

# Men's Help Seeking: Examination of Differences Across Community Size, Education, and Income

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The present study examined the relationships between traditional Western masculine norms, self-stigma, and attitudes toward counseling among 4,748 men from different community sizes, and different education and income levels. Structural equation modeling (SEM) analyses suggest that, across all male subgroups, masculine norms were linked to self-stigma and, in turn, attitudes toward counseling. However, several clear differences in the strengths of the relationships between model variables were found, including a relationship between masculine norms and self-stigma that was twice as strong for rural men than for other men. The importance of attending to the varying relationships among masculine norm conformity, self-stigma, and help-seeking attitudes for men from these diverse demographic backgrounds—in the context of clinical practice, prevention, and future research—is discussed.

*Keywords:* masculine norms, self-stigma, help seeking, rural

Epidemiological research consistently finds that women and men do not seek professional psychological help at the same rate, even when comparably distressed (Kessler, Brown, & Broman, 1981). Rather, men are less likely to seek help and tend to hold more negative attitudes toward counseling (Andrews, Issakidis, & Carter, 2001; Gonzalez, Alegria, & Prihoda, 2005). Not seeking help puts men at risk for exacerbated physical and emotional problems and the onus on mental health researchers to develop interventions to improve men's attitudes toward seeking help (Courtenay, 2001). To develop interventions, it is first necessary to identify those factors that influence men's attitudes toward seeking professional mental health services.

One of the most promising factors identified is men's level of adherence to traditional Western masculine norms. Norms regarding the importance of emotional control, dominance, pursuit of status, self-sufficiency, and winning are imposed on *all* men living within the United States (O'Neil, 2008; Wetherell & Edley, 1999). Seeking help represents a violation of each of these norms, as help seeking implies a "loss of status, loss of control and autonomy, incompetence, dependence, and damage of identity" (Moller-Leimkuhler, 2002, p. 6). Boys learn early on that opening up about weakness and vulnerability will lead to denigration by peers (Newberger, 1999). This social learning is reflected in research with adult men: Conformity to masculine norms and the resultant conflict consistently correlate with negative attitudes toward counseling and an unwillingness to seek it (Mahalik et al., 2003; Smith, Tran, & Thompson, 2008).

Addis and Mahalik (2003) have encouraged researchers to identify within-person and contextual variables that affect the relationship between masculine norms and help seeking. Identifying the factors that mediate the relationship between conformity to masculine norms and help-seeking attitudes is important, especially if such mediating factors are more amenable to change than one's gender role conformity. One such factor—identified by the U.S. Surgeon General as a central obstacle to help seeking—is stigma (Satcher, 1999). Researchers have consistently found an inverse relationship between stigma and help-seeking attitudes (e.g., Vogel, Wade, & Ascherman, 2009). Furthermore, researchers have suggested that men are especially prone to internalizing public stigma (i.e., the negative views society holds toward those who seek professional help) as self-stigma (i.e., seeing oneself negatively if one seeks help; Vogel, Wade, & Haake, 2006), due, in part, to the influence of masculine norms. Data from research also suggest that higher levels of male gender role conflict are linked to greater self-stigma in men (Magovcevic & Addis, 2005). In turn, self-stigma has been found to more strongly relate to help-seeking attitudes than public stigma (Vogel, Wade, & Hackler, 2007).

Given the established interrelationships between masculine norms, self-stigma, and attitudes toward seeking help, Pederson and Vogel (2007) sought to embed these variables in a testable model of help seeking. Their mediation model posited that greater gender role conflict increases men's self-stigma associated with seeking help, which, in turn, lowers men's attitudes toward seeking mental health services (i.e., gender role conflict → self-stigma → attitudes). Pederson and Vogel (2007) found that self-stigma partially mediates the relationship between gender role conflict and attitudes toward seeking mental health services, thereby reinforcing the key role that stigma plays in the masculine norms/help-seeking relationship.

