeking professional psychological help than male participants.

Vogel and his colleges conducted a study to evaluate help-seeking stigma across ten countries, which Taiwan was included (Vogel et al., 2017). The average public stigma and self-stigma in Taiwan were 8.79 (SD=2.16) and 25.33 (SD=4.96) respectively. The average public stigma and self-stigma scores in Taiwan ranked 7<sup>th</sup> and 6<sup>th</sup> compared with other countries. The study also examined the mediation model between self-stigma, public stigma, and attitude. The results for Taiwan revealed significant correlation between public stigma and self-stigma, and between self-stigma and attitude. Moreover, Taiwan also fit the mediation model which self-stigma mediate the relationship between public stigma and attitude ( $\chi$ 2=135.34; SRMR=.06).

In summary, very limited research on stigma, attitudes, and help-seeking intentions has been conducted in Taiwan. The existing research does indicate that stigma for having mental health concerns does exist (Yen et al., 2005; Zhuang et al., 2017). It also suggests that higher levels of depression are associated with more negative attitudes toward treatment-seeking (Chang, 2007a). Further, the research suggests that attitudes and stigma in Taiwan may not be as negative as other areas of the world and that self-stigma may mediate the relationship between public stigma and attitudes in college students (Vogel et al., 2017). However, this body or research is small and additional studies are needed with non-college student populations in

Taiwan to gain a better understanding of the relationships between stigma, attitudes, and helpseeking intentions in this country.

#### **Preferences**

While stigma, attitudes, and intentions have been found to predict help-seeking behaviors, preferences for treatment are thought to play a role in treatment-seeking, as well as treatment engagement, completion, and outcomes (Swift et al., 2018; Swift & Greenberg, 2015). In psychotherapy, client preferences are defined as the specific conditions or behaviors that clients desire in their treatment (Arnkoff et al., 2002). Contrary to another similar concept of client expectations, which represent clients' predictions of how the treatment will be, clients' preferences are their hopes and desires for the treatment (Swift et al., 2018). There are three primary domains of client preferences in psychotherapy: role preferences, therapist preferences, and treatment type preferences (Swift et al., 2018). Role preferences represent the type of roles (i.e. passive/active) that clients desire for both themselves and their therapists. Therapist preferences involve certain characteristics that clients want to see in their therapists. These can be preferences about the therapists' demographics, training, experience, or personality.

Treatment type preferences are clients' desires for a specific treatment approach (Swift et al., 2018).

The existing research provides strong evidence that clients' preferences play an important role in psychotherapy. Client preference accommodation has been found to be associated with treatment initiation and adherence (Raue et al., 2009). It is thought that if preferred options are not available, clients will be less likely to seek out treatment (Swift & Greenberg, 2015). Previous research has also indicated that client preference accommodation can have a significant impact on psychotherapy outcomes and dropout rates (Kwan et al., 2010; Swift et al., 2018). In

the most comprehensive and recent meta-analysis examining the effects of client preference accommodation, Swift and colleagues (2018) synthesized data from 53 different studies, including randomized controlled trials, partially randomized controlled trials, choice-no choice studies, and correlational studies. Across studies, clients whose preferences had been accommodated were almost two times less likely to drop out of treatment early (O.R. = 1.79). Preference accommodation was also associated with more positive treatment outcomes; however, with a small observed effect (d = 0.28). The effects of accommodating preferences were consistent across client age, gender, ethnicity, education level, preference type, and treatment type.

Although the research has indicated that the effects of accommodating client preferences remain consistent across most client variables, the exact preferences that clients do hold have been found to differ depending on who the client is (Swift et al., 2018; Tompkins et al., 2013). Importantly, preferences often differ based on the client's race, ethnicity, or culture. In brief, race and ethnicity differences have been found when examining treatment preferences (Jimenez et al., 2012; Noël, 2010). For instance, compared with African Americans, Non-Latino White, Latinos, and Asian Americans are more likely to prefer medications instead of psychotherapy (Jimenez et al., 2012). Other research has indicated that African Americans in particular desire spirituality to be included in their treatment (Jimenez et al., 2012; Johnson et al., 2005). Alaska Natives have been found to prefer relaxation and natural remedies over psychotherapy for the treatment of mental health problems (Stewart et al., 2013). Moreover, several studies have found that preferences for a therapist differ based on client race/ethnicity. For example, Asian Americans have been found to be more likely to prefer seeking help from a friend or family member for mental health needs compared to a professional therapist (Stewart et al., 2013; Suan & Tyler,

1990). In other studies, minority clients report that they hold strong preferences to work with a therapist who speaks their same primary language (Gray et al., 2009; Jimenez et al., 2012). Several studies have found that ethnic minority clients, particularly those who more strongly identify with their minority culture, hold stronger preferences for an ethnic match with their therapist (Atkinson et al., 1986; Beitel et al., 2013; Cabral & Smith, 2011; Fuertes & Gelso, 1998; Swift et al., 2015). Additionally, cultural understanding is another important therapist quality frequently chosen by all ethnic minority groups (Jimenez et al., 2012). Thus, it is important to not only study preferences for clients as a whole, but to seek to identify the preferences that various groups of clients hold.

#### Research on Psychotherapy Preferences in Taiwan

While several studies exist that report psychotherapy preferences for Asian Americans (Atkinson et al., 1998; Lee et al., 2021; Ruzek et al., 2011; Swift et al., 2013; Webster & Fretz, 1978), in our review of the literature, we identified only one study that examined mental health treatment preferences in Taiwan. In this study, the authors examined mental health treatment-seeking preference within the Taiwanese population from 1990 to 2000 (Wu et al., 2014). Specifically, the help-seeking preferences data were extracted from Taiwan Social Change Survey, which was randomly distributed to select individuals from the Taiwanese population every five years during the study time period (i.e., 1990,1995, and 2000). A total of 6,498 respondents participated in the three distributions. Specifically, in this survey, participants were given a case example describing either depression or anxiety concerns and then were instructed to indicate their preference for formal help-seeking from a medical doctor or psychiatrist or informal help-seeking (e.g., family, friends, spiritual). Interestingly, across the years only 15.05% indicated that they would prefer to seek professional help for the mental health concerns.

Although the results of this study are important (indicating low preferences for professional mental health help), they are from a survey conducted over two decades ago, did not specifically ask about psychologists, and did not ask about preferences for specific types of mental health research. Thus, additional research on treatment-seeking preferences in Taiwan is needed.

#### Aims of the Current Study

The broad aim of the study was to gain a better understanding of K-12 teachers' attitudes, intentions, experiences of stigma, and preferences towards psychotherapy and counseling for mental health concerns in Taiwan. Although some research exists on attitudes and stigma toward psychotherapy in Taiwan (Chang, 2007a; Vogel et al., 2017)), the existing research is limited to only a couple of studies which have not investigated intentions or preferences, and no research on these variables has been conducted with K-12 teachers in Taiwan. Efforts to understand K-12 teachers' attitudes, intentions, perceptions of stigma, and preferences towards mental health services in Taiwan is needed (Li, 2019). Previous research suggests that K-12 teachers in Taiwan often experience high levels of distress (Chou & Wang, 2013). The distress that K-12 teachers experience may have several negative impacts, including on their students' mental health and well-being (Harding et al., 2019). Thus, a better understanding of K-12 teachers' attitudes and preferences toward mental health treatments may help in formulating better psychotherapy and counseling services to help K-12 teachers when there is a mental health need, which in turn could have a positive impact not only for teachers, but also for their students.

Within the broad aim of this study, we had four specific research aims. The first specific aim of this study was to test whether the strength of intentions to seek help from a mental health professional differed significantly from intentions to seek help from other sources. Given the results from Wu et al. (2014) indicating lower preferences for formal help-seeking among the

general population in Taiwan, we hypothesized that intentions to seek help from a mental health professional for psychological concerns would be lower than other informal help-seeking options.

The second specific aim of this study was to test a mediational relationship between public stigma, self-stigma, attitudes, and intentions. Previous research has indicated that a mediational relationship between these variables exists in other populations (Vogel et al., 2007). Further, there is some research suggesting that a mediational relationship between public stigma, self-stigma, and attitudes exists in a Taiwan general population (Vogel et al., 2017). Thus, we hypothesized that we would also find a mediational relationship between these variables in a Taiwan sample of K-12 teachers. Specifically, self-stigma was hypothesized to partially mediate the relationship between public stigma and attitudes and self-stigma and attitudes were hypothesized to partially mediate the relationship between public stigma and intentions.

The third specific aim of this study was to test whether help-seeking intentions differ among Taiwanese K-12 teachers depending on the referral source of the recommendation to seek help. Specifically, Taiwanese K-12 teachers might differ in their likelihood of seeking mental health services depending on if a friend, colleague, boss, student, etc. recommend it to them. In one previous study, college student athletes were found to be more likely to seek psychotherapy when referred to it by a family member compared to a coach, teammate, or oneself (Wahto et al., 2016). Thus, differences might also exist for K-12 teachers. Although we hypothesized that differences in intentions would exist based on the referral source, we did not make any specific hypothesis about which referral source would produce the highest intentions.

The final specific research aim was to gain a better understanding of the attitudes and preferences that Taiwanese K-12 teachers hold toward various professional mental health

services that could be offered, including group psychotherapy/counseling, individual psychotherapy/counseling, mental health educational videos, a mental health educational workshops, and mental health educational written materials. No specific hypothesis was made regarding this research aim; instead, the goal was simply to gain a better understanding of mental health service options that might be most appealing and acceptable to K-12 teachers in Taiwan.

#### Method

#### **Participants**

Participants in this study consisted of 128 K-12 teachers recruited from Taiwan. Several recruitment methods were used. First, the recruitment script (English and Chinese versions can be found in Appendix I) was sent via direct emails to all K-12 teachers on the Teacher Support Center (a counseling resource center developed by researchers at National Taiwan Normal University who was collaborating on this project) contact list. Second, several faculty members in the National Taiwan Normal University Department of Educational Psychology and Counseling shared the recruitment script with their contact lists. Third, participants were asked to share the survey with any other K-12 teachers that they know. We also planned to advertise the study to K-12 teacher social media groups in Taiwan; however, the desired sample size was achieved through the first three recruitment methods.

Of the 128 participants, 122 (95.3%) identified as Taiwanese, 5 (3.9%) from Mainland China, and 1 (0.8%) identified as Other. The majority identified as female (n = 105), while 22 identified as male, and 1 as non-binary. The average age of the sample was M = 36.88 (SD = 7.55) years old. On average, they graduated 11.6 years ago and had taught for 11.32 years. In total, 28.1% of the participants were teaching 1<sup>st</sup> grade, 25% 2<sup>nd</sup> grade, 26.6% 3<sup>rd</sup> grade, 25% 4<sup>th</sup> grade, 28.1% 5<sup>th</sup> grade, 28.1% 6<sup>th</sup> grade, 21.9% 7<sup>th</sup> grade, 20.3% 8<sup>th</sup> grade, 24.2% 9<sup>th</sup> grade,

11.7%  $10^{th}$  grade, 10.2%  $11^{th}$  grade, and 12.5%  $12^{th}$  grade (the overall percentage across grades totals more than 100% because many participants were teaching multiple grades at the same time). A little over half (58.4%) of the participating K-12 teachers reported having experienced mental health issues at some point in their life and 47.2% of them had previously sought mental health services. The participating K-12 teachers were asked to rate their current stress level from a 0 (none) to 10 (extreme) - 43.7% of them endorsed a 5 or above on this measure (M = 5.29, SD = 1.87).

The minimal sample size was determined based on a power analysis conducted in G\*Power (version 3.1.9.7; http://www.gpower.hhu.de/en.html; Faul et al., 2009; Faul et al., 2007). Specifically, the analyses for Research Aim 3 (a six-way repeated measures ANOVA) would require the largest sample size to conduct with adequate power. A power analysis for a six-way repeated measures ANOVA estimating the smallest meaningful effect size, power of .80, an alpha of .05, and a low correlation between measurements (taking a conservative approach) indicated that 87 participants would be needed to detect significance. Although adequate data could be collected with just 87 participants, we a priori planned to collect data beyond the minimal number in order to increase generalizability of the sample.

#### **Procedure**

Upon seeing the recruitment email, individuals who were interested in the study were able to click on a secure link that directed their web browser to the online survey. The online survey was created using Qualtrics. Initially, potential participants were shown an informed consent page, which provided a general description of the study (see Appendix A for English and Chinese versions). Interested individuals were required to endorse that they are eligible to participate, had read the informed consent page, and agreed to participate prior to proceeding to

the rest of the survey. The survey then began with demographic and work history questions. Four self-report questionnaires assessing attitudes, intentions, perceptions of public stigma, and selfstigma toward seeking psychotherapy or counseling were then administered, being presented in a randomized order across participants. Participants were then asked to consider different referral sources (boss, fellow teacher, friend, intimate partner, parent, or student) and indicate their intentions to seek psychotherapy based on a recommendation from each. Last, participants were asked to rate their attitudes (intentions to use, preferences for, stigmatization against, and strength of barriers against) toward various forms of mental health help that may be available (group psychotherapy/counseling, individual psychotherapy/counseling, mental health educational videos, mental health educational workshops, and mental health educational written materials). At the end of the survey, participants were asked about their mental health and treatment use history. Attention check questions were inserted into the questionnaires, and participants who selected a wrong answer for any of the attention check questions were excluded from the data analyses. The entire survey took approximately 20 to 30 minutes to complete. Participants were compensated with 400 New Taiwan Dollars (approximately 15 U.S. dollars) for completing the survey. Institutional review board approval was obtained from Idaho State University and National Taiwan Normal University (home university for collaborators in Taiwan) prior to the start of data collection. The entire survey was distributed in Mandarin Chinese (traditional characters). Previously validated Mandarin Chinese versions of the PSOSH, SSOSH, ATSPPH-SF, and GHSQ questionnaires were used. For the rest of survey and questionnaires (i.e., informed consent, demographic questions, preference questions, debriefing), English versions were first created. These were then translated from English to Mandarin Chinese by the author, who is fluent in both Mandarin Chinese and English. The translated

versions were then shared with colleagues at National Taiwan Normal University (who are also fluent in both Mandarin Chinese and English) for review. They made some slight wording changes to reflect the Taiwanese culture and term usage. These were then shared with the first author and faculty supervisor for final approval.

#### **Measures**

### Demographic, Work, and Mental Health History Questions

Participants' gender, age, ethnicity, education level, years since graduation, years working as a K-12 teacher, grades taught, and location were collected through a demographic questionnaire administered at the beginning of the study. At the very end of the survey, participants were also asked to indicate whether they have ever experienced a mental health concern and if they have ever sought out professional mental health services. They were also asked to indicate their current level of distress on a Likert-type scale, ranging from 0 (none) to 10 (extreme). See Appendix B and H for demographic, work, and mental health history questions.

#### **Attitudes toward Seeking Psychotherapy**

Participant's attitudes towards psychotherapy and counseling were measured with the Attitude Towards Seeking Professional Psychological Help-Short Form (ATSPPH-SF; Fischer & Farina, 1995). The ATSPPH-SF is a 10-item self-report questionnaire in which participants rate each item on a 4-point Likert-type scale, ranging from 0 (disagree) to 3 (agree). Five items from this questionnaire are reverse scored after which total scores are calculated by summing the individual item scores. For the total score, higher scores indicate more positive views about seeking psychotherapy or counseling. Previous research has indicated strong psychometric properties for the ATSPPH-SF. For example, the correlation between ATSPPH-SF and the original ATSPPH questionnaire has been found to be r = .87 (Fischer & Farina, 1995). Further,

the internal consistency of ATSPPH-SF has been found to range from  $\alpha$  = .77 to  $\alpha$  = .84 (Constantine, 2002; Elhai et al., 2008; Fischer & Farina, 1995; Komiya et al., 2000), and the test-retest reliability apart from one month has been documented at r = .80 (Fischer & Farina, 1995). Moreover, a negative correlation has been found between the ATSPPH-SF and stigma-related worries for seeking professional help (Elhai et al., 2008; Komiya et al., 2000; Vogel et al., 2005), demonstrating strong concurrent validity. In addition, with a sample of college students in Taiwan specifically, adequate internal consistency and concurrent validity have been demonstrated (Vogel et al., 2017). For this study, since the targeted population was K-12 teachers from Taiwan, a previously tested Chinese version of the ATSPPH-SF was used (Chen et al., 2020) (see Appendix C for English and Chinese versions). The internal consistency for the measure with the current sample was  $\alpha$  = .65

## **Intentions to Seek Mental Health Help**

Participants' help-seeking intentions were measured using the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005). The GHSQ is a 10-item questionnaire in which individuals are asked to rate their likelihood for consulting formal or non-formal mental help sources (e.g., intimate partner, parents, mental health professional, etc.). Items are rated on this measure using a 7-point Likert-type scale, ranging from 1 (extremely unlikely) to 7 (extremely likely). For each helping source, participants are asked to rate their intentions for seeking help for suicidal ideation and personal/emotional problems separately. Total help-seeking intention scores can then be calculated by summing the ratings across all sources or ratings can be calculated for one particular type of resource. Higher scores indicate a stronger likelihood to seek help or use a particular resource for a mental health need. When combining ratings across resources, an adequate test-retest reliability (r = .88) and internal consistency ( $\alpha = .83$ ) have been

demonstrated (Wilson et al., 2005). For the current study, ratings of "mental health professional (e.g., psychologist, social worker, counsellor)" were compared to ratings of the other support services. For this study, a previously tested Chinese version of the GHSQ was used (Chen et al., 2020) (see Appendix D for English and Chinese versions). The internal consistency for the measure with the current sample was  $\alpha = .73$ 

## Perceptions of Public-Stigma for Seeking Psychotherapy

**Self-Stigma for Seeking Psychotherapy** 

Perceptions of public stigma toward seeking psychotherapy or counseling was measured with the Perceptions of Stigmatization by Others for Seeking Help scale (PSOSH; Vogel et al., 2009) The PSOSH is a 5-item self-report questionnaire. Items on this measure are scored on a 4point Likert-type scale, ranging from 1 (not at all) to 4 (a great deal). Item scores are added to get a total score, with higher scores indicating a stronger perception that negative public stigma exists toward those who seek psychotherapy or counseling. The PSOSH has been demonstrated to possess adequate internal consistency ( $\alpha = .88$ ) and test-retest reliability (r = .82; Vogel et al., 2007). Additionally, the PSOSH has been shown to be moderately correlated with other stigmarelated measures (e.g., self-stigma, public stigma toward counseling, and public stigma toward mental illness) and negatively associated with attitude towards seeking psychotherapy, thus demonstrating concurrent and predictive validity (Vogel et al., 2007). Particularly relevant to the current study, with a sample of college students in Taiwan, adequate internal consistency (\alpha = .90) has been demonstrated (Vogel et al., 2017). For this study, a previously tested Chinese version of the PSOSH was used (Vogel et al., 2007) (see Appendix E for English and Chinese versions). The internal consistency for the measure with the current sample was  $\alpha = .81$ 

Self-stigma for seeking psychotherapy or counseling was measured using the Self-Stigma of Seeking Help Scale (SSOSH; Vogel et al., 2006). The SSOSH is a 10-item self-report questionnaire measuring whether individuals would view themselves negatively if they were to seek psychotherapy. Items on this measure are scored on a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). After reverse scoring 5 items, a total score is calculated by summing the scores from all items. Higher total scores are taken to represent higher experiences of self-stigma related to seeking psychotherapy. The SSOSH has been demonstrated to have adequate test-retest reliability (r = .72) and strong internal consistency (ranging from  $\alpha = .86$  to  $\alpha = .90$ ) (Vogel et al., 2006; Vogel et al., 2007). In addition, the SSOSH has been shown to be negatively correlated with intentions and attitudes towards seeking professional help (Vogel et al., 2006), demonstrating strong predictive validity. The internal consistency specifically with a Taiwanese sample has been found to range from  $\alpha = .80$  to  $\alpha$ = .84 (Vogel et al., 2013; Vogel et al., 2017). For this study, a previously tested Chinese version of the SSOSH was used (Vogel et al., 2013) (see Appendix F for English and Chinese versions). The internal consistency for the measure with the current sample was  $\alpha = .81$ 

#### **Intentions based on Referral Source**

In this study, we were also interested in testing whether various referral sources result in different levels of help-seeking intentions. To address this question, participants were asked to imagine that those around them became aware of some personal or emotional concerns that they were experiencing. They were told that one of these individuals (boss, fellow teacher, friend, intimate partner, parent, or student) recommended that they seek help from a mental health professional. They were then asked to indicate their likelihood to follow through on that recommendation for each referral source, using the 7-point Likert-type scale from the GHSQ.

