

Breaking the Silence: Applying and Extending the Theory of Situational Support to Understand Mental Health Services Use Among Chinese Immigrants in the United States

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Statistics show that Chinese immigrants are less likely to use mental health services compared with other racial/ethnic groups. By conducting a nationwide survey ($N = 421$), this study applies the theory of situational support to examine how the 2 primary barriers to mental health service use (i.e., social stigma and normative beliefs) affect Chinese immigrants' psychosocial responses toward the problem, which may ultimately lead to their behavioral reactions. Implications for theory and practice are discussed.

Keywords: the theory of situational support, social stigma, mental health, immigrant health

Ethnic diversity in the population of the United States has rapidly increased in the past four decades, and as of 2017, 14% of the country's total population consisted of immigrants (Radford, 2019). Given the increasing cultural diversity in the country, health providers and scholars have noticed the vulnerability of immigrants and the severity of mental illness among this group (Saechao et al., 2012). The challenges that immigrants face on moving to a new country, such as stress associated with acculturation, maintaining cultural traditions, or economic struggles, considerably affect their mental health, which includes their emotional, psychological, and social well-being that affects thinking, feeling, or behavior (Abe-Kim et al., 2007). These challenges also create barriers for immigrants to using mental health services, including both psychosocial and medical therapies, such as seeing counselors and psychiatrists (Thomson, Chaze, George, & Guruge, 2015). Substantial literature has acknowledged remarkable disparities in the use of mental health services among numerous ethnic minority groups, especially among immigrants from Asian countries (Na, Ryder, & Kirmayer, 2016). Statistics show that Asian Americans are less likely to use mental health services compared with other racial groups (e.g., Office of Minority Health, 2018). Moreover, among Asians in the United States, those who were born in the country are approximately 85% more likely to seek professional help for mental health problems than are foreign-born individuals (Bauldry & Szaflarski, 2017). Although barriers to mental health services use among Asian immigrants have been well documented in various research in the past two decades, most of the studies consider Asian immigrants as a homogenous group (e.g., Nishi, 2016). However, Asian immigrants comprise a large number of people with ancestry from a wide range of culturally diverse traditions and unique beliefs. Cultural practices of each region and country of origin may contribute to different patterns of mental health services use among Asian immigrants (Tiwari & Wang, 2008).

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Although Asian cultures share some similar characteristics, such as collectivism and high-power distance, scholars proposed a typology that specifically describes the differences of cultural values and practices across regions in Asia, including the Sinosphere and Indosphere (Matisoff, 1990). The Sinosphere refers to the countries that were historically influenced by Chinese culture, mostly located in East Asia, such as China, Japan, and South Korea, whereas the Indosphere includes those that were historically influenced by Indian culture and language, mostly located in Southeast Asia, such as India, Nepal, and Malaysia. Consistent empirical evidence has shown that Sinospheric immigrants in Western countries are less likely to use mental health services compared with those from Indospheric countries in South and Southeast Asia (Tiwari & Wang, 2008). The disparities and limited research conducted in the United States show that the Sinospheric immigrants in the country warrant additional scrutiny about their use of mental health services. Therefore, this study focuses on a subset of the Sinospheric immigrant population: Chinese immigrants, as they are one of the fastest growing migrant groups and the second largest foreign-born group in the United States, trailing Mexican immigrants (Radford, 2019).

Furthermore, despite the abundant research on immigration and mental health services use, scholars and practitioners lack a clear model to explain the antecedents to communication and behavioral intentions in relation to the use of mental health services. To fill these gaps in the literature, the present study applies the theory of situational support to examine how the two primary barriers to mental health service use (i.e., social stigma and normative beliefs) affect Chinese immigrants' responses toward the problem, which may ultimately lead to their behavioral reactions. The theory of situational support has been used by communication scholars to study publics' behavior and provided practical implications for communication practitioners to improve participation in the target behavior (McKeever, Pressgrove, McKeever, & Zheng, 2016; Zheng, McKeever, & Xu, 2016). This study hopes to investigate the predictability of the theoretical framework in cultural and health communication with a focus on mental health services information processing and behavior engagement. This study aims to provide theoretical contributions by building on the existing literature to offer directions for future research to understand the perceptions, attitudes, and behaviors of Chinese immigrants about the use of mental health services. In addition, the findings of this study will be arguably valuable for organizations aiming to increase the use of mental health services among the Chinese immigrant community in the United States.

An Emerging Theory of Situational Support

The emerging theory of situational support is a newly developed theoretical framework that combines the situational theory of publics (STP) and the theory of reasoned action (TRA) to examine the extent to which a person might adopt a certain encouraged behavior (McKeever et al., 2016). STP is a communication theory that explains why and when people communicate through identifying their perception of an issue or situation (Grunig, 1997). Grunig (1997) suggested that people engage in information activity before making a decision, and such behaviors are based on their problem recognition, constraint recognition, and involvement. Problem recognition refers to the extent to which people are aware of an issue and stop to think about how to manage it (Grunig, 1997). Constraint recognition alludes to the extent to which people see difficulties that prohibit them from managing the issue. Involvement is defined as individuals' personal connections and relevance to the issue. STP suggests that a person who recognizes an issue, perceives few obstacles in acting on that issue, or feels personally connected to the issue will likely engage in information

activity. Information activity includes two specific dimensions of information behavior: information seeking and information processing. Information seeking refers to “the planned scanning of the environment for messages about the issue,” and information processing refers to “the unplanned discovery of a message followed by continued processing of it” (Grunig, 1997, p. 9).

