ATTITUDES TOWARD CHILD MENTAL HEALTH SERVICES:

ADAPTATION AND DEVELOPMENT OF AN ATTITUDE SCALE

A Thesis

by

ERLANGER A. TURNER

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

August 2006

Major Subject: Psychology

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Approved by:

Co-Chairs of Committee,	Robert W. Heffer
	Antonio Cepeda-Benito
Committee Member,	Amanda Jensen-Doss
Head of Department,	Steve W. Rholes

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ABSTRACT

Attitudes Toward Child Mental Health Services: Adaptation and Development of an Attitude Scale. (August 2006)

Erlanger A. Turner, B.S., Louisiana State University

Co-Chairs of Advisory Committee: Dr. Robert Heffer
Dr. Antonio Cepeda-Benito

Research shows that a considerable number of children and adolescents suffer needlessly from psychological problems and only about 50% of those receive the necessary services. Considering the impact of untreated child psychological problems on problems in adulthood, it is important to examine the influence of attitudes on seeking mental health service for children. Currently, no known measure exists to measure attitudes toward mental health services for children. Building on previous research, the goal of the present study was to develop a measure of individuals' attitudes toward mental health services for children. Using confirmatory factor analysis, the factor structure was assessed using a sample of university students ($N = 250$). In addition, several hypotheses were tested examining the influence of previous experience with mental health services on attitudes towards psychological services and mental health stigma. Finally, differences in child characteristics on intended help-seeking were examined. The measure developed consists of 26-items scored from 0 (strongly disagree) to 5 (strongly agree). Overall, results indicated that the 3-factor structure of the measure developed was valid and reliable. Also, consistent with previous research on

mental health services results supported the hypotheses of the current study. Future research will examine whether the 3-factor structure is replicated using a sample of parents.

DEDICATION

To my family, especially my aunt Patri

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I would like to thank my committee members, Dr. Heffer, Dr. Cepeda-Benito, and Dr. Jensen-Doss for their guidance and support throughout the course of this research project. I would also like to thank other faculty members in the department of psychology at Texas A&M University who have assisted me in the completion of this work. I also want to thank the members of Dr. Heffer's research team and my colleagues for their input, especially Beth Garland and Wendy Olsen.

I would like to thank my family and church for their support and prayers. I could not have done this without your encouragement. Finally, I would like to thank my aunt, Patri Alexander, for her support, love, and encouragement over the past 25-years. I don't know what I would do without you. Thanks for everything!

TABLE OF CONTENTS

	Page
ABSTRACT	iii
DEDICATION	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
INTRODUCTION	1
Help-Seeking and Attitudes	3
Help-Seeking and Adults	4
Help-Seeking and Youth	4
Mental Health Stigma and Attitudes	6
Child Behavior and Parental Help-Seeking	7
Summary of Hypotheses	9
METHOD	10
Participants	10
Measures and Case Vignettes	11
Procedure	13
RESULTS	14
Comparison of Sample to Population	14
Confirmatory Factor Analysis	15
Psychometric Properties	16
Mental Health Stigma and Attitudes	17
Attitudes Toward Child Mental Health	18
DISCUSSION AND CONCLUSION	20
Limitations of the Present Study	22
Implications for Future Research	22
REFERENCES	24

Page

APPENDIX………………………………………………………………. 29

VITA…………………………………………………………………... 40

LIST OF TABLES

TABLE Page

1 Variables Influencing Parents' Help-Seeking for Youth………… 29

2 Sample Demographics ………………………………………... 30

3 Standardized Factor Loadings of the IPAQ…………….……….. 32

4 CFA Results Comparing the Fits of the Three-, Two-, and One-Factor Models for the IPAQ………………………………… 35

5 Correlation Matrix for the IPAQ Total and Subscale Scores ……. 36

6 Internal Consistency for the IPAQ …………………………......... 37

7 Means and Standard Deviations of Participants Reporting Previous Experience or No Experience with Mental Health Services ………………………………………………….. 38

8 Means and Standard Deviations for the IPAQ Subscale Scores and Questions for Vignette Descriptions ……………………….. 39

INTRODUCTION

Over the past 15 years, several variables have been posited to influence individuals to seek, resist, or avoid mental health services. Researchers have identified variables such as environmental constraints (e.g., availability and accessibility), affordability of services, and various demographic characteristics that may influence help-seeking (Cepeda-Benito & Short, 1998; Dubow et al., 1990). Although this phenomenon has been extensively studied in adult help-seekers, more recently help-seeking regarding services for children and adolescents have been investigated. With a current emphasis on early intervention to prevent more severe behavioral and emotional problems in youths, understanding correlates of seeking treatment is vital to eliminating obstacles to appropriate service delivery for underserved children. In addition, a vital need exists for improved measurement of parental attitudes toward child mental health services.

A report of the Surgeon General's Conference on Children's Mental Health (U.S. Public Health Service, 2000) stated that a substantial number of children are suffering needlessly from emotional, behavioral, and developmental problems due to lack of access to mental health services. Data from the National Institute of Mental Health (2004) reported that 1 in 10 children and adolescents suffer from problems severe enough to cause some level of impairment, however only about 1 in 5 of these children receive treatment. Considering the substantial number of children that have problems serious enough to require treatment, it is important to better understand how parental

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attitudes contribute to seeking mental health services for children.

