

Depressive Symptoms and Help-Negation among Chinese University Students in Taiwan: The Role of Gender, Anxiety and Help-seeking Attitudes

Hsiaowen Chang

Published online: 8 November 2013

© Springer Science+Business Media New York 2013

Abstract This study extended the consideration of help-negation in regard to suicide to that of depressive symptoms in a large sample of 981 Chinese university students in Taiwan. The study examined the help-negation effects of depression and the impact of gender, anxiety, and help-seeking attitudes on that relationship. Chinese students, aged 17 to 27 years, completed a self-report survey that included measures of help-seeking behavior, depression, anxiety, and help-seeking attitudes. Results revealed higher levels of depressive symptoms were related to decreased likelihood of seeking help from friends and parents, indicating a possible help-negation effect of depression. In regard to the impact of gender, anxiety, and help-seeking attitudes, results showed that help-seeking attitudes were consistently positively correlated with seeking help from friends, parents, and professional helpers. Gender significantly moderated the relationship between depression and professional help-seeking. Implications for intervention are discussed within the Chinese cultural context.

Keyword Chinese college students · Depression · Anxiety · Help-seeking · Help-negation

Introduction

Studies have consistently found that depression is currently one of the most widespread mental health problems among young people around the globe (e.g., Adlaf et al. 2001; Belfer 2008; Chen et al. 2002; Rosenthal and Schreiner 2000), with estimates indicating that it affects up to almost one fifth of the population in developed countries (for a review see Gulliver et al. 2010). Surveys conducted with Chinese populations indicate that depression is prevalent among Chinese people in different societies (e.g., Huang and Guo 2009; Lee et al. 2006; Leung et al. 2012; Yan et al. 2012).

In addition to prevalence, the costs associated with depression can be serious and enduring. Research findings suggest that depression is not only associated with maladaptive coping, academic failure, poor interpersonal relationships and substance abuse, but in some

H. Chang (✉)

School of Humanity, Nanhua University, No.55, Sec. 1, Nanhua Rd., Dalin Township, Chiayi 62249
Taiwan, Republic of China
e-mail: hwchang@mail.nhu.edu.tw

cases suicide among college students (Huang and Guo 2009; Zong et al. 2010). Furthermore, the repercussions of depression can have lasting effects into adulthood, putting young people at risk for developing lifelong mental health problems (Kessler et al. 2005).

Unfortunately, despite the extended negative consequences of depression, a minority of distressed students ever seek professional assistance, despite the increasing presence of mental health services on and off campus (Furr et al. 2001; Morgan et al. 2003; Oliver et al. 1999). Previous studies have found that only approximately 18 to 34 % of young people in the West with elevated levels of depressive symptoms seek professional help (Gulliver et al. 2010). As well, there is growing evidence showing that individuals with elevated levels of depression often negate, refuse or avoid help (Wilson et al. 2005, 2007, 2010; Wilson and Deane 2010).

Researchers have found a significant inverse relationship between depressive symptoms and help-seeking intentions (e.g., Sen 2004; Wilson et al. 2007). Specifically, Wilson et al. (2007) found that higher levels of depressive symptoms consistently predicted lower intentions to seek help from formal and informal sources of help, together with higher intentions not to seek help from anyone among high school and university students. It is especially noteworthy that young people who are most at risk for developing a lifelong mental health problem are often those least likely to seek help from anyone. Wilson and colleagues thus hypothesized that the help-negation effect prevalent among suicidal clients can be applied to depression, as depressed people tend to refuse or avoid available help (Wilson et al. 2005, 2007, 2010; Wilson and Deane 2010).

Help-Negation

Help-negation was first used to describe acutely suicidal clients who have reached a state of utter hopelessness concerning treatment and thus soundlessly abandon, politely terminate, or angrily reject treatment (Clark and Fawcett 1992, p. 40). Help-negation suggests that individuals at the highest risk for suicide are most likely to avoid help for their debilitating symptoms (Wilson et al. 2007). However, the development of suicide intentions is usually progressive, with psychological disturbance often occurring prior to, and alongside of, suicidal thinking. Research evidence suggests that nearly 50 % of young people who commit suicide present prior symptoms of clinical mood disorders, such as major depression. Meanwhile, the risk for major depression is increased by subclinical levels of depressive symptoms in adults and adolescents (Wilson 2010). These results attest to the progressive nature of psychological disturbance and raise the question of whether the typical help-negation prevalent in suicidal clients may exist in individuals with depressive symptoms.

Interestingly, researchers have found a significant inverse relationship between depressive symptoms and help-seeking intentions (e.g., Sen 2004; Wilson et al. 2007). Using a sample of 313 high school and 269 university students, Wilson et al. found that as the levels of depression increased, the intention to seek help decreased. These associations seemed to suggest that the typical help-negation prevalent in suicidal clients might also exist in individuals with elevated levels of depression. Based on their findings, Wilson et al. (2007) suggest that, as social withdrawal and loss of motivation are commonly recognized symptoms of depression among young people, it is possible that as levels of depressive symptoms increase, individuals may experience increased levels of social withdrawal, which subsequently reduce their motivation to seek help. Consequently, depressive symptoms may function as an “avoidance” factor for help-seeking (Wilson et al. 2007). Moreover, researchers also suggest that help-negation may be a function of a general coping style that

is avoidant, negativistic and passive-aggressive, and could be exacerbated by situational stress, associated symptomology and clinical disorders (Wilson and Deane 2010).

