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# Testing the influence of Cultural Determinants on Help Seeking Theory

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## Abstract

**Background.—**Despite increased risks for mental health problems, East Asian Immigrant Women have the lowest overall service utilization rates of any cultural group in the U.S. While the influence of cultural processes as the cause of low service utilization is widely speculated, no empirical study has tested cultural determinants (including culturally specific idioms of distress, culturally based illness interpretations, or concerns about social consequences), social contextual factors, perceived need, and help seeking behaviors.

**Method.—**This present study examines how cultural determinants, such as symptom experience, beliefs and interpretations, and perceptions about the social environment, affect perceived need and help seeking type for Japanese women living in the US.

**Results.—**Increasing physical symptom severity increased the predicted probability of endorsing PN. For those participants with PN, 48.6% of them used Medical HS ($\chi^2 = 11.27$, $p = 0.00$), and 12.5 % of them used the Psychological HS ($\chi^2 = 7.43$, $p = 0.01$). Multivariate logistic regression revealed that when PN is considered with the other cultural variables while controlling for structural variables, PN increases the odds of Medical HS (OR=2.78, 95% CI [1.0-5.8], $p < 0.01$). The odds of Medical HS are also increased with higher social support (OR=1.07, 95% CI [1.0-1.1], $p < 0.01$). Finally, the presence of interpersonal stigma beliefs decreased the odds of Medical HS (OR=2.4, 95% CI [1.1-5.3], $p < 0.03$).

**Conclusions.—**Clinical and research implications are discussed.

The foreign-born population in the U.S. has more than tripled in the last thirty years, and Asians are the fastest-growing immigrant group in the United States, topping 37 million in 2012 (Larsen, 2004; Min, 2006; U.S. Census Bureau, 2007, 2008). Among immigrants, East Asian Immigrant Women (EAIW) have the highest distress (Takeuchi et al., 2007; Williams, 2002; Yeung et al., 2008), with suicide being the 7$^{th}$ leading cause of death for childbearing Asian women only (World Health Organization, 2009). Reported mental health risks for EAIW include separation from extended families; dependency due to migration laws; role changes amplified in new social networks; and unremitting responsibility for the care of

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others (World Health Organization, 2000). EAIW may share rules for female behavior include notions that women should sacrifice their needs for their family, leading to a tendency to ignore their symptoms (Ro, 2002; Ta & Hayes, 2010; Ta, Juon, Gielen, Steinwachs, & Duggan, 2007; Williams, 2002). Also, the National Latino and Asian American Study (NLAAS) found that depression rates for female immigrants may increase the longer women reside in a new location (Takeuchi, Hong, Gile, & Alegría, 2007 ). Despite these risks, as a group, EAIW also have the lowest overall service utilization rates of any cultural group in the U.S. (Garland, Lau, Yeh, McCabe, et al., 2005; Kimerling & Baumrind, 2005). While the influence of cultural processes as the cause of low service utilization is widely speculated, no empirical study has tested cultural determinants (including culturally specific idioms of distress, culturally based illness interpretations, or concerns about social consequences), social contextual factors, perceived need and help seeking behaviors. This study fills that gap.

EAIW have the lowest overall service utilization rates of any group in the U.S., and this low utilization may be related to physical symptomology as well as low perceived need (Garland, Lau, Yeh, & McCabe, 2005). In a nationally representative sample of individuals with an objective diagnosis of major depressive disorder, only 31% of Asian Americans, 36% of Latinos, and 41% of African Americans reported seeking depression care in the previous 12 months, compared with 60% of non-Latino whites (Interian, Lewis-Fernández, & Dixon, 2013). The NLAAS data showed that Asians had lower rates of mental health-related service use compared with the general population; only 8.6% of Asians sought help from any services, compared with 17.9% of the general population. Help seeking rates varied among individuals with services need 34.1% of Asians with a probable diagnosis sought services, compared with 41.1% of all persons in the National Comorbidity Survey sample (Abe-Kim et al., 2007). In an analysis that looked at the impact of having somatic symptoms on help seeking for data from the NLAAS, Escobar et al. found that Asians with somatic symptoms were less likely than whites to use medical OR mental health services (Escobar, Cook, Chen, Gara, Alegría, et al., 2010).

Help seeking is a process that involves a series of decisions and actions, rather than a single, planned choice. Pescosolido proposed that help seeking actions are embedded within the social network, and that network interactions influence the identification of a problem as well as what should be done it (Pescosolido, 1992). We define help seeking as any action taken to mitigate distress, including seeking advice; seeking social and emotional support; seeking traditional healing; seeking spiritual guidance; and seeking advice and treatment from medical or mental health providers. The process of mental health help seeking begins with the decision about whether to seek care (which is the object of our study), followed by ongoing decisions about whether to remain involved in treatment. Compared to their mainstream counterparts, ethnic minority clients, including EAIW, report experiencing a “distance” in the therapy relationship due to the multiplicity of ethnic and sociocultural differences that distinguish them from the therapist (Yasui & Henry, 2014). Cultural barriers to help seeking can include therapist misunderstanding; feelings of cultural alienation within the host culture; language and economic barriers; mistrust, stigma, and therapist cultural biases (Saint Arnault and Woo, 2017).