Total scores were not calculated for this measure, rather ratings from each referral source were compared to each other. English and Chinese versions of these questions can be found in Appendix G.

#### **Attitudes toward Various Mental Health Services**

Last, in this study were interested in examining participants' attitudes toward various forms of mental health services, including group psychotherapy/counseling, individual psychotherapy/counseling, mental health educational videos, mental health educational workshops, and mental health educational written materials. For each type of service, participants were asked to rate on a 7-point Likert-type scale their intentions to use the service [ranging from 1 (extremely unlikely) to 7 (extremely likely)], preferences for using the service [ranging from 1 (strong preference against) to 7 (strong preference for)], stigmatization against the service [ranging from 1 (no stigma at all involved) to 7 (extremely high stigma involved)], and barriers against using the service [ranging from 1 (no barriers at all involved) to 7 (extremely high barriers involved)]. After reverse scoring the stigma and barriers items, a total score was calculated by summing the four ratings separately for each service. Higher scores were taken to represent more positive attitudes toward the particular option. English and Chinese versions of these questions can be found in Appendix H.

#### **Data Analysis Plan**

## **Data Cleaning/Checking**

The data was first checked for completeness. Originally, 208 K-12 teachers started this study. Nine participants were removed from the study because they failed to provide informed consent. Another 34 participants were removed because they did not complete any measures beyond the demographic and work history questions. Next, 35 participants who failed one or

more of the attention check questions were excluded from this study. No participant was removed because they responded atypically by selecting the same answer through the entire survey (e.g., only scores on high end of the measures despite reverse scored items being present). The completion time of each participant was recorded, and two participants who took less than three minutes to complete the study were excluded from the analyses. This left data from 128 eligible participants.

Missing data was checked for individual items and across entire measures. When missing data was present for individual items, the missing item score was replaced with the participant's mean score for other items on the measure (as long as 75% of the items on the measure had been answered). Total measure scores were not calculated for participants who failed to respond to at least 75% of the items on a measure and no replacement was made for missing total scores. For this study, only three missing items from three participants were replaced by the participant's mean score for that measure.

The data then was examined for outliers and normality. Participant z-score values were calculated for total scores for each of the measures. Z-score values greater than 3.5 or less than -3.5 were considered outliers. We found eight outliers in both the GHSQ and ATSPPH-SF total scores and no outliers were found in the rest of the measures. Thus, we conducted all of the following statistical tests twice, once with outliers included and once without the outliers. The results of the statistical tests were identical between these two methods. In order to be most inclusive, throughout the following section we report the results from the tests when outliers were included in the data.

The data from the sample was expected to be normally distributed across all measures once outliers were removed. A visual inspection of histograms was performed to check

normality. Skewness and kurtosis values were also calculated. A visual inspection indicated that all measures had either a slight negative or slight positive skew to them; however, skew and kurtosis values for all measures except for two preference conditions were found to be in the acceptable limits (-2 to 2). Specifically, the kurtosis value of the preference total for individual therapy was 2.31. The kurtosis value of the preference total for mental health educational video was 2.92. However, after careful consideration, transformations of these two non-normally distributed conditions were not conducted. We made this choice given that the kurtosis values were not too deviant from the acceptable limits and given that these conditions were going to be compared to other conditions that did not show kurtosis problems, and thus we wanted to keep all assessments of preference across all condition options on the same, original, scale.

No age differences were detected through all the measures. Gender differences were only found in two variables from GHSQ: Professional Help (t (122) = -2.00, p <.05), and Formal Help (t (122) = -2.46, p =.02). Although significant differences were observed between males and females on Professional Help and Formal Help variables, we chose not to include gender as a covariate in the statistical tests because there were so few males in the sample and because we were using repeated measures analyses to test most of the hypotheses, the gender distribution would have remained consistent across conditions.

#### Research Aim 1

The first aim of this study was to test whether intentions to seek help from a mental health professional differ significantly from intentions to seek help from other sources. To test this aim, ratings for each participant on the GHSQ item assessing intentions to seek help from a mental health professional in the case of suicidality and personal or emotional problems were compared to scores on the other items. Ratings for each participant were averaged for the other

help-seeking sources on the GHSQ for suicidality and personal or emotional problems separately for the informal help-seeking items (intimate partner, friend, parent, other relative/family member, minister or religious leader), the other formal help-seeking items (doctor/GP, phone helpline), and the "I would not seek help" item. A four-way repeated-measures ANOVA was conducted comparing participant scores for the mental health professional to participant average scores for the informal group of items, the other formal group of items, and the I would not seek help item. The concern area were then split (suicidality and emotional problems) and repeated measures ANOVAs were conducted comparing mental health professional scores to each other help-seeking resource score individually using a Bonferroni correction to the alpha.

#### Research Aim 2

The second aim of this research study was to test whether frequently observed relationships between the stigma, attitudes, and intentions measures (Vogel et al., 2007) was also observed in our Taiwan sample of K-12 teachers. This aim was tested in several steps. First, we tested whether total scores for the four main measures (ATSPPH-SF, SSOSH, PSOSH, GHSQ) for this study were significantly correlated. Bivariate Pearson's *r* correlations were calculated for each pair. Based on previous research (Vally et al., 2018; Vogel et al., 2017; Vogel et al., 2007), significant positive correlations were expected between the two stigma-related questionnaires (SSOSH & PSOSH) and between the attitudes (ATSPPH-SF) and intentions (GHSQ score for mental health professional) ratings. In contrast, significant negative correlations were expected for each stigma measure with the attitudes and intentions measures. Second, we tested whether self-stigma scores (SSOSH) mediated the relationship between public stigma (PSOSH) and attitudes (ATSPPH-SF) using Preacher and Hayes bootstrapping method (Preacher & Hayes, 2004). See Figure 1 for an illustration of the hypothesized model. Using this method 5,000

bootstrap samples from the original data were used to calculate 95% confidence intervals for each path of the mediational model. If the confidence intervals for any path did not include zero, the result was considered significant. The PROCESS macro for SPSS was used to run the analysis. Based on previous research (Vally et al., 2018; Vogel et al., 2007; Wade et al., 2015), a partial mediation model was expected. That is, although self-stigma was expected to mediate the relationship between public stigma and attitudes, the relationship between public stigma and attitudes was still expected to be significant when self-stigma is included in the model. Since the mediational model was significant, we tested an additional mediational model that also included intentions. For this model, self-stigma (SSOSH) and attitudes (ATSPPH-SF) were both entered as mediators of the relationship between public stigma (PSOSH) and intentions (GHSQ). See Figure 2 for this hypothesized model. Preacher and Hayes bootstrapping method as described above was used to test this mediational model.

Figure 1

Illustration of the Hypothesized Relationship between Perceived Public Stigma, Self-Stigma, and Attitudes

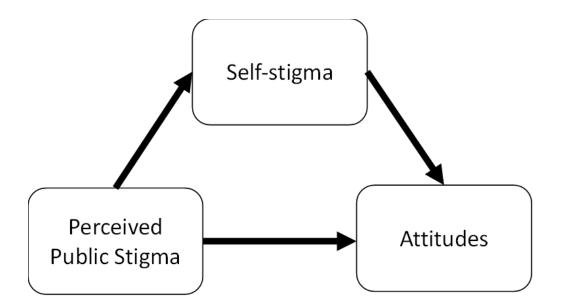
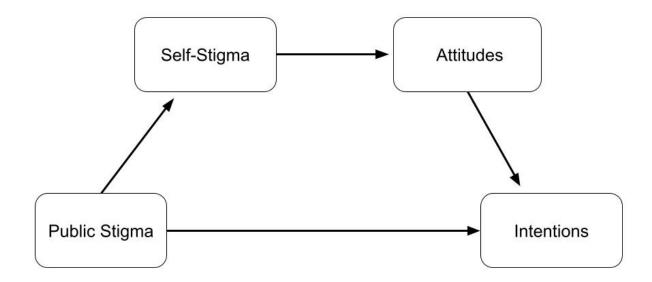


Figure 2

Illustration of the Hypothesized Relationship between Perceived Public Stigma, Self-Stigma,
Attitudes, and Intentions to Seek Treatment



#### Research Aim 3

The third aim of this study was to test whether help-seeking intentions differed among Taiwanese K-12 teachers depending on the referral source of the recommendation to seek help. Average intention scores and standard deviations were calculated for each referral source across the sample. A six-way repeated-measures ANOVA was used to compare the average scores across the referral sources. A significant main effect was followed with post-hoc pairwise comparisons between the referral sources using a Bonferroni correction.

#### Research Aim 4

The final research aim was to gain a better understanding of the attitudes and preferences that Taiwanese K-12 teachers held toward various professional mental health services that could be offered. Average attitude scores (the sum of intentions, preferences, stigma reverse scored, & barriers reversed scored) and standard deviations were calculated for each type of service. A five-way repeated-measures ANOVA was used to compare the average scores across the service types. A significant main effect was followed with post-hoc pairwise comparisons between the services using a Bonferroni correction.

#### **Results**

## **Research Aim 1: Intentions based on Service Type**

A repeated measures ANOVA was used to test whether, in our Taiwanese K-12 teacher sample, intentions to seek help from a mental health professional (as measured by the GHSQ) differed significantly from intentions to seek help from other sources. Means and standard deviations on the GHSQ Total for the four groups can be found in Table 1. Mauchly's Test of Sphericity indicated that the variance between the conditions was not constant,  $\chi^2(5) = 128.12$ , p < .001; thus, a Greenhouse-Geisser correction was applied to the degrees of freedom for the

omnibus repeated measures ANOVA test. A significant difference between the four groups was found, F(1.77, 219.09) = 122.96, p < .001. Post-hoc comparisons were used to further examine these differences between a mental health professional and the other conditions. Given the post-hoc nature of these tests and the possibility of an increased family-wise error rate, a Bonferroni-corrected error rate of  $\alpha = .017$  per test was adopted. Result of these comparisons can be found in Table 2. In summary, participants expressed significantly stronger intentions for seeking help from a mental health professional should they experience a mental health problem over all three of the other conditions (other formal help, informal help, and no help).

In addition to testing for differences in GHSQ Total scores between the conditions, repeated measures ANOVAs were conducted to compare participants' intentions to seek help from a mental health professional to each other help-seeking resource when the GHSQ scores were split by concern area (suicidality and emotional problems). Means and standard deviations on the GHSQ Suicidality for the four groups can be found in Table 1. Mauchly's Test of Sphericity indicated that the variance between the conditions was not constant,  $\chi^2(5) = 142.52$ , p < .001; thus, a Greenhouse-Geisser correction was again applied. A significant difference between the four groups was found, F(1.72, 212.85) = 102.24, p < .001. Post-hoc comparisons were used to further examine these differences between a mental health professional and the other conditions, also using a Bonferroni-corrected error rate of  $\alpha = .017$  per test. Result for these comparisons can be found in Table 3. In summary, participants expressed significantly stronger intentions for seeking help from a mental health professional for suicidality over all three of the other conditions (other formal help, informal help, and no help).

Means and standard deviations on the GHSQ Emotional Problems for the four groups can be found in Table 1. Similar to the other tests, Mauchly's Test of Sphericity indicated that the variance between the conditions was not constant,  $\chi^2(5) = 75.11$ , p < .001; thus, a Greenhouse-Geisser correction was again applied. A significant difference between the four groups was found, F(2.09, 258.90) = 109.78, p < .001. Post-hoc comparisons were used to further examine the differences between a mental health professional and the other conditions, also using a Bonferroni-corrected error rate of  $\alpha = .017$  per test. Result for these comparisons can be found in Table 3. In summary, participants expressed significantly stronger intentions for seeking help from a mental health professional for emotional problems over all three of the other conditions (other formal help, informal help, and no help).

**Table 1**GHSQ Means and Standard Deviations for the Four Help-seeking Options

	GHSQ Total	GHSQ Suicidality	GHSQ Emotional problem
Condition	Mean (SD)	Mean (SD)	Mean (SD)
Mental health professional	5.32 (0.11)	5.47 (0.13)	5.16 (0.12)
Other formal help	4.41 (0.11)	4.75 (0.12)	4.06 (0.12)
Informal help	4.54 (0.08)	4.44 (0.10)	4.64 (0.08)
No help	2.42 (0.12)	2.43 (0.15)	2.42 (0.13)

*Note.* GHSQ = General Help Seeking Questionnaire. Higher scores indicate greater intentions to seek that type of service for help.

 Table 2

 Post-hoc Comparisons of GHSQ Total Score Differences Between the Four Help-seeking

 Options

Comparison	Mean Difference (SD)
Psychotherapy vs. Other formal	0.91* (.09)
Psychotherapy vs. Informal help	0.78* (.12)
Psychotherapy vs. No help	2.89* (.21)
Psychotherapy vs. No help	2.89* (.21)

*Note.* \* The mean difference is significant at the .017 level.

 Table 3

 Post-hoc Comparisons of Differences Between the Four Help-seeking Options for GHSQ

 Emotional Problems and GHSQ Suicidality Administrations

	Emotional Problems	<u>Suicidality</u>
Comparison	Mean Difference (SD)	Mean Difference (SD)
Psychotherapy vs. Other formal	.41* (.13)	.72 * (.10)
Psychotherapy vs. Informal help	.52* (.12)	1.04* (.14)
Psychotherapy vs. No help	2.74* (.21)	3.04* (.25)

*Note.* \* The mean difference is significant at the .017 level.

# Research Aim 2: The Relationships between Attitudes, Stigma, and Intentions to Seek Psychological Help

For our second aim, we were interested in testing whether participants' ratings of their attitudes toward seeking professional help (ATSPPH-SF), their experience of stigma (self and public) for help-seeking (SSOSH & PSOSH), and their intentions to seek professional help (GHSQ Total) were significantly correlated with each other. Also, we were interested in testing whether a commonly observed mediational model of the relationships between these variables would be observed in the data from our sample of K-12 teachers in Taiwan.

As expected, ATSPPH-SF scores were significantly correlated with GHSQ Total scores, in a positive direction (r = .53, p < .001). ATSPPH-SF scores were also significantly correlated with SSOSH scores (r = -.52, p < .001) and PSOSH scores (r = -.19, p < .05), but in a negative direction, as predicted. SSOSH scores were positively correlated with PSOSH scores (r = .19, p < .05) and negatively correlated with GHSQ Total scores (r = -.35, p < .001), both as expected. Contrary to our hypothesis, PSOSH scores were not significantly correlated with GHSQ Total scores (r = .08, p = .35). In summary, more positive treatment-seeking attitudes and intentions (which were positively correlated with each other) were associated with lower experiences of self and perceived public stigma (which were positively correlated with each other), except for perceived public stigma not being correlated with intentions at a significant level.

Using the Preacher and Hayes (2008) Bootstrapping Method, we also tested whether the relationship between PSOSH (the independent variable) and ATSPPH-SF scores (the dependent variable) was mediated by SSOSH scores (the mediator) (see Figure 1). Data from 126 participants who completed all three measures were entered into the model. Then, based on this data, 5,000 bootstrap samples were created and 95% confidence intervals were calculated for

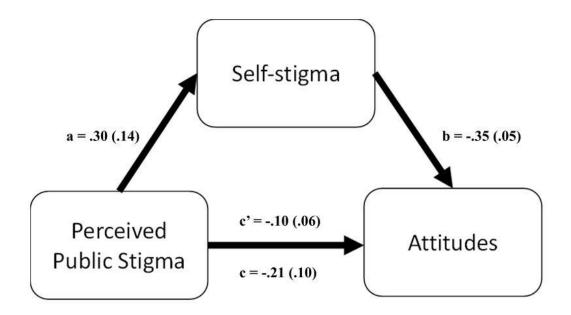
each path of the mediational model based on these bootstrap samples. The results indicated that SSOSH scores and PSOSH scores taken together predicted 27.88% of variance in ATSPPH-SF scores (R = .53, F (1, 124) = 23.77, p < .001). The pathway from PSOSH scores to SSOSH scores (a path) was significant, *unstandardized effect* = 0.30, p = .03, 95% CI [0.02, 0.58]. The pathway from SSOSH scores to ATSPPH-SF scores while controlling for the PSOSH scores (b path) was also significant, *unstandardized effect* = -0.35 p < .001, 95% CI [-0.25, -0.46]. The total effect, which is pathway from PSOSH scores to ATSPPH-SF scores (c path) was significant, *unstandardized effect* = -0.21, p = .04, 95% CI [-0.40, -0.01]. The indirect (ab) path from PSOSH scores to ATSPPH-SF scores through SSOSH scores was also significant, *unstandardized effect* = -0.11, 95% CI [-0.23, -0.001]. Interestingly, the direct (c') path from PSOSH scores to ATSPPH-SF scores when controlling for the indirect path was no longer significant, *unstandardized effect* = -0.10, 95% CI [-0.27, 0.07], p = .25, indicating a fully mediated model.

Given that this initial mediational model was significant, we tested a second mediational model that included GHSQ scores in the analysis with data from 125 participants. In this model, we wanted to test whether ATSPPH-SF and SSOSH scores were mediating the relationship between PSOSH scores and GHSQ scores. An illustration of this model can be found in Figure 2. The results indicated that PSOSH, SSOSH, and ATSPPH-SF scores, taken together, predicted 32% of variance in GHSQ Total scores, R = .57, F(1, 123) = 19.31, p < .001. The pathway from PSOSH scores to SSOSH scores was significant, *unstandardized effect* = 0.31, p = .03, 95% CI [0.03, 0.58]. This effect was slightly larger than the previous one due to the smaller sample size. The pathway from SSOSH to ATSPPH-SF scores, while controlling for PSOSH scores was significant, *unstandardized effect* = -0.36, p < .001, 95% CI [-0.47, -0.25], which was also

slightly larger compared to the previous model. The pathway from ATSPPH-SF scores to GHSQ Total scores (b path), controlling for both SSOSH and PSOSH scores was significant, unstandardized effect = 0.16, p < .001, 95% CI [0.11, 0.22]. The total effect of PSOSH scores on GHSQ scores (c path) was not significant, unstandardized effect = .03, p = .35, 95% CI [-0.03, 0.09]. The total indirect effects were also not significant, unstandardized effect = -0.04, 95% CI [-0.08, 0.005]. The individual indirect paths from PSOSH scores to SSOSH scores to GHSQ Total Scores, unstandardized effect = -0.01, 95% CI [-0.02, 0.01], from PSOSH scores to ATSPPH-SF scores to GHSQ Total Scores, unstandardized effect = -0.02, 95% CI [-0.04, 0.01], and from PSOSH scores to SSOSH scores to ATSPPH-SF scores to GHSQ Total Scores, unstandardized effect = -0.02, 95% CI [-0.01, 0.009], were all not significant. Interestingly, when controlling for these indirect paths, the direct effect path from PSOSH scores to GHSQ scores (c') became significant, unstandardized effect = .07, p = .01 95% CI [0.02, 0.12].