If, as researchers have hypothesized, the nature of depressive symptoms may reduce young people's motivation to seek help, it is possible that the inverse relationship between depression and help-seeking is evident across both informal and formal helping sources. Researchers have found that this trend of help-negation might exist also in regard to informal helpers, such as friends and family (Wilson et al. 2005, 2007; Wilson and Deane 2010), as it does for professional helpers. Wilson and Deane (2010) found a significant negative relationship between depressive symptoms and help-seeking intentions in relation to friends and family in a sample of 302 Australian university students. Help-negation in regard to informal helpers may be quite noteworthy, as friends and family can play an important role in the help-seeking pathway. They not only offer social support for young people in times of distress but often lend them specific support and encouragement to seek professional help. Indeed, help-negation toward friends and parents may be particularly concerning as depressed youth, by not seeking out or by rejecting help from those who have intimate knowledge of their distress, will also be less likely to receive support and encouragement to access appropriate mental health services (Wilson and Deane 2010).

Chinese Ways of Help-Seeking

Chinese people in different parts of the world have consistently underutilized mental health services. Previous studies conducted in Taiwan, Hong Kong, China, and North America consistently shown that Chinese students severely underutilize professional psychological services, despite their obvious need for professional help (e.g., Boey 1999; Chang 2008; Jiang and Wang 2003). For example, a recent study conducted in Taiwan showed that only 11.1 % of Chinese college students who reported personal/emotional stress sought professional assistance (Chang 2008).

The underutilization of mental health services can be attributed to cultural factors and the ways Chinese people express themselves. Many Chinese are still strongly influenced by the philosophy of Confucianism. Various researchers suggest that, owing to cultural values that emphasize emotional restraint, self-reliance, strong family ties, and avoidance of shame, many Chinese try to resolve psychological difficulties on their own before seeking help from others (Chiu 2004; Kung 2003; Leung et al. 2012; Mo and Mak 2009; Sue and Morishima 1982). When Chinese students do seek help, it is mostly from social support resources, with mental health services often being viewed as a last resort when all other resources have been exhausted (Boey 1999; Chang 2008; Jiang and Wang 2003; Kung 2003). As a result, the possible help-negation effect of depression might very well exacerbate further the evident help-seeking resistance among Chinese students.

Thus far, the help-negation effect of depression has been suggested in only a few studies in the West (Sen 2004; Wilson et al. 2010; Wilson and Deane 2010; Wilson et al. 2007). Given the serious implication of help-negation, there is a need to replicate and extend these findings to other non-clinical samples and unravel the factors that may affect the help-negation process. Therefore, in addition to investigating the help-negation effect of depression, this study also explored factors that may play a part in the help-negation effect particularly in relation to depression among Chinese students.

Anxiety Symptoms

There is increasing evidence suggesting that anxiety precedes the onset of mood disorders, with anxiety symptoms often occurring prior to and alongside of depressive symptoms in

both clinical and non-clinical populations (Beuke et al. 2003; Wilson 2010). While depressive symptoms have been associated with help-negation, the literature is currently unclear about whether anxiety symptoms prompt or impede help-seeking. A survey of clients diagnosed with clinical anxiety found that elevated levels of anxiety prompted them to seek mental health assistance in the first place (Thompson et al. 2004). The researchers thus suggest that heightened anxiety symptoms might be important in problem recognition and they, in turn, may facilitate the help-seeking process. If so, it might be that depressed individuals with accompanying symptoms of anxiety may be more likely to seek help than those without anxiety symptoms. Nevertheless, young people may have a general predisposition not to seek help for psychological problems, which may prevent them from seeking help before psychological symptoms such as anxiety develop into depression (Wilson 2010). Given the progressive nature of mental health disorders, reluctance to seek help for depressive symptoms may, therefore, be present also in regard to anxiety symptoms that often precede depressive symptoms (Wilson 2010). As a result, despite its promise as a major predictor of help-seeking, the extent to which anxiety influences the help-negation effect of depression is a question that is yet to be answered. A clearer understanding of the relationship between anxiety symptoms and help-negation among Chinese students is warranted.

Gender

Another highly researched variable in help-seeking patterns is gender. A recent meta-analysis of gender effects in help-seeking reported that gender was a significant predictor of attitudes toward seeking professional psychological help, with females generally holding more positive attitudes toward seeking such help than males (Nam et al. 2010). Specifically, females were found to be more willing to recognize the need for professional help, were more open about their problems, and had more confidence in the mental health services (Leong and Zachar 1999). Previous studies with adolescents in the West have found that females were more likely to seek help for mental health problems than males, even after controlling for the effects of psychological distress (Boldero and Fallon 1995; Rickwood and Braithwaite 1994; Schonert-Reichl and Muller 1996).

However, Nam et al. (2010) found that culture might moderate the gender effect on help-seeking, as research has shown that Asians showed relatively less gender difference in help-seeking than did Asian Americans and Caucasian Americans. For example, Chang (2008) found that the significant gender difference in help-seeking attitudes did not translate to help-seeking behaviors. While Chinese female students expressed more positive attitudes toward seeking help than males, Chinese females and males were equally unlikely to seek professional assistance for stressful events (Chang 2008). These findings may suggest that even though Chinese women are more open about seeking help, owing to social stigma attached to mental illness and cultural reluctance to disclose personal problems to outsiders depressed Chinese women may be just as unlikely to seek professional help as their male counterparts.