The perceived need for mental health services interacts with cultural variables such as stigma and social networks (Kimerling & Baumrind, 2005). The perception of distress has been differentiated from an objective need for help seeking literature. The perceived need may be a better predictor of problem recognition and subsequent help seeking than the nature of the symptoms themselves (Costello & Janiszewski, 1990; Kellam, Branch, Brown, & Russell, 1981; Srebnik, Cauce, & Baydar, 1996). However, the influence of culture on the subjective perception of need has received little empirical study. Anderson and Newman's (1973) help seeking model theorized that problem recognition prompts help seeking (Andersen, 1995). Also, research on structural determinants of health has documented the importance of structural variables that impact help seeking, such as access, language, insurance, poverty, and discrimination (Dean, Williams, & Fenton, 2013).

One subpopulation of EAIW is Japanese immigrants. While they share some characteristics with other EAIW groups, they also have distinct characteristics, making disaggregated research critical (Srinivasan & Guillermo, 2000). Michigan has a sizeable Japanese expatriate population due to the presence of the Japanese auto industry around Detroit. Most of the 8-10,000 Japanese living there work in the automotive industry and related businesses (Consulate General of Detroit, 2008), and the Japanese population in surrounding counties ranges from 4.2 to 8.3% of the total population (U.S. Census Bureau, 2001). While very few studies have examined the experience of the wives of Japanese sojourners in America, most research finds that the spouses of expatriates interact primarily among their social circles and that these women felt that their lives were suspended until their return to their homeland (Flory, 1989). Some spouses report trying to stay happy for the success of their husbands, and frustration with the long hours and demands the experience placed on the husbands (DeCieri, Dowling, & Taylor, 1991). The lead author has studied help seeking for the women in this community since the tragic drowning of a baby by a Japanese expatriate woman during a postpartum psychosis (Saint Arnault & Fetters, 2011). The intercultural dialog between the Japanese community and the clinical community that followed highlighted the need to understand how symptoms interact with social and cultural factors. This present study examines how cultural determinants, such as symptom experience, beliefs and interpretations, and perceptions about the social environment affect help seeking by testing the Cultural Determinants of Help Seeking theory.

## Theoretical and Study Model

We theorize that prevailing cultural models influence how people experience suffering, interpret that suffering, anticipate consequences of it, and interact with their social world around it. We refer to these concepts individually as cultural variables, and collectively as the Cultural Determinants of Help Seeking (CDHS) (Saint Arnault, 2018) (See Figure 1). This theory aims to operationalize how these cultural variables may inhibit help seeking for those who might otherwise desire to do so (Saint Arnault, 2009; Saint Arnault & Woo, 2017). Most research has focused on the structural circumstances that may limit access to health care for an immigrant (such as English fluency, age, income, education or length of time abroad). In our theory, we assume that these sociodemographic factors interact with cultural factors to influence help seeking (Dean et al., 2013). In this way, we have responded to calls for cultural theoretical models to guide research and interventions (Caldwell, 1993;

Dolatian et al., 2013; Dressler & Oths, 1997; Knutson, 2013; J. Lee, Donlan, Cardoso, & Paz, 2013; Salas, Raine, Vallianatos, & Spence, 2015).

We propose that a person's *Suffering Experience* is perceived and labeled according to cultural norms, beliefs, and patterns, that this experience initiates the help seeking process, and that the nature of this suffering is the primary impetus for cultural interpretation (de Oliveira & Nisbett, 2017; Hofmann & Hinton, 2014). We theorize that cultural models direct perception of both physical sensations and emotional feelings (Moscovici & Duveen, 1998) and that these are developmentally shaped through interaction with the culture and society (Luria, 1976; Moscovici & Duveen, 1998). In other words, the cultural model "tells" the person what aspects of his or her experience to attend to; as well as which physical and emotional sensations, changes, and experiences should be acknowledged and articulated. This dynamic interaction between symptoms, meaning making and culture is sometimes referred to as "idioms of distress," and these are a well-documented source of cultural variation (Kirmayer, Dao, & Smith, 1998; Parsons, 1984; Parsons & Wakeley, 1991). We operationalize this concept as symptom type and measure both depression symptoms as well as physical symptoms to capture the varieties of culturally-based symptom patterns. Like others, we have consistently demonstrated the importance of somatic symptoms for Japanese immigrants. In a study of Japanese and Korean students, an examination of the co-occurrence of physical symptoms with depression using a 59 item physical symptom checklist found that women who scored high on the depression screening tool also endorsed more than 20 physical symptoms (Saint Arnault & Kim, 2008), in contrast to depressed American women who endorsed only three physical symptoms (Saint Arnault, Sakamoto & Moriwaki, 2006). Research on the relationship between culture, physical symptoms and use of services can also be found outside of Asian cultures. For example, studies of other cultural groups have found that higher somatic symptoms was associated with higher medical service use (Kiat, Youngmann, & Lurie, 2017), as well as higher use of primary care (Rask, Ørnbøl, Rosendal, & Fink, 2017).

In our theory, a person's culturally-based understanding of their suffering experience is the core phenomenon of interest, and we believe it is comprised of two interrelated evaluations. *Suffering Interpretations* are those cultural beliefs about the cause, controllability, expected course (or recurrence), and curability of suffering. *Suffering Consequences* are a person's expectations about how others might view their suffering. We operationalize interpretations and consequences as beliefs toward mental illness. For example, in our study of Irish domestic violence survivors, we found that shame fostered a sense of immobilization, and decreased help seeking (Saint Arnault & O'Halloran, 2016). Research has shown that collectivist values held by people in East Asian cultures can cause people to fear that others will judge people with mental illness harshly, which can decrease the likelihood of self-disclosure (Association of Asian Pacific Community Health Organizations, 1995; Iwamasa & Hilliard, 1999; K.-M. Lin & Cheung, 1999; Ma, 1999). We define *Social Context* as the perceived availability of social support within the one's social world, and we operationalize this as perceived social support. Research has shown that low social support may inhibit help seeking for the Japanese (Bachnik, 1994; Lebra, 1974, 1976; Lock, 1987; Saint Arnault, 2004, 2014; Saint Arnault & Roels, 2012; Saint Arnault & Shimabukuro, 2016). Our early grounded theory research with 25 Japanese expatriate women in 1997-1998 revealed that

high distress and internal pressures to fulfill roles compelled women to use nonverbal, medical, spiritual and social efforts to communicate distress (Saint Arnault, 2002). In qualitative research of the meaning of distress for the 24 highly distressed subsample of the 209 Japanese women examined in this study, we found that a lack of social support was related to stigma, and were both a cause of distress and a barrier to help seeking (Saint Arnault & Shimabukuro, 2016).