However, their sample largely consisted of unmarried men in their first and second year of undergraduate studies at a single Midwest university. Vogel, Heimerdinger-Edwards, Hammer, and Hubbard (2011) extended this research to look at salient multicul-

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tural variables in men that may alter this model of help-seeking behavior. Vogel and colleagues (2011) examined over 4,000 men from different racial/ethnic backgrounds and sexual orientations and found several key differences across these subgroups of men. For example, self-stigma was found to fully mediate the effect of masculine norms on attitudes for gay men while only partially mediating the effect for heterosexual men. In addition, while African American men expressed greater overall endorsement of masculine norms than European American men, this endorsement was *less* predictive of self-stigma. This research demonstrated the importance of investigating diverse backgrounds and multicultural variables instead of assuming a one-size-fits-all model of help seeking in men. In fact, Pederson and Vogel (2007) acknowledged the results of their study could not yet be generalized to diverse or underserved male populations. Best practices in psychological research stress the importance of cross-validating theoretical models with diverse samples (American Psychological Association, 2002; Ponterotto, Casas, Suzuki, & Alexander, 2001; Sue, Zane, & Young, 1994). If interventions designed to improve help-seeking attitudes among diverse groups of men are to be sensitive and efficacious for all men, it is important to understand how demographic factors influence the strength of the relationships between masculine norms, stigma, and help-seeking attitudes (Vogel et al., 2011). However, Vogel et al. (2011) did not focus on several potentially important demographic factors, including community size, education, and income level. As such, the goal of the present research is to reanalyze Vogel and colleagues' (2011) diverse sample of around 4,800 men to assess whether these three demographic factors play an important role in the relationship of masculine norms and stigma on help-seeking attitudes for men.

### **Demographic Differences in Masculine Norms, Stigma, and Help Seeking**

While research suggests that masculine norms and stigma are factors in men's help seeking, the literature has less to say about how these factors may operate across different groups of men. The lack of research comparing groups of men on these variables is an important omission, as there have been reported differences in endorsement of gender role norms for males who live in rural areas compared with those who live in urban areas (Levant & Habben, 2003). For example, previous research has suggested that residents of rural areas endorse traditional male norms, such as self-reliance (Fuller, Edwards, Proctor, & Moss, 2000; Rost, Smith, & Taylor, 1993) and stoicism, which could lead to greater self-stigmatization and dislike for seeking help. Furthermore, in rural areas, men may be particularly cognizant of stigma because of the lack of privacy in small towns, where residents are more involved in each other's lives and aware of each other's problems. As such, it has been suggested that men may be less likely to seek help for health issues in rural communities due to concerns about stigmatization (Gunnell & Martin, 2004; Hoyt, Conger, Valde, & Weihs, 1997; Wrigley, Jackson, Judd, & Komiti, 2005), and studies have shown initial links between stigma and the underutilization of mental health service in rural communities (Rost et al., 1993). For example, Rost and colleagues (1993) found that rural residents labeled people who sought professional psychological help more negatively than did their urban counterparts. Furthermore, this labeling predicted lesser treatment seeking among rural residents but not

urban residents. Several qualitative studies suggest that stigma is exacerbated in rural communities, due, in part, to rural residents' regard for autonomy and self-help, and their tendency to equate mental health issues with insanity (Kelleher, Taylor, & Rickert, 1992; Scattolon & Stoppard, 1999).

Education and income may also play a role in the endorsement of dominant masculine norms and the internalization of stigma associated with seeking help. For example, those with higher levels of education tend to be less gender-typified (Myers & Booth, 2002). This is partially influenced by the university environment, through exposure to diverse perspectives, thus allowing men to change how they think about gender role norms as well as allowing them make choices regarding how much they subscribe to these norms (Calvo-Salguero, García-Martínez, & Monteoliva, 2008). Conformity to dominant masculine norms has also been found to vary across educational levels, full- and part-time work status, occupational prestige, and male- versus female-dominated professions (Calvo-Salguero et al., 2008). Similarly, lower income and unemployment are linked to lesser use of professional services (Verhaak, 1995), and people from disadvantaged backgrounds are less likely to seek psychological help (Hodgetts & Chamberlain, 2002). It has also been suggested that those who are less educated and have lower income are more likely to worry about stigma for seeking help (Nadeem et al., 2007). People of high economic status, on the other hand, are generally accorded more privilege in society and therefore may be subject to less stigmatization (Grossman & Charmaraman, 2009). In addition, their generally greater access to resources (e.g., financial, health insurance, reliable transportation, providers who are willing to take them on) could facilitate their private use of help-seeking services. In light of these differences, it is important to understand whether the same factors that influence male college students are equally important predictors of attitudes toward help seeking in males from other backgrounds.