Figure 3

Illustration of the Mediational Relationship between Perceived Public Stigma, Self-Stigma, and Attitudes

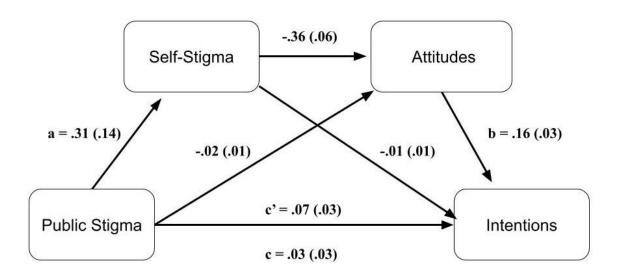


Note. Unstandardized Effects (B values) and standard error values (in parentheses) are listed.

Figure 4

Illustration of the Mediational Relationship between Perceived Public Stigma, Self-Stigma,
Attitudes, and Intentions to Seek Treatment

## Total indirect path -.04 (.02)



Note. Unstandardized Effects (B values) and standard error values (in parentheses) are listed.

#### Research Aim 3: Intentions based on Referral Source

A repeated measures ANOVA was used to test whether the Taiwanese K-12 teachers' help-seeking intentions differed depending on the referral source of the recommendation to seek help. The referral sources that were compared included an intimate partner, a friend, a parent, a boss, a fellow teacher, and a student. Mean and standard deviation intention scores for the six groups can be found in Table 4. Mauchly's Test of Sphericity indicated that the variance between the conditions was not constant,  $\chi^2(14) = 71.59$ , p < .001; thus, a Greenhouse-Geisser correction was applied to the degrees of freedom for the omnibus repeated measures ANOVA test. A significant difference in intention scores between the six groups was found, F(4.05, 498.58) =84.79, p < .001. Post-hoc, pair-wise comparisons were used to further examine these differences. Given the post-hoc nature of these tests and the possibility of an increased family-wise error rate, we adopted a Bonferroni-corrected error rate of  $\alpha = .003$  per test. Results can be found in Table 5. In summary, participants expressed the strongest intention to seek psychotherapy if they were recommended to it by their intimate partner or friend (which were not significantly different from each other), followed by recommendations from a fellow teacher or parent (which were not significantly different from each other), followed by a recommendation from a boss, and followed last by a recommendation from a student.

**Table 4**Descriptive Statistics for Intentions Based on Referral Source

Referral source	Mean (SD)
Intimate Partner	5.52 (1.33)
Friend	5.35 (1.15)
Parent	4.73 (1.52)
Boss	3.82 (1.51)
Fellow teacher	4.79 (1.28)
Student	3.16 (1.53)

 Table 5

 Post-hoc Comparisons of Mean Differences (SD) Between the Six Referral Sources

	Friend	Parent	Boss	Fellow teacher	Student
Intimate Partner	0.17 (0.12)	0.78* (0.14)	1.69* (0.17)	0.73* (0.14)	2.36* (0.16)
Friend		0.61* (0.14)	1.52* (0.14)	0.56* (0.10)	2.19* (0.14)
Parent			0.91* (0.15)	-0.06 (0.16)	1.57* (0.15)
Boss				-0.97* (0.12)	0.66* (0.12)
Fellow teacher					1.63* (0.13)

*Note.* \* The mean difference was significant at the .003 level.

#### Research Aim 4: Preferences for Different Formats of Mental Health Services

A repeated measures ANOVA was also used to test for differences in Taiwanese K-12 teachers' preferences between different formats of mental health services, including individual psychotherapy, group psychotherapy, educational workshops, educational videos, and written educational materials. Preference means and standard deviations for the five formats can be found in Table 6. Mauchly's Test of Sphericity indicated that the variance between the conditions was not constant,  $\chi^2(9) = 87.32$ , p < .001; thus, a Greenhouse-Geisser correction was applied. A significant difference in preferences was found, F(2.91, 360.64) = 31.19, p < .001. Post-hoc, pair-wise comparisons were used to further examine these differences. A Bonferronicorrected error rate of  $\alpha = .005$  per test was adopted. Results can be found in Table 7. In summary, participants expressed the most positive towards individual therapies, followed by mental health written materials (no significant difference between individual therapies and mental health written materials), mental health video (no significant difference between mental health video and mental health written materials), mental health workshop, and lastly the group therapy.

 Table 6

 Descriptive Statistics for Preferences for the Five Mental Health Services

Condition	Mean (SD)
Mental health educational videos	22.80 (3.57)
Mental health educational workshops	21.44 (3.68)
Group psychotherapy/counseling	20.36 (4.15)
Mental health educational written materials	23.59 (3.32)
Individual psychotherapy/counseling	23.65 (3.08)

 Table 7

 Post-hoc Comparisons of Mean Differences (SD) Between the Five Mental Health Services

_	MH educational	Group	MH educational	Individual
	workshops	psychotherapy	written material	psychotherapy
MH educational video	1.36* (0.31)	2.44* (0.42)	-0.79* (0.23)	-0.85 (0.35)
MH educational workshops		1.08 (0.40)	-2.15* (0.32)	-2.21* (0.36)
Group psychotherapy			-3.23* (0.47)	-3.29* (0.35)
MH educational written materials				-0.06 (0.37)

*Note.* \* The mean difference is significant at the .005 level.

#### **Discussion**

The overall purpose of the current study was to gain a better understanding of Taiwanese K-12 teachers' attitudes and preferences towards treatment-seeking and mental health services. To date, there have been limited studies conducted in Taiwan examining stigma, attitudes, and intentions toward seeking professional psychological help, and no research, that we were able to identify, that has studied these variables in Taiwanese K-12 teachers. Mental health concerns are highly prevalent in Taiwan and the number of people who experienced mental disorders has doubled from 1990 to 2010 (Fu et al., 2013). In particular, previous research suggests that K-12 teachers Taiwan are especially susceptible to mental health concerns, such as depression and other stress-related problems (Chou & Wang, 2013; Kuo, 2004; Kyriacou & Chien, 2004; Lee, 2002; Yu et al., 2010). Studying and seeking to improve K-12 teachers' mental health is particularly important given that poor teacher mental health has been found to have a negative impact on teachers' work performance and students' well-being (Cheng & Ren, 2010; Chung et al., 2013; Harding et al., 2019; Oberle & Schonert-Reichl, 2016; Huang, 2013; Kuo, 1994; Li, 2019).

Although mental health services, including psychotherapy and counseling, are readily available in Taiwan, existing research suggests that the general population in Taiwan are less likely to seek mental health services compared with many other countries (Vogel et al., 2017). Further, previous research has suggested that individuals with mental health concerns in Taiwan often hold a low willingness to disclose their issues to others, including mental health professionals (Wu et al., 2014; Han et al., 2015; Han et al., 2015). Existing studies have indicated that a lack of willingness to disclose or to seek mental health help may be due to stigma regarding mental health concerns that is experienced by many on the island (Yen et al., 2005;

Zhuang et al., 2017). Thus, efforts to better understand treatment-seeking stigma, attitudes, and intentions, especially in a population where mental health concerns may be more likely (K-12 teachers), could lead to methods for improving treatment-seeking when there is a psychological need. This could, in turn, lead to a reduced overall mental health burden experienced by the people in Taiwan.

With the first aim of our study, we sought to test whether the strength of intentions to seek help from a mental health professional would differ significantly from intentions to seek help from other resources (other formal help, other informal help, and no help at all). We hypothesized that participants' intention to seek professional psychological help would be significantly lower than intentions to seek help from other sources. The results showed a significant difference between four resources; however, the K-12 teachers who participated in this study expressed the strongest intentions for seeking help from a mental health professional compared to the three other conditions. This difference was observed for intentions overall (GHSQ Total scores) as well as when analyzed separately for suicidality and emotional problems.

The finding of higher intentions to seek treatment from a mental health professional contradicted our hypothesis. Previous research has indicated that many people in Taiwan are reluctant to disclose mental health concerns to others or to seek formal treatment (Chien et al., 2004; Han et al., 2015). In addition, previous research has indicated that individuals in Taiwan are more likely to seek self-therapy or alternative therapy (i.e., yoga, foot massage, tui na) instead of formal psychotherapy (Pan et al., 2005; Yang, 1992). Further, a study conducted to evaluate mental health treatment-seeking preferences within the Taiwanese population from 1990 to 2000 showed that only 15.05% of the participants were willing to seek any form of

professional help (i.e., a medical doctor or psychiatrist) for mental health concerns (Wu et al., 2014). Given this past research, we believed that no help or informal help would be rated the highest in our sample.

There are several possible reasons why the results from our study (favorable attitudes toward professional mental health help) seem to contradict the previous research. First, it is possible that attitudes within Taiwanese society have changed over the past decade. The previous studies were published eight years or more prior to when we conducted our study and people's attitudes towards seeking professional help could have changed over that time period. There are several examples of companies, organizations, the government, and individuals who have sought to improve mental health attitudes in Taiwan. For example, several new companies have developed there in recent years with the goal of helping people recognize when they experience a mental health problem and encouraging them to seek treatment when they do (e.g., Here Hear, By My Side). Professional organizations and support services, such as the Teacher Support Center, have been developed and are making outreach efforts across the island. As an example of this, the Mental Health Association in Taiwan in 2017 started their MH literacy Program in which they teach mental health topics in the public schools (https://www.mhat.org.tw/efcont.aspx?id=K3JOsteln/k=). The government in Taiwan has also made efforts to improve mental health attitudes on the island. For example, although the Mental Health Act of Taiwan has existed since 1990, significant changes were made in recent years to offer a greater amount of support to the people, including developing a dedicated department for mental health within the government (Taiwan Business Topics, 2022). This department has been working to establish more community mental health centers across the island with a significant outreach focus. Mental health awareness has also made its way into popular culture in Taiwan

with the help of social media. As an example of this, Mr. Doumiao (豆苗先生), an illustrator who has a large social media following through Instagram and Twitter, often discusses mental health issues, including his own, in his work.

Another reason why we may have found more positive attitudes toward mental health services in our sample is because we surveyed teachers instead of the general population. As we mentioned above, efforts were made to expand K-12 teachers' mental health knowledge and promote positive attitudes through mental health training literacy programs. Therefore, compared with the public, K-12 teachers may be more likely to show positive attitudes towards mental health concerns and treatment-seeking. There are limited studies conducted in Taiwan to evaluate the effect of mental health literacy programs; however, research conducted in other countries showed positive effect. For instance, a systematic review indicated that the mental health training programs have shown significant improvement on menta health knowledge and attitudes for secondary teachers (Anderson et al., 2019). Further, our particular sample was composed of many teachers (47.2%) who had sought professional psychological help in the past. This could be due to our recruitment methods (contact list of those affiliated with the Teacher Support Center, which may include teachers who have reached out to the Teacher Support Center in the past) as well as the possibility that those with previous mental health experience may have been more willing to participate in a study about mental health attitudes. More positive attitudes are likely to be found in those with past treatment-seeking experiences.

With the second aim of our study, we sought to test a mediational relationship between public stigma, self-stigma, attitudes, and intentions toward help-seeking. Specifically, we hypothesized that the relationship between public stigma and attitudes would be mediated by the experience of self-stigma. Moreover, we also hypothesized that the relationship between public

stigma and help-seeking intentions would be mediated by both self-stigma and attitudes. These mediational relationships were hypothesized given that they have been demonstrated in several previous studies with other samples (Vogel et al., 2007; Vogel et al., 2010; Vogel et al., 2017; Vally et al., 2018)

As expected, the results indicated that attitudes towards seeking professional help were positively correlated with the intention to seek help (more positive attitudes were linked with a greater wiliness to seek mental health help). Self-stigma and perceptions of public stigma for seeking help were also positively correlated with each other (higher perceptions of stigma of one type was associated with higher perceptions of the other). And attitudes and intentions towards seeking professional help were negatively correlated with only self-stigma but only attitudes were negatively correlated with public stigma (a greater experience of self-stigma was associated with more negative attitudes and lower intentions and a greater perception of public stigma was associated with more negative attitudes).

Regarding the first mediational model, we found that self-stigma did indeed mediate the relationship between public stigma and attitudes. Evidence for full mediation was found, indicating that the relationship between public stigma and attitudes was fully explained by the internalization of the public stigma into self-stigma. This suggests that if the perception of public stigma is not internalized, it will, perhaps, not result in more negative attitudes.

Regarding the second mediational model, the results of the indirect paths between public stigma, self-stigma, attitude towards seeking professional help, and intentions to seek help were not significant. Self-stigma still mediated the effect of public stigma on attitudes towards seeking professional help., but attitudes towards seeking professional help showed no significant effect in mediating the relationship between public stigma and intention to seek help. Lastly, self-stigma

showed no significant effect in mediating the relationship between public stigma and intention to seek help. The lack of mediational effects for the second model may be due to the fact that with our sample, perceptions of public stigma were generally no associated with intentions. Thus, there was no (or a very little) relationship to potentially explain through mediation.

Our results partly fit with the previous research. Previous research has shown that both self-stigma and public stigma are negatively correlated with help-seeking attitudes in other samples (Vally et al., 2018; Vogel et al., 2017; Wade et al., 2015). In fact, previous research conducted even in Taiwan has shown a mediational relationship between these variables (Vogel et al., 2017). It makes sense that a higher perception of stigma toward something (and potentially the experience of shame) would result in more negative attitudes toward seeking that thing (Fripp & Carlson, 2017; Mak et al., 2014; Vogel et al., 2006). Many have suggested (and found) that more negative attitudes are the result of an individual internalizing (self-stigma) the negative perceptions that exist in the general public (public stigma) (Vally et al., 2018; Vogel et al., 2017; Wade et al., 2015). Through the current study, it is now clear that the relationship between these variables holds true for Taiwanese K-12 teachers as well.

However, another mediational model including both help-seeking attitudes and self-stigma as mediators between public stigma and intentions to seek help was not supported by our results. This result was inconsistent with previous research indicating that public stigma, self-stigma, and attitudes towards seeking professional help are strong predictors for intention to seek treatment (Vogel et al., 2007; Wade et al., 2015). As mentioned previously, our lack of significant findings for this mediational model are likely due to the lack of a relationship between public stigma and intentions in our sample. It could be that our sample of K-12 teachers are good at ignoring stigma that exists in the general public. That is, they base their treatment

seeking decisions on their own attitudes rather than the attitudes that they perceive in others. It is unclear whether this is something unique to Taiwan, unique to K-12 teachers, or unique to our particular sample.

For our third study aim, we tested whether Taiwanese K-12 teachers' help-seeking intentions differed depending on the referral source of the recommendation to seek help. The referral sources that were compared included a boss, fellow teacher, friend, intimate partner, parent, or student. This aim was exploratory and although differences between the referral sources were expected, no specific hypothesis was formed for which referral source would result in the most positive intentions. We did find a significant difference in intentions between the six referral sources. The participating K-12 teachers rated intentions to seek treatment based on the recommendation of an intimate partner or friend significantly higher than all other referral sources. A referral from parents or a fellow teacher were the next highest and a boss and student were rated the lowest. It is notable that three of the four highest rated relationships fall under the personal domain, rather than a professional one. Perhaps teachers feel that the topic of mental health is a more intimate topic that doesn't belong in a work setting. It is also possible that they may fear negative repercussions if a boss or student found out that they were experiencing mental health problems. Only one previously published study has examined the impacts of referral source on intentions in a similar manner. Wahto et al. (2016) asked college student athletes if their intentions to seek help would differ depending on if it was referred to them by a family member, coach, or teammate. They found that intentions were significantly more positive if the referral came from a family member compared to the other two referral sources. Thus, there appears to be overlap between the Wahto et al. study and ours in that referrals from more intimate or personal relationships seem to be most effective.

Last, in this study we sought to identify Taiwanese K-12 teachers' preferences towards various types of mental health services. The different types of services that we compared included mental health educational materials (videos, workshops, & written materials) and individual and group psychotherapy. Again, although differences in preferences between these treatment options were expected, no specific hypothesis was formed regarding which options would be preferred the most. We found that the participating K-12 teachers held significantly stronger preferences towards individual psychotherapy and mental health written materials compared with other types of services (mental health educational videos, mental health educational workshops, and group psychotherapy).

To our knowledge, no previous studies have been conducted in Taiwan evaluating people's preferences and attitudes toward different types of mental health services. There have been some studies conducted in other countries that have consistently indicated that people, on average, tend to have a stronger preference for individual psychotherapy compared to other types of mental health services (Kaltman et al., 2014; Vázquez et al., 2021). Shechtman and Kiezel (2016) have brought up several explanations for why people tend to have a stronger preference towards individual psychotherapy over services offered in a group setting. For instance, they suggested that people may desire the full attention from their therapist and while they may not fear criticism from a therapist, they may fear they would be judged by other group participants (Shechtman & Kiezel, 2016). Moreover, with individual therapy, clients are able to get more immediate and personalized help with their personal problems, compared to most group settings. Further, individual psychotherapy may be less stigmatizing as no one besides the therapist has to know that one is seeking treatment.

There may also be several reasons why the Taiwanese K-12 teachers in this study highly preferred the mental health educational written material over the other educational options. Similar to individual psychotherapy, the written material can be accessed more privately than in a group workshop setting in which fears of stigma may exist. The written material may also be preferred because it could be easily accessed and carried around. Further, teachers are normally a well-educated population, and as such, they may prefer receiving information in a written format that they can study at their own pace compared to a group workshop or educational video that is paced by the group leaders and other members.

### **Limitation of the Study**

The current study has some limitations which should be taken into consideration when interpreting the results. First, our sample may have some issues with generalizability. Our participants were mainly Taiwanese females, which is consistent with the current gender distribution of Taiwanese K-12 teachers (Huang et al., 2012). However, our data had fewer participants who identified as males and only one participant who identified their gender identity as "other". Thus, our data may not fully represent the treatment attitudes, intentions, and preferences of K-12 teachers who do not identify as female. Also related to generalizability, our study was only conducted in Taiwan. We did make efforts to gather data from teachers on all parts of the island, thus we may have some confidence that our findings are representative of the attitudes, intentions, and preferences that are held there. However, K-12 teachers in even neighboring countries, such as China and Japan, may hold different attitudes, and thus future research using similar designs should be conducted in other areas of the world. Our sample also primarily (95%) identified as Han Chinese. Although 95% of the people in Taiwan report a Han Chinese ethnicity, other ethnic groups are present on the island (Central Intelligence Agency;

https://www.cia.gov/the-world-factbook/countries/taiwan/). In particular, our findings may not represent attitudes and intentions held by indigenous K-12 teachers. Personal communication between Dr. Swift and several indigenous community leaders in Taiwan suggests that the indigenous people may hold more negative attitudes toward mental health problems and mental health treatments than the majority population. Future research with these different populations is needed. Furthermore, as we mentioned above, 47.2% of our sample had previously sought mental health services, which contradicted with our previous literature review. Our sample might be more open-minded regarding mental health compared to other occupations given numerous recent efforts that have been made in Taiwan to improve mental health attitudes, particularly within the educational system. Therefore, the data might not be generalizable to other professions in Taiwan.