An outcome of cultural interpretations of suffering is the perception of the need for help. We define *Perceived Need* as the personal summative evaluation of one's need for health care. We believe that the evaluation of need results from consideration of symptom type, interpretations about the symptoms, the expected consequences of having the symptoms, and the social context characteristics, and that perceived need precedes help seeking action. In our previous studies examining this sample, we examined the role of depressive symptoms as well as cultural beliefs that inhibited help seeking for the 34% (n=71) of our sample who stated they perceived a need for health care but did not seek help. Of those who perceived a need but did not seek help, women with high depression scores had significantly higher scores for incurability (illness interpretation), as well as shame (illness consequence) when compared with their low depression group. Logistic regression revealed that having somatic symptoms was a significant predictor of NOT seeking help (Saint Arnault & Woo, 2017). In a different study that examined help seeking type in a community-based sample of 402 South Korean women, we also found a positive correlation between perceived need and help seeking for formal mental health help (Saint Arnault, Woo, & Gang, 2018). However, we did not examine the relationships among all of the CDHS variables and help seeking type.

*Help seeking* is our primary outcome, and our definition of help seeking is "*the experiences, expectations, and interpretations that interact with structural variables, as well as context, to influence behavior aimed at reducing suffering and promoting health* (Saint Arnault, 2018)." We operationalize help seeking by type of service use, including social, professional and traditional help seeking. These avenues are often interacting and iterative. Little is known about the specific help seeking types used by the population under study; however, some reports suggest that medical help and traditional therapies are favored over psychological therapy and medication (Hsiao et al., 2006).

To test the CDHS theory, we operationalized the concepts into variables, which we examine as theoretical predictors of perceived need and help seeking for Japanese women living in the US. Specifically, controlling for sociodemographic variables, does symptom type and theoretical predictor variables (including interpretations, anticipated consequences, and social context) predict Perceived Need (PN)? Based on our previous work, we hypothesize that physical symptoms will predict PN, but emotional symptoms will not. Second, is PN related to Help Seeking (HS) type (Medical, Psychological, or Traditional)? While we do not find published research in this area, based on our fieldwork, we hypothesize that medical help will be the primary help sought, and that somatic distress will predict medical HS. Finally, controlling for sociodemographic variables, do these predictor variables, along with PN, predict the likelihood of engaging in various HS types? We hypothesize PN, somatic distress and stigma will interact to influence HS types.

## Methods

### Design

This study uses the quantitative data from a larger mixed method project that examined distress and help seeking for a sample of Japanese immigrant women living in Michigan. The University of Michigan IRB approved all procedures and materials for this study, and all participants gave informed consent (HUM00002837). We sampled Japanese-born women from both primary-care sites and the general community using random start interval sampling over a 5-year enrollment period between the years 2005-2010. All materials were in Japanese, including consent forms and the survey packet.

### Sample

Participants were 209 Japanese immigrant women living in the United States. The average length of time they resided in the US was 4.84 ± 4.98 years (see Table 1). Their average English fluency score was 14.18 ± 5.41 (range = 5-30) and average perceived social support score was 51.63 ± 10.59 (range = 0-64). The average depressive symptom score was 7.08 ± 8.11 (range = 0-41), and average physical symptom severity was 19.40 ± 18.87 (range = 0-102).

### Measures

The theoretical concepts and their operationalized study variables are depicted in Table 2.

The sociodemographic questions were family income, education, age, years in the US, and English fluency. Income was measured with a scale anchored at 20,000 or below to over 100,000 dollars. Education was across a continuum of high school to graduate school. English fluency was measured with the Stanford Foreign Language Oral Skills Evaluation Matrix (FLOSEM) (Padilla & Sung, 1999). The FLOSEM relies on a matrix with five categories of language use in columns of the matrix, including self-assessment of Comprehension, Fluency, Vocabulary, Pronunciation, and Grammar. For each category, there are six possible self-assessment levels: representing a continuum of self-reported competence, ranging from "extremely limited ability" (Level 1) through "native-like ability" (Level 6). For example, for the Fluency category, a level one response is "*I can participate only in interactions which involve…offering very short responses to simple questions…*" to Level 4 "*I can effortlessly express myself, but may occasionally…hesitate as I try to express more complex ideas…(or) search for less-common words and expressions…*" FLOSEM scores across the matrix were summed, with a higher score indicating overall self-perceived facility with English. The reliability of the FLOSEM for our study was 0.95.