Help-Seeking Attitudes

A number of studies have revealed the importance of help-seeking attitudes in regard to the help-seeking process. For example, Carlton and Deane (2000) found that high school students' attitudes toward seeking mental health care was one of the most important predictors of help-seeking intentions for suicidal thoughts and personal-emotional problems. Additionally, Wilson et al. (2005) reported that negative attitudes toward seeking help explained some of the help-

negation effect of suicidal thoughts. The researchers suggest that young people's negative attitudes toward help-seeking are an important barrier to seeking professional assistance. Similarly, many researchers believe that negative attitudes toward help-seeking, typically transmitted by family and social networks, are one of the major barriers to the utilization of mental health services among Asians. For example, Leong and Lau (2001) argued that the pattern of underutilization of professional psychological treatment among Asians largely might be attributed to culturally biased views regarding this form of assistance. Consequently, they avoid or delay seeking professional assistance until their problems become so pronounced that they can no longer be contained within the social network. Chang (2008) found that Chinese students' help-seeking attitudes made a significant contribution to the prediction of their professional help-seeking for personal/emotional stress. Together, these findings suggest that negative help-seeking attitudes may exacerbate Chinese students' reluctance to seek help and, consequently, potentially strengthen the help-negation effect of depression.

Study Aims

Understanding the impact of depressive symptoms on help-negation in Chinese youth is essential given the high prevalence rates and the debilitating effects of depression on every domain of young people's lives (Wilson et al. 2007; Wilson and Deane 2010). Therefore, the purpose of the present study was to extend an examination of the help-negation effect in regard to depression specifically to a sample of Chinese university students in Taiwan.

Previous studies of help-negation have generally focused on help-seeking intentions (e.g., Wilson et al. 2007; Wilson and Deane 2010). However, as attitudes, beliefs and cultural norms may constrain seeking help, it would be expected that intentions would be reported more favourably than actually help-seeking itself. For that reason, the present study sought to unravel the help-negation effect of depressive symptoms on actual help-seeking behavior. The first aim of the study was to examine the extent to which levels of depressive symptoms were related to seeking help from friends, parents, and professional helpers.

In addition to studying the help-negation effect of depressive symptoms, the study further sought to explore factors that may explain why Chinese youth with depressive symptoms might be reluctant to seek help. The second aim of the study was, therefore, to explore the possibility that anxiety, gender, and help-seeking attitudes might mediate for the help-negation effect of depression. It was hypothesized that anxiety, gender, and help-seeking attitudes might explain the relationship between depressive symptoms and actual help-seeking among Chinese university students.

Finally, the possibility that gender, anxiety and help-seeking attitudes might influence the overall strength of Chinese university students' help-negation inclinations was also explored. Specifically, the third aim of the study was to determine whether anxiety, gender, and help-seeking attitudes moderated the relationship between depressive symptom and actual help-seeking. It was hoped that the results of the current study would help to clarify whether depressive symptoms act as barriers to help-seeking among Chinese university students, and the roles that anxiety, gender and help-seeking attitudes played in the help-negation process.

Method

Participants and Procedures

The sample consisted of 1,133 first-year Chinese college students from a private university in southern Taiwan. The packet of instruments was distributed and retrieved during a general

education class at the beginning of the Fall semester. The students were informed that the study was aimed at understanding help-seeking behavior among college students. Their participation was voluntary and the confidentiality of their data was ensured. Of the 1,133 students, the data for 153 were excluded owing to incomplete questionnaires, resulting in a total sample of 981 students. Among the 981 respondents, 450 (45.9 %) were male and 531 (54.1 %) were female. The mean age for the sample was 18.44 years ($SD=0.92$), ranging from 17 to 27 years of age.

Instruments

Survey of Help-Seeking for Stressful Events

This survey, constructed for the study, examined the Chinese college students' actual help-seeking for stressful events upon entering college. The first section of the survey included questions covering demographic factors, including age, gender, majors, religion, extracurricular activities, and marital status. The students were then asked if they had sought counseling in the past.

The second section of the survey examined students' help-seeking behaviors for stressful events upon entering college. To determine from whom the students sought help for their problems, three sources of help were listed: friends, parents and professional helpers such as teachers, mental health professionals, and medical doctors. Participants were asked, "To whom did you talk about your problem? Check all that apply." The participants were then asked to rate the perceived effectiveness of the help they received from the helper concerned, ranging from minimally helpful (1) to extremely helpful (5).

Beck Anxiety Inventory (BAI; Beck and Steer 1990)

The BAI is a 21-item self-report inventory for measuring the presence and severity of anxiety. The time frame for its assessment is for the "past week, including today." Each item is rated on a 4-point scale: 0 (*not at all*) to 3 (*severely, I could barely stand it*). A total score is calculated to reflect the severity of anxiety symptoms, with summary scores ranging from 0 to 63.

The BAI has demonstrated high internal consistency (Cronbach $\alpha=0.92$) and test-retest reliability ($r=0.82$) over a week (Beck and Steer 1990). In addition, the BAI's validity was indicated by its correlation with the revised 'Hamilton Anxiety Rating Scale' ($r=0.51$), and its low correlation with the revised 'Hamilton Depression Rating Scale' ($r=0.25$) (Beck et al. 1988). The Chinese BAI showed a high internal consistency coefficient of 0.91 for the current sample.

Beck Depression Inventory-II (BDI-II; Beck et al. 1996)

The BDI-II is a 21-item self-report instrument that assesses the presence and severity of depressive symptoms. The time frame for its assessment is the previous 2 weeks. Each item is rated on a 4-point Likert-type scale, ranging from 0 (*least severe*) to 3 (*highly severe*). A total score is calculated to reflect severity of depressive symptoms, with summary scores ranging from 0 to 63.

The BDI-II scale has been used extensively with college students (e.g., Beck et al. 1996) and has demonstrated acceptable psychometric properties with Chinese college students (Chang 2005). The Chinese BDI-II had an internal consistency coefficient of 0.87 with the current sample.