### **Current Study**

The current study sought to determine (a) whether Pederson and Vogel's (2007) help-seeking mediation model (see Figure 1) retains utility with men from diverse community sizes, educational backgrounds, and income levels, and (b) whether and how the strength of the relationships among the model's variables (conformity to masculine norms, self-stigma, attitudes toward mental health services) varies across these groups. Structural invariance analysis—a structural equation modeling (SEM) technique—was used to test the equivalence of hypothesized relationships between the latent variables across these groups (Miller & Sheu, 2009). Structural invariance analysis permits researchers to investigate how well a theoretical model performs across diverse populations, that is, whether the model retains cross-cultural relevance. Such analysis is needed because it remains unclear whether, and to what degree, constructs (e.g., self-stigma) measured by the mediation model predict attitudes toward mental health services among men from diverse demographic backgrounds (Brown et al., 2010; Shechtman, Vogel, & Maman, 2010). The findings from this investigation could shed light on which factors retain significance for men from underserved groups (e.g., men from rural areas) who may benefit from seeking professional mental health services, and thereby guide professionals who develop interventions to increase

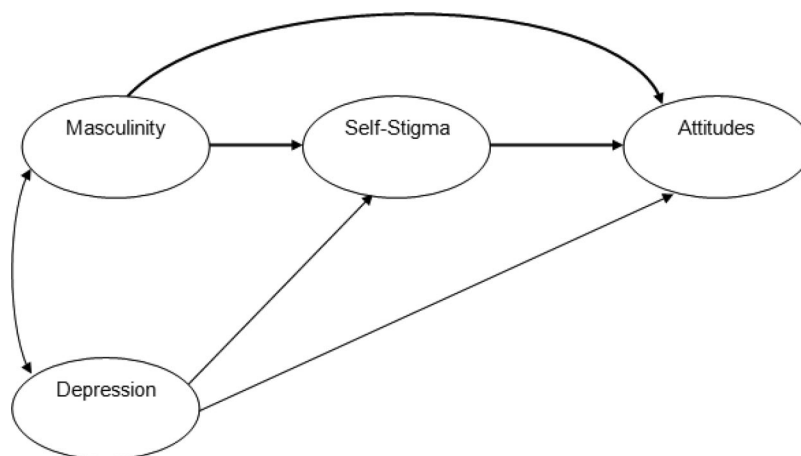


Figure 1. The help-seeking mediated model.

help-seeking behavior among these men. Because depressive symptoms have been found to relate to each of the model's variables (Good & Wood, 1995; Yen et al., 2005), depression was controlled for in the model. As was hypothesized by Vogel and colleagues (2011) in regard to racial/ethnic background and sexual orientation, the current study hypothesized that Pederson and Vogel's (2007) mediation model would retain adequate model fit across each of the male demographic groups. Likewise, it was hypothesized that the strength of the relationships among the three variables of interest would vary across groups.

## Method

### Participants

Participants ( $N = 4,748$ ) ranged in age from age 18 to 79, with a mean age of 32.9 years and a standard deviation of 12.2 years. While the majority of participants (72.7%,  $n = 3,454$ ) identified as European American, a sizable number of participants identified as Asian American (10.0%;  $n = 475$ ), Latino American (7.3%;  $n = 347$ ), and African American (4.7%;  $n = 224$ ), with other participants identifying as Multiracial (4.0%;  $n = 192$ ) and Native American (0.6%;  $n = 26$ ). Thirty participants (0.6%) did not indicate their ethnicity.

Participants indicated they live in rural areas (16.5%;  $n = 783$ ), suburban areas (47.0%;  $n = 2,231$ ), and urban areas (35.7%;  $n = 1,695$ ). Thirty-nine participants (0.8%) did not indicate their community size. Based on their responses to the Center for Epidemiological Studies Depression scale (see Measures section), 42.8% ( $n = 2,034$ ) met the clinical cutoff (score of  $\geq 16$ ) for depression.