Second, we measured teachers' preferences, attitudes, and intentions toward treatment-seeking should they experience a psychological problem. Thus, the participating teachers were asked to consider a hypothetical scenario. Conducting the research in this manner is important because it provides us with a view of the attitudes held by the population of interest (K-12 teachers in Taiwan); however, attitudes may differ when an actual psychological problem is present. For example, one may have strong preferences for individual psychotherapy over group psychotherapy when considering a hypothetical scenario, but those preferences may disappear when they are actually experiencing a mental health concern and are contemplating treatment for it – at that point they may be happy with whatever treatment is available to them. It is also possible that preferences may intensify when faced with a real-life problem in which an actual choice needs to be made. In our study we asked the participants to report their distress level on a 0 (none) to 10 (extreme) scale. Nearly half of the participants (43.7%) reported a rating of 5 or

above, thus indicating that our sample was on average, only moderately stressed. Relatedly, in this study we assessed variables that reflect attitudes and beliefs. These variables have all been found to significantly predict treatment-seeking behaviors (Vogel et al., 2007; Wade et al., 2015); however, they are not measures of the actual behavior itself. What one thinks and feels does not always reflect what one does (Ajzen, 1985). Future research is needed to investigate treatment-seeking behaviors in populations that face a mental health need.

Third, the findings from this study are limited to the options that were presented in the survey. For example, on the GHSQ, which assesses treatment-seeking intentions, the treatment options include things like a mental health professional, a doctor, a religious leader, a parent, and an intimate partner. Intentions for a mental health professional were found to be higher than intentions for the other formal and informal help-seeking sources. However, the GHSQ does not include options such as yoga, foot massage, and tui na, which previous research has indicated may be preferred options in Taiwan (Pan et al., 2005; Yang, 1992).

As another example, we asked about attitudes and preferences for five different professional psychological treatment options, but there may be other types of treatment that Taiwanese K-12 teachers are more likely to seek that were not included in our survey. For instance, social media could be another platform for mental health education and support. In one study that used a Twitter sample, 90% of the participants showed interest in using social media to cope with their symptoms and 85% of them express interest in mental health services delivered through social media (Naslund et al., 2019).

In our study we asked about treatment-seeking attitudes and intentions, and only one treatment-seeking barrier (stigma). There may be other barriers that could prevent K-12 teachers from seeking professional psychological help even when they hold positive attitudes and

intentions. For example, K-12 teachers may believe that it would be too difficult to fit treatment into their busy schedule or there may not be an available mental health professional in a close proximity to them. The government in Taiwan has made significant efforts to make sure mental health care is accessible to the people, including the establishment of hundreds of community mental health centers which provide services at no or reduced cost, the development of national crisis call-in hotlines, and increased coverage of mental health care within the National Health Insurance system. The Teacher Support Center is another effort to make mental health services more readily available to K-12 teachers in Taiwan; however, barriers such as time and ease of initiating services may still be present.

Fourth, there may be a limitation within the methods that we used to recruit participants. The study was conducted in collaboration with National Taiwan Normal University and the Teacher Support Center. National Taiwan Normal University is a well-known university in Taiwan and has a well-established reputation, especially among teachers there. Some K-12 teachers in Taiwan may be familiar with the university or faculty members who work there. Therefore, they may hold positive attitudes toward the services that were being recommended by the Teacher Support Center. Additionally, those who hold more positive attitudes toward National Taiwan Normal University and the Teacher Support Center (and thus more positive attitudes toward mental health services) may have been more likely to respond to the recruitment email that was coming from them. However, K-12 teachers who might not know the National Taiwan Normal University faculty may be less likely to participate, and they may hold different attitudes towards seeking mental health help. Lastly, the internal consistency of the attitudes measure was lower than we were expecting. A lower level of internal consistency suggests that the ratings of the items on the measure were not consistent with one another. This problem

creates additional error or noise within the measurement of attitudes towards seeking professional help. As a result, the correlation between the stigma measures, intentions, and attitudes may have been impacted. This may partially explain why the indirect effects in the second mediational model between public stigma, self-stigma, attitudes, and intentions were not significant. Moreover, the internal consistencies of other measures in this study were also lower than expected based on the previous literature. This suggests that previously established norms and measures of psychotherapy attitudes and stigma may not be a good fit for the Taiwanese population due to cultural differences. In particular, some items may need to be removed from the measures in order to a more consistent ratings of these variables. Research developing culturally appropriate measures of psychotherapy and mental health attitudes and stigma for Taiwan are needed.

## **Future Research Directions**

There are several future directions for this area of research. First, future research could seek to address some of the limitations of this study. For example, future research could seek to recruit more Taiwanese K-12 teachers who identify as male and non-binary, as well as non-Han Chinese participants, and teachers from other Asian nations. This research could provide a broader understand of K-12 teachers' attitudes and intentions towards psychotherapy. Future research could also assess actual treatment behaviors, include a greater number of treatment options, and seek to understand additional barriers to treatment-seeking. This research could broaden our scope of understanding of Taiwanese K-12 teachers' attitudes toward and use of psychotherapy and other mental-health treatment options.

A qualitative study could also be beneficial for understanding Taiwanese K-12 teachers' attitudes towards seeking professional help. The results from our study illustrate different

preferences and relationships between variables, but these results do not explain why the preferences and attitudes exist. For instance, open-ended questions like "what would prevent you from seeking professional help if you experienced a psychological need," "what would your ideal help for mental health problems looks like,", and "what would you recommend as possible ways to improve mental health attitudes in K-12 teachers" could be asked.

In addition, future qualitative and quantitative research could investigate the role of outcome expectations in predicting K-12 teachers' attitudes and preferences toward various mental health treatment options. Outcomes to assess could include participants' beliefs about potential positive effects of the intervention (questions such as "the likelihood of the treatment being helpful") as well as the potential negative effects of treatment-seeking (questions such as "the likelihood of getting fired when people find out about treatment-seeking"). This type of research could provide a more in-depth understanding of methods for encouraging treatment seeking and potential outcomes in the Taiwanese K-12 teacher population.

Future research could also seek to develop and test culturally appropriate interventions to improve K-12 teachers' attitudes, intentions, and preferences. Previous research has indicated that short commercials or advertisements have been effective at reducing stigma and improving attitudes in the United States (Brecht et al., 2017; Friedberg & Bayar, 2017; Gallo et al., 2015). These commercials could be edited to a Taiwanese K-12 teacher context. A study could then be conducted to evaluate the effect of brief commercials on K-12 teachers' attitude towards seeking professional help. In conducting this study, K-12 teachers could be randomly assigned into a psychotherapy commercial or control group. Pre- and post-commercial attitudes, stigma, intentions, and treatment-seeking behaviors could be assessed. If effective, this type of advertisements could be disseminated on a broader level.

## **Implications and Conclusion**

The purpose of this study was to learn about K-12 teachers' attitudes toward professional mental health services in Taiwan. Mental health problems are a highly prevalent and significant issue in Taiwan, especially within the K-12 teachers' population (Chou & Wang, 2013; Chung et al., 2013; Fu et al., 2013; Kuo, 2004; Kyriacou & Chien, 2004; Lee, 2002; Yu et al., 2010). This study was conducted as a first step to help identify potential mechanisms for improving K-12 teachers' treatment-seeking attitudes and intentions and, in turn, lesson the mental health burden in Taiwan. First, we found that K-12 teachers had significantly stronger intentions to seek psychotherapy when they were in need, compared with other types of help. Second, we found that self-stigma mediated the relationship between public stigma and attitudes toward seeking professional help among Taiwanese K-12 teachers, but self-stigma and attitudes towards seeking professional help did not mediate the relationship between public stigma and intentions.

Several implications from these findings follow. Given the generally positive attitudes and intentions toward psychotherapy that were observed, efforts could be made to help teachers learn how to access this preferred option. The Teacher Support Center has already started on this initiative by offering a call-in line for K-12 teachers that will then provide a referral to a mental health provider anywhere on the island. The Teacher Support Center is also offering some remote services for teachers to access when there are no mental health providers in the close vicinity. More efforts like this as well as education about how to identify a provider and make an appointment could be useful.

Based on the finding that self-stigma fully mediates the relationship between public stigma and attitudes, mental health campaigns that are targeted to K-12 teachers may not have to worry as much about addressing public perceptions of mental health treatment seeking. Public

attitudes among K-12 teachers may already be positive. Or, their impact on attitudes, really only occurs when it is internalized. Further, given that within our sample, intentions were not significantly related to perceptions of public stigma, self-stigma may be a better target. Helping teachers recognize that it takes personal strength to reach out for help could replace feelings of personal shame with empowering beliefs. Additionally, encouraging open disclosures about mental health can help individuals see that they do not have to be ashamed of their treatment-seeking behaviors.

Given the finding that K-12 teachers were more likely to seek professional help if they were referred to by their intimate partner or parents, organizations and government bodies could encourage more open conversations of mental health topics at home. This could be done through TV commercials or other media campaigns. In addition, if a boss or fellow teacher is concerned about another teacher's mental health problems, they could, with the teacher's permission, reach out to their intimate partner or other family members to try to encourage the teacher to seek help. Other efforts could also be made within the school system to form and promote safe environments for teachers to talk about their mental health problems with people there. For instance, schools could have a mental health day every month for teachers and students to openly talk about mental health topics. Additionally, bosses could make discussions of mental health and psychological distress a normal part of the feedback process to teachers. Therapists and counselors who are on site in the schools not just for students, but also for teachers, could be helpful.

Last, the findings of this study help us understand that Taiwanese K-12 teachers' most strongly desire individual psychotherapy or written educational materials. Previously, the Teacher Support Center focused on mental health workshops as their primary outreach

mechanism. Additionally, when a teacher called in to find mental health services, their first recommendation was for group psychotherapy. Outreach efforts and treatment recommendations may be less effective when they do not match the attitudes and preferences that the potential clients hold. Based on the results of this study, we would recommend that the Teacher Support Center and other similar organizations increase their ability to offer individual psychotherapy. Additionally, they could increase their use of written (or online) educational materials for teachers to study on their own. This type of material could be made easily available and noticeable within the school setting. One important message that needs to be noted is that even though the result showed that the participating teacher favored individual psychotherapy over the other options, they rated all of the intervention options very highly (all above 20 on a 5 to 25 scale). The mean difference between their favorite option (individual psychotherapy) and least favorite option (group psychotherapy) was only 3.29 points. This may suggest that the K-12 teachers who participated in this study just really wanted some type of mental health help and they did not care as much about what type of help that was. Therefore, if individual psychotherapy is temporarily not available for K-12 teachers, other mental health services should also be considered. The efforts described above could have a significant impact on the overall mental health care in Taiwan. Improving mental health attitudes in K-12 teachers could have a trickle-down effect on students as they attend school in the teachers' classrooms (i.e., teachers may subtly share opinions that would then be adopted by their students). Additionally, as teachers take care of their mental health, they are more likely to have a beneficial educational and well-being impact on their students (Li, 2019; Oberle & Schonert-Reichl, 2016; Harding et al., 2019)

## References

- About us (n.d.). Mental health association in Taiwan. Retrieved April 13, 2023, from https://www.mhat.org.tw/efcont.aspx?id=K3JOsteln%2Fk
- Adler, A. B., Britt, T. W., Riviere, L. A., Kim, P. Y., & Thomas, J. L. (2015). Longitudinal determinants of mental health treatment-seeking by US soldiers. *Br J Psychiatry*, 207(4), 346-350. https://doi.org/10.1192/bjp.bp.114.146506
- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control: From Cognition to Behavior* (pp. 11-39). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-69746-3\_2
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs. NJ: Prentice Hall. Albert JM. Mediation analysis via potential outcomes models. Statistics in Medicine, 27, 1282-1304.
- Aldridge, R. W., Story, A., Hwang, S. W., Nordentoft, M., Luchenski, S. A., Hartwell, G., Tweed, E. J., Lewer, D., Vittal Katikireddi, S., & Hayward, A. C. (2018). Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. *Lancet*, 391(10117), 241-250. https://doi.org/10.1016/S0140-6736(17)31869-X
- American Psychological Association. (n.d.). Just-world hypothesis. In *APA dictionary of psychology*. Retrieved January 18, 2020, from https://dictionary.apa.org/just-world-hypothesis
- Anderson, M., Werner-Seidler, A., King, C., Gayed, A., Harvey, S., & O'Dea, B. (2019). Mental Health Training Programs for Secondary School Teachers: A Systematic Review. *School Mental Health*. https://doi.org/10.1007/s12310-018-9291-2

- Andrade, L. H., Alonso, J., Mneimneh, Z., Wells, J. E., Al-Hamzawi, A., Borges, G., Bromet, E., Bruffaerts, R., de Girolamo, G., de Graaf, R., Florescu, S., Gureje, O., Hinkov, H. R., Hu, C., Huang, Y., Hwang, I., Jin, R., Karam, E. G., Kovess-Masfety, V., . . . Kessler, R. C. (2014). Barriers to mental health treatment: results from the WHO World Mental Health surveys. *Psychological Medicine*, *44*(6), 1303-1317. https://doi.org/10.1017/S0033291713001943
- Andrews, G., Henderson, S., & Hall, W. (2001). Prevalence, comorbidity, disability and service utilisation: Overview of the Australian National Mental Health Survey. *The British Journal of Psychiatry*, 178(2), 145-153.
- Andrews, G., Issakidis, C., & Carter, G. (2001). Shortfall in mental health service utilisation. *Br J Psychiatry*, 179, 417-425. doi:10.1192/bjp.179.5.417
- Arnkoff, D. B., Glass, C. R., & Shapiro, S. J. (2002). Expectations and preferences. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 335–356). Oxford University Press.
- Atkinson, D. R., Furlong, M. J., & Poston, W. C. (1986). Afro-American preferences for counselor characteristics. *Journal of Counseling Psychology*, 33(3), 326-330. https://doi.org/10.1037/0022-0167.33.3.326
- Atkinson, D. R., Wampold, B. E., Lowe, S. M., Matthews, L., & Ahn, H.-N. (1998). Asian

  American Preferences for Counselor Characteristics:: Application of the Bradley-Terry
  Luce Model to Paired Comparison Data. *The Counseling Psychologist*, 26(1), 101-123.

  https://doi.org/10.1177/0011000098261006

- Barkham, M. I. C. H. A. E. L., & Lambert, M. J. (2021). The efficacy and effectiveness of psychological therapies. *Bergin and Garfield's handbook of psychotherapy and behavior change*, 7.
- Barkham, M., Lutz, W., & Castonguay, L. G. (2021). *Bergin and Garfield's handbook of psychotherapy and behavior change*. John Wiley & Sons.
- Barney, L. J., Griffiths, K. M., Jorm, A. F., & Christensen, H. (2006). Stigma about Depression and its Impact on Help-Seeking Intentions. *Australian & New Zealand Journal of Psychiatry*, 40(1), 51-54. https://doi.org/10.1080/j.1440-1614.2006.01741.x
- Bauer, J., Unterbrink, T., Hack, A., Pfeifer, R., Buhl-Griesshaber, V., Müller, U., Wesche, H., Frommhold, M., Seibt, R., Scheuch, K., & Wirsching, M. (2007). Working conditions, adverse events and mental health problems in a sample of 949 German teachers. *Int Arch Occup Environ Health*, 80(5), 442-449. https://doi.org/10.1007/s00420-007-0170-7
- Beck, A. T., & Steer, R. A. (1990). Manual for the Beck anxiety inventory. *San Antonio, TX:*\*Psychological Corporation.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck depression inventory (BDI-II)* (Vol. 10). Pearson.
- Beitel, M., Andrada Allahjah, A., Cutter, C., Blackhawk, N., & Barry, D. T. (2013). Expectations and preferences for counseling and psychotherapy in Native Americans. *Journal of Indigenous Research*, 2(1).
- Bolton, P., Bass, J., Neugebauer, R., Verdeli, H., Clougherty, K. F., Wickramaratne, P., Speelman, L., Ndogoni, L., & Weissman, M. (2003). Group Interpersonal Psychotherapy for Depression in Rural UgandaA Randomized Controlled Trial. *JAMA*, 289(23), 3117-3124. https://doi.org/10.1001/jama.289.23.3117

- Borrelli, I., Benevene, P., Fiorilli, C., D'Amelio, F., & Pozzi, G. (2014). Working conditions and mental health in teachers: a preliminary study. *Occup Med (Lond)*, *64*(7), 530-532. https://doi.org/10.1093/occmed/kqu108
- Britt, T. W., Jennings, K. S., Cheung, J. H., Pury, C. L. S., & Zinzow, H. M. (2015). The role of different stigma perceptions in treatment seeking and dropout among active duty military personnel. *Psychiatric Rehabilitation Journal*, 38(2), 142-149.
  https://doi.org/10.1037/prj0000120
- Bruwer, B., Sorsdahl, K., Harrison, J., Stein, D. J., Williams, D., & Seedat, S. (2011). Barriers to mental health care and predictors of treatment dropout in the South African Stress and Health Study. *Psychiatric services (Washington, D.C.)*, 62(7), 774-781. https://doi.org/10.1176/ps.62.7.pss6207\_0774
- Buser, J. K. (2009). Treatment-seeking disparity between African Americans and Whites:

  Attitudes toward treatment, coping resources, and racism. *Journal of Multicultural Counseling and Development*, *37*(2), 94-104. https://doi.org/10.1002/j.2161-1912.2009.tb00094.x
- Brecht K, Swift JK, Worrall JM, & Parkin SR (2017). A randomized controlled test of direct-to-consumer marketing using the american psychological association psychotherapy works videos. *Professional Psychology: Research and Practice*, 48(6), 421–428.

  10.1037/pro0000167
- Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental health services: A meta-analytic review of preferences, perceptions, and outcomes [doi:10.1037/a0025266]. American Psychological Association.

- Chambless, D. L., & Ollendick, T. H. (2001). Empirically supported psychological interventions: controversies and evidence. *Annu Rev Psychol*, *52*, 685-716. https://doi.org/10.1146/annurev.psych.52.1.685
- Chang, H. (2007a). Depressive symptom manifestation and help-seeking among Chinese college students in Taiwan. *International Journal of Psychology*, 42(3), 200-206.
- Chang, H. (2007b). Psychological distress and help-seeking among Taiwanese college students: role of gender and student status. *British Journal of Guidance & Counselling*, *35*(3), 347-355. <a href="https://doi.org/10.1080/03069880701418789">https://doi.org/10.1080/03069880701418789</a>
- Centers for Disease Control and Prevention. (2019). Leading Causes of Death and Injury.

  Retrieved November 28, 2021, from

  https://www.cdc.gov/injury/wisqars/LeadingCauses.html
- Charlson, F., van Ommeren, M., Flaxman, A., Cornett, J., Whiteford, H., & Saxena, S. (2019).

  New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis. *Lancet*, *394*(10194), 240-248. https://doi.org/10.1016/S0140-6736(19)30934-1
- Chen, P., Liu, X. J., Wang, X. Q., Yang, B. X., Ruan, J., & Liu, Z. (2020). Attitude Toward Seeking Professional Psychological Help Among Community-Dwelling Population in China [10.3389/fpsyt.2020.00417]. *Frontiers in Psychiatry*, 11, 417. https://www.frontiersin.org/article/10.3389/fpsyt.2020.00417
- Cheng, Y.-W., & Ren, L. (2010). Elementary resource room teachers' job stress and job satisfaction in Taoyuan County, Taiwan. *Journal of Intellectual & Developmental Disability*, 35(1), 44-47. https://doi.org/10.3109/13668250903496369

- Chien, I. C., Chou, Y. J., Lin, C. H., Bih, S. H., & Chou, P. (2004). Prevalence of psychiatric disorders among National Health Insurance enrollees in Taiwan. *Psychiatr Serv*, 55(6), 691-697. https://doi.org/10.1176/appi.ps.55.6.691
- Chou, Y. C., & Wang, C. H. (2013). The research of teachers' emotional experiences. *Journal of Professional Teachers*, 5, 49-84. https://doi.org/10.7054/JPT
- Chu, L.-C. (2012). The Effects of Cultural Values on Mental Health Among the Taiwanese People: Mediating of Attitudes Toward Emotional Expression. *Asia Pacific Journal of Public Health*, 27(2), NP1880-NP1892. https://doi.org/10.1177/1010539512443975
- Chuang, H.-L., & Huang, W.-C. (2007). A Re-Examination of the Suicide Rates in Taiwan.