**Suffering Experience.—**To capture various idioms of distress, we examined both emotional and physical distress. Depression symptoms were assessed using a cultural adaptation of the Center for Epidemiologic Studies-Depression Scale (CESD), which is a 20-item scale with a higher score indicating greater impairment (Radloff, 1977). The CESD asks participants to rate whether they had experienced the symptoms described in each item during the previous 2 weeks on a 4-point scale from 0 (never) to 3 (more than 5 days), with higher scores (above 16) indicative of clinically significant depression, and was the cut-off

used in this study. Noh and colleagues, who reversed the wording of the positive affect items, have substantiated that these modifications improve the performance of the CESD with East Asian populations (Noh, Avison, & Kaspar, 1992). In studies using the CESD-K-R, Cronbach's alpha coefficients range between 0.71-0.89. Cronbach's alpha for our study was 0.90. We measured physical symptoms with a modified version of the Pennebaker Inventory of Limbic Languidness (PILL) (Pennebaker, 1982). The original PILL had 54 items and was a self-report checklist designed to measure the severity of experiencing a variety of common physical symptoms and diseases, and we used the same Likert rating scale as the CESD. We modified the PILL by collapsing seven items with others items to allow for natural translation. For example, the three items "*sneezing*," "*congestion*" and "*runny* nose" were collapsed into "*congestion or sneezing*." Also, because of the importance of somatic symptoms in depression in some Asian cultures, we added twelve items: *poor appetite, poor sleep, confusion, fatigue, abdominal pain, dizziness, lightheadedness, joints pain, shoulder pain, weakness, palpitations, and tiredness*. The final instrument had 59 items. Because no symptom necessarily correlates with any other symptom, internal consistency measures are not appropriate. However, the PILL has shown a 2-month test-retest reliability range from 0.79 to 0.83 (Pennebaker, 1982).

**Predictor variables.—***Suffering Interpretations* were measured with the beliefs about incurability and recurrence subscales of the Beliefs toward Mental Illness Scale (BMI) (Hirai & Clum, 2000). The original BMI consists of value and belief statements about internalized expectations and values related to mental illness, including subscales for dangerousness, recurrence, embarrassment, interpersonal/role, and incurability. Participants rated their level of agreement with belief statements according to a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). The alpha reliabilities for the incurability subscale for our sample was 0.68 and was 0.62 for the recurrence subscale. *Suffering Consequences* was measured with the dangerous, embarrassment and interpersonal role subscales of the BMI. The alpha reliability scores for our sample were dangerousness ($\alpha$=0.52); embarrassment ($\alpha$=0.76); and interpersonal role ($\alpha$=0.79). *Social Context* was measured as perceived social support using the Personal Resource Questionnaire (PRQ) (Weinert & Brandt, 1987), which is a measure of perceived social support. The fifteen items are arranged along a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), and are summed with total points that range from 15 to 105, with higher scores indicating higher levels of perceived social support. Example questions include "*There is someone I feel close to that makes me feel secure*," and "*There are people who are available if I need help over an extended period of time*." Cronbach's alpha for our study was 0.93.

**Outcomes.—**Outcomes in this study were perceived need (PN) and help seeking (HS) behavior. *Perceived Need* was determined with two questions. First, "*In the last year, did you have problems in your mind or body for which you needed help*" (Lin, Goering, Offord, Campbell, & Boyle, 1996). Women who answered "no" were determined to have "No Perceived Need (NPN)." We also asked women *"Did you have a physical or emotional problem for which you did not seek help?"* Women who answered "yes" to this question we deemed to have "Perceived Need without Help Seeking (PNnoHS)." *Help seeking behavior* was measured with the Help Seeking Behavior Questionnaire (HSBQ), which asks the

participant about recent life events for which they sought help in the last year, the specific sources of help they sought, and includes professional medical, professional psychological, and traditional therapies (Lin, Goering, Offord, Campbell, & Boyle, 1996). Medical help included primary care, nurses, general medical, medications, and specialty medical help; Psychological help included crisis hotlines, counselors, psychiatrists and social workers; and Traditional help included traditional herbs, moxibustion, folk remedies and acupuncture.

## Study Procedures

All communication was in the participant's native language, and all research materials and measures were translated using the three-phase linguistic and cultural translation procedure (Bullinger et al., 1998). Our transcription and translation protocol for all materials used a systematic notation system that includes comments about the implied meaning, and a record of subtleties in meaning, alternative translations and other information (Bullinger et al., 1998). All research packets will be in the native languages of the addressee. The mailed packet included: code number; an IRB approved informational letter; a list of community endorsements; the survey; a multilingual toll-free number for questions; and a referral list of local mental health and domestic violence service providers. We used reminder cards if a survey was not returned within two weeks. Returned surveys were deemed informed consent and women who completed the survey were mailed a $10 gift card.

## Analysis

The study variables include symptom type (depressive symptoms, physical symptoms), beliefs about mental illness (BMI subscales of dangerousness, embarrassment, interpersonal role, incurability, and recurrence), perceived social support, perceived need and help seeking type (medical, psychological and traditional). We carried out a descriptive analysis of variable relationships and evaluated the significance of demographic, symptom and predictor variables for inclusion in the regression modeling using bivariate regression against the outcomes of PN and Medical HS. While we generally excluded non-significant variables, we retained age and English fluency because they are described in the literature as critical to HS (Nguyen & Lee, 2012; Sentell, Shumway, & Snowden, 2007). Descriptive analyses were performed to examine how the characteristics of the participants related to the study variables. Chi-square tests were performed to examine relationships among categorical data (PN and HS Type). Multivariate logistic regression analyses were performed to identify contributors to the likelihood of engaging the use of professional services. Then, predicted probabilities were calculated to determine the impact of the predictor variables on the likelihood to perceive a need. The prediction was expressed as odds ratios (ORs) and predicted probabilities are presented in graphical form. An example of a predicted probability calculation is below (Long & Freese, 2006).

$$\widehat{\Pr}(Medical\ HS = 1 \mid Perceived\ Need = 1) = 0.47$$

Analyses were performed with IBM SPSS (Version 22.0; IBM Corp., 2013) and R (Version 3.2.0; R Core Team, 2015). Statistical significance was considered at $p < 0.05$.