Concerning educational level, 694 (14.6%) participants had a high school diploma or GED or less; 1,733 (36.5%) had some college or a 2-year college degree; 1,394 (29.4%) had a 4-year college degree; and 900 (19.0%) had a postgraduate degree (e.g., master's, Ph.D., or other professional degree). Twenty-seven (.6%) participants did not indicate their education level.

Current household income varied as follows: 1,248 (26.3%) reported less than \$30,000/year; 1,649 (34.7%) reported \$30,000 to \$74,999 per year; 1,285 (27.1%) reported \$75,000 or more per year; and 566 (11.9%) declined to disclose their income. The

racial/ethnic background and age of participants within each community size and educational level subsample are listed in Table 1.

### Measures

#### Conformity to dominant masculine gender role norms.

The 22-item version of the Conformity to Masculinity Norms Inventory (CMNI-22; Mahalik et al., 2003) was used to measure participants' endorsement of traditional Western masculine gender role norms. The CMNI was used rather than other masculinity scales (i.e., Gender Role Conflict Scale-I; O'Neil, Helms, Gable, David, & Wrightsman, 1986), as the CMNI taps into a more comprehensive array of prevalent traditional Western masculine norms (e.g., power over women, violence, risk taking). A sample item is, "I love it when men are in charge of women." Items are rated on a 4-point scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). Nine of the items are reverse scored so that a higher total score indicates greater conformity. In this study, the coefficient alpha was .77. Evidence of validity has been demonstrated through correlations with increased health-risk behaviors, alcohol use, and homophobia (Hamilton & Mahalik, 2009), and internal consistency across diverse populations of men has ranged from .70 to .94 (Burns & Mahalik, 2008; Hamilton & Mahalik, 2009; Liu & Iwamoto, 2006).

**Self-stigma.** The Self-Stigma of Seeking Help scale (SSOSH; Vogel et al., 2006) was used to measure participants' perceived self-stigma associated with seeking psychological help. The SSOSH is a 10-item self-report measure that assesses the degree to which participants feel their self-esteem is threatened by seeking counseling. A sample item is, "I would feel inadequate if I went to a therapist for psychological help." Items are rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Half of the items are reverse scored so that a higher total score indicates greater self-stigma. In this study, the coefficient alpha was .90. Evidence of validity has been demonstrated through correlations with attitudes toward seeking counseling ( $r_s = -.53$  to  $-.63$ ) and intention to seek counseling ( $r_s = -.32$  to  $-.38$ ). Internal consistency across diverse populations of men has ranged from .80 to .92 (Shechtman et al., 2010; Soheilian & Inman, 2009; Vogel et al., 2006).

Table 1  
Participant Age and Ethnic Background by Subsample

	Urban				Suburban				Rural			
	HS	2 Yr	4 Yr	PG	HS	2 Yr	4 Yr	PG	HS	2 Yr	4 Yr	PG
Age												
Mean	25.8	29.1	32.4	38.3	27.8	30.6	34.2	40.5	31.7	32.1	36.3	44.2
SD	10.1	10.8	10.6	11.5	12.2	11.4	10.8	12.0	13.0	12.4	12.2	12.4
Ethnicity												
European American	114	311	353	281	225	654	499	309	163	292	142	83
African American	22	52	30	17	11	35	24	11	3	9	5	4
Latino American	25	67	48	22	19	71	38	21	4	10	7	1
Asian American	29	61	92	62	27	47	77	38	5	4	12	3
Native American	10	41	0	15	20	37	16	14	5	8	6	0
Multiracial	2	4	16	1	1	2	3	4	1	6	2	2
Other	2	2	1	2	2	6	6	4	2	0	1	0

Note. HS = high school diploma or equivalent; PG = postgraduate degree; 4 yr = 4-yr college degree; 2 yr = some college or 2-yr degree.

**Attitudes toward mental health services.** The 10-item Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-S; Fischer & Farina, 1995) was used to measure participants' attitudes toward seeking mental health services. A sample item is, "The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts." Items are rated on a 4-point scale ranging from 0 (*disagree*) to 3 (*agree*). Half of the items are reverse scored so that a higher total score indicates more positive attitudes toward seeking mental health services. In this study, the coefficient alpha was .87. Evidence of validity has been demonstrated through correlations with intentions to seek help ( $r = .50$ ; Vogel et al., 2007) and prior use of professional help for a problem ( $r = .39$ ; Fischer & Farina, 1995). Internal consistency across diverse populations has ranged from .79 to .85 (Kim & Omizo, 2003; Moore & Constantine, 2005; Pederson & Vogel, 2007).