  Social Indicators Research, 83(3), 465-485. https://doi.org/10.1007/s11205-006-9056-4
- Chung, P.-C., Yu, M.-N., Syu, J.-J., Chen, P.-L., & Qiao, P.-C. (2013). From languishing to flourishing: Exploration of the types of teachers' mental health statuses and predictors of teachers' mental health. *Bulletin of Educational Psychology*, *44*(3), 646-665.
- Ciarrochi, J. V., & Deane, F. P. (2001). Emotional competence and willingness to seek help from professional and nonprofessional sources. *British Journal of Guidance & Counselling*, 29(2), 233-246. https://doi.org/10.1080/03069880124843
- Ciftci, A., Jones, N., & Corrigan, P. W. (2013). Mental Health Stigma in the Muslim Community. *Journal of Muslim Mental Health*, 7(1). https://doi.org/10.3998/jmmh.10381607.0007.102
- Cohen, J. (2013). Statistical power analysis for the behavioral sciences. Academic press.
- Collaborators, G. D. a. I. (2020). Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*, 396(10258), 1204-1222. https://doi.org/10.1016/S0140-6736(20)30925-9

- Conner, K. O., Copeland, V. C., Grote, N. K., Koeske, G., Rosen, D., Reynolds, C. F., 3rd, & Brown, C. (2010). Mental health treatment seeking among older adults with depression: the impact of stigma and race. *The American journal of geriatric psychiatry : official journal of the American Association for Geriatric Psychiatry*, *18*(6), 531-543. https://doi.org/10.1097/JGP.0b013e3181cc0366
- Consedine, N. S., Magai, C., & Bonanno, G. A. (2002). Moderators of the Emotion Inhibition-Health Relationship: A Review and Research Agenda. *Review of General Psychology*, 6(2), 204-228. https://doi.org/10.1037/1089-2680.6.2.204
- Constantine, M. G. (2002). Predictors of satisfaction with counseling: Racial and ethnic minority clients' attitudes toward counseling and ratings of their counselors' general and multicultural counseling competence. *Journal of Counseling Psychology*, 49(2), 255-263. https://doi.org/10.1037/0022-0167.49.2.255
- Corrigan, P., & Bink, A. B. (2005). *On the stigma of mental illness*. American Psychological Association.
- Corrigan, P. W., & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *Am Psychol*, *54*(9), 765-776. https://doi.org/10.1037//0003-066x.54.9.765
- Corrigan, P. W., & Rao, D. (2012). On the self-stigma of mental illness: stages, disclosure, and strategies for change. *Canadian journal of psychiatry. Revue canadienne de psychiatrie*, 57(8), 464-469. https://doi.org/10.1177/070674371205700804
- Crabb, J., Stewart, R. C., Kokota, D., Masson, N., Chabunya, S., & Krishnadas, R. (2012).

  Attitudes towards mental illness in Malawi: a cross-sectional survey. *BMC Public Health*, 12(1), 541. https://doi.org/10.1186/1471-2458-12-541

- Cuijpers, P., Andersson, G., Donker, T., & van Straten, A. (2011). Psychological treatment of depression: results of a series of meta-analyses. *Nord J Psychiatry*, 65(6), 354-364. https://doi.org/10.3109/08039488.2011.596570
- Dattani, S., Ritchie, H., & Roser, M. (2021, August 20). Mental health. Our World in Data.

  Retrieved November 28, 2021, from https://ourworldindata.org/mental-health.
- Deacon, B. J., & Abramowitz, J. S. (2004). Cognitive and behavioral treatments for anxiety disorders: a review of meta-analytic findings. *J Clin Psychol*, 60(4), 429-441. https://doi.org/10.1002/jclp.10255
- Deane, F.P., Ciarrochi, J., Wilson, C.J., Rickwood, D. & Anderson, S. (2001). Do high school students' intentions predict actual help seeking from school counsellors? Paper presented at the 8th Annual Conference Suicide Prevention, July 2001, Sydney. Australia.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- Elhai, J. D., Schweinle, W., & Anderson, S. M. (2008). Reliability and validity of the Attitudes

  Toward Seeking Professional Psychological Help Scale-Short Form. *Psychiatry Res*,

  159(3), 320-329. https://doi.org/10.1016/j.psychres.2007.04.020
- Farooq, S. (2013). Early intervention for psychosis in low- and middle-income countries needs a public health approach. *British Journal of Psychiatry*, 202(3), 168-169. https://doi.org/10.1192/bjp.bp.112.113761
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*

  Power 3.1: Tests for correlation and regression analyses. *Behavior research methods*,

  41(4), 1149-1160.

- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, 39(2), 175-191.
- Feng, M. C., Wu, H. C., Lin, H. T., Lei, L., Chao, C. L., Lu, C. M., & Yang, W. P. (2020).
  Exploring the Stress, Psychological Distress, and Stress-relief Strategies of Taiwan
  Nursing Staffs Facing the Global Outbreak of COVID-19. *Hu Li Za Zhi*, 67(3), 64-74.
  https://doi.org/10.6224/jn.202006\_67(3).09
- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychologial help: A shortened form and considerations for research. *Journal of College Student Development*, 36(4), 368-373.
- Fischer, E. H., & Turner, J. I. (1970). Orientations to seeking professional help: development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35(1p1), 79.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behaviour: An introduction to theory and research* (Vol. 27).
- Franz, L., Carter, T., Leiner, A. S., Bergner, E., Thompson, N. J., & Compton, M. T. (2010).

  Stigma and treatment delay in first-episode psychosis: a grounded theory study. *Early intervention in psychiatry*, 4(1), 47-56. <a href="https://doi.org/10.1111/j.1751-7893.2009.00155.x">https://doi.org/10.1111/j.1751-7893.2009.00155.x</a>
- Friedberg RD, & Bayar H (2017). If it works for pills, can it work for skills? Direct-to-consumer social marketing of evidence-based psychological treatments. *Psychiatric Services*, 68(6), 621–623. 10.1176/appi.ps.201600153B
- Fripp, J., & Carlson, R. (2017). Exploring the Influence of Attitude and Stigma on Participation of African American and Latino Populations in Mental Health Services. *Journal of*

- Multicultural Counseling and Development, 45, 80-94. https://doi.org/10.1002/jmcd.12066
- Fu, T. S., Lee, C. S., Gunnell, D., Lee, W. C., & Cheng, A. T. (2013). Changing trends in the prevalence of common mental disorders in Taiwan: a 20-year repeated cross-sectional survey. *Lancet*, *381*(9862), 235-241. https://doi.org/10.1016/S0140-6736(12)61264-1
- Fuertes, J. N., & Gelso, C. J. (1998). Asian-American, Euro-American, and African-American Students' Universal-Diverse Orientation and Preferences for Characteristics of Psychologists. *Psychological Reports*, 83(1), 280-282. https://doi.org/10.2466/pr0.1998.83.1.280
- Gallo KP, Comer JS, Barlow DH, Clarke RN, & Antony MM (2015). Direct-to-consumer marketing of psychological treatments: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 83(5), 994–998. 10.1037/a0039470
- Ginn, S., & Horder, J. (2012). "One in four" with a mental health problem: the anatomy of a statistic. *BMJ*, *344*, e1302. https://doi.org/10.1136/bmj.e1302
- *GBD results tool*. GHDx. (n.d.). Retrieved November 28, 2021, from http://ghdx.healthdata.org/gbd-results-tool.
- Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology/Psychologie* canadienne, 58(3), 203-210. https://doi.org/10.1037/cap0000117
- Gray, H. L., Jimenez, D. E., Cucciare, M. A., Tong, H.-Q., & Gallagher-Thompson, D. (2009). Ethnic Differences in Beliefs Regarding Alzheimer Disease Among Dementia Family Caregivers. *The American Journal of Geriatric Psychiatry*, *17*(11), 925-933. https://doi.org/10.1097/JGP.0b013e3181ad4f3c

- Gross, A. E., & McMullen, P. A. (1983). Models of the help-seeking process. *New directions in helping*, 2, 45-61.
- Hai, A. H., Lee, C. S., Abbas, B. T., Bo, A., Morgan, H., & Delva, J. (2021). Culturally adapted evidence-based treatments for adults with substance use problems: A systematic review and meta-analysis. *Drug and Alcohol Dependence*, 226, 108856.
  https://doi.org/https://doi.org/10.1016/j.drugalcdep.2021.108856
- Han, D. Y., Lin, Y. Y., Liao, S. C., Lee, M. B., Thornicroft, G., & Wu, C. Y. (2015). Analysis of the barriers of mental distress disclosure in medical inpatients in Taiwan. *Int J Soc Psychiatry*, 61(5), 446-455. https://doi.org/10.1177/0020764014552865
- Han J.-J. (2018). The Inheritance Way of Taiwan Hakka 's Good Tradition"Honesty,

  Uprightness, Hardworking and Frugality" *Journal of Jiaying University*, 7,11-15.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., Evans, R., Bell, S., Grey, J., Brockman, R., Campbell, R., Araya, R., Murphy, S., & Kidger, J. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders*, 242, 180-187.
  https://doi.org/10.1016/j.jad.2018.08.080
- Hilton, M. F., Whiteford, H. A., Sheridan, J. S., Cleary, C. M., Chant, D. C., Wang, P. S., & Kessler, R. C. (2008). The Prevalence of Psychological Distress in Employees and Associated Occupational Risk Factors. *Journal of Occupational and Environmental Medicine*, 50(7).
  - https://journals.lww.com/joem/Fulltext/2008/07000/The\_Prevalence\_of\_Psychological\_ Distress\_in.4.aspx

- Huang& Lai. (2015) Are You Happy, Teachers?-A Case Study on Well-Being of Elementary School Teachers. *Journal of social science*, 95, 182-204.

  doi:10.3966/160683002015010095010
- Huang M.H. (2013) A Study on Relationships among Elementary School Teachers' JobInvolvement, Job Stress and Well-Being: Taoyuan County As an Example [In Chinese].Master Thesis. doi:10.6840/CYCU.2013.00040
- Hung, C.-L. (2011). Coping Strategies of Primary School Teachers in Taiwan Experiencing Stress Because of Teacher Surplus. *Social Behavior and Personality: an international journal*, *39*, 1161-1173. https://doi.org/10.2224/sbp.2011.39.9.1161
- Jennings, K. S., Cheung, J. H., Britt, T. W., Goguen, K. N., Jeffirs, S. M., Peasley, A. L., & Lee, A. C. (2015). How are perceived stigma, self-stigma, and self-reliance related to treatment-seeking? A three-path model. *Psychiatric Rehabilitation Journal*, *38*(2), 109-116. https://doi.org/10.1037/prj0000138
- Jimenez, D. E., Bartels, S. J., Cardenas, V., Dhaliwal, S. S., & Alegría, M. (2012). Cultural Beliefs and Mental Health Treatment Preferences of Ethnically Diverse Older Adult Consumers in Primary Care. *The American Journal of Geriatric Psychiatry*, 20(6), 533-542. https://doi.org/10.1097/JGP.0b013e318227f876
- Johnson, K. S., Elbert-Avila, K. I., & Tulsky, J. A. (2005). The influence of spiritual beliefs and practices on the treatment preferences of African Americans: a review of the literature. *J Am Geriatr Soc*, 53(4), 711-719. https://doi.org/10.1111/j.1532-5415.2005.53224.x
- Joseph, S., Williams, R., Irwing, P., & Cammock, T. (1994). The preliminary development of a measure to assess attitudes toward emotional expression. *Personality and Individual Differences*, 16, 869-875. <a href="https://doi.org/10.1016/0191-8869(94)90231-3">https://doi.org/10.1016/0191-8869(94)90231-3</a>

- Kaltman, S., Hurtado de Mendoza, A., Gonzales, F. A., & Serrano, A. (2014). Preferences for trauma-related mental health services among Latina immigrants from Central America,
   South America, and Mexico. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*, 83-91. https://doi.org/10.1037/a0031539
- Kamenov, K., Twomey, C., Cabello, M., Prina, A. M., & Ayuso-Mateos, J. L. (2017). The efficacy of psychotherapy, pharmacotherapy and their combination on functioning and quality of life in depression: a meta-analysis. *Psychological Medicine*, *47*(3), 414-425. https://doi.org/10.1017/S0033291716002774
- Kazdin, A. E. (1991). Effectiveness of psychotherapy with children and adolescents. *J Consult Clin Psychol*, 59(6), 785-798. https://doi.org/10.1037//0022-006x.59.6.785
- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Chatterji, S., Lee, S., Ormel, J., Ustün, T. B., & Wang, P. S. (2009). The global burden of mental disorders: an update from the WHO World Mental Health (WMH) surveys. *Epidemiol Psichiatr Soc*, 18(1), 23-33. https://doi.org/10.1017/s1121189x00001421
- Kohler, H.-P., Billari, F. C., & Ortega, J. A. (2002). The Emergence of Lowest-Low Fertility in Europe during the 1990s. *Population and Development Review*, 28(4), 641-680. http://www.jstor.org/stable/3092783
- Kohn, R., Saxena, S., Levav, I., & Saraceno, B. (2004). The treatment gap in mental health care.

  \*Bull World Health Organ, 82(11), 858-866. https://doi.org//S0042-96862004001100011
- Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology*, 47(1), 138-143. https://doi.org/10.1037/0022-0167.47.1.138

- Kovess-Masféty, V., Rios-Seidel, C., & Sevilla-Dedieu, C. (2007). Teachers' mental health and teaching levels. *Teaching and Teacher Education*, 23(7), 1177-1192.
  https://doi.org/10.1016/j.tate.2006.07.015
- Kuo, C.-J., Gunnell, D., Chen, C.-C., Yip, P. S. F., & Chen, Y.-Y. (2012). Suicide and non-suicide mortality after self-harm in Taipei City, Taiwan. *British Journal of Psychiatry*, 200(5), 405-411. https://doi.org/10.1192/bjp.bp.111.099366
- Kuo Y. H. (2004). The study of the relationships between the job stresses and burnout in the primary school teachers [M.S. thesis], National Pingtung University of Education, Pingtung, Taiwan.
- Kuo Y.-S. (1994). A Study of the Factors Associated with Teacher Burnout. *Journal of Psychology*. 27, 63-79. DOI: 10.6251/BEP.19940601.3
- Kwan, B. M., Dimidjian, S., & Rizvi, S. L. (2010). Treatment preference, engagement, and clinical improvement in pharmacotherapy versus psychotherapy for depression.
  Behaviour Research and Therapy, 48(8), 799-804.
  https://doi.org/10.1016/j.brat.2010.04.003
- Kyriacou, C., & Chien, P.-Y. (2004). Teacher stress in Taiwanese primary schools. *Journal of Educational Enquiry*, 5.
- Lambert, M. J. (2013). Outcome in psychotherapy: The past and important advances.

  \*Psychotherapy, 50(1), 42-51. https://doi.org/10.1037/a0030682
- Lauber, C., & Rössler, W. (2007). Stigma towards people with mental illness in developing countries in Asia. *Int Rev Psychiatry*, 19(2), 157-178. https://doi.org/10.1080/09540260701278903

- Lee , I.-chia. (2019, September 8). *Suicide rate falling as teen attempts rise*. Taipei Times. http://www.taipeitimes.com/News/taiwan/archives/2019/09/09/2003721971.
- Lee, J. Y., & Shin, Y. J. (2020). Using the Theory of Planned Behavior to Predict Korean College Students' Help-Seeking Intention. *J Behav Health Serv Res*. https://doi.org/10.1007/s11414-020-09735-z
- Lee K.-W. (2007) A Study of Role Stress and Burnout of Junior High School Physical Education

  Teachers in Taipei [In Chinese]., *Journal of Physical Education*, 96, 76-84.

  doi:10.6695/AUES
- Lee, L. J., Kuo, H. T., Chiang, M. H., & Lien, C. C. (2008). A study of the effects of the statutory quota on elementary teachers sampled from Taichung City and County [In Chinese]. *The Journal of Social Studies Education Research*, 13, 125-152.
- Lee, M., Lu, W., Mann-Barnes, T., Nam, J.-H., Nelson, J., & Ma, G. X. (2021). Mental Health Screening Needs and Preference in Treatment Types and Providers in African American and Asian American Older Adults. *Brain Sciences*, 11(5). https://doi.org/10.3390/brainsci11050597
- Lee YJ (2002). A study on the relationship of working stress and emotional management of teachers in elementary schools. MA thesis, National TaiChung Teachers College [in Chinese].
- Li, P. H. (2019). *The importance of primary school teachers' mental health in Taiwan*. Taiwan Insight. <a href="https://taiwaninsight.org/2019/01/31/the-importance-of-primary-school-teachers-mental-health-in-taiwan/">https://taiwaninsight.org/2019/01/31/the-importance-of-primary-school-teachers-mental-health-in-taiwan/</a>

- Li, W., Dorstyn, D. S., & Denson, L. A. (2014). Psychosocial correlates of college students' help-seeking intention: A meta-analysis. *Professional Psychology: Research and Practice*, 45(3), 163-170. https://doi.org/10.1037/a0037118
- Lin, Y.-n. (2014). College Psychotherapy at a Taiwanese Counseling Center. *Journal of College Student Psychotherapy*, 28(1), 6-11. https://doi.org/10.1080/87568225.2013.824321
- Lora, A., Kohn, R., Levav, I., McBain, R., Morris, J., & Saxena, S. (2012). Service availability and utilization and treatment gap for schizophrenic disorders: a survey in 50 low- and middle-income countries. *Bull World Health Organ*, 90(1), 47-54, 54a-54b. https://doi.org/10.2471/blt.11.089284
- Ma, W. F., Huang, X. Y., Chang, H. J., Yen, W. J., & Lee, S. (2010). Impact of Taiwanese culture on beliefs about expressing anxiety and engaging in physical activity: a discursive analysis of the literature. *J Clin Nurs*, *19*(7-8), 969-977. https://doi.org/10.1111/j.1365-2702.2009.02840.x
- Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging & Mental Health*, *10*(6), 574-582. https://doi.org/10.1080/13607860600641200
- Mak, W. W., Chong, E. S., & Wong, C. C. (2014). Beyond attributions: Understanding public stigma of mental illness with the common sense model. *Am J Orthopsychiatry*, 84(2), 173-181. https://doi.org/10.1037/h0099373
- Madden-Szeszko, G. M. (2000). Variables contributing to teacher efficacy: An examination of burnout, affect, demographic variables, and general self-efficacy. *Dissertation Abstracts International Section A: Humanities and Social Sciences, Vol 61 (3-A), Sep, 2000. pp.* 881., 61(3-A).