Attitudes Toward Seeking Professional Psychological Help Scale- Short Form (ATSPPH-SF; Fischer and Farina 1995)

The ATSPPH-SF is a 10-item version of Fischer and Turner's 29-item scale for measuring attitudes toward seeking psychological help. Each item is a statement that is scored on a 4-point scale, ranging from 1 (strongly disagree) to 4 (strongly agree). The total score is obtained by summing the item scores. High scores on this scale indicate a positive attitude toward seeking professional help for psychological problems.

The ATSPPH-SF has demonstrated adequate internal consistency (Cronbach $\alpha=0.84$) and test-retest reliability ($r=0.82$) over a period of 6 weeks (Fischer and Farina 1995). Evidence of the scale's validity has been provided by Hatchett (2006), who found that the ATSPPH-SF scores significantly predicted the prior utilization of and self-reported satisfaction with mental health services. The ATSPPH-SF had an adequate internal consistency coefficient of 0.75 with the current sample.

Data Analysis

Correlational analyses were conducted to examine the relationship between depressive symptoms and help-seeking in this sample of Chinese university students in Taiwan. Additionally, in order to examine whether anxiety, gender, and help-seeking attitudes mediated and/or moderated the help-negation effect of depressive symptoms, three hierarchical regression analyses were conducted with anxiety, gender, and help-seeking attitudes as covariates and each help source (i.e., friends, parents, and professional helpers) as the dependent variable in the analyses.

In order to test the hypothesized mediation model, which investigated the extent to which anxiety, gender, and help-seeking attitudes explained the help-negation effect of depressive symptoms, depressive symptoms were entered in the first step of the regression equation, gender added in the second step, anxiety entered in the third step, and the ATSPPH-SF scores entered in the fourth step of the analysis. Next, the possibility that anxiety, gender, and help-seeking attitudes might influence the overall strength of Chinese students' help-negation was explored. On the basis of recommendations made by Cohen et al. (2003), regression analyses were used to evaluate whether anxiety, gender, and help-seeking attitudes moderated the help-negation relationship. The moderation effect was tested by using the interaction variables (i.e., gender \times BDI-II, BAI \times BDI-II, and ATSPPH-SF \times BDI-II) to predict help-seeking from each help source. Given the binominal nature of help-seeking, logistic regression models were used to compute adjusted odds ratios (*OR*; with 95 % confidence intervals). The *p* value for any finding with a $p<0.05$ was reported.

Results

Help-Negation Effect of Depression for Informal and Formal Help Sources

As presented in Table 1, evidence of possible help-negation is indicated by significant correlations between depressive symptoms and actual help-seeking. Depressive symptoms were significantly negatively associated with seeking help from friends ($r=-0.12$, $p<0.001$) and parents ($r=-0.24$, $p<0.001$). However, depressive symptoms were not significantly correlated with professional help-seeking ($r=-0.05$, $p>0.05$). It is noteworthy that the magnitude of the help-negation effect was strongest for seeking help from parents.

Table 1 Intercorrelations between variables

Variable	BDI-II	Gender	BAI	ATTSPPH-SF	Friend	Parent
BDI-II						
Gender	0.03					
BAI	0.57***	0.08*				
ATTSPPH-SF	-0.16***	0.20***	-0.01			
Friend	-0.12***	0.06	-0.04	0.13***		
Parent	-0.24***	0.03	-0.10**	0.20***	0.28***	
Professional	-0.05	-0.02	0.06*	0.25***	0.21***	0.30***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Mediation Effect of Anxiety, Gender, and Help-Seeking Attitudes in the Relationship Between Depressive Symptoms and Help-Seeking

In regard to seeking help from friends, depressive symptoms, when entered into the regression equation in Step 1, emerged as a significant predictor of seeking help from friends ($OR=0.96$, $p < 0.01$) (see Table 2). Entering gender and anxiety in Steps 2 and 3 of the regression equation did not produce significant effects for both variables ($OR=1.47$, $p > 0.05$ and $OR=1.02$, $p > 0.05$ respectively). When the ATSPPH-SF scores were entered in Step 4, they were significantly positively correlated with increased likelihood of seeking help from friends ($OR=1.07$, $p < 0.01$). However, as reported in Table 2, with anxiety, gender, and the ATSPPH-SF scores controlled, depressive symptoms remained significantly correlated with lower likelihood of seeking help from friends ($OR=0.96$, $p < 0.01$), indicating that none of the variables above functioned as a mediator of the help-negation phenomenon for seeking help from friends. In other words, anxiety symptoms, gender, and help-seeking attitudes were, neither individually nor collectively, able to fully account for help-negation for depressive symptoms in regard to seeking help from friends.

In regard to seeking help from parents, entering depressive symptoms in Step 1 resulted in a significant negative correlation with seeking help from parents ($OR=0.93$, $p < 0.001$) (see Table 2). Entering gender and anxiety in Steps 2 and 3 of the regression equation did not produce significant effects for both variables ($OR=1.14$, $p > 0.05$ and $OR=1.05$, $p > 0.05$ respectively). When the ATSPPH-SF scores were entered in Step 4, they were significantly positively correlated with increased likelihood of seeking help from parents ($OR=1.07$, $p < 0.01$). However, as reported in Table 2, with anxiety, gender, and the ATSPPH-SF scores controlled, depressive symptoms remained significantly correlated with lower likelihood of seeking help from parents ($OR=0.94$, $p < 0.01$), indicating that none of the variables above functioned as a mediator of the help-negation phenomenon for seeking help from parents. In other words, anxiety symptoms, gender, and help-seeking attitudes were, neither individually nor collectively, able to fully account for the help-negation for depressive symptoms in regard to seeking help from parents.