**Depression.** The Center for Epidemiological Studies Depression scale (CES-D; Radloff, 1977) was used to measure participants' level of depressive symptoms. The CES-D is a 20-item self-report measure that assesses cognitive, affective, and vegetative symptoms of depression. A sample item is, "I felt lonely." Items are rated on a 4-point scale ranging from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). Four items are reverse scored so that a higher score indicates greater depressive symptoms. In this study, the coefficient alpha was .91. Evidence of validity has been demonstrated through correlations with the Beck Depression Inventory ( $r_s = .86$  to  $.87$ ; Santor, Zuroff, Ramsay, Cervantes, & Palacios, 1995), and internal consistency estimates have been found to be similar across diverse samples (Roberts, 1980). Furthermore, research suggests that the CES-D is one of the more accurate measures for assessing depression in men (Sharp & Lipsky, 2002).

## Procedures

Participants were sampled from an archival data set of almost 4,800 men recruited via Internet Web sites for a larger research study on men's health (see Hammer & Vogel, 2010). To increase the diversity of the sample, listservs (e.g., Prostate Cancer and Gay Men) and Web sites (e.g., BlackMenInAmerica.com) that tailor

their content to men from diverse backgrounds were asked to post an announcement about the study. The announcement described the study as an investigation into the interaction between masculinity, depression, and attitudes toward seeing a mental health professional. In the larger Internet study, participants gave online assent, completed the study's demographic questions and measures, and were listed above, and were debriefed.

## Results

### Descriptive Statistics and Mean Comparisons

The data analyzed in the present article were cleaned of univariate and multivariate outliers (Tabachnick & Fidell, 2001). Table 2 shows means, standard deviations, and internal consistency of the measures by demographic group tested in this study. Analysis of variance (ANOVA) comparison of the means for each measure, by demographic group, are discussed in the following paragraphs.

**Conformity to masculine norms.** Statistically significant conformity to masculine norms differences were found for community size,  $F(2, 4541) = 3.08, p = .046$ , and education,  $F(3, 4547) = 4.93, p = .02$ , but not income,  $F(2, 4025) = 1.953, p = .14$ . Specifically, follow-up Tukey comparisons showed differences between rural and urban ( $p = .035$ ), and between postgraduate degree and the other education levels (high school or less, 2-year degree, 4-year degree;  $p_s < .03$ ). As shown in Table 2, individuals in rural communities endorsed greater masculine norms than individuals in urban communities. In addition, individuals with postgraduate degrees reported less endorsement of masculine norms than individuals at other educational levels.

**Self-stigma.** Statistically significant self-stigma differences were found in community size,  $F(2, 4621) = 11.49, p < .001$ , education,  $F(3, 4630) = 30.68, p < .001$ , and income,  $F(2, 4108) = 23.91, p < .001$ , across all demographic groups. Follow-up Tukey comparisons showed differences between all community sizes (rural, suburban, urban;  $p_s \leq .04$ ); all education levels ( $p_s \leq .001$ ), with the exception of between 2-year degree and 4-year degree ( $p = .55$ ); and all income levels ( $< \$30,000$ ,  $\$30,000$  to  $\$74,999$ , and  $\geq \$75,000$ ;  $p_s \leq .006$ ). Individuals living

Table 2  
Means, Standard Deviations, and Internal Consistencies for Variables by Demographic Group