Recently, research has suggested that attitudes may impede individuals from seeking or fully participating in mental health services (Corrigan, 2004a; Cauce et al., 2002). One study in New Zealand examined the use of mental health services in adults and found that 30% of those participants did not seek treatment primarily based on attitudinal, not financial, reasons. Participants reported that they thought they should handle the problem alone, hoped that the problem would resolve itself, and didn't think anyone could help; therefore, they didn't seek mental health services (Hornblow et al, 1990). In addition, research has noted that some people with psychological difficulties may not seek services to avoid the label and to escape stigma's impact on their sense of self (Corrigan, 2004a). In the current paper, mental health stigma is defined as, "the extent to which individuals are concerned about how they or others negatively perceive those who seek mental health services."

Although mental health services exist to treat emotional and behavioral problems, it is unclear whether stigma or other situational variables, such as financial inadequacy, contribute to the relatively small proportion of children receiving treatment. During a child's life most decisions are made by her or his parents, including decisions involving mental health care. Given our limited knowledge about parental help-seeking, research is needed to elucidate variables that contribute to or hinder parental help-seeking and to develop more effective strategies to remove barriers to service utilization and to better engage parents in psychological treatment for their children.

Help-Seeking and Attitudes

In the mental health service utilization literature, “help-seeking” is typically delineated as an evaluative reaction to seeking help for a psychological problem (Mackenzie et al., 2004). Stated differently, help-seeking is defined as an individual's perception or intention that he or she will obtain services for an emotional or behavioral problem. To maintain consistency with the mental health services literature, the current study employed the Mackenzie and colleagues (2004) definition of help-seeking attitudes.

Since the 1970’s, researchers have recognized the importance of attitudes on seeking professional help for psychological problems. One of the most well-known attitude measures is Fischer and Turner’s (1970) Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS). Fisher and Turner were the first to develop an attitudinal scale sampling from many variables that relate to seeking professional psychological help. For example, their measure assessed components such as social variables, beliefs about treatment, and the stigma surrounding mental heath care. Considering the importance of parents in the utilization of child mental health services, it is worthwhile to develop a parental attitude scale. Currently, no known measure exists to assess parental attitudes toward seeking psychological help. Given that many children exhibit diagnosable behavioral and emotional problems, it is important to understand variables that contribute to the current underutilization of mental health services for children.

Help-Seeking and Adults

Recently, Smith and colleagues (2004) examined if age, attitudes toward help-seeking, education, and gender were related to previous or intended mental health utilization in a rural population. To ascertain whether participants utilized mental health services in the past, they asked participants if they had ever seen a professional counselor, psychologist, psychiatrist, social worker, minister, or family physician for a mental health concern. In addition, participants were explicitly asked whether they thought they would ever seek out mental health treatment in the future. Results indicated that positive attitudes toward help-seeking, prior use of mental health services, younger age, and female gender were related to a willingness to seek treatment in the future. The independent variables (gender, education, age, and attitudes toward help-seeking) explained 15% of the variance in prior mental health use and 28% of the variance in intended future use.

Help-Seeking and Youth

In a study on help-seeking behaviors with high school students, individuals more likely to have sought psychological help or to seek it in the future also reported: a culture of openness fostered at home, previous positive experiences with mental health professionals, having problems they deemed serious, and being encouraged by someone (e.g., parents) in their environment (Timlin-Scalera et al., 2003). Regarding children receiving mental health services, variables may differ significantly considering that adolescents may exert more autonomy over the decision to seek services (Logan & King,

2001). Adolescents may also be more likely to conceal behaviors and feelings more effectively than children.

Few research studies have focused on variables (e.g. attitudes toward mental health professionals) that contribute to mental health services use for children. However, studies comparing help-seeking among parents have shown that overall Caucasian parents are more likely to contact professionals and agencies whereas African-American and Latino parents were likely to make initial contact with family and community members (McMiller & Weisz, 1996). McKay, Pennington, Lynn, and McCadam (2001) examined the impact of child, family, and environmental variables that influenced initial and ongoing service use in a sample of urban minority children and their families. The authors sampled 100 children’s caregivers who requested an appointment at an urban mental health clinic. Adult caregivers requesting one-time appoints for medication, testing services, crisis interventions, or other non-therapy services were excluded from this sample. Findings of the study indicated that parental efficacy and positive attitudes toward mental health services were significantly correlated with child attendance at an initial intake appointment. According to the study there was a 49% decrease in the odds of attending if parents expressed skepticism reading the helpfulness of mental health care. Consistent with previous research findings, results indicated the importance of mental health stigma in parents’ decision to seek mental health services for children.

In addition to studies examining the role of mental health stigma, one literature review noted Verhulst and Koot's (1992) proposed pathways to seeking services for children and adolescents (Zwaanswijk et al., 2003). The first pathway, parental help-

seeking, refers to parental recognition of the problem and the subsequent decision to consult a physician. The second is problem recognition by the general practitioner or pediatrician and the decision to refer the child for mental health care service. Several variables were hypothesized to influence these pathways (Table 1). Taking into account the need to better understand the small number of children receiving services, one necessary step is developing a measure to assess parental attitudes toward mental health services.