For those seeking help from professional helpers, the inclusion of anxiety symptoms in Step 3 meant that the inverse relationship between depressive symptoms and professional help-seeking became significant ($OR=0.96$, $p < 0.01$). This result seemed to suggest that when anxiety symptoms occurred alongside depressive symptoms, the Chinese students with elevated depressive symptoms were less likely to seek professional help. It is interesting to

Table 2 Summary of moderated logistic regressions of depression and seeking help from friends, parents, and professional helpers

Predictors	Friends OR ^a (95 %CI)	Parents OR ^a (95 %CI)	Professionals OR ^a (95 %CI)
Step 1			
BDI-II	0.96(0.93–0.98)**	0.93(0.92–0.95)***	0.98(0.97–1.00)
Step 2			
BDI-II	0.96(0.92–0.98)**	0.93(0.92–0.95)***	0.98(0.97–1.00)
Gender	1.47(0.93–2.33)	1.15(0.87–1.53)	0.97(0.74–1.28)
Step 3			
BDI-II	0.94(0.91–0.98)**	0.93(0.91–0.95)***	0.96(0.94–0.99)**
Gender	1.44(0.91–2.29)	1.14(0.86–1.51)	0.94(0.71–1.24)
BAI	1.02(0.99–1.06)	1.01(0.99–1.04)	1.04(1.01–1.06)**
Step 4			
BDI-II	0.96(0.92–0.99)**	0.94(0.92–0.96)***	0.98(0.95–1.01)
Gender	1.26(0.79–2.02)	1.01(0.76–1.35)	0.76(0.57–1.02)
BAI	1.02(0.98–1.05)	1.01(0.99–1.03)	1.03(1.01–1.06)**
ATSPPH-SF	1.07(1.02–1.13)**	1.07(1.04–1.10)***	1.12(1.09–1.16)***
Step 5			
BDI-II	0.96(0.83–1.10)	1.02(0.91–1.13)	0.97(0.86–1.09)
Gender	0.99(0.42–2.30)	1.37(0.81–2.29)	1.36(0.81–2.28)
BAI	1.01(0.96–1.07)	1.00(0.97–1.03)	1.01(0.98–1.05)
ATSPPH-SF	1.09(1.00–1.19)*	1.09(1.04–1.15)**	1.09(1.03–1.15)**
BDI-II × Gender	1.02(0.96–1.08)	0.97(0.93–1.01)	0.95(0.90–0.99)**
BDI-II × BAI	1.00(1.00–1.00)	1.00(1.00–1.00)	1.00(1.00–1.00)
BDI-II × ATSPPH-SF	1.00(0.99–1.00)	1.00(0.99–1.00)	1.00(1.00–1.01)

^a Odds ratio

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

note that when the ATSPPH-SF scores were included in Step 4, however, the inverse relationship between depressive symptoms and professional help-seeking became non-significant ($OR=0.98$, $p > 0.05$). It seems that help-seeking attitudes might have decreased the help-negation effect of depressive symptoms in regard to professional help-seeking.

Moderation Effect of Gender, Anxiety, and Help-Seeking Attitudes in the Relationship Between Depressive Symptoms and Help-Seeking

With respect to seeking help from friends and parents, results revealed none of the interaction variables made a significant contribution to the regression equation.

With respect to seeking help from professional helpers, results revealed that BDI-II × gender made a significant negative contribution to the prediction of seeking help from professional helpers ($OR=0.95$, $p < 0.01$). This finding indicated that gender significantly weakened the relationship between depressive symptoms and professional help-seeking.

Discussion

The current study provides preliminary support for the help-negation effect of depressive symptoms for Chinese university students in Taiwan. Consistent with previous findings in the West, this study found that higher levels of depressive symptoms were related to a decreased likelihood of seeking help from friends and parents (Wilson et al. 2007, 2010; Wilson and Deane 2011). Importantly, these results suggest that Chinese university students with elevated levels of depressive symptoms who might be in need of help were also those less likely to seek help from friends and parents. The potential help-negation of depressive symptoms, as evidenced in the present and previous studies, suggests that there may be specific factors associated with depressive symptoms that impede youth from seeking help from friends and parents. Wilson et al. (2007) suggest that social withdrawal, lack of motivation, and/or apathy commonly recognized in depression may contribute to help-avoidance among depressed youth. As levels of depression increase, young people may experience increased levels of withdrawal and indifference toward help-seeking that subsequently reduces their motivation to seek help (Wilson et al. 2007). It is thus possible that as levels of depression increase, Chinese students find it increasingly difficult to reach out and articulate their thoughts and feelings.

In addition, the vital influence of Chinese culture might also help explain Chinese youth's reluctance to seek help from friends and parents for depressive symptoms. A salient aspect of Chinese culture is its emphasis on collectivism and interdependence (Mo and Mak 2009; Shea and Yeh 2008). With an eye to preserve interpersonal harmony, individuals with interdependent self-construal tend to avoid intense expression of emotions, especially negative emotions, due to their potential threats to interpersonal harmony (Shea and Yeh 2008). As seeking help for depressive symptoms involves displays of negative feelings and thoughts, Chinese students with elevated depressive symptoms may not conceive help-seeking as being a viable solution to their problems. Another plausible explanation is that help-seeking can be subjectively interpreted as a violation of self-reliance, something that is highly treasured in Chinese culture, even when the problem is such as to stretch one's coping capacity (Chiu 2004). As Chiu has pointed out, when a problem such as depression involves intimate revelations of the self or social comparisons with others, seeking help from others may pose a threat to the sense of self, and so friends and family may no longer be regarded as desirable sources of help.