Group	Masculinity			Self-stigma			Attitudes		
	<i>M</i>	<i>SD</i>	$\alpha$	<i>M</i>	<i>SD</i>	$\alpha$	<i>M</i>	<i>SD</i>	$\alpha$
Community size									
Rural	32.05	8.56	.77	26.30	9.58	.91	13.27	7.55	.89
Suburban	31.40	8.61	.78	25.15	8.09	.90	14.53	7.00	.87
Urban	31.11	8.52	.75	24.42	8.82	.89	15.22	6.92	.86
Education									
High school or less	31.88	9.19	.79	27.09	9.71	.90	12.31	7.08	.87
2-year degree	31.62	8.70	.77	25.51	9.23	.90	13.74	7.02	.87
4-year degree	31.48	8.26	.76	25.08	8.79	.90	15.17	6.76	.86
Postgraduate	30.41	8.20	.76	22.83	8.40	.89	17.03	6.93	.88
Income									
<\$30,000	31.42	8.63	.75	26.23	8.90	.88	13.66	6.84	.85
\$30,000 to \$74,999	31.15	8.61	.77	25.17	9.31	.91	14.61	7.14	.88
>\$75,000	31.79	8.66	.79	23.73	8.91	.91	15.84	7.23	.89

Note.  $\alpha$  = internal consistency.

in rural communities endorsed greater self-stigma than those in suburban communities, who, in turn, endorsed greater self-stigma than those in urban communities. Likewise, self-stigma was endorsed to the greatest degree by those with a high school degree or less. Individuals with 2- or 4-year degrees reported less stigma than those with a high school degree or less, and those with postgraduate education reported the least stigma. Individuals making \$30,000 or less reported the most stigma, followed by those making \$30,000 to \$74,999; those making more than \$75,000 reported the least stigma.

**Attitudes.** Statistically significant attitude differences were found for community size,  $F(2, 4647) = 20.35, p < .001$ , education level,  $F(3, 4653) = 73.31, p < .001$ , and income,  $F(2, 4120) = 29.734, p < .001$ . Follow-up Tukey comparisons for analysis showed differences between all community sizes ( $ps \leq .007$ ), all education levels ( $ps < .001$ ), and all income levels ( $< \$30,000, \$30,000$  to  $\$74,999$ , and  $\geq \$75,000; ps \leq .001$ ). Individuals living in rural communities reported less favorable attitudes than those in suburban communities, who, in turn, reported less favorable attitudes than those in urban communities. Those with a high school degree or less reported less favorable attitudes than those with a 2-year degree. Those with a 2-year degree reported less favorable attitudes than those with a 4-year degree, who, in turn, reported less favorable attitudes than those with postgraduate education. Individuals making \$30,000 or less reported the least favorable attitudes, followed by those making \$30,000 to \$74,999; those making more than \$75,000 reported the most favorable attitudes.

### Primary Analyses: Invariance Testing

To examine the invariance of the model paths across community size, education level, and income level, we first followed the recommendation of Russell, Kahn, Spoth, and Altmaier (1998) and created three parcels (observed indicators) for each of the latent variables (conformity to masculine norms, self-stigma, attitudes toward counseling, and depression). We created the parcels by separately factor-analyzing each scale. Using the factor loading from these analyses, the items were then assigned to parcels in

pairs, consisting of the highest and lowest remaining items. This procedure results in parcels that represent the construct to an equal degree (for a detailed discussion, see Russell et al., 1998). Next, we used the full information maximum likelihood (FIML) estimation in LISREL 8.8 to conduct the models. Results showed that the data was not normally distributed,  $\chi^2 = 1730.43, p < .001$ . Therefore, we used Satorra and Bentler's (2001) adjusted chi square as well as four additional fit indices (Martens, 2005): the comparative fit index (CFI;  $> .95$ ), the incremental fit index (IFI;  $> .95$ ), the root mean square error of approximation (RMSEA;  $< .06$ ), and the standard root mean square residual (SRMR;  $< .08$ ). Scaled chi-square difference tests ( $\Delta\chi^2$ ) were also used to test differences in nested models.

**Community size.** The overall model for community size (i.e., across all groups), as well as the models for men living in rural areas, suburban areas, and urban areas, all showed acceptable fit to the data (see Table 3). To examine invariance across groups, we compared a freely estimated model (i.e., each model path was allowed to be freely estimated across the community size groups) to an invariant model (i.e., each model path set to be equal). The nested models significantly differed across the three groups,  $\Delta\chi^2(10) = 23.15, p = .01$ . To determine where the differences were, we conducted follow-up analyses to compare the three specific paths of interest (i.e., conformity to masculine norms to self-stigma, conformity to masculine norms to attitudes, and self-stigma to attitudes) for each group comparison (e.g., urban compared with rural). For each analysis, the invariant model was compared with the freely estimated model (see Table 4 for standardized *bs* for each group).