Although STP continues to be an effective theory that helps identify targeted publics and communication behaviors, scholars have acknowledged its limitations and have encouraged the extension of the theoretical framework (Grunig, 1997). For example, Grunig (1997) suggested that in addition to relevance to an issue, individuals’ attitude valence (i.e., the way people think) may be an important variable in understanding publics’ communication behaviors. Other scholars likewise believe that situational theory should have the ability to predict the likelihood of a noncommunication behavior despite the theory being originally developed to predict communication behavior (Kim & Grunig, 2011). The emerging theory of situational support was proposed through the integration of TRA to address some of these issues.

TRA suggests that individuals systematically process available information and evaluate the outcomes of performing a behavior before taking an action (Fishbein & Ajzen, 1981). Their attitudes toward a behavior and perceived subjective norms about the behavior are the primary information that they take into account before performing the behavior. Specifically, attitudes in TRA refer to individuals’ evaluation of a behavior along dimensions such as pleasant–unpleasant, positive–negative, or good–bad among people (Ajzen, 2001). Positive evaluation outcomes of the target behavior will lead to positive beliefs toward that behavior, whereas negative assessment results of the behavior will result in negative attitudes toward that behavior. In addition, individuals will hold positive subjective norms if they perceive that an important person or group of people in their social networks will support or approve a particular behavior. The decision to act as others approve of or as one ought to do influences a person’s intention to engage in a behavior (Fishbein & Ajzen, 1981).

Given that TRA and STP have complementary but distinct variables that help explain individuals’ motivations, the integration of the two theories provides a comprehensive explanation of the factors that impact individuals’ decision-making processes (e.g., Werder & Schweickart, 2013). Specifically, in addition to STP variables that examine the relevance of an issue to individuals, understanding the way they think (i.e., attitudes and perceived social norms) is likewise necessary for a complete comprehension of publics and their behaviors (McKeever, 2013). McKeever and colleagues (2016) proposed and tested the emerging theory of situational support in an attempt to integrate the findings of previous research that employed the two theories simultaneously to predict a person’s reactions to an issue. The integrated model places each variable from STP and TRA on the antecedent level as predictors of communication behavior and adds behavioral intention as a resulting variable of communication behavior. The new theoretical framework is believed to be able to explain additional variance in individuals’ communication and behavioral intention (McKeever, 2013; McKeever et al., 2016). Specifically, the theory has demonstrated that the enhancement of awareness, involvement, or normative beliefs and the minimization of barriers or negative attitudes in the decision-making process may help facilitate information activity, which in turn increases behavioral intention to engage in a behavior (see, e.g., Li, Harrison, Qiao, & Li, 2019). The current study will expand the scope of the theory and examine its applicability in the exploration of Chinese immigrants’ motivations

for seeking help from mental health professionals. This study proposes the following hypotheses on the basis of the literature on the situational theory:

H1a–e: Chinese immigrants’ problem recognition (H1a), involvement (H1c), attitudes (H1d), and subjective norms (H1e) about the use of mental health services will be positively associated with their information activity on mental health services, whereas their constraint recognition (H1b) will be negatively related with their information activity on mental health services.

Communication behaviors have long been considered in the fields of health and persuasive communication as prerequisite factors for the development of certain behaviors (Griffin, Dunwoody, & Neuwirth, 1999). People expose themselves to information about an issue and “make decisions and formulate judgements about these entities” (Chaiken, Liberman, & Eagly, 1989, p. 239). A rational decision maker with sufficient health information is empowered to adjust his/her behavior accordingly. The theory of situational support suggests that the combination of the dependent variables of STP and TRA (i.e., information activity and preventive behavior, respectively) helps explain the relationship between communication and behavioral intent. Thus, this study proposes the following hypothesis:

H2: Chinese immigrants’ information activity will be positively associated with their behavioral intention to use mental health services.

In addition to testing the potential linear relationships among the variables, the theory of situational support suggests that information activity should serve as a mediating variable, thereby influencing the relationship between the situational perceptions and the outcome (McKeever et al., 2016). For example, an increase in awareness of an issue, positive attitudes toward the situation, and a decrease in perceived barriers to dealing with the issue might help enhance information activity participation and thus facilitate behavioral intentions. Therefore, the current study proposes the following hypotheses to test the mediating role of information activity:

H3a–e: Information activity will mediate the relationship among the predictive variables of problem recognition (H3a), constraint recognition (H3b), involvement (H3c), attitudes (H3d), and subjective norms (H3e) of Chinese immigrants and the outcome variable of their behavioral intention to use mental health services.

Sociocultural Influences in Mental Health Services Seeking

Sociocultural factors refer to a set of norms, beliefs, values, perceptions, or preferences that facilitate or inhibit human action in groups or societies (Prinz, 2011). The informal rules are not only the facilitators that help members of society to interact and live together but also barriers that restrict the range of options available to members when making decisions (Giddens, 2006). The role of sociocultural constructs in mental health care-seeking action has been well demonstrated in the literature, indicating that individuals’ concerns about social relations are associated with mental health outcomes, such as openly discussing the illnesses or seeking professional help (Alegría et al., 2008). Scholars suggested that Chinese people are especially sensitive to sociocultural influences on mental health services use due to their cultural values and

beliefs (Mo & Mak, 2009). Collectivist Chinese cultures are based on respecting the needs of a group or a community over the individual, which emphasizes harmony in the group, adherence to mutual relationships, and concern for face loss (Singelis & Brown, 1995). People in such cultures tend to internalize group values as socially acceptable and act consistent with their perceptions about group values (Triandis, 1999). This study examines two types of sociocultural influences that may shape the beliefs, attitudes, and behaviors around mental health care: subjective norms and stigma.