Mental Health Stigma and Attitudes

During the past decade, advocates and researchers have realized the importance of attitudes and mental illness stigma as barriers to receiving mental health services (Corrigan, 2004b; Cauce et al., 2002). The stigma surrounding mental illness has been identified by the New Freedom Commission on Mental Health as a major obstacle to Americans getting the quality mental health care they deserve (Hogan, 2003). Corrigan (2004b) has described two types of stigma (a) *public stigma*, the ways in which the public reacts to a group based on stigma about that group, and (b) *self-stigma*, the reactions that individuals turn against themselves because they are members of a stigmatized group. In the current study, mental health stigma is defined as the extent to which individuals are concerned about how they or others negatively perceive those who seek mental health services.

Whereas research has been conducted examining mental health stigma and help-seeking behaviors, little research has evaluated child behavior problems, mental health stigma, attitudes toward mental health and parental help-seeking simultaneously. Cauce

and colleagues (2002) noted that social networks may facilitate or inhibit service selection, depending on socio-cultural norms around help-seeking behavior and attitudes. For example, some parents of African-American or Hispanic descent may prefer to seek advice from religious leaders or family members. In one study, the author stated that many African-Americans appear to deny mental health problems due to a history of self-reliance and mistrust of mental health providers (Snowden, 2001). In addition, attitudes about mental health services such as receptivity to care, anticipated and real negative consequences from others, self-consciousness, and stigma tolerance have also been linked to mental health help seeking and to utilization of formal mental health services (Cauce et al, 2002).

Child Behavior and Parental Help-Seeking

During the course of development, children encounter many experiences and display behaviors that continue to influence them later in life. A recent literature review described how a considerable number of children and adolescents exhibit emotional and behavioral problems that interfere with everyday functioning, but only a small number of these youngsters receive treatment (Zwaanswijk et al., 2003). This is of major importance because the likelihood of developing psychopathology in adulthood is increased if treatable problems in childhood remain untreated. According to Hofstra and colleagues (2002), social problems in girls and rule breaking behaviors in boys are associated with being diagnosed with a variety of DSM-IV-TR disorders in adulthood (e.g., anxiety, mood, or disruptive). One necessary step for a child to receive treatment from a mental health provider is the initiation of treatment seeking by his or her

parent(s). As previously noted, several variables (e.g., affordability of services) influence whether or not an individual seeks treatment. Although studies have stated the importance of financial considerations in making decisions concerning mental health service utilization (Dubow et al., 1990), one study demonstrated that family income was unrelated to mental health help seeking behaviors (McMiller & Weisz, 1996). Additional explanations for why people may not utilize mental health services include a preference for advice from family members, friends, media "experts," religious leaders, or from self-help books and resources. For example, a parent may consult with a family member or read a book on how to deal with a child that is disruptive or disobedient. Dubow and colleagues (1990) also reported that parents are less likely to seek services due to negative perceptions of mental health professionals.

The severity and nature of a child's behavior problem may also influence a parents' decision to seek services. Symptoms and behaviors leading to mental health care are not always distressing to the individual, perceived as due to a mental disorder, or seen as requiring mental health treatment (Cuffel, 1997). Weisz and Weiss (1991) reported that child externalizing (undercontrolled) problems were referred significantly more than internalizing (overcontrolled) problems. The study noted some of the most referred problems were poor school work, fighting, disobedience, and withdrawal; and the least referred problems included obsessiveness and impulsivity. Although these variables have been shown to influence help seeking, several other variables are likely to contribute to parents seeking help including any previous experience with mental health services, and their attitudes toward mental health professionals. Although mental health

services exist to treat emotional and behavioral problems, it is unclear whether stigma or other situational variables (e.g., financial inadequacy) contribute to the relatively small proportion of children receiving treatment. The present study hopes to provide empirical findings to help improve a gap in the mental health services literature concerning child mental health. The first step is to develop effective measurement of attitudes toward mental health services for children.

Summary of Hypotheses

The current study adapted and developed a measure to assess attitudes toward mental health service for children. In addition the following hypotheses were tested, (a) the measure developed would demonstrate theoretically and psychometrically sound factor structure, (b) the measure developed would demonstrate adequate test-retest reliability and internal consistency, (c) individuals who reported previous experience with mental health services will have lower levels of mental health stigma and more positive attitudes, and (d) significant differences in case vignette's age, gender, and behavior problem type will be found for participants' likelihood to report intention to use mental health services such that participants who respond to case vignettes of older children, boys, and children with externalizing problems will be more likely to report intentions to use mental health services.