Results showed significant differences in the relationships of conformity to masculine norms and self-stigma for men living in rural areas compared with men living in both (a) suburban areas,  $\Delta\chi^2(1) = 12.74, p < .001$ , and (b) urban areas,  $\Delta\chi^2(1) = 14.00, p < .001$ . Men from rural areas showed a stronger connection between conformity to masculine norms and self-stigma ( $b = .64$ ) than other men ( $bs = .45$  to  $.48$ ). No differences across groups were found for the link between self-stigma and attitudes ( $ps > .53$ ) or the link between conformity to masculine norms and

Table 3  
Fit Indices by Demographic Group

Group	Scaled $\chi^2$	<i>df</i>	<i>N</i>	RMSEA (95% CI)	CFI	IFI	SRMR
Community size							
Overall	1157.10	144	4709	.057 (.063, .071)	.98	.98	.039
Rural	204.36	48	783	.065 (.046, .074)	.98	.98	.035
Suburban	573.59	48	2231	.070 (.065, .075)	.98	.98	.044
Urban	376.19	48	1695	.064 (.058, .070)	.98	.98	.039
Education							
Overall	1203.01	192	4721	.067 (.063, .070)	.98	.98	.045
High school or less	187.62	48	694	.065 (.055, .075)	.98	.98	.039
2-year degree	410.94	48	1733	.066 (.060, .072)	.98	.98	.041
4-year degree	316.17	48	1984	.063 (.057, .070)	.98	.98	.040
Postgraduate	286.63	48	900	.074 (.066, .083)	.97	.97	.045
Income							
Overall	1077.37	144	4182	.068 (.064, .072)	.98	.98	.043
<\$30,000	321.01	48	1248	.068 (.061, .075)	.98	.98	.041
\$30,000 to \$74,999	390.92	48	1649	.066 (.060, .072)	.98	.98	.038
>\$75,000	365.35	48	1285	.072 (.065, .079)	.98	.98	.043

Note. CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation; Scaled  $\chi^2$  = Satorra and Bentler's (2001) adjusted chi square; sRMR = standard root mean square residual.

attitudes ( $ps > .19$ ), suggesting that these relationships may be relatively constant for men from different community sizes.

**Educational level.** The overall educational level model, as well as the models for men with a high school diploma/GED or less, some college or a 2-year college degree, a 4-year college degree, and postgraduate education, all showed acceptable fit to the data (see Table 3). As with community size, invariance testing showed significant differences in the relationships between the variables across the different groups,  $\Delta\chi^2(15) = 32.69$ ,  $p = .005$ . Follow-up analyses showed significant differences in the relationships of conformity to masculine norms and self-stigma for men having a postgraduate degree ( $b = .41$ ) and men with both (a) a high school diploma or less ( $b = .55$ ),  $\Delta\chi^2(1) = 6.90$ ,  $p = .009$ , and (b) a 4-year college degree ( $b = .54$ ),  $\Delta\chi^2(1) = 7.02$ ,  $p = .008$ . Men with a postgraduate degree exhibited a weaker connection between conformity to masculine norms and self-stigma than the other two groups of men.

Moreover, men with a postgraduate degree and men with some college or a 2-year degree also showed a difference in the

relationship between self-stigma and attitudes,  $\Delta\chi^2(1) = 5.14$ ,  $p = .023$ . Men with a postgraduate ( $b = .71$ ) had a stronger connection between self-stigma and attitudes than those with some college or a 2-year degree ( $b = .60$ ). No other differences across groups were found for the link between self-stigma and attitudes ( $ps > .09$ ) or the link between conformity to masculine norms and attitudes ( $ps > .45$ ), suggesting that these relationships may be relatively similar for men with different educational levels.

**Income level.** The overall educational level model, as well as the models for men that reported a household income of less than \$30,000/year, \$30,000 to \$74,999 per year, and over \$75,000 per year, showed acceptable fit to the data (see Table 3). In contrast to community size and education, however, the invariant and freely estimated models did not significantly differ across the three groups,  $\Delta\chi^2[10] = 13.26$ ,  $p = .21$ , suggesting that the relationships between variables may be similar for men with different income levels.