# Results

## Descriptive analysis

The number of participants with CESD scores at 16 or above (considered to be at risk for clinical depression) was 27 (13.3%), and the number of those who perceived a need for HS was 72 (34.6%). Seventy women (33.5%) had engaged in Medical HS. There were significant positive relationships between CESD and physical symptoms ($r = 0.51$, $p < 0.01$), and between CESD score and total BMI score ($r = 0.21$, $p < 0.01$). There were significant inverse relationships between CESD and age ($r = -0.15$, $p = 0.04$) and PRQ ($r = -0.26$, $p < 0.01$). There were no relationships between age and FLOSEM, between CESD and FLOSEM or between these and the length of time in the US or family income (see Table 2).

**RQ1: Predicting PN.—**Multivariate logistic regression revealed that, while controlling for age and English fluency, women with physical symptoms were somewhat more likely to endorse PN (OR=1.05, 95% CI [1.0-1.2], $p<0.00$) (Table 3). The predicted probabilities of PN based on the severity of physical symptoms severity (while holding all other predictors constant) is shown in Figure 2. Using points along the slope, one can see that the predicted probability increases. For example, at physical symptom severity of 12 (four symptoms rated at three or higher), the predicted probability of endorsing PN is 26%, and with seven symptoms at three or higher, this probability that one will have PN rises to 38%.

**RQ2: Relating PN to HS type.—**We used chi-square analysis to examine the relationships among the categorical variables of PN (yes/no) and use of the various HS types (Medical HS, Psychological HS, or Traditional HS). For those participants with PN, 48.6% of them used Medical HS ($\chi^2 = 11.27$, $p = 0.00$) and 12.5 % of them used the Psychological HS ($\chi^2 = 7.43$, $p = 0.01$). There was no statistically significant association between PN and use of traditional medicine.

**RQ3: Theoretical variables and PN in Predicting HS type.—**Multivariate logistic regression revealed that when PN is considered with the other cultural variables, and while controlling for age and English fluency, PN increases the odds of Medical HS (OR=2.78, 95% CI [1.0.5.8], $p<0.01$). The odds of Medical HS are also increased somewhat with higher social support (OR=1.07, 95% CI [1.0-1.1], $p<0.01$). Finally, the presence of interpersonal stigma beliefs decreased the odds of Medical HS (OR=2.4, 95% CI [1.1-5.3] $p<0.03$) (see Table 4). These variables did not significantly predict any other type of help.

Figure 3 shows the predicted probabilities of using Medical HS for those who endorsed PN while controlling for all other predictors. The probability of Medical HS is about 47% for the group who had PN and was 24% for those who did not.

# Discussion

Our study examined the influence of hypothesized theoretical variables on both perceived need as well as the actual use of medical and psychological services for a sample of Japanese women in the US. This study is significant because Japanese and other East Asian Immigrant women have the lowest psychological service use of any immigrant group despite

significant need (Takeuchi et al., 2007; Williams, 2002; Yeung et al., 2008). Therefore, a treatment goal is to foster engagement in treatment for those in need. This research adds to the growing body of research aiming to understand the social and cultural factors that inhibit or promote service use to help mitigate internal barriers to help seeking. Specifically, for Japanese women, providers can explore the interactions among distress, the meaning of it, and concerns about the consequences of seeking care in routine primary care and social services. Moreover, the number of physical symptoms was related to perceived need in this sample. This finding suggests that providers can use the number of physical symptoms as a starting point to discuss the need for help and treatment options.

The link between perceived need and service type is a relatively new domain of exploration. For example, Lee and colleagues, examining the National Latino and Asian American Study (NLAAS) dataset found that perceived need was associated with a higher likelihood of using formal mental health services for those with high level of social support, but only for the people who immigrated as children or teens (1.5 generation) (Lee et al., 2017). However, they did not examine use of medical services. Using this same dataset, Escobar and colleagues found an association between physical symptoms and perceived need (Escobar, Cook, Chen, Gara, Alegria, et al., 2010; Escobar et al., 1987; Escobar, Rubio-Stipec, Canino, & Karno, 1989). Taken together, these studies and ours support the theory that perceived need may be an important variable in predicting service use. This finding are also consistent with our theoretical formulation that perceived need might relate to symptom type, may be moderated by cultural and social factors, and probably precedes help seeking actions. However, much more research is needed to clarify these associations. For example, exploring the associations between symptoms, perceived need, internal barriers and service use can be carried out using mixed methods to examine treatment seeking trajectories. Qualitative interviewing can be used to examine meanings and choice points, and Latent Class Analysis can explore clinically relevant subgroups.

Only the presence of physical symptom severity influenced the perception of need in our sample. We expected women with negative beliefs about mental illness would somehow self-censure their need recognition, especially if they had embarrassment or beliefs that mental illness was incurable (Crisp, 2001; Weiss et al., 1992; Weiss, Ramakrishna, & Somma, 2006). However, in our analysis, stigma beliefs only exerted a negative influence on Medical HS behavior. These patterns is consistent with our qualitative research that has shown that the Japanese women in our samples have and are aware significant symptom burden, but do not necessarily interpret those symptoms to mean that they need help or intervention (Saint Arnault & Shimabukuro, 2016). We know from qualitative work that stigma is essential to understand, and our findings help clarify that there are different types of stigma beliefs that may interact with symptom types and social network characteristics. However, when considering need, we wonder if people also evaluate the potential benefit of *any given service* in a context-specific way, considering symptoms and stigma and meanings, but also evaluating the *specific* clinic, service provider, location, clientele, and reputation.