METHOD

Participants

The sample consisted of approximately 250 undergraduate students (55 % male) recruited from Introduction to Psychology courses at Texas A&M University (TAMU). The ethnic distribution of this sample was 74.4% European-American, 6% African-American, 12.8% Hispanic, 5.6% Asian-American and 1.2% self identified as other. Participants ranged in age from 18 to 29 years old (M = 19.20 SD = 1.16). Sixty-seven percent of the sample was first year college students and 20.4% reported previous mental health services use. A majority who had previous mental health use sought services from a licensed psychologist. Socioeconomic status was assessed in two ways, participants reported their parents' highest level of education (mother M = 16 years, SD = 1.5; father M = 16 years, SD = 1.6), and rated a Likert-type question from (1) less than enough to (5) more than enough, on whether they thought they had enough financially growing up (M = 2.2, SD = 0.93). In addition, participants reported whether they had any children and rated the likelihood they would seek services in the future for any mental health concern. Because only two participants reported having children, they were not included in analyses.

A random sub-sample of 92 students completed the Inventory of Parental Attitudes Questionnaire (IPAQ) one week after the initial session to assess test-retest reliability. The ethnic distribution of this sample was 77.2% European-American, 6.5% African-American, 8.7% Hispanic, 6.5% Asian-American and 1% self identified as

other. Participants ranged in age from 18 to 27 years old (*M* = 19.01, *SD* = 1.00). See Table 1 for a summary of demographic data.

Measures and Case Vignettes

Demographic Information. Participants completed the *Demographic Information Questionnaire,* developed for the present study, which was used to gather the following data: (a) gender, (b) age, (c) ethnicity, (d) year in school, (e) parents' highest level of education, and (f) previous experience with mental health. In addition, participants reported whether they had any children and rated the likelihood they would seek services in the future for any mental health concern.

Case Vignettes. Each participant was asked to read a case vignette adapted from Weisz (2004) and was instructed to complete the questionnaire (IPAQ) as if they were the child's parent. Several versions of the vignettes were randomly assigned to each participant altering: (a) the age (6 years vs. 11 years), (b) gender (female vs. male), and (c) nature of the problem (externalizing vs. internalizing). Participants were also asked to rate the vignette on severity of the problem described and several additional questions (e.g. this child will have problems making friends).

Psychopathology and Distress. The *Hopkins Symptom Checklist-21* (HSCL-21; Green, Walkey, McCormick, & Taylor, 1988) was used to assess how individuals had been feeling over the previous seven days. The HSCL consists of 21 Likert-scale items scored from 1 (not at all) to 4 (extremely). The three 7-item factors are General (psychological) Feelings of Distress (GFD), Somatic Distress (SD), and Performance Difficulty (PD). Green et al. (1988) reported alpha coefficients ranging from .75 to .86

for the three subscales and .90 for the total scale. In the current study, the alpha coefficient was .86 for the total scale. The HSCL-21 has been shown to correlate with other measures of distress, to discriminate between clinical and non-clinical samples, and to be sensitive to changes in distress over the course of therapy (Deane, Leathern, & Spicer, 1992; Snow-Turek & Finch, 1997).

Attitudes Toward Mental Health. The *Thoughts About Psychotherapy Survey* (TAPS) (Kushner & Sher, 1989) was used to measure individual's fears of psychological services. The TAPS is a global measure of concerns about therapy (e.g., mental health services) and it consists of 25 Likert-scale items scored from 1 (not concerned) to 5 (very concerned). Total scores can range from 19 to 95, with higher numbers indicating greater concerns. The scale's reliability was .93 in the Kushner and Sher sample, and found that people who said they had avoided treatment scored higher on the TAPS than did participants who had sought psychotherapy. At comparable levels of distress, participants entering treatment reported less fear of psychotherapy than did participants who were not in treatment (Kushner & Sher, 1989). In the present study, the alpha coefficient was .90.

Attitudes Toward Child Mental Health. The *Inventory of Parental Attitudes Questionnaire* (IPAQ) was used to measure participants' help-seeking attitudes. The IPAQ was developed specifically for the purpose of this study by adapting the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) (Mackenzie et al., 2004). The IASMHS is an adapted measure of help-seeking attitudes with reliability and validity similar to a well-established measure of help seeking attitudes (ATSPPHS)

(Fisher and Turner, 1970). The IASMHS was developed to address methodological limitations of the ATSPPHS (Mackenzie et al., 2004). In the current study, items were adapted further and additional items were created to address attitudes toward mental health services for children. Adaptation was informed by use of an expert panel, composed of faculty in clinical psychology doctoral programs at TAMU who specialize in mental health services for children and adolescents. In addition, before data collection a small sample (n = 20) of parents reviewed the measure and provided feedback concerning the length, readability, and importance of the questions. The measure consists of 26 Likert-type items scored from 0 (strongly disagree) to 5 (strongly agree).

Procedure

Data were collected via group administration in a classroom on the university campus where the participants were enrolled. Following informed consent, all participants initially completed the study measures (demographic information, TAPS, HSCL-21, and IPAQ). A random sub-sample of students returned one week after the initial session to complete the IPAQ to assess test-retest reliability, students read the same vignette used during their initial session. Students received course research credit for their participation. Study measures were distributed in a counter-balanced order with the demographic information questionnaire completed first. Case vignettes were pseudo-randomized with the order chosen at random each study session to ensure equal number of participants in each condition. Half of the participants completed the HSCL-21 before the TAPS, and the other half completed these measures in the reverse order.