Friends and family play an important role in the help-seeking pathway. Research results suggest that Chinese people rely heavily on their social network in coping with psychological distress (Chang 2008; Kung 2003; Leung et al. 2012; Mo and Mak 2009). Consequently, the help-negation effect in regard to seeking help from friends and parents among Chinese university students might be particularly concerning, as those in need of assistance may not receive the support they sorely need, while for various reasons seeking professional help is usually not considered as an option (Leung et al. 2012).

Consequently, for those seeking to implement interventions aiming at promoting help-seeking among Chinese students, the current results have particularly important implications for the roles of parents and peers in the help-seeking process. As Chinese people generally view professional psychological help as an undesirable last resort, there is a need to address both cultural and practical barriers to supporting loved ones in seeking professional assistance. In particular, there is a need to help parents and peers appropriately recognize depressive symptoms in loved ones and to respond in ways that guide young people to appropriate mental health services. For example, orientation programs and informal class presentations may not only educate students and their parents about mental health issues

confronting college students and familiarize them with the mental health resources on and off campus, but could help them understand the benefits of professional help-seeking.

The current study found no evidence supporting the view that increased levels of depressive symptoms were related to professional help-seeking among Chinese university students. Despite an increased need for mental health services, there was no corresponding increase in professional help-seeking. This finding needs to be interpreted within the Chinese cultural context. Owing to a cultural stigma attached to seeking professional help for psychological problems, it is possible that those with elevated levels of depression were equally unlikely to seek professional assistance as those with low levels of depression.

Chinese culture emphasizes interpersonal harmony, emotional restraint, and avoidance of shame (“saving face”) (Mo and Mak 2009). Traditionally, Chinese are expected to deal with problems on their own or within the family. Seeking professional help is often considered a violation of the cultural norm of keeping the problem within the family, as it may indicate the family’s inadequacy to take care of its own, which in turn brings disgrace to the family (Shea and Yeh 2008). Seeking professional help may thus be viewed as a sign of weakness that brings shame to the family. It is possible that such potentially shameful feelings reduce Chinese students’ motivation to seek help.

In Chinese society, psychological problems are often viewed as signs of personality flaws and moral defects, and affective and cognitive aspects of depression may be seen as evidence of weakness of character and a cause for family shame that would not allow seeking help from professional helpers (Sue and Morishima 1982). Therefore, social stigma and cultural reluctance to respond to psychological symptoms may be responsible for the current findings. Another possibility is that Chinese students in this study might not have perceived a need for professional assistance for their depressive symptoms. Many Chinese people view psychological distress as a part of normal life and professional help-seeking as thus not necessary, as depressive symptoms are perhaps not perceived as severe enough to warrant professional assistance (Kung 2003).

For those seeking help from professional helpers, regression results showed that the inclusion of anxiety symptoms meant that an inverse relationship between depressive symptoms and professional help-seeking became significant, with anxiety symptoms being positively correlated with professional help-seeking (see Table 2). These results seemed to suggest that when anxiety symptoms occurred alongside depressive symptoms, Chinese students with elevated anxiety symptoms were more likely to seek professional help, while students with elevated depressive symptoms were less likely to seek professional help. These findings indicated that anxiety might act as an approach factor for professional help-seeking. As a result, when Chinese students experience increased levels of depressive symptoms, those with accompanying symptoms of anxiety may be more likely to recognize that they have a problem that warrants professional help than those without such anxiety symptoms.

One interesting finding from the current study was the gender effect on the relationship between depressive symptoms and help-seeking. Gender significantly moderated help-negation in regard to professional help-seeking. Closer examination of the data indicates that the negative association between depressive symptoms and seeking help from professional helpers was more pronounced among Chinese female students than their male counterparts. In other words, Chinese females presenting higher levels of depressive symptoms were less likely to seek professional help. These findings may bear important implications for research and development of clinical interventions, as it suggests that the help-negation effect of depression may be more pronounced for Chinese females than their male counterparts.

The current study's findings are certainly intriguing. It is worth noting that the gender effect observed in this study was clearly tentative. More empirical investigations are needed to clarify how gender interacts with other variables to affect help-negation in regard to depression among people with Chinese origins.

Not surprisingly, Chinese students who held more favorable attitudes toward help-seeking were more likely to seek help from friends, parents, and professional helpers. Most importantly, the current regression result also suggests that help-seeking attitudes may counter the help-negation effect of depression as it relates to professional help-seeking. These findings support previous findings suggesting that attitudes toward help-seeking, transmitted by family and social network, are a major facilitator in the help-seeking process (Cramer 1999; Deane and Chamberlain 1994; Fischer and Farina 1995; Leaf et al. 1986; Leong and Zachar 1999).

These findings bear significant implications for interventions for increasing help-seeking among university students with Chinese origins. Since Chinese students' help-seeking attitudes seem to play such a central role in actual help-seeking, there is a strong need for counseling services to reach out, to foster favorable attitudes toward seeking professional psychological help among Chinese students. A psycho-education intervention that aims to normalize help-seeking and the reasons people might seek help could help improve students' attitudes toward help-seeking (Gonzalez et al. 2002). Special attention should be focused on promoting the value of seeking professional mental health services alongside the consequences of not seeking such help (Wilson 2010).