Our study found that the presence of perceived need increased as the severity of physical symptoms increased. This finding signals to us the cultural importance of physical

symptoms for this population. If this is the case, attention to the patient's specific stated physical and emotional problems could be a pathway to mutual understanding and building a therapeutic alliance. For example, if a Japanese patient reports headaches, muscle pain, dizziness and stomach pains, providers should recognize that all these symptoms have relevance to the patient regardless of whether or not the provider understands their cultural significance. Culturally diverse populations often complain that the clinical encounter is dominated by the provider attending to a selected set of indicators, making them feel that their symptoms are not considered relevant by the provider (Yasui & Henry, 2014). Good clinical practice might include a negotiation process about the importance of all noted symptoms since the patient's symptom experiences and beliefs may not match those offered by the provider (Benish, Quintana, & Wampold, 2011).

Estimating the clinical significance of these findings poses interesting questions. From the cultural 'idioms of distress' perspective, certain symptoms carry cultural meanings, and not all symptoms hold equal weight. Also, symptoms rarely stand alone, but come together with others experientially in symptom clusters. Our finding that physical symptom severity was related to both PN and Medical HS does not help us understand *which* symptoms might drive women to overcome stigma and seek medical care. Also, it might be that a certain set of symptoms, rather than two or three intensely experienced symptoms, that promotes perceived need or help seeking. Certain symptoms, including pain, fatigue, numbness, shortness of breath, palpitations, dizziness, and tinnitus are found in clinical practice in people from Japanese, Chinese and Korean cultures. For example, in China, the concept of neurasthenia remains an important social and cultural marker of distress (Li & He, 2018). Researchers found that Koreans (but not Americans) showed more sympathy in response to distress narratives using somatic words than narratives using emotional words (Choi, Chentsova-Dutton, & Parrott, 2016). In the Japanese, concepts such as *futeisheiso* and Autonomic Nervous System Dysfunction we an important part of the popular and clinical discourse through the early 2000's, although recognition of these symptom patterns has mostly been absorbed into the psychosomatic realm (Abe, 1993; Lock, 1987; Saint Arnault, 2014; Tsutsui, 1999). The prevalence of these symptoms, the difficulty to fit them into the somatoform categories, and the cultural significance of them for patients and providers prompted the development of the International Classification of Diseases Bodily Distress Syndrome (Gureje & Reed, 2016). For our purposes here, we can see that clinical attention to physical symptoms, along with perceived need and help seeking type, can assist clinicians in listening for cultural idioms that may be important for their patients.

We found that PN, social support, and interpersonal stigma predicted Medical HS in different ways. Women with PN were much more likely to seek medical help, and it seems that social support affected that likelihood. However, fears about the social consequence (interpersonal stigma) decreased the likelihood of medical HS. This finding indicates the value of examining perceived consequences and hints that social support is in contrast to concerns about community censure. Research shows that social support and perceived social negativity (in this case, anticipated stigma) may not be opposing ends of the same spectrum. For example, in one study, higher levels of negativity within and outside of the family are each associated with higher allostatic load, but only perceived support of the spouse is associated with lower allostatic load (Brooks, Gruenewald, Karlamangla, Hu, Koretz, &

Seeman, 2014). While internalized stigma beliefs may not be the same as social negativity, but it is likely that it relates to perceptions of support or negativity. Unfortunately, we did not assess social negativity in this study. However, our qualitative research has found that social negativity and stigma are connected but not the same for these Japanese women (Saint Arnault & Roels, 2012; Saint Arnault & Shimabukuro, 2016).

Limitations of this study include the small sample size, as well as the regionality of the participants. We also only sampled women for this study, and have no comparable data for men; therefore, we cannot draw any definitive conclusions from this sample. Additional work is needed to isolate clinically significant symptom clusters, add social negativity variables, and examine the aspects of the social and cultural help seeking decision-making processes that may relate to use of specific services in specific situations.

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**Public Policy statement:** The low mental health and primary care service utilization of East Asian Immigrant Women contributes to mental health disparities in morbidity and increased suicide rates. Theorizing about the intersection of culture and service use is needed to begin to understand population-level barriers and facilitators. This theorizing allowed the discovery of the critical importance of assessing somatic distress in this population, suggesting that policies that regulate mental health assessment practice should include assessment of somatic distress as well as emotional health symptoms for immigrants.