RESULTS

Comparison of Sample to Population

According to the Texas A&M University Office of Institutional Studies and Planning, 33,493 undergraduate students were enrolled in the 2006 Spring semester (Texas A&M University, 2006). The demographic analysis of the University population was nearly equally divided between males (50.95%) and females (49.05%). Regarding ethnicity, percentages of the University's undergraduate population were as follows: Caucasian (80.36%), African American (2.68%), Hispanic (11.09%), Asian American (3.60%), and "Other" (2.27%). The age distribution of the undergraduate population was divided into several categories: less than 18 years old (> 0.0001%), 18-21 years old (55.93%), 22-25 years old (40.75%), 26-30 years old (2.30%), 31-39 years old (0.68%) and over 40 years old (0.33%).

Three chi-square analyses were conducted to compare the study sample to the current undergraduate student population of Texas A&M University. The first chi-square analysis showed significant difference between the sample and population on ethnicity [χ^2 (1) = 15.67, p = .004], with the sample having a slightly higher representation of ethnic minorities and slightly lower number of European-Americans. The second chi-square revealed no significant difference between the groups in gender [χ^2 (1) = 1.77, p = .183]. The third chi-square revealed a significant difference between the sample's and population's age distribution [χ^2 (1) = 160.575, $p < .001$], with the sample being somewhat younger than the population. Since primarily freshmen and sophomore students were sampled, participants were more representative of the 18-21 year old

category than the overall population at Texas A&M University. In general, the study sample was representative of the current University undergraduate population.

Confirmatory Factor Analysis

To assess the factorability of the data, we used Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity (Kaiser, 1974; Bartlett, 1954). The KMO values range from 0 to 1, with values over .80 and .90 suggesting that the data is adequate for factor analysis (Kaiser, 1974). The Bartlett's test of sphericity should be significant ($p < .05$). The KMO measure of sampling adequacy and Bartlett's test of sphericity suggested that the data were adequate for factor analysis [KMO = .861; χ^2 (325, N=250) = 2199.016, $p < .0001$].

To examine the factor structure of the IPAQ, the 26 items were submitted to a confirmatory factor analysis (CFA) to assess the goodness of fit of the hypothesized three factor structure (Mackenzie et al., 2004). The data were analyzed using the Maximum Likelihood (ML) method (Jöreskog & Sörbom, 2005). Model fit was evaluated using the Tucker-Lewis index or non-normed fit index (NNFI; Bentler, 1990), the root mean squared error of approximation (RMSEA; Hu & Bentler, 1999) and the comparative fit index (CFI; Bentler, 1990). Hu and Bentler (1999) suggested that a 2-index combination strategy is the best way to access model fit and concluded that models with a RMSEA close to .06, and a NNFI or CFI close to .10 suggests a good fit between the hypothesized model and the observed data. The NNFI and CFI have been found to be unaffected by sample size (Bentler, 1990).

The CFA using the ML method suggested replication of the 3-factor model hypothesized. Although the chi-square statistic was significant significant [χ^2 (296, N=250) = 491.25, $p < .0001$], the RMSEA = .051, NNFI = .94, and CFI = .94 suggested good model fit of the 3-factor model. Following recommendations to use a 2-index combination (Hu & Bentler, 1999), the 3-factor model should not be rejected.

Overall, the item factor loadings in the present study and the study conducted by Mackenzie et al (2004) were similar; however loadings were slightly higher in this study (see Table 3). For example, in the stigmatization scale, the factor loadings ranged from .41 to .81 and the item, "I would not want to take my child to a professional because of what people might think" had the highest loading in this factor. In the study by Mackenzie et al (2004), the same factor had loadings ranging from .34 to .79. There were 6 items with relatively high modification indexes (range = 7.26-24.69). However, all of these items except two loaded higher in their intended factors. Moreover, chi-square difference test comparing the 1-, 2-, and 3-factor models were statistically significant (see Table 4), suggesting that the 3-factor model was a better fit than the 1-, or 2- factor model. Overall, the fit indices, as well as the individual item loadings suggest a good fit.

Psychometric Properties

Pearson correlation coefficients were calculated between test and retest scores for the IPAC Total scale and three subscales. Test-retest reliabilities were as follows: Psychological Openness, $r = .77$; Help-Seeking, $r = .66$; Stigmatization, $r = .84$; and IPAQ Total score, $r = .82$. Overall, reliability for the IPAQ was moderate to high given

the sample size (Murphy & Davidshofer, 2001). Factor correlations and alpha coefficients are presented in Tables 5 and 6

Mental Health Stigma and Attitudes

To examine the hypothesis whether individuals with previous experience using mental health services will have lower levels of mental health stigma (higher scores on the IPAQ stigmatization scale) and more positive attitudes toward mental health services (lower scores on the TAPS), two between-subjects ANOVAs were conducted. Results indicated that individuals who previously sought mental health services reported lower levels of mental health stigma [F (1,248) = 4.53, $p < .05$, $\eta_p^2 = .018$] and more positive attitudes [F (1,248) = 4.54, $p < .05$, $\eta_p^2 = .018$]. Effect sizes were small based on Cohen (1988), who characterized .01 as a small effect size, .06 as a medium effect size, and .14 as a large effect size. See Table 7 for means and standard deviations for IPAQ Stigmatization scores and TAPS scores used in these analyses.