Subjective Norms

Accounting for cultural value orientation, it could be argued that how others think of the targeted behavior (i.e., subjective norms) would play an important role in seeking mental health services (Barksdale & Molock, 2009). Although the majority of research considers subjective norms, in parallel with attitudes, as an exogenous factor that leads to behavioral intentions, subjective norms may also exert some impact on attitudinal responses toward a behavior (Quintal, Lee, & Soutar, 2010). Subjective norms are outcomes of social normative pressures, which encourage individuals to follow the rules and conform to others in their social networks to avoid “being different.”

A social environment’s norm belief about a behavior may influence one’s awareness and attitudes about that behavior; meanwhile, such social pressures may also serve as facilitators or barriers in individuals’ decision-making processes (Bagozzi, Moore, & Leone, 2004). Therefore, in addition to the original situational theory framework that places subjective norms as a parallel predictor to other situational variables (McKeever et al., 2016), this study also investigates the role of subjective norms in shaping one’s problem recognition, constraint recognition, involvement, and attitudes.

Particularly accounting for the social pressure from the values of Chinese cultures, how the social networks believe and think of the target behavior (i.e., subjective norms) should play an important role in shaping one’s perceptual and attitudinal responses toward the behavior—that is, professional help-seeking in this study (Mo & Mak, 2009). Specifically, when the beliefs among the social networks are not positive and encouraging about formal mental health treatments, individuals may underestimate the importance of help-seeking and pay less attention to the needs of professional help for mental health problems (i.e., *problem recognition*; Barksdale & Molock, 2009).

Meanwhile, those who believe that friends and family would not seek professional help in a similar situation or would not approve such a behavior may be more likely to perceive higher risks/difficulty associated with doing so (Vogel, Wade, Wester, Larson, & Hackler, 2007). The discouraging evaluation and the potential consequences of seeking mental health treatments in one’s social network can serve as the deterrent and barrier to seeking professional help (Mo & Mak, 2009), which increases individuals’ *constraint recognition*.

In addition, the high level of social pressure about mental health services use may also enable individuals to misjudge their connection with mental health services. The disapproval of mental health treatments may reduce individuals’ perceived relevance to such care or belittle the treatments to avoid embarrassment and discrimination (Ilic et al., 2013), thereby decreasing *involvement recognition*.

Finally, social norms for professional help-seeking are undesirable, worthy of concern, or deviant may also influence individuals' attitudes toward such behaviors (i.e., *attitudes*; Lee et al., 2009). A compliance with the beliefs in social networks is particularly important in the values of Chinese cultures (Ng, 2000). Thus, attitudes toward professional help-seeking may be established based on the views of significant others in social circles (Mo & Mak, 2009). This study thus proposes the following hypotheses to test the influence of subjective norms on the situational theory variables:

H4a-d: Chinese immigrants' perceived positive subjective norms about the use of mental health services will be positively associated with their problem recognition (H4a), involvement (H4c), attitudes (H4d) toward the behavior, whereas such positive normative perception will be negatively related with their constraint recognition (H4b).

Social Stigma

Another type of sociocultural barrier to professional mental health help-seeking is social stigma. Mental illness stigma refers to negative perceptions and beliefs that generate fear, rejection, avoidance, and discrimination toward people with emotional disorders (Corrigan & Penn, 1999). Experiences related to stigma, such as embarrassment and humiliation, are the main factors that impede people with mental illness from using health-care services (Schomerus et al., 2019). Asian Americans possess more stigmatizing attitudes toward mental illness and the use of mental health services compared with other ethnic groups in the United States (Rao, Feinglass, & Corrigan, 2007). Scholars believe that this pattern is associated with core Confucian beliefs and values (e.g., Lai, Zhuo, Singla, Wu, & Yang, 2009). Confucianism considers people with mental illness as those who lack the ability and capacity to fulfill their duties and valued roles. Weak characteristics and moral failures resulting from mental illness will lead to a "loss of face" for the family of the mentally ill individual as well as for themselves (Lam et al., 2010). Loss of face is a unique ethnic-cultural factor among the Chinese and is defined as the loss of the respect from others or humiliation (Lai et al., 2009). Concerns about embarrassment and loss of face from mental illness or the use of mental health services therefore form prevalent social stigma among Chinese American groups (Liang, Mays, & Hwang, 2017). Hence, this study proposes that social stigma is an important variable that may influence Chinese immigrants' mental health attitudes and beliefs. In this context, we believe that stigma may be an important precursor to situational perceptions and attitudes toward mental health issues.

Previous studies found that social stigma associated with mental illness often leads to underdiagnosed, underestimated, or nontreatment of the illness (Pyne et al., 2004). Scholars suggested that Asian Americans often believe that their cultural norms do not consider mental illness important or worth discussing. The social stigma formed by such cultural values has been shown to undermine their knowledge, awareness, attitudes, or behaviors about formal mental health care (Lee et al., 2009). Namely, such stigmatizing attitudes can contribute to the ignorance of the need and the necessity of mental health services (Shannon, Wieling, Simmelink-McCleary, & Becher, 2015), thereby decreasing individuals' *problem recognition*.