Aside from promoting mental health education with Chinese students, mental health professionals should be aware of Confucianism as it relates to every sphere of Chinese people's lives, especially in regard to interpersonal harmony, emotional restraint, and avoidance of shame (Mo and Mak 2009). As Mo and Mak have suggested, because many Chinese students are discouraged from talking about their feelings openly, they may not benefit as much as Westerners from traditional talk therapy. Instead, nonverbal types of therapy such as art therapy may help Chinese students to better connect with and express their feelings.

There are several limitations that must be considered in regard to these results. Firstly, although this study offers important information concerning the help-negation effect in regard to depression among Chinese university students, the cognitive and behavioral mechanism by which this might occur is yet to be answered and thus requires further investigations. Additionally, since this study used a non-clinical convenience sample of first-year Chinese university students in Taiwan, the results cannot be uniformly generalized to all Chinese student populations without taking into account the great sociopolitical differences existing in various Chinese communities. Future investigations need to include representative samples of Chinese university students across demographic and geographical boundaries, as well as clinical samples that experience high levels of depression. Furthermore, the correlational nature of this study's design does not allow for establishing a causal relationship between the independent and outcome variables. Finally, since this is a cross-sectional study, the time sequence of the help-seeking process cannot be established.

Despite the limitations, the current study suggests that even at the non-clinical level, Chinese college students with elevated depressive symptoms may negate, refuse or avoid help from friends and parents and may tend to deal with distress on their own. Thus, outreach efforts in the form of mental health education are needed to inform students, faculty and staff that depressive symptoms might serve as a barrier to help-seeking for Chinese students. It may be especially important to offer information that helps identify students at risk of depression. As Nam et al. (2010) have suggested, college counseling

services should reframe and rebuild their services to be more responsive to ‘hidden’ clients; Asians and male students in particular.

Additionally, Chinese students troubled by depressive symptoms may be less likely to initiate help-seeking, and as a result, faculty and staff should receive special training emphasizing the warning signs of depression while highlighting the importance of knowing when and where to seek help in order to facilitate referral to professional services. Finally, on-campus screening performed on a regular basis might be effective in identifying Chinese university students at risk of depression, so they can be targeted for assistance and encouraged directly to seek help.

References

- Adlaf, E. M., Gliksmann, L., Demers, A., & Newton-Taylor, B. (2001). The prevalence of elevated psychological distress among Canadian undergraduates: findings from the 1998 Canadian campus survey. *Journal of American College Health, 50*, 67–72.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: psychometric properties. *Journal of Consulting and Clinical Psychology, 56*, 893–897.
- Beck, A. T., & Steer, R. A. (1990). *Manual for the Beck Anxiety Inventory*. San Antonio: The Psychological Corporation (Chinese version).
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio: Psychological Corporation (Chinese version).
- Beuke, C. J., Fischer, R., & McDowall, J. (2003). Anxiety and depression: why and how to measure their separate effects? *Clinical Psychology Review, 23*, 831–848.
- Belfer, M. L. (2008). Child and adolescent mental disorders: the magnitude of the problem across the globe. *Journal of Child Psychology and Psychiatry, 49*(3), 226–236.
- Boey, K. W. (1999). Help-seeking preference of college students in urban China after the implementation of the “open-door” policy. *International Journal of Social Psychiatry, 45*, 104–116.
- Boldero, J., & Fallon, B. (1995). Adolescent help-seeking: what do they help for and from whom? *Journal of Adolescence, 18*, 193–209.
- Carlton, P. A., & Deane, F. P. (2000). Impact of attitudes and suicidal ideation on adolescents’ intentions to seek professional psychological help. *Journal of Adolescence, 23*, 35–45.
- Chang, H. (2005). Dimensions of the Chinese Beck Depression Inventory-II in a university sample. *Individual Differences Research, 3*, 193–199.
- Chang, H. (2008). Help-seeking for stressful events among Chinese college students in Taiwan: roles of gender, prior history of counseling, and help-seeking attitudes. *Journal of College Student Development, 49*(1), 41–51.
- Chen, T., Bi, Y., Mao, Z., Rappe, P., & Edwards, G. D. (2002). Identifying factors influencing mental health development of college students in China. *Social Behavior and Personality, 30*, 547–560.
- Chiu, M. Y. L. (2004). Why Chinese women do not seek help: a cultural perspective on the psychology of women. *Counselling Psychology Quarterly, 17*, 155–166.
- Clark, D., & Fawcett, B. (1992). Review of empirical risk factors for evaluation of the suicidal patient. In B. Bongar (Ed.), *Suicide: Guidelines for assessment, management, and treatment* (pp. 16–48). New York: Oxford University Press.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah: Lawrence Erlbaum.
- Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: a reanalysis using path modeling structures. *Journal of Counseling Psychology, 46*, 381–387.
- Deane, F. P., & Chamberlain, K. (1994). Treatment fearfulness and distress as predictors of professional psychological help-seeking. *British Journal of Guidance & Counseling, 22*, 207–217.
- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: a shortened form and considerations for research. *Journal of College Student Development, 36*, 368–373.
- Furr, S. R., Westefeld, J. S., McConnell, G. N., & Jenkins, J. M. (2001). Suicide and depression among college students: a decade later. *Professional Psychology: Research and Practice, 32*, 97–100.
- Gonzalez, J. M., Tinsley, H. E. A., & Kreuder, K. R. (2002). Effects of psycho educational interventions on opinions of mental illness, attitudes toward help seeking, and expectations about psychotherapy in college students. *Journal of College Student Development, 43*, 51–63.

- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry*, *10*, 113.
- Hatchett, G. T. (2006). Additional validation of the attitudes toward seeking professional psychological help scale. *Psychological Reports*, *98*, 279–284.
- Huang, C. Y., & Guo, S. E. (2009). Stress, perceived support, resourcefulness and depressive symptoms in Taiwanese adolescents. *Journal of Clinical Nursing*, *18*, 3271–3279.
- Jiang, G., & Wang, M. (2003). A study on help-seeking propensity of Chinese undergraduates. *Chinese Journal of Clinical Psychology*, *11*, 180–184 (In Chinese).
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distribution for DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*, 593–602.
- Kung, W. W. (2003). Chinese Americans' help seeking for emotional distress. *The Social Service Review*, *77*, 110–134.
- Lee, S., Tsang, A., & Kwok, K. (2006). Twelve-month prevalence, correlates, and treatment preference of adults with DSM-IV major depressive episode in Hong Kong. *Journal of Affective Disorders*. doi:10.1016/j.jad.2006.07.009.
- Leaf, P. J., Bruce, M. L., & Tischler, G. L. (1986). The differential effect of attitudes on the use of mental health services. *Social Psychiatry*, *21*, 187–192.
- Leong, F. T. L., & Lau, A. S. L. (2001). Barriers to providing effective mental health services to Asian Americans. *Mental Health Service Research*, *3*(4), 201–214.
- Leong, F. T. L., & Zachar, P. (1999). Gender and opinions about mental illness as predictors of attitudes toward seeking professional psychological help. *British Journal of Guidance & Counseling*, *27*, 123–132.
- Leung, P., Cheung, M., & Tsai, V. (2012). Help-seeking behaviors among Chinese Americans with depressive symptoms. *Social Work*, *57*, 61–71.
- Mo, P. K. H., & Mak, W. W. S. (2009). Help-seeking for mental health problems among Chinese. *Social Psychiatry and Psychiatric Epidemiology*, *44*, 675–684.
- Morgan, T., Ness, D., & Robinson, M. (2003). Students' help-seeking behavior by gender, racial background, and student status. *Canadian Journal of Counseling*, *37*, 151–166.
- Nam, S. K., Chu, H. J., Lee, M. K., Lee, J. H., Kim, N., & Lee, S. M. (2010). A meta-analysis of gender differences in attitudes toward seeking professional psychological help. *Journal of American College Health*, *59*(2), 110–116.
- Oliver, J. M., Reed, C. K. S., Katz, B. M., & Haugh, J. A. (1999). Students' self-reports of help-seeking: the impact of psychological problems, stress, and demographic variables on utilization of formal and informal support. *Social Behavior and Personality*, *27*, 109–128.
- Rickwood, D. J., & Braithwaite, V. A. (1994). Social-psychological factors affecting help-seeking for emotional problems. *Social Science and Medicine*, *39*, 563–572.
- Rosenthal, B. S., & Schreiner, A. C. (2000). Prevalence of psychological symptoms among undergraduate students in an ethnically diverse urban public college. *Journal of American College Health*, *49*, 12–19.
- Schonert-Reichl, K. A., & Muller, J. R. (1996). Correlates of help-seeking in adolescence. *Journal of Youth and Adolescence*, *25*, 705–732.
- Sen, B. (2004). Adolescent propensity for depressed mood and help seeking: race and gender differences. *Journal of Mental Health Policy and Economics*, *7*, 133–145.
- Shea, M., & Yeh, C. (2008). Asian American students' cultural values, stigma, and relational self-construal: correlates of attitudes toward professional help seeking. *Journal of Mental Health Counseling*, *30*, 157–172.
- Sue, S., & Morishima, J. K. (1982). *The mental health of Asian Americans*. San Francisco: Jossey-Bass.
- Thompson, A., Hunt, C., & Issakidis, C. (2004). Why wait? Reasons for delay and prompts to seek help from mental health problems in an Australian clinical sample. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 810–817.
- Wilson, C. J. (2010). General psychological distress symptoms and help-seeking intentions in young Australians. *Advances in Mental Health*, *9*, 63–72.
- Wilson, C. J., Deane, F. P., & Ciarrochi, J. (2005). Can hopelessness and adolescents' belief about seeking help account for help negation? *Journal of Clinical Psychology*, *61*, 1525–1539.
- Wilson, C. J., & Deane, F. P. (2010). Help-negation and suicidal ideation: the role of depression, anxiety and hopelessness. *Journal of Youth and Adolescence*, *39*, 291–305.
- Wilson, C., & Deane, F. (2011). Predicting adolescents' future intentions to seek help for mental health problems. *Youth Studies Australia*, *30*, 27–33.
- Wilson, C. J., Deane, F. P., Marshall, K. L., & Dalley, A. (2010). Adolescents' suicidal thinking and reluctance to consult general medical practitioners. *Journal of Youth and Adolescence*, *39*, 343–356.

- Wilson, C. J., Rickwood, D., & Deane, F. P. (2007). Depressive symptoms and help-seeking intentions in young people. *Clinical Psychologist, 11*, 98–107.
- Yan, J. Y., Xiao, H. Q., Wang, L., Zheng, X. Q., Xiu, X. Y., & Hai, L. S. (2012). Associations among impulsivity, aggression, and sub threshold depression in Chinese university students. *Social Behavior and Personality: An International Journal, 40*, 239–249.
- Zong, J.G., Cao, X.Y., Cao, Y., Shi, Y.F., Wang, Y.N., Yan, C., Abela, J.R.Z., Gan, Y.Q., Gong, Q.Y., & Chan, R.C.K. (2010). Coping flexibility in college students with depressive symptoms. *Health and Quality of Life Outcomes: Open Access, 8*:66. <http://www.hqlo.com/content/8/1/66>