To examine differences in levels of psychological distress experienced by individuals who reported previous use of mental health services compared to individuals who reported no such experiences, three between-subjects ANOVAs were conducted using the three subscales of the HSCL-21. Results indicated no differences between groups on Somatic Distress; however, differences where found for General Psychological Distress [F (1,248) = 10.04, $p < .05$, $\eta_p^2 = .039$], and for Performance Difficulties [F (1,248) = 4.34, $p < .05$, $\eta_p^2 = .017$]. As shown in Table 7, participants who reported previous experience with mental health services reported higher general psychological distress and higher performance difficulty compared to participants who

reported no experience. For both groups, participants reported relatively low levels of distress (i.e., HSCL-21 subscales scores may range from 7 to 28), in general.

Two chi-square analyses were conducted to compare individuals with previous experience using mental health services to individuals who had no previous experience. The first chi-square analysis showed significant difference in ethnicity between individuals with previous experience and individuals with no prior experience [χ^2 (2) = 8.51, p = .014], with the individuals reporting prior use having a slightly higher representation of European Americans and no Hispanics or Asian-American reported previous use. The second chi-square analysis showed a slight trend towards significant difference in gender between individuals with previous experience and individuals with no prior experience [χ^2 (1) = 3.66, p = .056], with slightly more females reporting prior use.

Attitudes Toward Child Mental Health

To examine the hypothesis that significant differences in case vignette's age, gender, and behavior problem type will be found for participants' likelihood to report intention to use mental health services for children, a between-subjects MANOVA was conducted, with IPAQ subscale scores (Psychological Openness, Help Seeking, and Stigmatization) as dependent variables. Results indicated no significant findings for age and gender. However, overall there was a significant main effect for problem type [F (3,240) = 2.33, p = .07, η_p^2 = .028]. Further analyses indicated significant differences only in Psychological Openness for problem type [F (1,242) = 6.01, p = .015, η_p^2 = .024]. Participants reported higher intentions to be open to using mental health services

for vignettes describing externalizing (*M* = 32.60, *SD* = .60) than for internalizing problems (*M* = 30.50, *SD* = .60). See Table 8 for descriptive statistics.

DISCUSSION AND CONCLUSION

The present study is the first known study to develop a measure of attitudes toward mental health services for children. The results suggest that the hypothesized 3-factor model (Mckenzie et al, 2004) should not be rejected and was replicated using the IPAQ. Following suggestions from Hu and Bentler (1999), the findings appear robust using several different fit indices that suggest the 3-factor model is a good fit for the data. Moreover, the psychometric data of the IPAQ suggests good reliability and internal consistency. According to Clark and Watson (1995) good reliability can range from .60 to .70, although .80 is desired. In addition, according to George and Mallery (2003) Cronbach alphas ranging from .70-.80 are considered good.

This study also examined the effects of child demographics (e.g., age, gender, and type of disorder) on intended use of mental health services. In the present study, results indicated no significant findings for age and gender, however significant differences were found for problem type. Participants were more open to seek services for the child described as having an externalizing problem (e.g. ADHD) consistent with the literature on help-seeking. For example, Weisz and Weiss (1991) reported that child externalizing problems are referred significantly more than internalizing problems. Several potential reasons exist for the non-significant findings. First, due to sample characteristics (non-parents), vignette descriptions may not have influenced the individuals' ratings on the IPAQ. Secondly, participants seemed to read and understood the vignettes according to their ratings of the questions following the descriptions and

child demographics may have no differential effects on report to use mental health services.

Finally, the present study examined the influence of previous experience with mental health services on mental health stigma and attitudes toward mental health. Results indicated that individuals with previous experience using mental health services had lower levels of mental health stigma (higher scores) and more positive attitudes towards mental health (lower scores). This is consistent with previous research findings that suggest that individuals with more positive attitudes toward mental health professionals are more inclined to seek services (Smith et al., 2004). Participants who reported previous use also reported higher level of psychological distress. In addition, the results of the present study corroborate the importance of mental health stigma on preventing individuals from seeking services. As suggested in the help-seeking literature, mental health stigma may impede individuals from seeking or fully participating in mental health services (Corrigan, 2004a).

Considering the number of children and adolescents who are not receiving necessary psychological services, it is important to understand how mental health stigma may influence a parents' decision to seek services. Given our limited knowledge on parental help seeking, understanding correlates of treatment seeking is vital to eliminating obstacles to appropriate service delivery for underserved children. This study provided a first step by developing a psychometrically sound measure of attitudes toward mental health services for children.

Limitations of the Present Study

The results of the current study are promising, although limitations exist. For example, to consideration must be given to how these results generalize to non-student populations. Because the sample was undergraduate students, results may not generalize to actual parents. Although the CFA results supported the hypothesized 3-factor model of the IPAQ using a convenience sample, confirming evidence is needed regarding the goodness of fit. In addition, although the literature posits the influence of negative attitudes on help-seeking, future studies should examine the usefulness of the IPAQ with a sample of parents.