Moreover, stigma has also been found to be negatively associated with personal relevance toward seeking professional help for mental illness (Hackler, Vogel, & Wade, 2010). When people hold stereotypes toward those with mental illness and accepted discriminative beliefs that seem to be endorsed by society,

they then believe that these perceptions also personally apply to themselves (Corrigan, Watson, & Barr, 2006). Such internalization of the stereotypes can prompt individuals to disassociate themselves from the topic and from related health care services, thereby decreasing their *involvement recognition*.

The prejudices also often lead to the devaluation of mental health services (Nam et al., 2013). The possible relationship between social stigma and attitudes toward mental health services among Chinese immigrants can be expected partially through cultural values (Mo & Mak, 2009). Studies indicated that Chinese are more likely to hold beliefs that seeking professional help for mental illness could bring embarrassment to family (Mo & Mak, 2009), thereby resulting in negative *attitudes* toward related services and treatments (Nam & Choi, 2013).

Besides negative attitudes, stigma has also been found to create a feeling of difficulty in the use of psychological help (Clement et al., 2015). The shame and humiliation from stigmatizing perceptions about mental illness may inhibit individuals from facing such problems. These feelings may convert into barriers and obstacles when considering whether to seek professional help for mental illness (Corrigan & Wassel, 2008). Thus, individuals with high stigma would perceive constraints in the use of mental health services, thereby increasing *constraint recognition*.

Finally, social stigma associated with mental illness can be seen as another type of normative belief in mental health research. Stigma perceptions are constructed in and through social relations and serve as a guide that defines whether a behavior is acceptable, normal, or expected by society (Nisbet & Perrin, 1977). However, when speaking of normative beliefs concerning the topic of mental health, the majority of research measured them as the perceived social pressure of whether to use mental health services (Xu, Huang, Koesters, & Ruesch, 2017). According to previous research, mental health stigma can also be considered as a type of normative belief, as it represents the social pressure that individuals perceive about mentally ill people (Medidor, 2014). Although the relationship between these two types of normative beliefs (i.e., one is about mental illness and the other is concerning mental health treatments) were not examined in prior research, we assume that one's perceptions in terms of how others consider mental illness should be relevant to his or her perceptions about how others evaluate mental health treatments. On the basis of the previous discussion, this study proposes the following hypotheses:

H5a-d: Chinese immigrants' perceived stigma about the use of mental health services will be negatively associated with their problem recognition (H5a), involvement (H5c), subjective norms, (H5d) attitudes (H5e) toward the behavior, whereas such stigma perception will be positively related with their constraint recognition (H5b).

Figure 1 shows a diagram of the main hypotheses.

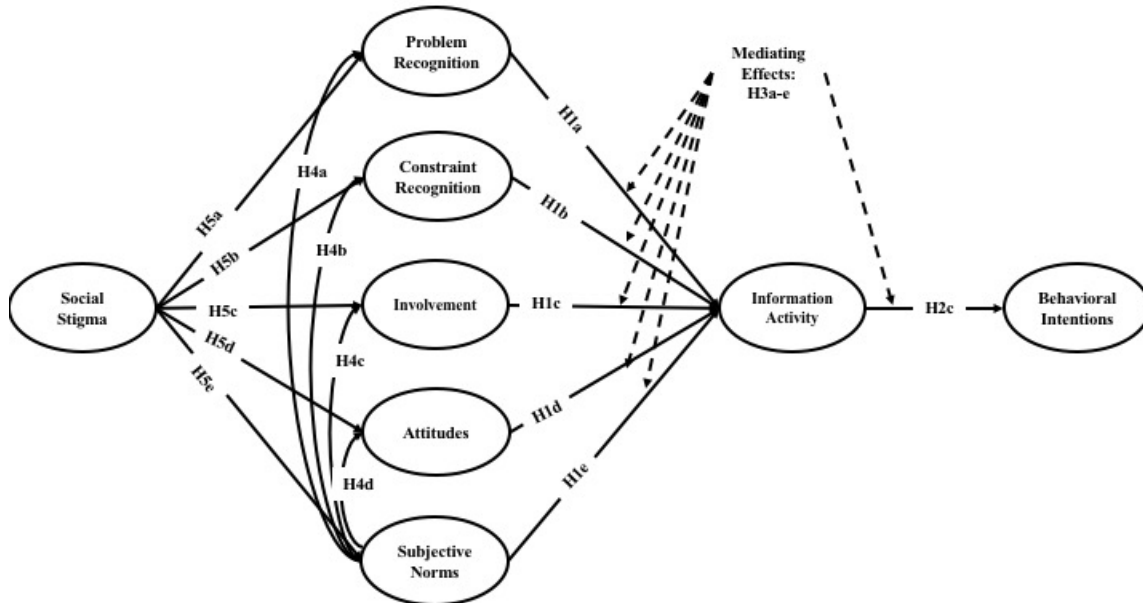


Figure 1. Conceptual model.