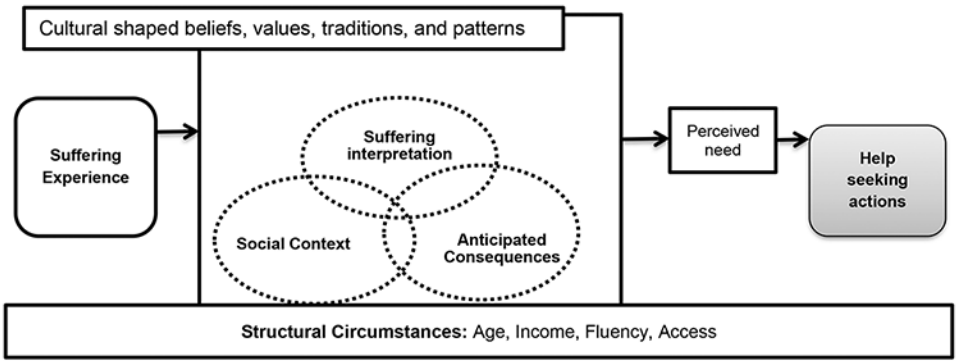


**Figure 1:**
Cultural Determinants of Help Seeking-Revised

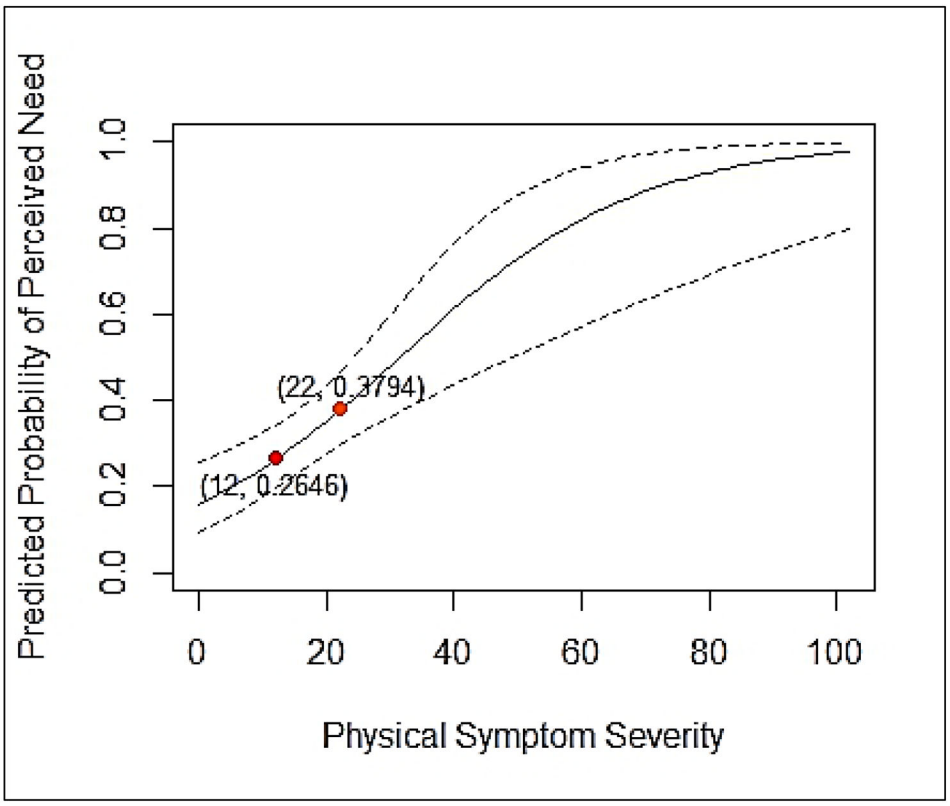


**Figure 2:**
Predicted Probability of Help Seeking based on Perceived Need

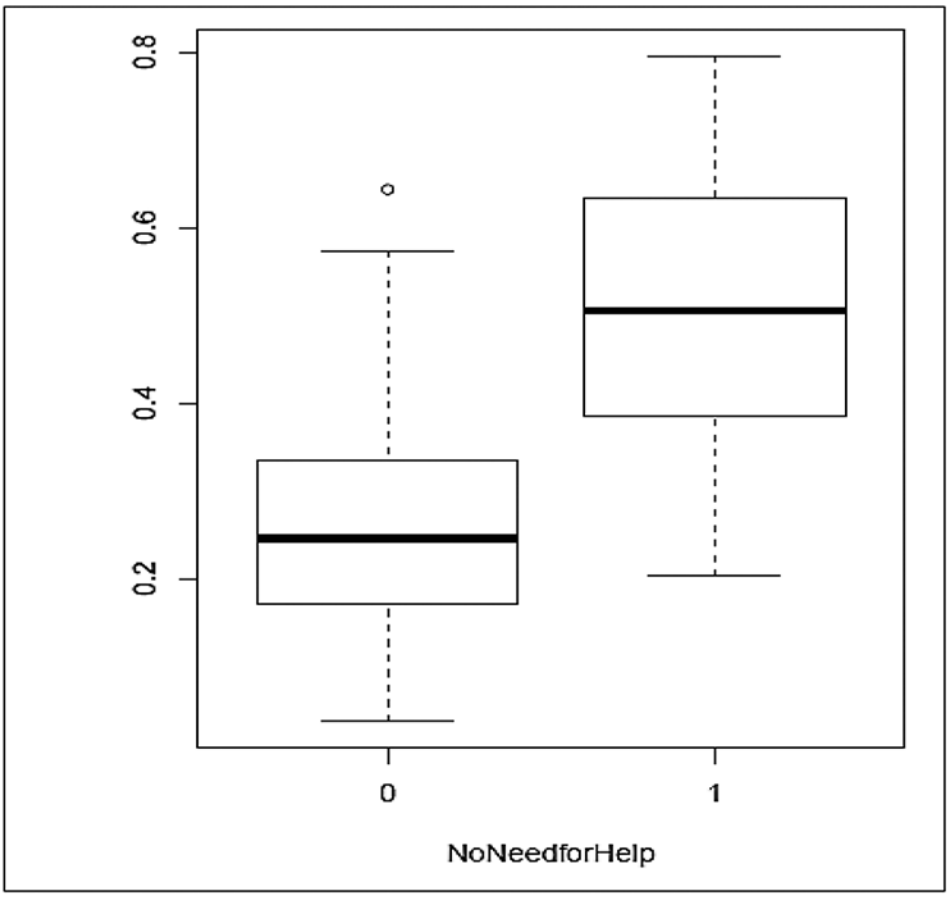


**Figure 3.**
The predicted probabilities of the use of Medical intervention based on perceived need.

**Table 1:**

Measurement of Cultural Determinants of Help Seeking

| **Theoretical concept** | **Operationalization** | **Measure** |
|---|---|---|
| Sociodemographic factors | Family income, education, age, years in the US, and English fluency | FLOSEM |
| Social Context | Social Support | Perceived social resources (PRQ) |
| Suffering Experience | Symptom type | Depression (CESD-K-R); Physical symptoms (CSC Physical) |
| Suffering Interpretation | Recurrence, Curability | Recurrence, incurability BMI subscales |
| Suffering Consequences | Other's Perception | Dangerousness, embarrassment and interpersonal role BMI subscales |
| Perceived Need | ---- | PN yes or no |
| Help seeking | ---- | Help seeking type |