- Mathers, C. D., & Loncar, D. (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med*, *3*(11), e442. https://doi.org/10.1371/journal.pmed.0030442
- Ministry of Health and Welfare Department of Statistics Organization of Data Science

  Center. Retrieved November 28, 2021, from https://dep.mohw.gov.tw/DOS/mp-113.html.
- Ministry of the Interior (MOI). (2010). *Number and rates of birth, death, marriage, and divorce*. http://sowf.moi.gov.tw/stat/month/m1-02.xls
- Mojaverian, T., Hashimoto, T., & Kim, H. (2013). Cultural Differences in Professional Help Seeking: A Comparison of Japan and the U.S [10.3389/fpsyg.2012.00615]. *Frontiers in Psychology*, *3*, 615. https://www.frontiersin.org/article/10.3389/fpsyg.2012.00615
- Morgan, N. T., & Robinson, M. (2003). Students' Help-Seeking Behaviours. *Canadian Journal of Counselling and Psychotherapy*, 37(2).
- Murphy, C., & Liu, M. (1998). Choices must be made. *Education 3-13*, 26(2), 9-16. https://doi.org/10.1080/03004279885200161
- Murray, C. J., Vos, T., Lozano, R., Naghavi, M., Flaxman, A. D., Michaud, C., Ezzati, M.,
  Shibuya, K., Salomon, J. A., Abdalla, S., Aboyans, V., Abraham, J., Ackerman, I.,
  Aggarwal, R., Ahn, S. Y., Ali, M. K., Alvarado, M., Anderson, H. R., Anderson, L.
  M., . . . Memish, Z. A. (2012). Disability-adjusted life years (DALYs) for 291 diseases
  and injuries in 21 regions, 1990-2010: a systematic analysis for the Global Burden of
  Disease Study 2010. Lancet, 380(9859), 2197-2223. https://doi.org/10.1016/S0140-6736(12)61689-4
- Nagai, S. (2015). Predictors of help-seeking behavior: Distinction between help-seeking intentions and help-seeking behavior. *Japanese Psychological Research*, 57. https://doi.org/10.1111/jpr.12091

- Naslund, J. A., Aschbrenner, K. A., McHugo, G. J., Unützer, J., Marsch, L. A., & Bartels, S. J. (2019). Exploring opportunities to support mental health care using social media: A survey of social media users with mental illness. *Early intervention in psychiatry*, *13*(3), 405-413. https://doi.org/10.1111/eip.12496
- Noël, L. T. (2010). An Ethnic/Racial Comparison of Causal Beliefs and Treatment Preferences for the Symptoms of Depression Among Patients with Diabetes. *The Diabetes Educator*, 36(5), 816-827. https://doi.org/10.1177/0145721710380145
- Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students.

  Social Science & Medicine, 159, 30-37. https://doi.org/10.1016/j.socscimed.2016.04.031
- Olfson, M., & Marcus, S. C. (2010). National trends in outpatient psychotherapy. *Am J Psychiatry*, *167*(12), 1456-1463. https://doi.org/10.1176/appi.ajp.2010.10040570
- Olfson, M., Marcus, S. C., Druss, B., & Pincus, H. A. (2002). National trends in the use of outpatient psychotherapy. *Am J Psychiatry*, *159*(11), 1914-1920. https://doi.org/10.1176/appi.ajp.159.11.1914
- O'Neill, A. (2021, November 17). *Taiwan gross domestic product (GDP) 1986-2026*. Statista. Retrieved November 28, 2021, from https://www.statista.com/statistics/727589/gross-domestic-product-gdp-in-taiwan/.
- Pan, J. J., Chen, B. Y., Teng, H. W., Lu, M. L., & Shen, W. W. (2005). The use of alternative medicine among Taiwanese psychiatric outpatients. *Psychiatry Clin Neurosci*, *59*(6), 711-716. https://doi.org/10.1111/j.1440-1819.2005.01441.x
- Pang, S., Liu, J., Mahesh, M., Chua, B. Y., Shahwan, S., Lee, S. P., Vaingankar, J. A., Abdin, E., Fung, D. S. S., Chong, S. A., & Subramaniam, M. (2017). Stigma among Singaporean

- youth: a cross-sectional study on adolescent attitudes towards serious mental illness and social tolerance in a multiethnic population. *BMJ Open*, 7(10), e016432. https://doi.org/10.1136/bmjopen-2017-016432
- Pedersen, E. R., & Paves, A. P. (2014). Comparing perceived public stigma and personal stigma of mental health treatment seeking in a young adult sample. *Psychiatry research*, *219*(1), 143-150. https://doi.org/10.1016/j.psychres.2014.05.017
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behav Res Methods Instrum Comput*, *36*(4), 717-731. https://doi.org/10.3758/bf03206553
- Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007).

  No health without mental health. *Lancet*, *370*(9590), 859-877.

  https://doi.org/10.1016/S0140-6736(07)61238-0
- Raue, P. J., Schulberg, H. C., Heo, M., Klimstra, S., & Bruce, M. L. (2009). Patients' depression treatment preferences and initiation, adherence, and outcome: a randomized primary care study. *Psychiatr Serv*, 60(3), 337-343. https://doi.org/10.1176/appi.ps.60.3.337
- Rehm, J., & Shield, K. D. (2019). Global Burden of Disease and the Impact of Mental and Addictive Disorders. *Curr Psychiatry Rep*, 21(2), 10. https://doi.org/10.1007/s11920-019-0997-0
- Reynders, A., Kerkhof, A. J., Molenberghs, G., & Van Audenhove, C. (2014). Attitudes and stigma in relation to help-seeking intentions for psychological problems in low and high suicide rate regions. *Soc Psychiatry Psychiatr Epidemiol*, 49(2), 231-239. https://doi.org/10.1007/s00127-013-0745-4

- Rice, S. M., Oliffe, J. L., Kealy, D., Seidler, Z. E., & Ogrodniczuk, J. S. (2020). Men's Help-Seeking for Depression: Attitudinal and Structural Barriers in Symptomatic Men. *Journal of Primary Care & Community Health*, 11, 2150132720921686.
  https://doi.org/10.1177/2150132720921686
- Rosenberg, M. J., Hovland, C. I., McGuire, W. J., Abelson, R. P., & Brehm, J. W. (1960).

  Attitude organization and change: An analysis of consistency among attitude

  components. (Yales studies in attitude and communication.), Vol. III. Yale Univer. Press.
- Ruzek, N. A., Nguyen, D. Q., & Herzog, D. C. (2011). Acculturation, enculturation, psychological distress and help-seeking preferences among Asian American college students. *Asian American Journal of Psychology*, 2(3), 181-196. https://doi.org/10.1037/a0024302
- Satcher, D. (2000). Mental health: A report of the Surgeon General--Executive summary.

  \*Professional Psychology: Research and Practice, 31(1), 5.
- Schnyder, N., Panczak, R., Groth, N., & Schultze-Lutter, F. (2017). Association between mental health-related stigma and active help-seeking: Systematic review and meta-analysis.

  \*\*British Journal of Psychiatry, 210(4), 261-268.\*\*

  https://doi.org/10.1192/bjp.bp.116.189464
- Schuler, M. S., Puttaiah, S., Mojtabai, R., & Crum, R. M. (2015). Perceived Barriers to

  Treatment for Alcohol Problems: A Latent Class Analysis. *Psychiatr Serv*, 66(11), 12211228. https://doi.org/10.1176/appi.ps.201400160
- Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The Consumer Reports study.

  \*American Psychologist\*, 50(12), 965-974. https://doi.org/10.1037/0003-066X.50.12.965

- Seyfi, F., Poudel, K. C., Yasuoka, J., Otsuka, K., & Jimba, M. (2013). Intention to seek professional psychological help among college students in Turkey: influence of help-seeking attitudes. *BMC Res Notes*, 6, 519. https://doi.org/10.1186/1756-0500-6-519
- Shechtman, Z., & Kiezel, A. (2016). Why do people prefer individual therapy over group therapy? *International Journal of Group Psychotherapy*, 66, 571-591.
- Sickel, A. E., Seacat, J. D., & Nabors, N. A. (2014). Mental health stigma update: A review of consequences. *Advances in Mental Health*, 12(3), 202-215.
  https://doi.org/10.1080/18374905.2014.11081898
- Smith, M., & Glass, G. (1977). Meta-Analysis of Psychotherapy Outcome Studies. *The American psychologist*, 32, 752-760. https://doi.org/10.1037//0003-066X.32.9.752
- Soong, W. T. (1998). The needs and popularization of psychotherapy in Taiwan. *Psychiatry Clin Neurosci*, 52 Suppl, S229-232. https://doi.org/10.1111/j.1440-1819.1998.tb03229.x
- Steel, Z., Marnane, C., Iranpour, C., Chey, T., Jackson, J. W., Patel, V., & Silove, D. (2014). The global prevalence of common mental disorders: a systematic review and meta-analysis 1980-2013. *International journal of epidemiology*, *43*(2), 476-493. https://doi.org/10.1093/ije/dyu038
- Stewart, T. J., Swift, J. K., Freitas-Murrell, B. N., & Whipple, J. L. (2013). Preferences for mental health treatment options among Alaska Native college students. *Am Indian Alsk Native Ment Health Res*, 20(3), 59-78. https://doi.org/10.5820/aian.2003.2013.59
- Suan, L. V., & Tyler, J. D. (1990). Mental health values and preference for mental health resources of Japanese-American and Caucasian-American students. *Professional Psychology: Research and Practice*, 21(4), 291-296. https://doi.org/10.1037/0735-7028.21.4.291

- Substance Abuse and Mental Health Services Administration. (2020). Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55).

  Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/
- Sun, L., & Fulginiti, L. E. (2007). Accounting for Taiwan GDP Growth: Parametric and Nonparametric Estimates.
- Swift, J., Stewart, T., Whipple, J., & Kominiak, N. (2013). Asian American preferences for an ideal mental health treatment provider. *Asia Pacific Journal of Counselling and Psychotherapy*, 4, 44-56. https://doi.org/10.1080/21507686.2013.770046
- Swift, J. K., Callahan, J. L., Cooper, M., & Parkin, S. R. (2018). The impact of accommodating client preference in psychotherapy: A meta-analysis. *J Clin Psychol*, *74*(11), 1924-1937. https://doi.org/10.1002/jclp.22680
- Swift, J. K., Callahan, J. L., Tompkins, K. A., Connor, D. R., & Dunn, R. (2015). *A delay-discounting measure of preference for racial/ethnic matching in psychotherapy* [doi:10.1037/pst0000019]. Educational Publishing Foundation.
- Swift, J. K., & Greenberg, R. P. (2015). Premature termination in psychotherapy: Strategies for engaging clients and improving outcomes [doi:10.1037/14469-000]. American Psychological Association. https://doi.org/10.1037/14469-000
- Taiwan (n.d.). Central Intelligence Agency. Retrieved April 12, 2023, from https://www.cia.gov/the-world-factbook/countries/taiwan/

- Taiwan Business TOPICS, & About Taiwan Business TOPICS Taiwan Business TOPICS is published monthly by the American Chamber of Commerce in Taiwan. (2022, October 7). Taiwan's commitment to Mental Health. Taiwan Business TOPICS. Retrieved April 11, 2023, from https://topics.amcham.com.tw/2022/10/taiwans-commitment-to-mental-health/
- Thornicroft, G., Mehta, N., Clement, S., Evans-Lacko, S., Doherty, M., Rose, D., Koschorke, M., Shidhaye, R., O'Reilly, C., & Henderson, C. (2016). Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *Lancet*, 387(10023), 1123-1132. https://doi.org/10.1016/s0140-6736(15)00298-6
- Tomczyk, S., Schmidt, S., Muehlan, H., Stolzenburg, S., & Schomerus, G. (2020). A Prospective Study on Structural and Attitudinal Barriers to Professional Help-Seeking for Currently Untreated Mental Health Problems in the Community. *The Journal of Behavioral Health Services & Research*, 47(1), 54-69. http://dx.doi.org/10.1007/s11414-019-09662-8
- Tomlinson, M., & Lund, C. (2012). Why Does Mental Health Not Get the Attention It Deserves?

  An Application of the Shiffman and Smith Framework. *PLOS Medicine*, 9(2), e1001178.

  https://doi.org/10.1371/journal.pmed.1001178
- Tompkins, K. A., Swift, J. K., & Callahan, J. L. (2013). Working with clients by incorporating their preferences. *Psychotherapy (Chic)*, 50(3), 279-283. https://doi.org/10.1037/a0032031
- Tseng, W. S., Ebata, K., Kim, K. I., Krahl, W., Kua, E. H., Lu, Q., Shen, Y., Tan, E. S., & Yang,
  M. J. (2001). Mental health in Asia: social improvements and challenges. *Int J Soc Psychiatry*, 47(1), 8-23. https://doi.org/10.1177/002076400104700102

- Vally, Z., Cody, B. L., Albloshi, M. A., & Alsheraifi, S. N. M. (2018). Public stigma and attitudes toward psychological help-seeking in the United Arab Emirates: The mediational role of self-stigma. *Perspect Psychiatr Care*, 54(4), 571-579. https://doi.org/10.1111/ppc.12282
- Vázquez, A. L., de la Caridad Alvarez, M., Flores, C. M. N., Vera, J. M. G., Barrett, T. S., & Rodríguez, M. M. D. (2021). Youth mental health service preferences and utilization patterns among Latinx caregivers. *Children and Youth Services Review*, *131*, 106258.
- Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness.

  \*Lancet Psychiatry, 3(2), 171-178. https://doi.org/10.1016/S2215-0366(15)00505-2
- Vocks, S., Tuschen-Caffier, B., Pietrowsky, R., Rustenbach, S. J., Kersting, A., & Herpertz, S. (2010). Meta-analysis of the effectiveness of psychological and pharmacological treatments for binge eating disorder. *Int J Eat Disord*, 43(3), 205-217. https://doi.org/10.1002/eat.20696
- Vogel, D. L., Armstrong, P. I., Tsai, P.-C., Wade, N. G., Hammer, J. H., Efstathiou, G., Holtham, E., Kouvaraki, E., Liao, H.-Y., Shechtman, Z., & Topkaya, N. (2013). Cross-cultural validity of the Self-Stigma of Seeking Help (SSOSH) scale: Examination across six nations. *Journal of Counseling Psychology*, 60(2), 303-310. https://doi.org/10.1037/a0032055
- Vogel, D. L., Heath, P. J., Engel, K. E., Brenner, R. E., Strass, H. A., Al-Darmaki, F. R., Armstrong, P. I., Galbraith, N., Galbraith, V., Baptista, M. N., Gonçalves, M., Liao, H.-Y., Mackenzie, C., Mak, W. W. S., Rubin, M., Topkaya, N., Wang, Y.-F., & Zlati, A. (2019). Cross-cultural validation of the Perceptions of Stigmatization by Others for

- Seeking Help (PSOSH) Scale. *Stigma and Health, 4*(1), 82–85. https://doi.org/10.1037/sah0000119
- Vogel, D. L., Shechtman, Z., & Wade, N. G. (2010). The Role of Public and Self-Stigma in Predicting Attitudes Toward Group Counseling. *The Counseling Psychologist*, 38(7), 904-922. https://doi.org/10.1177/0011000010368297
- Vogel, D. L., Strass, H. A., Heath, P. J., Al-Darmaki, F. R., Armstrong, P. I., Baptista, M. N.,
  Brenner, R. E., Gonçalves, M., Lannin, D. G., Liao, H.-Y., Mackenzie, C. S., Mak, W.
  W. S., Rubin, M., Topkaya, N., Wade, N. G., Wang, Y.-F., & Zlati, A. (2017). Stigma of Seeking Psychological Services: Examining College Students Across Ten
  Countries/Regions. *The Counseling Psychologist*, 45(2), 170-192.
  https://doi.org/10.1177/0011000016671411
- Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology*, 56(2), 301-308. https://doi.org/10.1037/a0014903
- Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, *53*(3), 325-337. https://doi.org/10.1037/0022-0167.53.3.325
- Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, 54(1), 40-50. https://doi.org/10.1037/0022-0167.54.1.40

- Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The Role of Outcome

  Expectations and Attitudes on Decisions to Seek Professional Help. *Journal of*Counseling Psychology, 52(4), 459-470. https://doi.org/10.1037/0022-0167.52.4.459
- Wade, N. G., Vogel, D. L., Armistead-Jehle, P., Meit, S. S., Heath, P. J., & Strass, H. A. (2015).
  Modeling stigma, help-seeking attitudes, and intentions to seek behavioral healthcare in a clinical military sample. *Psychiatric Rehabilitation Journal*, 38(2), 135-141.
  https://doi.org/10.1037/prj0000131
- Wahto, R. S., Swift, J. K., & Whipple, J. L. (2016). The role of stigma and referral source in predicting college student-athletes' attitudes toward psychological help-seeking. *Journal of Clinical Sport Psychology*, 10(2), 85-98.
- Walker, E. R., McGee, R. E., & Druss, B. G. (2015). Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. *JAMA Psychiatry*, 72(4), 334-341. https://doi.org/10.1001/jamapsychiatry.2014.2502
- Wampold, B. E. (2007). Psychotherapy: The humanistic (and effective) treatment. *American Psychologist*, 62(8), 857-873. https://doi.org/10.1037/0003-066X.62.8.857
- Wang, P. S., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M. C., Borges, G., Bromet, E. J.,
  Bruffaerts, R., de Girolamo, G., de Graaf, R., Gureje, O., Haro, J. M., Karam, E. G.,
  Kessler, R. C., Kovess, V., Lane, M. C., Lee, S., Levinson, D., Ono, Y., Petukhova,
  M., . . . Wells, J. E. (2007). Use of mental health services for anxiety, mood, and
  substance disorders in 17 countries in the WHO world mental health surveys. *Lancet*(London, England), 370(9590), 841-850. https://doi.org/10.1016/S0140-6736(07)61414-7

- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: exploring the central role of negative affectivity. *Psychol Rev*, 96(2), 234-254. https://doi.org/10.1037/0033-295x.96.2.234
- Webster, D. W., & Fretz, B. R. (1978). Asian American, Black, and White college students' preferences for help-giving sources. *Journal of Counseling Psychology*, 25(2), 124-130. https://doi.org/10.1037/0022-0167.25.2.124
- Wen, C. H. (2007). A study of the overemployed teacher in elementary and junior high schools of Yi-lan County [In Chinese]. School Administration, 48, 276-299.
- Whiteford, H. A., Degenhardt, L., Rehm, J., Baxter, A. J., Ferrari, A. J., Erskine, H. E., Charlson, F. J., Norman, R. E., Flaxman, A. D., Johns, N., Burstein, R., Murray, C. J., & Vos, T. (2013). Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet*, 382(9904), 1575-1586. https://doi.org/10.1016/S0140-6736(13)61611-6
- World Health Organization. (2020, August 27). "World Mental Health Day: an opportunity to kick-start a massive scale-up in investment in mental health" Retrieved from <a href="https://www.who.int/news/item/27-08-2020-world-mental-health-day-an-opportunity-to-kick-start-a-massive-scale-up-in-investment-in-mental-health">https://www.who.int/news/item/27-08-2020-world-mental-health-day-an-opportunity-to-kick-start-a-massive-scale-up-in-investment-in-mental-health</a>
- World Health Organization. (2018). World health statistics 2018: monitoring health for the SDGs, sustainable development goals. World Health Organization.
- Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. (2005). Measuring Help-Seeking Intentions: Properties of the General Help-Seeking Questionnaire. *Canadian Journal of Counselling*, 39(1), 15-28.