Method

Definitions of Study Population

This questionnaire was only administered to immigrants who were born in China or Taiwan because these countries' native or primary language is Mandarin. In addition, this study only sampled immigrants who had arrived in the United States after the age of 12 years. People who immigrated to a new country when they were younger tend to assimilate to the new culture more rapidly compared with those who were older at the time of arrival (Cheung, Chudek, & Heine, 2011). It is necessary to separate young immigrants from the sample because the original cultural identity and ability to speak their native languages may ultimately be discarded due to the quick assimilation of a new culture (Rumbaut, 1997). Therefore, the minimum age of the time of immigration of respondents was set at 12 years old (Rumbaut, 1997).

Questionnaire Design

A Mandarin Chinese version of the questionnaire was composed through the translation-back-translation method, one of the most common translation approaches used by cross-cultural researchers (Willgerodt, Kataoka-Yahiro, Kim, & Ceria, 2005). An English version of the questionnaire was prepared first and translated by a bilingual person who is a Mandarin Chinese speaker and a fluent English speaker. Another bilingual person blindly translated the Mandarin Chinese version of the instrument back to English. A group of bilingual researchers verify the consistency of the content and establish the equivalence between English and Mandarin Chinese versions. The participants were given a choice about which language of the

questionnaire they preferred to use in the beginning of the survey. Sixty-eight percent of the participants in the sample selected the Mandarin-based questionnaire.

Measures

Problem recognition was measured with three items adapted from Zheng and associates (2016) by asking respondents to assess the recognized needs of mental health services ($\alpha = .81$). *Constraint recognition* was measured with three items that asked the respondents to assess the extent of obstacles that they face in assessing mental health services ($\alpha = .82$). The measures were adapted from Zheng and cohorts (2016). *Involvement* was measured with three items adapted from Zheng and colleagues (2016) by asking respondents to indicate their connection with the use of mental health services ($\alpha = .93$). *Attitudes* toward mental health services were measured with three items adapted from Bohon, Cotter, Kravitz, Cello, and Fernandez y Garcia (2016; $\alpha = .95$). *Subjective norms* about mental health services were measured with three items adapted from Bohon and colleagues (2016; $\alpha = .85$). *Information activity* in the theory was measured with six items adapted from McKeever and associates (2016) and Zheng and team (2016). A composite index of information activity was constructed by averaging the six items ($\alpha = .88$). *Behavioral intentions* were measured with four items adapted from Bohon and collaborators (2016; $\alpha = .79$).

Social Stigma Associated Mental Illness

The concept was assessed with four questions adapted from previous research (Ritsher, Otilingam, & Grajales, 2003). A composite index of mental health stigma was constructed by averaging the four items ($\alpha = .87$).

Participants who answered several questions related to demographic characteristics, including age, gender, income, and the length of residency in the United States, and past behavior of mental health services were included as covariates in the analyses. Table 1 shows the complete question items.

Table 1. Measurement Items and Factor Loadings.

	Measurement items	Standardized factor loadings
Problem recognition	<i>If I were to experience an emotional problem,</i> I think getting professional help would be necessary.	.902*
	I believe getting professional help would be important.	.921*
	I would need to seek professional help immediately.	.933*
Constraint recognition	<i>If I were to experience an emotional problem,</i> I would see problems in getting professional help for such an issue.	.892*
	It would be difficult for me to use mental health services.	.913*
	I would feel uncomfortable using mental health services.	.903*

Involvement	<i>If I were to experience an emotional problem,</i>	
	I recognized a strong connection between the use of mental health services and me or someone close to me.	.874*
	I would be closely connected with the use of mental health services.	.893*
Attitudes	<i>If I were to experience an emotional problem,</i>	
	It would be good for me to use mental health services.	.954*
	It would be beneficial for me to use mental health services.	.943*
Subjective norms	<i>If I were to experience an emotional problem,</i>	
	Most people who are important to me would think that I should use mental health services.	.924*
	Most people who are important to me would approve of my use of mental health services.	.936*
Social stigma	<i>If I were to experience an emotional problem,</i>	
	I would not socialize as much as I used to because it might make me look or behave weirdly.	.867*
	I would be embarrassed or ashamed.	.853*
Information activity	I would not talk about myself much because I don't want to burden others with my mental illness.	.878*
	I would stay away from social situations protect my family or friends from embarrassment.	.879*
	I have invested enough time and energy so that I understand mental health services.	.892*
	I know where to go when I need updated information about mental health services.	.916*
	I can easily judge the value of information about mental health services.	.889*
	I have searched for more information about mental health services.	.903*
	I have spent some time and effort to find information related to mental health services.	.874*
I have a selection of trusted sources that I check for updates on mental health services.	.853*	

Behavioral intentions	<i>If I were to experience an emotional problem,</i>	
	I would seek counseling or support from mental health professionals.	.921*
	I would want to seek professional help.	.933*
	My first decision would be to get professional help.	.902*

* $p < .001$.

Descriptive statistics and correlations are shown in Table 2.

Table 2. Descriptive Statistics and Correlations Among Study Variables.

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
Problem recognition	5.51	1.07	–							
Constraint recognition	3.71	1.19	.12*	–						
Involvement	4.63	1.67	.25**	–.16**	–					
Attitudes	5.61	1.19	.27**	–.13**	.15**	–				
Subjective norms	4.84	1.18	.24**	–.13**	.18**	.37**	–			
Social stigma	4.78	1.19	.21**	–.23**	–.16**	–.14**	–.13**	–		
Information activity	4.79	1.00	.24**	–.17**	.33**	.31**	.20**	–.11*	–	
Behavioral intentions	3.46	1.30	.22**	–.19**	.18**	.32**	.31**	–.21**	.33**	–

Data Collection

A survey email invitation was sent to more than 50 Chinese-related organizations and associations across the nation, such as Chinese churches and local Chinese community clubs. At least one organization or church (the unit that has the largest membership) was selected from each state. According to research examining recruitment strategies associated with immigrants and minorities, organizational snowballing is the most effective recruitment approach (Mendez-Luck, Kennedy, & Wallace, 2009). The scholars suggested that researchers can access targeted population by identifying organizations and institutions in the local community.