Secondly, taking into account the potential effects of a child's gender and age on help-seeking, future studies should examine whether any differences exist. It is possible that the vignette descriptions (e.g., age and gender) had no effect on the subjects' ratings on the IPAQ. Examining these variables in a sample of parents may present different findings. However, the results of the current study provide preliminary findings suggesting that individuals are equally likely to seek help for children regardless of age or gender when a psychological problem exists.

Implications for Future Research

Future research will examine a theoretical model of parental help-seeking building on Ajzen's theory of planned behavior (1985). Specifically, the model will examine whether parents are more like to seek mental health services given their mental health stigma, attitudes toward mental health services, and the demographic characteristics of their child. In addition, future research will examine the factor

structure of the IPAQ using a sample of parents. Future research will improve the existing body of literature on help-seeking and attitudes in several ways. First, developing a measure of attitudes toward child mental health service will provide a research tool to aid in examining the influence of parental attitudes on intended help-seeking behaviors. Secondly, extensions of the current study will build on emerging literature regarding the relation between mental health stigma and help seeking. Research has suggested that stigma may impede people from seeking services for themselves or from fully participating in those services (Cauce, Paradise et al., 2002). Lacking in the literature are data on how parental attitudes and perceptions of mental health stigma may influence their decisions to seek treatment for their children.

In addition, this study noted some differences in psychological distress between participants who reported previous experience with mental health services compared to participants who reported no experience. Future analyses may explore whether differences on intentions to seek help were moderated by symptoms of distress. Likewise, attitudes toward therapy might be explained in part by reported symptoms of distress through multiple regression analysis predicting likelihood of seeking psychological help from attitudes, prior mental health experience, psychological distress, and the interaction between distress and attitudes toward psychological help.

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APPENDIX

Table 1 *Variables influencing parents' help-seeking for youth*

Pathway	Child	Parents and family	Environment
1. Parental help-seeking	-type of problem -severity of problem -gender	-awareness of problem -distress threshold -personality -psychopathology -attitudes and beliefs -education level -support from extended family -psychosocial family stress	-socio-demographic variables -availability of services
2. Problem recognition by physician	-type of problem -severity of problem		-socio-demographic variables -availability of services -screening measures

Adapted from Zwaanswijk et al., 2003

Table 2 *Sample Demographics* (*N* = 250)

Variable	*n* (%)
Gender	
Male	139 (55.6)
Female	111 (44.4)
Age (in years) *M (SD)*	19.20 (1.2)
Ethnicity	
African-American	15 (6.0)
European-American	186 (74.4)
Hispanic	32 (12.8)
Asian-American	14 (5.6)
Biracial	1 (0.4)
Other	2 (0.8)
Year in University	
Freshman	169 (67.6)
Sophomore	54 (21.6)
Junior	12 (4.8)
Senior	15 (1.2)
Previous Mental Health Use	
Yes	51 (20.4)
No	199 (79.6)

Table 2 *Continued*

Variable	*n* (%)	
Previous Mental Health Provider*		
Professional Counselor	14	
Psychologist	26	
Minister	3	
Psychiatrist	5	
Social Worker	0	
Physician	3	
Parents' Education Level	Mother	Father
8th grade or below	4 (1.6)	3 (1.2)
Some high school	6 (2.4)	5 (2.0)
High school graduate	35 (14.0)	29 (11.6)
Some college/technical school	50 (20.0)	47 (18.8)
Graduated 2-year college/tech school	25 (10.0)	12 (4.8)
Bachelors degree	95 (38.0)	92 (36.8)
Masters degree	31 (12.4)	41 (16.4)
Doctoral degree	4 (1.6)	21 (8.4)

*Note: some individual had experience with multiple providers

Table 3 *Standardized Factor Loadings of the IPAQ*

Scales (item #)	Factor Loadings
Help Seeking (9)	
7. If my child were experiencing a serious psychological or behavior problem at this point in my life, I would be confident that I could find relief in professional help.	.69
4. If a good friend or family member asked my advice about a psychological or behavior problem, I might recommend that they see a professional.	.62
13. I would want to get professional help if my child were worried or upset for a long period of time.	.59
17. If I believed my child were having a mental breakdown, my first decision would be to get professional help.	.55
8. If my child were to experience a psychological or behavior problem, I could get professional help if I wanted to.	.47
20. I would willingly confide intimate matters to an appropriate person if I thought it might help my child or a member of my family.	.45
1. I know where to go if I wanted professional help for my child.	.37
11. It would be relatively easy for me to find the time to take my child to see a professional for help.	.32
12. I would discuss all experiences in my life with anyone.	.20
Stigmatization (8)	
15. I would not want to take my child to a professional because what people might think.	.81
18. I would feel uneasy going to a professional because of what some people would think.	.79