**Table 2:**

Demographics of Japanese Immigrant Women (N=209)

| Characteristics | Prevalence | |
|---|---|---|
| | ***M*** | ***SD*** |
| Age | 39.57 | 7.60 |
| Years in the US | 4.84 | 4.98 |
| English Fluency (FLOSEM) | 14.18 | 5.41 |
| Social Support (PRQ) | 51.63 | 10.59 |
| CESD | 7.08 | 8.11 |
| Physical Symptoms | 19.40 | 18.87 |
| Beliefs toward Mental Illness (BMI) | 46.03 | 9.77 |
| | *N* | Percentage |
| Annual Family Income | | |
| $20,000 – 40,000 | 7 | 3.6 |
| $40,000 – 60,000 | 25 | 12.9 |
| $60,000 – 80,000 | 30 | 15.5 |
| $80,000 – 100,000 | 39 | 20.1 |
| > $100,000 | 47 | 24.2 |
| Unknown | 46 | 23.7 |
| Education | | |
| High school | 25 | 12.1 |
| Technical or Junior College | 86 | 41.5 |
| Undergraduate Degree | 78 | 37.7 |
| Graduate Degree | 12 | 5.8 |
| Other | 6 | 2.9 |
| CESD | | |
| CESD below 16 | 176 | 86.7 |
| CESD above 16 | 27 | 13.3 |
| Help Seeking Needs | | |
| No perceived need | 136 | 65.4 |
| Perceived need but did not seek help | 72 | 34.6 |
| Use of Professional Interventions | | |
| Professional Medical | 70 | 33.5 |
| Professional Psychological | 13 | 6.2 |

**Table 3:**

Logistic Regression Analysis of Perceived Need

| | Perceived Need | | | | | |
|---|---|---|---|---|---|---|
| **Variable** | ***B*** | ***SE B*** | ***Wald*** | ***df*** | ***p*** | $e^B$ |
| Physical Symptoms | 0.05 | 0.01 | 13.94 | 1 | 0.00* | 1.05 |
| CESD | 0.002 | 0.03 | 0.01 | 1 | 0.95 | 1.00 |
| Perceived Social Resources | −0.02 | 0.02 | 0.80 | 1 | 0.37 | 0.98 |
| BMI: Interpersonal/Role | −0.02 | 0.42 | 0.003 | 1 | 0.96 | 0.98 |
| BMI: Embarrassment | 0.05 | 0.37 | 0.02 | 1 | 0.89 | 1.06 |
| BMI: Dangerousness | −0.03 | 0.42 | 0.01 | 1 | 0.94 | 0.97 |
| BMI: Recurrent | 0.48 | 0.35 | 1.95 | 1 | 0.16 | 1.62 |
| BMI: Incurability | 0.30 | 0.32 | 0.90 | 1 | 0.34 | 1.35 |
| Constant | −0.94 | | | | | |
| $\chi^2$ | | | 41.78 | | | |
| *df* | | | 10 | | | |

*Notes: N* = 188. Non-significant control variables (income, education, and years in the US) omitted from analysis. Significant control variables (age and English fluency) omitted from the table. Control variables are age and FLOSEM (omitted from the table). $e^B$ = exponentiated B.

**Table 4:**

Logistic Regression Analysis of Professional Medical Help Seeking

| | Professional Medical Help Seeking | | | | | |
|---|---|---|---|---|---|---|
| **Variable** | ***B*** | ***SE B*** | ***Wald*** | ***df*** | ***p*** | ***e*$^{B}$** |
| Physical Symptoms | 0.01 | 0.01 | 0.42 | 1 | 0.52 | 1.01 |
| CESD | 0.02 | 0.03 | 0.43 | 1 | 0.51 | 1.02 |
| Social Support | 0.07 | 0.03 | 6.49 | 1 | 0.01* | 1.07 |
| Perceived Need | 1.02 | 0.38 | 7.36 | 1 | 0.01* | 2.78 |
| BMI: Interpersonal/Role | 0.89 | 0.40 | 4.89 | 1 | 0.03* | 2.42 |
| BMI: Embarrassment | 0.18 | 0.35 | 0.27 | 1 | 0.61 | 1.20 |
| BMI: Dangerousness | −0.20 | 0.40 | 0.24 | 1 | 0.63 | 0.82 |
| BMI: Recurrent | −0.41 | 0.34 | 1.48 | 1 | 0.23 | 0.67 |
| BMI: Incurability | 0.24 | 0.31 | 0.64 | 1 | 0.43 | 1.28 |
| Constant | −5.16 | | | | | |
| $\chi^2$ | | | 26.53 | | | |
| *df* | | | 11 | | | |

*Notes: N* = 188. Non-significant control variables (income, education, and years in the US) omitted from analysis. Significant control variables (age and English fluency) omitted from the table. $e^B$ = exponentiated B.