In addition, an online survey was shared through certain Facebook Groups that are designated for Chinese immigrants, such as a group called "Taiwanese in the United States," which currently has 35,000 members. Facebook Groups are the platform for small group communication in which people share their common interests. Studies on health research recruitment, including in the contexts of individuals with depression (Morgan, Jorm, & Mackinnon, 2013) have demonstrated that social media is a useful tool to recruit participants for sensitive topics. The final sample encompasses 42% of participants recruited from organizations and 58% of participants recruited from social media.

Data Analysis

Preliminary analyses, including removing invalid responses, computing descriptive statistics, and calculating reliability coefficients, were performed in SPSS. For analysis related to hypotheses and research

questions testing, a confirmatory factor analysis (CFA) and a structural equation modeling (SEM) were calculated in Mplus.

Results

Demographic Information of the Respondents

Of the final 421 survey respondents, 67.2% (283) were female and 32.8% (138) were male. Participants ranged in age from 20 to 67 years, with a mean age of 38.7 years (*SD* = 8.01). The average length of residency in the United States was about 14 years (*SD* = 9.14); the average age that the respondents migrated to the United States was 24.8 years (*SD* = 7.79); and the average years that the participants have gone to school in the United States was more than four years (*SD* = 4.21).

Analysis of Theory of Situational Support

The conceptual model of this study met one of the two-index strategies proposed by Hu and Bentler (1999) and reached good model fits. Therefore, we interpreted the parameter estimates to answer our hypotheses. All the parameter estimates from the three structural model tests are presented in Figure 2.

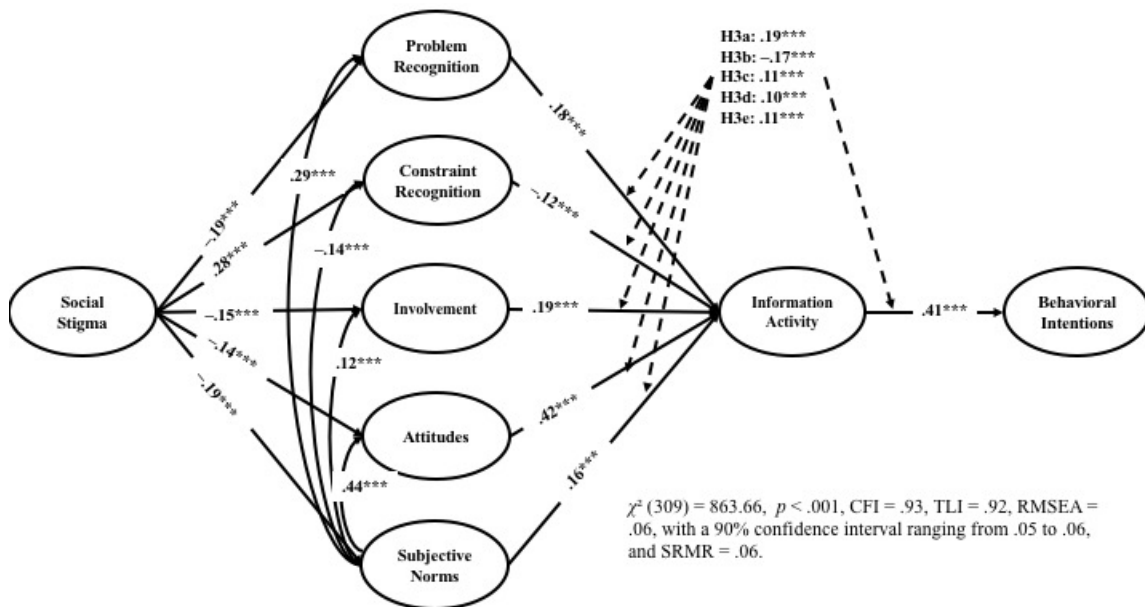


Figure 2. Results of the hypothesized model.

H1a–e predicted that significant relationships would exist among (H1a) problem recognition, (H1b) constraint recognition, (H1c) involvement, (H1d) attitudes, and (H1e) subjective norms about the use of mental health services and information activity. As predicted, Chinese immigrants who identified the problem of the underuse of mental health services in the community (H1a: $\beta = .18, p < .001$), recognized

fewer barriers to mental health services (H1b: $\beta = -.12, p < .001$), had personal connections to mental illness (H1c: $\beta = .19, p < .001$), and possessed positive attitudes (H1d: $\beta = .42, p < .001$) and subjective norms (H1e: $\beta = .16, p < .001$) about the use of mental health services were likely to seek or share information about mental health services. Therefore, H1a–e were all supported.

H2 proposed that a positive relationship would exist between information activity and the behavioral intentions of mental health service use. As predicted, Chinese immigrants who tended to share or seek information about mental health services were likely to use mental health services ($\beta = .41, p < .001$). Thus, H2 was supported.