- Wilson, C. J., Rickwood, D., & Deane, F. P. (2007). Depressive symptoms and help-seeking intentions in young people. *Clinical Psychologist*, 11(3), 98-107. https://doi.org/10.1080/13284200701870954
- Wilson, G. T., Wilfley, D. E., Agras, W. S., & Bryson, S. W. (2010). Psychological Treatments of Binge Eating Disorder. *Archives of General Psychiatry*, 67(1), 94-101. https://doi.org/10.1001/archgenpsychiatry.2009.170
- Wong, L. P., Hung, C.-C., Alias, H., & Lee, T. S.-H. (2020). Anxiety symptoms and preventive measures during the COVID-19 outbreak in Taiwan. *BMC Psychiatry*, 20(1), 376. https://doi.org/10.1186/s12888-020-02786-8
- Wu, C.-Y., Liu, S.-I., Chang, S.-S., & Sun, F.-J. (2014). Surveys of medical seeking preference, mental health literacy, and attitudes toward mental illness in Taiwan, 1990–2000. *Journal of the Formosan Medical Association*, 113(1), 33-41.
  https://doi.org/10.1016/j.jfma.2013.03.004
- Yang I.-F. (2001). The role conflicts that the revolution of the grade 1–9 integrated curriculum brings to the teachers of elementary and secondary schools and their solutions. MA thesis, National Tapei Teachers College [in Chinese].
- Yang, W. (1992). Analysis of health seeking behavior of the Taiwanese people. *Vancouver General Hospital Nursing*, 121.
- Yang, S. (2018). Only 20% of Taiwanese depression sufferers seek help: doctor. Taiwan New. https://www.taiwannews.com.tw/en/news/3435488
- Yen, C. F., Chen, C. C., Lee, Y., Tang, T. C., Yen, J. Y., & Ko, C. H. (2005). Self-stigma and its correlates among outpatients with depressive disorders. *Psychiatr Serv*, *56*(5), 599-601. https://doi.org/10.1176/appi.ps.56.5.599

- Yin, H., Xu, L., Shao, Y., Li, L., & Wan, C. (2016). Relationship between suicide rate and economic growth and stock market in the People's Republic of China: 2004-2013.
  Neuropsychiatric disease and treatment, 12, 3119-3128.
  https://doi.org/10.2147/NDT.S116148
- Yu M.-N., Chen P-L., Syu J-J. (2010). The Study of Impact Factors on Teachers' Depression Tendencies [In Chinese]. Journal of Social Science psychology, 32 (2), 73-97. DOI 10.7040/JGC.201011.0073
- Yu, M.-N., Chen, P.-L., Syu, J.-J., Chung, P.-C., & Chao, P.-C. (2012). The proposal of types of teachers' mental health status. *Chinese Journal of School Health*, 60, 31-59.
- Yu, S., Kowitt, S. D., Fisher, E. B., & Li, G. (2018). Mental Health in China: Stigma, Family Obligations, and the Potential of Peer Support. *Community Mental Health Journal*, *54*(6), 757-764. https://doi.org/10.1007/s10597-017-0182-z
- Zewdu, S., Hanlon, C., Fekadu, A., Medhin, G., & Teferra, S. (2019). Treatment gap, help-seeking, stigma and magnitude of alcohol use disorder in rural Ethiopia. *Substance Abuse Treatment, Prevention, and Policy*, *14*(1), 4. https://doi.org/10.1186/s13011-019-0192-7
- Zhang, J., Ma, J., Jia, C., Sun, J., Guo, X., Xu, A., & Li, W. (2010). Economic growth and suicide rate changes: A case in China from 1982 to 2005. *European Psychiatry*, 25(3), 159-163. https://doi.org/10.1016/j.eurpsy.2009.07.013
- Zhuang, X. Y., Wong, D. F. K., Cheng, C. W., & Pan, S. M. (2017). Mental health literacy, stigma and perception of causation of mental illness among Chinese people in Taiwan.
  Int J Soc Psychiatry, 63(6), 498-507. https://doi.org/10.1177/0020764017719303

# **Appendices**

# **Appendix A: Inform Consent**

Please read this consent document carefully before you decide to participate in this study.

#### **Purpose of this study:**

The purpose of this study is to learn about K-12 teachers' attitudes toward counseling services in Taiwan. In order to participate, you must be a current K-12 teacher in Taiwan.

# What you will be asked to do in the study:

Participation in this study consists of completing a set of questions that ask about your attitudes towards seeking counseling, including questions about attitudes, intentions, self and public stigma, and preferences. There are no right or wrong responses to the items on the measures. It typically requires 15-20 minutes to complete the entire survey.

### **Eligibility:**

In order to participate, you must be a current K-12 teacher working in Taiwan. We are expecting approximately 150 K-12 teachers to participate in this study.

#### **Risk and Benefits:**

There are no direct benefits to you for participating in the study. There are also no known risks involved in completing the questionnaires, and many participants find that they learn something about themselves from answering the items. You will be contributing to knowledge that will help researchers further understand K-12 teachers' attitudes towards counseling in Taiwan.

Nonetheless, if being part of the study makes you feel uncomfortable, you can stop participating in the study at any time without penalty. If you experience any level of mental health distress while participating in the study, you may also consider speaking to a counselor who may be able to help you with your reactions. You may contact the researchers for information on how to find a counselor near you.

Upon completion of the study, you will be compensated with 400 New Taiwan Dollars (approximately 15 U.S. dollars) in the form of a 7-Eleven gift card. In order to receive this compensation, you will be asked to provide a mailing address at the end of the survey. A separate link will be used to gather your name and mailing address and this information will in no way be linked to the answers you provide in the survey.

#### **Confidentiality:**

Your responses to the survey will be completely anonymous. Your name and email address will not be linked to your questionnaire responses.

#### **Voluntary Participation:**

Your participation in this study is completely voluntary. There is no penalty for not participating. You have the right to withdraw from the study at any time without penalty; however, if you withdraw, you will not receive financial compensation.

#### **Contact Information:**

If you have any questions concerning the study, you may contact: Joshua K. Swift, Ph.D., Principal Investigator, Department of Psychology, Idaho State University, <a href="mailto:swifjosh@isu.edu">swifjosh@isu.edu</a> OR Ailun Li, Student Investigator, Idaho State University, <a href="mailto:Ailunli@isu.edu">Ailunli@isu.edu</a> OR Ying-Fen Wang, Ph.D., Principal Investigator, Department of Educational Psychology and Counseling, National Taiwan Normal University, <a href="mailto:yfwang22@gmail.com">yfwang22@gmail.com</a>, OR Anxin Chen, Student Investigator, National Taiwan Normal University, <a href="mailto:anxintan@gmail.com">anxintan@gmail.com</a>.

If you have any questions or concerns about your rights in this study, you can contact the Idaho State University HSC Office at (208) 282-2179 or (208) 282-3371 OR the National Taiwan Normal University Center for Research Ethics at 02-7749-1903.

## Agreement

- o I have read the above informed consent information, I am a current K-12 teacher in Taiwan, and I choose to participate in the study.
- o I have read the above informed consent information, but I am not eligible or do not want to participate in this study.

# 臺灣幼兒園到高中教師 及大學生對心理健康諮商的態度

參與研究知情同意說明

在您決定參與本研究之前,請仔細閱讀本知情同意說明。

### 研究目的:

本研究的目的是希望瞭解臺灣現任幼兒園至高中教師對諮商的態度和偏好。

## 問卷內容與預計填答問卷時間:

問卷內容包括您對諮商的態度、尋求諮商的意圖、對於諮商的自我污名和公眾污名,以及 諮商偏好等。答案沒有絕對的對錯。完成整個問卷通常需要 15-20 分鐘。

#### 參與條件:

要參與實驗,您必須是臺灣現任幼兒園至高中的教師。我們預計招募大約250名符合條件之教師參與這項研究。

#### 研究風險或潛在利益:

參加本研究對您沒有直接好處,但可能幫助您更了解自己。您所提供的資訊也將幫助研究 人員進一步了解臺灣幼兒園至高中教師對諮商的態度。

作為答謝,本研究將提供新臺幣 400 元的 7-11 禮品卡給完成問卷者。為了獲得此獎勵,您需要在提交問卷後,連結至另一個獨立表單填寫您的姓名和郵寄地址。透過此方式,研究者無法將您在問卷中填寫的答案連結至您的真實身分,而且這些個人資訊將在禮品卡寄送後全數刪除。

參與本研究沒有已知風險,對您造成傷害的可能性相當低。但如果參與研究讓您感到不舒服,您可以隨時停止填寫問卷。如果您在參與研究期間遭遇任何心理困擾,您可以聯絡研究人員以獲取鄰近您的所在位置之諮商資源,再依照個人意願尋求協助。

本研究並未安排保險,但您不會因為閱讀或是同意這份知情同意說明的內容,而喪失在法律上應有的權利。

#### 資訊保密:

本問卷採匿名填答。填寫完畢之後,您會被導引至另一個連結,填寫個人資料,以便研究者寄發禮品卡給您。您在另一個表單提供的姓名和電子郵件地址將不會連結至問卷填寫內容。問卷回收後的電子檔將加密保存於電腦中,除了研究人員之外,沒有人有機會看到填答結果。本研究將保存您的資料最多20年,直至2042年1月1日為止。屆期將刪除所有資料。將來發表研究結果時,您的身份也將被充分保密。

## 自願性參與:

參與本研究完全是自願性質的。參與這項研究與否,並不會對您造成任何權益損失。您有權 權隨時退出研究。如果您退出研究,您將不會獲得受試獎勵。

## 研究者聯絡資訊:

如果您對本研究有任何疑問,歡迎聯絡以下研究員

計劃主持人,王櫻芬:yfwang22@ntnu.edu.tw; 02-7749-3789

計劃共同主持人, Joshua K. Swift: swifjosh@isu.edu

研究助理, Ailun Li: Ailunli@isu.edu

如果您對研究程序、風險、利益,或是您在本研究的權利有任何疑慮,請與以下單位聯絡:

Idaho State University HSC 辦公室: 208-282-2179 或 208-282-3371 國立臺灣師範大學研究倫理中心: 02-7749-1903; ntnurec@gmail.com

- 我已閱讀上述知情同意說明,我是臺灣幼兒園至高中教師,我想參與本研究。(請 點選下頁進行填寫)
- 我已閱讀上述知情同意說明,但我不符合參與條件或不想參與本研究。(請自行關 閉瀏覽器離開此頁面)

# Appendix B

# **Demographic Questionnaire**

#### **Personal Information**

- 1. What is your age?
- 2. What is your gender?
  - o Female
  - o Male
  - o Other
- 3. What is your education level?
  - o Bachelor level
  - o Master level
  - o Ph.D. level
  - Other
- 4. What is your ethnicity?
  - o Taiwanese
  - Mainland Chinese
  - o Other indigenous tribal peoples
  - o Ami
  - o Other
- 5. How many years since you graduated?
- 6. How many years in total you have been working as a K-12 teacher?
- 7. How many years have you worked in your current school?
- 8. What grade(s) do you teach?
- 9. If applicable, what subjects do you teach?
- 10. On which area of the island is your school located?

# 參與者個人資訊

### **Personal Information**

首先,請提供一些您的背景資訊	
----------------	--

- 1. 您的年齡是?
- 2. 您的性别是?
  - 0 女性
  - 0 男性
  - 0 其他
- 3. 您的最高學歷為何?
  - 專科(副學士)
  - 0 學士學位
  - 0 碩士學位
  - o 博士學位
  - 0 其他
- 4. 您所屬的族群是?
  - 漢人(閩南人、客家人)
  - 0 外省人
  - 原住民族,族別:\_\_\_\_\_族
  - 0 其他
- 5. 您畢業幾年了?
- 6. 您作為現任高中以下教師, 年資為多少年?
- 7. 您在現在的學校工作了多少年?
- 8. 您教哪一個/哪幾個年級? (可複選)
  - 0 幼兒園
  - 0 小一
  - 0 小二
  - 0 小三
  - 0 小四
  - 0 小五
  - 0 小六
  - 0 國一
  - 0 國二
  - 0 國三
  - 高一
  - 高二
  - 0 高三
- 9. 如果可以回答,您教什麼科目?
- 10. 您的學校位於哪一個縣市?

# Appendix C

# Attitudes Toward Seeking Professional Psychological Help Scale—Short Form

(ATSPPH-SF)

Instructions Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

0 = Disagree 1 = Partly disagree 2 = Partly agree 3 = Agree

1. If I believed I was having a mental breakdown, my first inclination would	0	1	2	3
be to get professional attention.				
2. The idea of talking about problems with a psychologist strikes me as a poor	0	1	2	3
way to get rid of emotional conflicts.				
3. If I were experiencing a serious emotional crisis at this point in my life, I	0	1	2	3
would be confident that I could find relief in psychotherapy.				
4. There is something admirable in the attitude of a person who is willing to	0	1	2	3
cope with his or her conflicts and fears without resorting to professional help.				
5. I would want to get psychological help if I were worried or upset for a long	0	1	2	3
period of time.				
6. I might want to have psychological counseling in the future.	0	1	2	3
7. A person with an emotional problem is not likely to solve it alone; he or	0	1	2	3
she is likely to solve it with professional help.				
8. Considering the time and expense involved in psychotherapy, it would	0	1	2	3
have doubtful value for a person like me.				
9. A person should work out his or her own problems; getting psychological	0	1	2	3
counseling would be a last resort.				
10. Personal and emotional troubles, like many things, tend to work out by	0	1	2	3
themselves.				

# 尋求專業心理幫助態度量表 (簡版)

Attitudes Toward Seeking Professional Psychological Help Scale—Short Form

請仔細閱讀下列每一項敘述,並選擇符合您實際情況的答案。這些答案只代表您的個人觀點,無對錯之分,請根據您的真實想法進行選擇。

0 = 不同意, 1 = 部分不同意, 2 = 部分同意, 3 = 同意

1. 如果我認為自己出現了精神崩潰,首先會尋求專業幫	0	1	2	3
助。				
*2. 對我而言,和諮商(臨床)心理師討論自己的問題是解	0	1	2	3
決情緒衝突的差勁方法。				
3. 如果在當下的生活中我正經歷嚴重的情緒危機,我相信	0	1	2	3
心理治療可以緩解它。				
*4. 不尋求專業幫助而是靠自己解決衝突和恐懼的做法使我	0	1	2	3
感到欽佩。				
5. 如果我在很長一段時間內都感覺到焦慮和不安,那麼我	0	1	2	3
想要去尋求心理專業幫助。				
6. 在將來我可能會想去做心理諮商。	0	1	2	3
7. 一個人不太可能靠自己解決情緒問題,他或她要在專業的	0	1	2	3
幫助下,才有可能解決這個問題。				
*8. 考慮到心理治療的時間和費用,我懷疑它對像我這樣的	0	1	2	3
人是否有價值。				
*9. 自己應該解決自己的問題,不到萬不得已不做心理諮	0	1	2	3
商。				
*10. 個人問題和情感問題同許多其他事情一樣,往往可以	0	1	2	3
不需解決自行消失。				

# Appendix D

# **General Help-Seeking Questionnaire**

# **General Help-Seeking Questionnaire**

If you were having a personal or emotional problem, how likely is it that you would seek help from the following people? Please indicate your response by clicking the number that best describes your intention to seek help from each help source that is listed.

1 = Extremely Unlikely 3 = Unlikely 5 = Likely 7 = Extremely Likely

a. Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)	1	2	3	4	5	6	7
b. Friend (not related to you)	1	2	3	4	5	6	7
c. Parent	1	2	3	4	5	6	7
d. Other relative/family member	1	2	3	4	5	6	7
e. Mental health professional (e.g. psychologist, social worker, counselor)	1	2	3	4	5	6	7
f. Phone helpline (e.g. Lifeline)		2	3	4	5	6	7
g. Doctor/GP	1	2	3	4	5	6	7
h. Minister or religious leader (e.g. Priest, Rabbi, Chaplain)	1	2	3	4	5	6	7
i. I would not seek help from anyone	1	2	3	4	5	6	7
j. I would seek help from another not listed above (please list in the space		2	3	4	5	6	7
provided, (e.g., work colleague). If no, leave blank.							

If you were experiencing suicidal thoughts, how likely is it that you would seek help from the following people? Please indicate your response by clicking the number that best describes your intention to seek help from each help source that is listed.

1 = Extremely Unlikely 3 = Unlikely 5 = Likely 7 = Extremely Likely

a. Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)	1	2	3	4	5	6	7
b. Friend (not related to you)	1	2	3	4	5	6	7
c. Parent	1	2	3	4	5	6	7
d. Other relative/family member	1	2	3	4	5	6	7
e. Mental health professional (e.g. psychologist, social worker, counselor)	1	2	3	4	5	6	7
f. Phone helpline (e.g. Lifeline)				4	5	6	7
g. Doctor/GP	1	2	3	4	5	6	7
h. Minister or religious leader (e.g. Priest, Rabbi, Chaplain)	1	2	3	4	5	6	7
i. I would not seek help from anyone	1	2	3	4	5	6	7
j. I would seek help from another not listed above (please list in the space		2	3	4	5	6	7
provided, (e.g., work colleague). If no, leave blank.							
							1

# 一般求助行為問卷

# **General Help-Seeking Questionnaire**

如果您有個**人或情感問題**,您向下列人選尋求幫助的可能性有多大?請針對各個人選,選擇最能代表您願意向對方求助的程度之數字。

1=非常不可能,3=不可能,5=可能,7=非常可能

a. 親密伴侶(如男朋友、女朋友、丈夫或妻子)	1	2	3	4	5	6	7
b. 朋友(無親戚關係)	1	2	3	4	5	6	7
c. 父母	1	2	3	4	5	6	7
d. 其他親戚或家庭成員(如祖父母,兄弟姐妹等)	1	2	3	4	5	6	7
e. 精神衛生專業人員 (精神科醫師、諮商心理師、社工師、臨	1	2	3	4	5	6	7
床心理師、學校輔導老師/其他機構的諮商心理師)							
f. 電話求助熱線(如:生命線)	1	2	3	4	5	6	7
g. 其他醫生	1	2	3	4	5	6	7
h. 求神問 卜/宗教領袖 (如:牧師、神父、法師)	1	2	3	4	5	6	7
i. 我不會向其他任何人尋求幫助	1	2	3	4	5	6	7
j. 會向上述列表中以外的其他人尋求幫助, (例如同事/同學或	1	2	3	4	5	6	7
其他人. 如果不是,保留空							
白)							

如果您有**自殺念頭**,您向下列人選尋求幫助的可能性有多大?請針對各個人選,選擇最 能代表您願意向對方求助的程度之數字。

1=非常不可能,3=不可能,5=可能,7=非常可能

a. 親密伴侶(如男朋友、女朋友、丈夫或妻子)	1	2	3	4	5	6	7
b. 朋友(無親戚關係)	1	2	3	4	5	6	7
c. 父母	1	2	3	4	5	6	7
d. 其他親戚或家庭成員(如祖父母,兄弟姐妹等)	1	2	3	4	5	6	7
e. 精神衛生專業人員(精神科醫師、諮商心理師、社工師、臨	1	2	3	4	5	6	7
床心理師、學校輔導老師/其他機構的諮商心理師)							
f. 電話求助熱線(如:生命線)	1	2	3	4	5	6	7
g. 其他醫生	1	2	3	4	5	6	7
h. 求神問卜/宗教領袖(如:牧師、神父、法師)	1	2	3	4	5	6	7
i. 我不會向其他任何人尋求幫助	1	2	3	4	5	6	7
j. 會向上述列表中以外的其他人尋求幫助, (例如同事/同學或	1	2	3	4	5	6	7
其他人. 如果不是,保留空							
白)							

# Appendix E

# Perceptions of Public-Stigma for Seeking Psychotherapy

INSTRUCTIONS: Imagine you had an emotional or personal issue that you could not solve on your own. If you sought counseling services for this issue, to what degree do you believe that the people you interact with would \_\_\_\_\_.