Table 3 *Continued*

Scales (item #)	Factor Loadings
22. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with mental health concerns.	.76
14. I would be uncomfortable seeking professional help for my child because people (friends, family, coworkers, etc.) might find out about it.	.73
9. Important people in my life would think less of my child if they were to find out that he/she had a psychological or behavior problem.	.63
21. Had my child received treatment for a psychological or behavior problem, I would feel that it ought to be "kept secret".	.50
2. I would not want others (friends, family, teachers, etc.) to know if my child had a psychological or behavior problem.	.49
5. Having been mentally ill carries with it feelings of shame.	.41
Psychological Openness (9)	
25. Seeking professional help is a sign of weakness.	.78
26. Strong willed parents can handle problems without professional help.	.76
23. People should workout their own problems instead of getting professional help.	.75
19. Strong willed individuals can handle emotional or behavior problems without needing professional help.	.70
10. Psychological problems tend to work out by themselves.	.61
16. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without seeking professional help.	.44

Table 3 *Continued*

Scales (item #)	Factor Loadings
3. To avoid thinking about my child's problems, doing other activities is a good solution.	.31
24. There are things that happen in my family I would not discuss with anyone.	.18
6. It is probably best to know everything about my child.	.08

Table 4 *CFA Results Comparing the Fits of the Three-, Two-, and One-Factor Models for the IPAQ (N = 250)*

Model	χ^2	*df*	*RMSEA*	*NNFI*	*CFI*	$\Delta\chi^2$ (*df*)	*p*
Three-Factor*	491.25	296	.05	.94	.94		
Two-Factor	645.75	298	.07	.92	.92		
One-Factor	1094.81	299	.10	.85	.87		
Two vs. Three						154.50 (2)	>.05
One vs. Three						603.56 (3)	>.05

* Best-fit model. RMSEA = root mean square error of approximation; NNFI = non-formed fit index; CFI = comparative fit index; SRMR = standardized root mean residual.

Table 5 *Correlation Matrix for the IPAQ Total and Subscale Scores*

	1	2	3	4
Time 1 (n = 250)				
1. Psychological openness	-			
2. Help-seeking	.51**	-		
3. Stigmatization	.52**	.37**	-	
4. IPAQ total	.84**	.73**	.82**	-
Time 2 (n = 92)				
1. Psychological openness	-			
2. Help-seeking	.41**	-		
3. Stigmatization	.45**	.34**	-	
4. IPAQ total	.82**	.67**	.81**	-

** p <.01

Table 6 *Internal Consistency for the IPAQ*

Scales	Number of Items	Cronbach's Alpha
Time 1 (*n* = 250)		
Psychological openness	9	.73
Help-seeking	9	.72
Stigmatization	8	.84
IPAQ total	26	.86
Time 2 (*n* = 92)		
Psychological openness	9	.71
Help-seeking	9	.75
Stigmatization	8	.92
IPAQ total	26	.88

Table 7 *Means and Standard Deviations of Participants Reporting Previous Experience or No Experience with Mental Health Services*

Variable	Previous Experience			No Experience		
	n	*M*	*SD*	*n*	*M*	*SD*
Mental Health Stigma[a]	51	28.25	8.01	199	25.55	8.10
Attitudes[b]	51	63.39	19.41	199	69.49	17.92
Psychological Distress[c]	51	14.24	5.06	199	12.13	4.00
Somatic Distress[c]	51	11.20	4.06	199	10.33	3.12
Performance Difficulty[c]	51	14.73	3.89	199	13.60	3.33

[a]measured using the IPAQ stigmatization scale
[b]measured using the TAPS
[c]measured using the HSCL-21 subscales
Note. IPAQ Stigmatization score ranges form 0 to 45, HSCL-21 scores range from 7 to 28, and TAPS scores can range from 19 to 95.

Table 8 *Means and Standard Deviations for the IPAQ Subscale Scores and Questions for Vignette Descriptions*

Variable	*n*	*M (SD)*		
		O	S	H
Vignette Characteristic				
Externalizing Problem	123	32.60 (6.19)	27.09 (8.12)	28.72 (6.32)
Internalizing Problem	127	30.48 (7.06)	25.15 (8.12)	28.25 (6.44)
6-year old	124	31.41 (7.36)	26.05 (8.70)	28.22 (6.30)
11-year old	126	31.63 (6.04)	26.16 (7.60)	28.73 (6.50)
Boy	121	31.72 (6.35)	26.91 (7.40)	28.45 (6.27)
Girl	129	31.34 (7.06)	25.35 (8.73)	28.52 (6.50)
Vignette Question				
This child currently has a severe problem.			4.12 (1.34)	
This child will have problems making friends			4.68 (1.21)	
This child's parents are distressed.			3.96 (1.50)	
This problem is not a big deal.			1.32 (1.23)	
This child has school problems.			4.02 (1.51)	
This child will have problem when grown up.			3.75 (1.54)	
This child causes problems in the family.			3.18 (1.61)	

Note. IPAQ subscale scores can range from 0 to 45 (O = Psychological Openness), 0 to 40 (H = Help Seeking), and 0 to 45 (S = Stigmatization). Vignette questions were answered on a Likert-type scale in which 1= disagree and 5=agree.

VITA

Name: Erlanger A. Turner

Address: Texas A&M University-Department of Psychology
TAMU 4235
College Station, TX 77843-4235

Email: eturner@psych.tamu.edu

Education: B.S., Psychology, Louisiana State University, 2004