H3a–e investigated the potential mediating impact of information activity as posited by theory of situational support. Specifically, the hypotheses predicted that information activity would mediate the relationships among the five predicting variables (i.e., problem recognition, constraint recognition, involvement, attitudes, subjective norms) and the outcome variable (i.e., behavioral intentions). The mediation analysis confirmed the statistically significant positive mediating effects of problem recognition (point estimate = .19, $SE = .05$, 95% CI [.13, .26]), involvement (point estimate = .11, $SE = .02$, 95% CI [.07, .15]), attitudes (point estimate = .10, $SE = .02$, 95% CI [.05, .14]), and subjective norms (point estimate = .11, $SE = .02$, 95% CI [.05, .15]) through information activity. Additionally, the analysis confirmed the negative mediating effect of constraint recognition (point estimate = $-.17, SE = .03$, 95% CI [-.13, -.03]) through information activity, because the corresponding bias-corrected confidence intervals did not contain zero. Thus, H3a–e were all supported.

Analysis Related to Sociocultural Factors—Subjective Norms and Social Stigma

H4a–d predicted that significant relationships would exist among subjective norms and (H4a) problem recognition, (H4b) constraint recognition, (H4c) involvement, and (H4d) attitudes about the use of mental health services and information activity. As predicted, Chinese immigrants who perceived more positive subjective norms about the use of mental health services were more likely to identify the problem of the underuse of mental health services in the community (H4a: $\beta = .29, p < .001$), recognized fewer barriers to mental health services (H4b: $\beta = -.14, p < .001$), had personal connections to the use of mental health services (H4c: $\beta = .12, p < .001$), and possessed positive attitudes (H4d: $\beta = .44, p < .001$) about the use of mental health services. Thus, H4a–d were all supported.

Finally, H5a–e proposed that significant relationships would exist among mental illness stigma and (H5a) problem recognition, (H5b) constraint recognition, (H5c) involvement, (H5d) attitudes, and (H5e) subjective norms about the use of mental health services. As predicted, Chinese immigrants who held greater mental illness stigma about the use of mental health services were less likely to identify the problem of the underuse of mental health services in the community (H5a: $\beta = -.19, p < .001$), recognized fewer barriers to mental health services (H5b: $\beta = .28, p < .001$), had personal connections to the use of mental health services (H5c: $\beta = -.15, p < .001$), and possessed positive attitudes (H5d: $\beta = -.14, p < .001$) and subjective norms (H5e: $\beta = -.19, p < .001$) about the use of mental health services. Thus, H5a–d were all supported.

Discussion

By surveying 421 Chinese immigrants in the United States, the contribution of this study may be assessed in three ways. First, this study replicated a newly developed theoretical framework, the theory of situational support, in the health communication context to improve its generalizability. Second, the current study included two sociocultural factors as predictors of individuals' cognitive thinking about a target behavior. Lastly, the findings provided practical implications to help health communicators develop future interventions and campaigns to break the silence on mental illness in the Chinese immigrant community and to encourage Chinese immigrants to use mental health services.

Theoretical Implications

This study was one of the few that applied the theory of situational support in the context of a controversial health issue. The findings suggested that the theory of situational support may be useful in guiding further intervention efforts designed to encourage Sinospheric populations, particularly Chinese people, to seek professional help for mental health problems. Consistent with the tenets of the theory of situational support, Chinese immigrants who recognized the severity of mental health problems were more likely to indicate their willingness to participate in information activity about the issues. Chinese immigrants who identified fewer obstacles and had stronger personal connections to mental health problems were likewise significantly willing to welcome information about the issues. Moreover, Chinese immigrants who reported positive attitudes and lived in a society where intolerances of mental health service use were not normative were likely to participate in information activity. Such information activity engagement could lead to the increased intentions of the use of mental health services.

Another contribution of this study involved the inclusion of social stigma as an antecedent in the theoretical framework of the theory of situational support. Although situational theory is constructed based on solid conceptualizations and empirical studies, communication scholars suggest that the situational variables in the theory are not the only determinants of humans' psychological behavior (e.g., Aldoory & Sha, 2007). Grunig (1997) and many scholars have emphasized the significance of individual differences, which may include other variables as antecedents to the situational factors (e.g., McKeever, 2013). Adding antecedents to the situational variables may improve the public segmentation function of the theoretical framework.

Social stigma has been the primary challenge for minorities and immigrants to accessing mental health services (Aloud & Rathur, 2009). Concerns with loss of face, a specific belief in Chinese culture, made the group particularly sensitive and susceptible to social stigma influence (Gao, 1998). Our findings suggested that social stigma could strengthen and/or weaken situational perceptions among individuals, which helps validate previous research that sought to expand the conceptual framework of the situational theory (Kim & Grunig, 2011). These findings are relatively new and need further studies to confirm their validity and applicability. However, they may help health communicators focus their efforts on mental illness issues in immigrant communities by understanding the deeper level of their mind about the problem. Moreover, against this background, the proposed model in this study could be used in future research to explore individuals' behaviors in terms of stigmatized illness/issues in cultural settings with a large foreign-born population.

Specifically, the combination of strategic communication theories and sociocultural influence concepts helps explain the factors that may contribute to health behaviors among ethnic minority groups.