1 = Not at all 2 = A little 3 = Some 4 = A lot 5 = A great deal

1. React negatively to you	1	2	3	4	5
2. Think bad things of you	1	2	3	4	5
3. See you as seriously disturbed	1	2	3	4	5
4. Think of you in a less favorable way	1	2	3	4	5
5. Think you posed a risk to others	1	2	3	4	5

# 尋求心理幫助的公眾汙名量表

# Perceptions of Public-Stigma for Seeking Psychotherapy

試想像您有一些情緒或人際問題是不能自己解決的。如果您尋求心理諮商服務來解決問題,請問您認為那些和您互動的人有多大的程度會\_\_\_\_。

1 = 完全不會, 2 = 少許, 3 = 有一點, 4 = 很多時侯會, 5 = 幾乎一定會

1.	對您有負面的回應	1	2	3	4	5
2.	對您有負面的想法	1	2	3	4	5
3.	把您視為一個情緒嚴重受困擾的人	1	2	3	4	5
4.	覺得您比以前差	1	2	3	4	5
5.	認為您對其他人會構成威脅	1	2	3	4	5

# Appendix F

# **Self-Stigma for Seeking Psychotherapy**

INSTRUCTIONS: People at times find that they face problems that they consider seeking help for. This can bring up reactions about what seeking help would mean. Please use the 5-point scale to rate the degree to which each item describes how you might react in this situation.

1 = Strongly Disagree, 2 = Disagree, 3 = Agree & Disagree Equally, 4 = Agree, 5 = Strongly Agree

1. I would feel inadequate if I went to a therapist for psychological	1	2	3	4	5
help.					
2. My self-confidence would NOT be threatened if I sought	1	2	3	4	5
professional help.					
3. Seeking psychological help would make me feel less intelligent.	1	2	3	4	5
4. My self-esteem would increase if I talked to a therapist.	1	2	3	4	5
5. My view of myself would not change just because I made the	1	2	3	4	5
choice to see a therapist.					
6. It would make me feel inferior to ask a therapist for help.	1	2	3	4	5
7. I would feel okay about myself if I made the choice to seek	1	2	3	4	5
professional help.					
8. If I went to a therapist, I would be less satisfied with myself.	1	2	3	4	5
9. My self-confidence would remain the same if I sought professional	1	2	3	4	5
help for a problem I could not solve.					
10. I would feel worse about myself if I could not solve my own	1	2	3	4	5
problems.					

# 尋求心理幫助的自我汙名量表 Self-Stigma for Seeking Psychotherapy

在面對困難的時候,人們有時會考慮尋求心理協助,而這個舉動可能會引起一些反應。請依照您對求助情境的反應,用下列的量表選出適當的數字,來代表您對這些句子同意或不同意的程度。

1 = 非常不同意, 2 = 不同意, 3 = 中立, 4 = 同意, 5 = 非常同意

1. 假如我去尋求治療師的心理專業協助,我會覺得自己很沒用。       1       2       3       4       5         2. 即使我去尋求心理專業協助,也不會損壞我的自信心。       1       2       3       4       5         3. 尋求心理專業協助會讓我覺得自己沒有那麼聰明。       1       2       3       4       5         4. 如果我跟心理治療師談話,會提昇我的自尊心。       1       2       3       4       5         5. 我對自己的看法不會因為選擇去看心理治療師而改變。       1       2       3       4       5         6. 尋求心理治療師的協助會讓我覺得自卑。       1       2       3       4       5         7. 我覺得自己很好,即使我決定去尋求心理專業協助。       1       2       3       4       5         8. 假如我去看心理治療師,我會對自己有所不滿。       1       2       3       4       5         9. 如果我因為自己無法解決的問題而去尋求心理專業協助,我的自信心不會因此而有所改變。       1       2       3       4       5         10. 如果我不能解決自己的問題,我會覺得自己很差       1       2       3       4       5         30。       2       3       4       5							
<ol> <li>2. 即使我去尋求心理專業協助,也不會損壞我的自 1 2 3 4 5 信心。</li> <li>3. 尋求心理專業協助會讓我覺得自己沒有那麼聰 1 2 3 4 5 明。</li> <li>4. 如果我跟心理治療師談話,會提昇我的自尊心。 1 2 3 4 5</li> <li>5. 我對自己的看法不會因為選擇去看心理治療師而 1 2 3 4 5</li></ol>	1.	假如我去尋求治療師的心理專業協助,我會覺得	1	2	3	4	5
信心。 3. 尋求心理專業協助會讓我覺得自己沒有那麼聰 1 2 3 4 5 明。 4. 如果我跟心理治療師談話,會提昇我的自尊心。 1 2 3 4 5 5		自己很沒用。					
3. 尋求心理專業協助會讓我覺得自己沒有那麼聰明。       1       2       3       4       5         4. 如果我跟心理治療師談話,會提昇我的自尊心。       1       2       3       4       5         5. 我對自己的看法不會因為選擇去看心理治療師而改變。       1       2       3       4       5         6. 尋求心理治療師的協助會讓我覺得自卑。       1       2       3       4       5         7. 我覺得自己很好,即使我決定去尋求心理專業協助。       1       2       3       4       5         8. 假如我去看心理治療師,我會對自己有所不滿。       1       2       3       4       5         9. 如果我因為自己無法解決的問題而去尋求心理專業協助,我的自信心不會因此而有所改變。       1       2       3       4       5         10. 如果我不能解決自己的問題,我會覺得自己很差       1       2       3       4       5	2.	即使我去尋求心理專業協助,也不會損壞我的自	1	2	3	4	5
明。     4. 如果我跟心理治療師談話,會提昇我的自尊心。		信心。					
<ul> <li>4. 如果我跟心理治療師談話,會提昇我的自尊心。</li> <li>5. 我對自己的看法不會因為選擇去看心理治療師而 1 2 3 4 5 改變。</li> <li>6. 尋求心理治療師的協助會讓我覺得自卑。</li> <li>7. 我覺得自己很好,即使我決定去尋求心理專業協 1 2 3 4 5 助。</li> <li>8. 假如我去看心理治療師,我會對自己有所不滿。 1 2 3 4 5 9. 如果我因為自己無法解決的問題而去尋求心理專 1 2 3 4 5 業協助,我的自信心不會因此而有所改變。</li> <li>10. 如果我不能解決自己的問題,我會覺得自己很差 1 2 3 4 5</li> </ul>	3.	尋求心理專業協助會讓我覺得自己沒有那麼聰	1	2	3	4	5
5. 我對自己的看法不會因為選擇去看心理治療師而 改變。       1       2       3       4       5         6. 尋求心理治療師的協助會讓我覺得自卑。       1       2       3       4       5         7. 我覺得自己很好,即使我決定去尋求心理專業協 助。       1       2       3       4       5         8. 假如我去看心理治療師,我會對自己有所不滿。       1       2       3       4       5         9. 如果我因為自己無法解決的問題而去尋求心理專		明。					
及變。     6. 尋求心理治療師的協助會讓我覺得自卑。	4.	如果我跟心理治療師談話,會提昇我的自尊心。	1	2	3	4	5
6. 尋求心理治療師的協助會讓我覺得自卑。       1       2       3       4       5         7. 我覺得自己很好,即使我決定去尋求心理專業協助。       1       2       3       4       5         8. 假如我去看心理治療師,我會對自己有所不滿。       1       2       3       4       5         9. 如果我因為自己無法解決的問題而去尋求心理專業協助,我的自信心不會因此而有所改變。       1       2       3       4       5         10. 如果我不能解決自己的問題,我會覺得自己很差       1       2       3       4       5	5.	我對自己的看法不會因為選擇去看心理治療師而	1	2	3	4	5
7. 我覺得自己很好,即使我決定去尋求心理專業協 1 2 3 4 5 助。 8. 假如我去看心理治療師,我會對自己有所不滿。 1 2 3 4 5 9. 如果我因為自己無法解決的問題而去尋求心理專 1 2 3 4 5 業協助,我的自信心不會因此而有所改變。 10. 如果我不能解決自己的問題,我會覺得自己很差 1 2 3 4 5		改變。					
助。  8. 假如我去看心理治療師,我會對自己有所不滿。  9. 如果我因為自己無法解決的問題而去尋求心理專 業協助,我的自信心不會因此而有所改變。  10. 如果我不能解決自己的問題,我會覺得自己很差  1 2 3 4 5	6.	尋求心理治療師的協助會讓我覺得自卑。	1	2	3	4	5
8. 假如我去看心理治療師,我會對自己有所不滿。 1 2 3 4 5 9. 如果我因為自己無法解決的問題而去尋求心理專 1 2 3 4 5 業協助,我的自信心不會因此而有所改變。 10. 如果我不能解決自己的問題,我會覺得自己很差 1 2 3 4 5	7.	我覺得自己很好,即使我決定去尋求心理專業協	1	2	3	4	5
9. 如果我因為自己無法解決的問題而去尋求心理專 1 2 3 4 5 業協助,我的自信心不會因此而有所改變。 10. 如果我不能解決自己的問題,我會覺得自己很差 1 2 3 4 5		助。					
業協助,我的自信心不會因此而有所改變。 10. 如果我不能解決自己的問題,我會覺得自己很差 1 2 3 4 5	8.	假如我去看心理治療師,我會對自己有所不滿。	1	2	3	4	5
10. 如果我不能解決自己的問題,我會覺得自己很差 1 2 3 4 5	9.	如果我因為自己無法解決的問題而去尋求心理專	1	2	3	4	5
		業協助,我的自信心不會因此而有所改變。					
勁。	10	. 如果我不能解決自己的問題,我會覺得自己很差	1	2	3	4	5
		勁。					

# Appendix G

# **Intentions based on referral source**

INSTRUCTIONS: If other people (see below) were aware of a personal or emotional problem that you were experiencing and recommend you seek help from a mental health professional, how likely is it that you would follow their advice?

1 = Extremely Unlikely, 3 = Unlikely, 5 = Likely, 7 = Extremely Likely

a. Intimate Partner	1	2	3	4	5	6	7
b. Friend (not related to you)	1	2	3	4	5	6	7
c. Parent	1	2	3	4	5	6	7
d. Boss	1	2	3	4	5	6	7
e. Fellow teacher	1	2	3	4	5	6	7
f. Student	1	2	3	4	5	6	7

## **Intentions based on Referral Source**

說明:如果其他人(見下文)知道您的個人或情感問題並建議您向心理健康專家尋求幫助。您聽從他們的建議的可能性有多大?

1=非常不可能,3=不可能,5=可能,7=非常可能

a. 親密伴侶(如男朋友、女朋友、丈夫或妻子)	1	2	3	4	5	6	7
b. 朋友(無親戚關係)	1	2	3	4	5	6	7
c. 父母	1	2	3	4	5	6	7
d. 上司/老闆	1	2	3	4	5	6	7
e. 教師同事	1	2	3	4	5	6	7
f. 學生	1	2	3	4	5	6	7

## Appendix H

#### **Attitudes toward various mental health services**

INSTRUCTIONS: Among various forms of mental health services, please rate how likely you will use the service, your preference for using the service, stigmatization against the service, and barriers against using the service.

If you were experiencing a personal or emotional problem, how likely would you use each service?

1 = Extremely Unlikely, 3 = Unlikely, 5 = Likely, 7 = Extremely Likely

Group psychotherapy/counseling	1	2	3	4	5	6	7
Individual psychotherapy/counseling	1	2	3	4	5	6	7
Mental health educational videos	1	2	3	4	5	6	7
Mental health educational workshops	1	2	3	4	5	6	7
Mental health educational written materials	1	2	3	4	5	6	7

If you were experiencing a personal or emotional problem, how strong is your preference for using each service?

1 = Strongly Do Not Prefer, 3 = Do Not Prefer, 5 = Prefer, 7 = Strongly Prefer

	~ **	~~B~J					
Group psychotherapy/counseling	1	2	3	4	5	6	7
Individual psychotherapy/counseling	1	2	3	4	5	6	7
Mental health educational videos	1	2	3	4	5	6	7
Mental health educational workshops	1	2	3	4	5	6	7
Mental health educational written materials	1	2	3	4	5	6	7

If you were experiencing a personal or emotional problem, how strong is the stigmatization against using each service?

1 = No stigma at all, 3 = Small amount of stigma, 5 = Large amount of stigma, 7 = Extreme amount of stigma

Group psychotherapy/counseling	1	2	3	4	5	6	7
Individual psychotherapy/counseling	1	2	3	4	5	6	7
Mental health educational videos	1	2	3	4	5	6	7
Mental health educational workshops	1	2	3	4	5	6	7
Mental health educational written materials	1	2	3	4	5	6	7

If you were experiencing a personal or emotional problem, how strong are the barriers against using each service?

1 = No barriers at all, 3 = Small amount of barriers, 5 = Large amount of barriers, 7 = Extreme amount of barriers

Group psychotherapy/counseling	1	2	3	4	5	6	7
Individual psychotherapy/counseling	1	2	3	4	5	6	7
Mental health educational videos	1	2	3	4	5	6	7
Mental health educational workshops	1	2	3	4	5	6	7
Mental health educational written materials	1	2	3	4	5	6	7

# 對使用各種心理健康服務的態度

## **Attitudes toward Various Mental Health Services**

說明:在各種形式的心理健康服務中,請評價您使用該服務的可能性、您使用該服務的偏好、對該服務的汙名化程度以及使用該服務的阻礙程度。

如果您有個人或情感問題, 您使用該服務的可能性。

1=非常不可能,3=不可能,5=可能,7=非常可能

團體心理治療/諮商	1	2	3	4	5	6	7
個人心理治療/諮商	1	2	3	4	5	6	7
心理健康教育影片	1	2	3	4	5	6	7
心理健康教育研討會	1	2	3	4	5	6	7
心理健康教育書面資料	1	2	3	4	5	6	7

如果您有個人或情感問題, 您使用該服務的偏好。

1=強烈反對,3=反對,5=偏愛,7=強烈偏愛

團體心理治療/諮商	1	2	3	4	5	6	7
個人心理治療/諮商	1	2	3	4	5	6	7
心理健康教育影片	1	2	3	4	5	6	7
心理健康教育研討會	1	2	3	4	5	6	7
心理健康教育書面資料	1	2	3	4	5	6	7

如果您有個人或情感問題, 對該服務的汙名化程度。

1=沒有汙名化,3=小汙名化,5=大汙名化,7=極端汙名化

團體心理治療/諮商	1	2	3	4	5	6	7
個人心理治療/諮商	1	2	3	4	5	6	7
心理健康教育影片	1	2	3	4	5	6	7
心理健康教育研討會	1	2	3	4	5	6	7
心理健康教育書面資料	1	2	3	4	5	6	7

如果您有個人或情感問題,使用該服務的障礙程度。

1=沒有障礙,3=小障礙,5=大障礙,7=極端障礙

團體心理治療/諮商	1	2	3	4	5	6	7
個人心理治療/諮商	1	2	3	4	5	6	7
心理健康教育影片	1	2	3	4	5	6	7
心理健康教育研討會	1	2	3	4	5	6	7
心理健康教育書面資料	1	2	3	4	5	6	7

## **Open Ended Questions**

- 1. If you were interested in seeking counseling for a personal or emotional problem, what would your ideal treatment look like?
- 2. What barriers might get in the way of you seeking out this type of treatment?
- 3. What factors might encourage you to take steps to seek out this type of treatment?
- 4. If you were currently experiencing stress and want to seek help, what kind of services you would prefer?
- 5. Elaborate in detail on how you would like to be helped.

# **Additional History Questions**

- 1. Have you ever experienced a mental health problem? (Yes, No)
  - a. If yes, what was it?
- 2. Have you ever sought counseling? (Yes, No)
  - a. If yes, what type of services (e.g., individual, group, couple) did you seek?

## **Distress Questions**

- 1. From a scale of 0 to 10, how stressed you are currently? (0=none, 10=extreme)
  - a. 0 (none)
  - b. 1
  - c. 2 (low)
  - d. 3
  - e. 4 (low-median)
  - f. 5
  - g. 6 (high-median)
  - h. 7
  - i. 8 (high)
  - J. 5
  - k. 10 (extreme)

## 開放式問題

- 1. 如果您希望能為個人或情感問題尋求諮商服務,您理想的諮商方式會是如何?
- 2. 您認為您尋求此類諮商時,可能會遇到什麼樣的阻礙?
- 3. 哪些因素可能會鼓勵您尋求此類諮商? (有哪些因素會提高您尋求諮商的意願?)
- 4. 若可以為您正在經歷的壓力尋求幫助,您希望得到什麼類型的幫助?
- 5. 請進一步說明您希望該幫助如何協助您?

## 過往相關經驗

- 1. 您是否曾遭遇過心理健康問題? (有,沒有)
  - a. 如果有,是什麼?
- 2. 您是否曾尋求過心理專業資源(心理諮商服務)? (有,沒有)
  - a. 如果有,您尋求什麼類型的服務(例如:個人、團體、夫妻)?

## 壓力相关问题

- 1. 以 0 (沒有)到 10 (極高度)的量尺來評量,您目前的壓力/苦惱程度有多高?
  - a. 1
  - b. 2 (低)
  - c. 3
  - d. 4 (中低)
  - e. 5
  - f. 6 (中高)
  - g. 7
  - h. 8 (高)
  - i. 9
  - j. 10 (极高)

### Appendix I

## K-12 Teacher Recruitment Announcement (English Version)

# This announcement will be emailed, posted to listservs, and posted to other Taiwan K-12 teacher social media sites

Dear K-12 Teacher,

We (researchers from National Taiwan Normal University and Idaho State University) are conducting a study examining K-12 teachers' attitudes and opinions about mental health counseling services in Taiwan. We are hoping that you would be willing to participate.

If you choose to participate, you would be asked to complete a short online survey (15 to 20 minutes) with questions assessing your attitudes about counseling services. Your responses will be kept completely confidential and will help us better understand ways to improve the counseling services that are currently offered to K-12 teachers.

As a thank you for your participation, you will have the option to receive a \$400 NTD 7-Eleven gift card. This gift card will be mailed to you after the completion of the survey.

If you are interested in participating, please follow this link: STUDY LINK INCLUDED

If you have any questions about this study, please contact one of the principal investigators – Professor Joshua K. Swift at <a href="mailto:swifjosh@isu.edu">swifjosh@isu.edu</a> or Professor Ying-Fen Wang at <a href="mailto:yfwang22@ntnu.edu.tw">yfwang22@ntnu.edu.tw</a>.

Thank you!

Sincerely,

Ying-Fen Wang, Ph.D., Professor, Department of Educational Psychology and Counseling, National Taiwan Normal University

Anxin Chen, Graduate Student, Department of Educational Psychology and Counseling, National Taiwan Normal University

Joshua K. Swift, Ph.D., Associate Professor, Department of Psychology, Idaho State University

Ailun Li, Graduate Student, Department of Psychology, Idaho State University

# 臺灣教師與大學生對心理諮商的態度研究

教師招募說明

您好,

我們是來自國立臺灣師範大學和愛達荷州立大學的研究人員。我們正在進行一項有關臺灣教師對諮商的態度和偏好的研究,並希望能邀請您來參與。

參與這項研究需要完成一份 15 到 20 分鐘的線上問卷。問卷採匿名填答,您的填答將被完全保密。您的參與可以幫助我們了解如何改進以高中職以下教師為對象的心理諮商服務之品質。作為答謝,本研究將提供一份 7-11 禮品卡給完成問卷者。禮品卡將在您完成問卷後郵寄給您。

如果您有興趣參與,請點擊連結:Study Link Included

如果您對本研究有任何疑問,歡迎聯絡本計劃主持人,Joshua K. Swift 教授 (swifjosh@isu.edu)或王櫻芬教授 (yfwang22@ntnu.edu.tw)

誠摯感謝!

國立臺灣師範大學教育心理與輔導學系教授,王櫻芬 愛達荷州立大學心理學系副教授,Joshua K. Swift 愛達荷州立大學心理學系研究生,Ailun Li 敬上