Furthermore, the findings of this study also showed that subjective norms and the other individual perceptual variables may not be as independent as the original TRA framework suggests. Subjective norm is found to affect Chinese immigrants' problem recognition, constraint recognition, involvement, and attitudes toward mental health services. These interactive relationships could be explained with the notion of social norms theory, suggesting that perceptions about how others behave or agree would affect their attitudinal responses toward certain issues or behaviors (Berkowitz, 2004). The high level of social influences in the context of mental health services can explain the findings of such relationships (Mo & Mak, 2009). In line with previous studies in the TRA and mental health help-seeking, our findings indicated that adding the paths from subjective norms to attitudes, to perceived control, and to the situational variables from STP is important. These findings demonstrated that subjective norms place significant influences on individual factors in the framework of the theory of situational support.

Practical Implications

This study advanced our practical understanding of Chinese immigrants' motivations to seek professional help for mental illness. First, the predictive power of socio-cultural factors (i.e., social stigma and subjective norms) to Chinese immigrants' situational perceptions about mental health treatment in this study demonstrated the importance of culturally contextualized strategies in developing interventions to increase the use of mental health services among this community. While developing interventions to encourage professional help-seeking among Chinese immigrants, it is important to address the particular stigma and norms created on the basis of Chinese cultural values. For Chinese immigrants, understanding socio-cultural influences related to mental health help-seeking is of primary importance, because these influences are considered as culturally relevant factors of intentions to seek professional help for mental illness problems. Thus, developing and implementing educational interventions that tackle negative normative beliefs faced by Chinese immigrants may allow health communicators to be able to facilitate effective conversations about the use of mental health services with this specific population.

Specifically, our findings indicated the need to foster healthy and open discussions of mental illness and related professional treatments in the community. Such discussions, which involve how other people in the community have dealt with their emotional issues through professional help, may facilitate the normalization of having these issues and the development of positive norms of seeking mental health care. The current results suggested that Chinese immigrants may be more likely to recognize the importance of mental health care, identify fewer barriers to professional help, hold positive attitudes toward such treatment if the individuals perceive less stigma associated with mental illness in the community and if their social network has sought professional help for their emotional issues. As such, it may be necessary to implement community-level campaigns and interventions and introduce mental health care in a way that emphasizes the benefits not only for individual immigrants who might need help but also for those around them in the social community. The focus on fostering a healthy and open social environment for mental health discussion and related care could be the first step in developing awareness, self-efficacy, and positive attitudes toward mental health services use among Chinese immigrants.

Moreover, through the lens of the theory of situational support, individuals who are aware of the problem, acknowledge few barriers to act, recognize personal connections to the problem, and possess positive attitudes and subjective norms on acting on the problem can be considered as "active publics" (Li et al., 2019). These active publics may be helpful in reaching out and communicating with other potential publics, reducing mental illness stigma, and encouraging themselves and others to use mental health services when it is needed (Kim & Grunig, 2011). If they were recruited as "endorsers," "advocates," "volunteers," "ambassadors," or "influencers" for mental health in the community, positive social norms about using psychiatric care might be established because of active publics' communication ability and their impacts on other publics. Health communicators and practitioners should make every effort to maintain the relationship with these active publics and encourage continued support for mental illness care.

Finally, the model highlighted the important role of information activity as a mediator of Chinese immigrants' perceptions and intentions to use mental health services. Opportunities for Chinese immigrants to engage in information activity may enable them to increase their knowledge on mental illness and their willingness to act on mental health problems. Enhanced communication in mental illness may also reinforce the positive attitudes and strong self-efficacy among Chinese immigrants, which could lead to increased comfort in the use of mental health services. Therefore, information activity could be a key aspect to target in efforts within the Chinese immigrant community to alleviate the impacts from related stigma, thereby motivating them to seek professional help for mental problems.

Limitations and Future Research

This study has limitations that have to be addressed through future research. First, this study used an organizational snowballing method to recruit participants from Chinese organizations in the United States and social media groups that are designated for Chinese immigrants. The sample, therefore, was purposive and not selected based on random selection. To improve the model's validity, future research should replicate the research with populations by sampling approach that overcomes the issues generated by nonrandom selection.

Second, as a part of the nature of survey research, this study involves determining the direction of causality. The correlations found in our research may suggest but do not confirm any direction of causality. For example, the significant correlation between problem recognition and communicative action may indicate that problem recognition, as we hypothesized, can contribute to the increase or decrease in immigrants' communicative action. The same correlation, however, can also indicate that problem recognition increases/decreases as a consequence of immigrants' communicative action. That is, the direction of causality is unclear in our study, and we should not rule out the possibility of an opposite casual direction when interpreting our findings. Future research can test the proposed model in this study within experimental design to establish causation.

Third, although this study controlled for the past behavior of mental health service use, the measurements for attitudes, subjective norms, and behavioral intentions were asked in a hypothetical situation (i.e., "if I were to experience an emotional problem"). Thus, the hypothetical wording may affect the interrelationships among all the variables in the model. Future research could sample Chinese

immigrants who have sought professional help for their emotional problems and examine the applicability of the proposed model.

While limited in scope, this study provides relevant findings and proposes a new working model to examine immigrants' mental health related behavior. The same survey could also be adapted to other samples in the United States or to the context of other stigmatized conditions, such as sexually transmitted infections or substance use, to identify innovative ways to reduce the negative impacts of sociocultural factors on health outcomes. It would be interesting to see how results might be different among different populations or differ because of the type of health issue. Replicating the model with different data sets is necessary to validate the findings from the current study.

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