Table 4  
Model Paths by Demographic Group

Group	Masculinity → stigma	Stigma → attitudes	Masculinity → attitudes
Community size			
Rural	.64	-.61	-.26
Suburban	.48	-.63	-.19
Urban	.45	-.64	-.21
Education			
High school or less	.55	-.60	-.23
2-year degree	.48	-.60	-.19
4-year degree	.54	-.64	-.20
Postgraduate	.41	-.71	-.25
Income			
<\$30,000	.51	-.58	-.25
\$30,000 to \$74,999	.55	-.59	-.28
>\$75,000	.47	-.66	-.18

Note. All coefficients are significant at  $p < .001$ .

## Discussion

This study sought to answer two main questions. First, does Pederson and Vogel's (2007) help-seeking mediation model appear to retain validity for men across demographic groups? Second, how does the strength of the relationships among the mediation model's variables vary across these groups? As hypothesized, (a) the model adequately fit the data provided by men from every community size, educational background, and income level examined, and (b) several notable variations in the strength of the relationships among the model's variables (conformity to masculine norms, self-stigma, attitudes toward counseling) were present. The results provide evidence that the utility of Pederson and Vogel's (2007) mediation model extends beyond unmarried male college students to groups of underserved groups of men, such as those with little education or income and those who reside in rural communities. In other words, self-stigma appears to play a crucial role in the influence of male norms on the formation of help-seeking attitudes for men from each of these groups. This finding aligns with prior research on the role of stigma in psychological help seeking (e.g., Ludwikowski, Vogel, & Armstrong, 2009; Vogel, Schectman, & Wade, 2010; Vogel et al., 2011).

### Demographic Differences in Masculine Norms, Stigma, and Help Seeking

While the model performed well across all groups analyzed, the variation in means, as well as the relationship strength among the model variables, requires explication.

**Community size.** First, significant differences in the relationships of conformity to dominant masculine norms and self-stigma for men living in rural communities, compared with men living in other community sizes, were found. Men in rural areas showed the strongest connection between conformity to dominant masculine norms and self-stigma. By treating the standardized betas as correlation coefficients (an approximate way to interpret the magnitude of the relationship-strength differences; D. Bonnet, personal communication, October 11, 2010), we found that roughly 41% of the variance of self-stigma was accounted for by conformity to masculine norms for men from rural communities versus around 20% to 23% of the variance for other men. Rural men reported stronger norm conformity, more self-stigma, and less favorable attitudes, and their conformity to masculine norms accounted for almost double the amount of variance in self-stigma compared with other men. This finding is consistent with previous theoretical discussions in the literature regarding the importance of masculinity (Fuller et al., 2000; Levant & Habben, 2003) and stigma (Gunnell & Martin, 2004; Hoyt et al., 1997; Wrigley et al., 2005) for men from rural communities. The current finding also helps to explain initial studies finding that men from rural communities are more likely to delay seeking medical care and to underutilize mental health services (Esters, Cooker, & Ittenbach, 1998).

One reason for the greater relationship between conformity to masculine norms and self-stigma for rural men may be due to more limited confidentiality and the greater potential for dual relationships in small towns. Lower levels of social support could also be an important factor accounting for this increased prominence of stigma (Dudley, 2000). Future researchers may want to directly

assess the importance of these variables for the link between conformity to dominant masculine norms and self-stigma. Alternatively, due to a shortage of psychological providers in rural areas, men may feel guilty (and have greater self-stigma) about traveling longer distances to seek services, as travel requires time away from family. Furthermore, this shortage reduces choice among mental health providers, which makes it more difficult to identify a provider whose treatment philosophy matches the worldview of the client (Jackson et al., 2007). In addition to this, rural providers' higher workloads may strain their ability to allocate adequate time to treating each client and increase wait-list times for their clients. It is possible that this lack of access to mental health services could exacerbate self-stigma in rural settings, and future research is needed to address this possibility.

Importantly, there may have been significant within-group differences in the studied constructs among men from rural areas. For example, the relationship between self-stigma and help-seeking attitudes might be stronger for rural men from low socioeconomic backgrounds versus those from high socioeconomic backgrounds. As we did not consider other measures of socioeconomic background beyond education and income, future researchers should examine such intragroup differences for a more nuanced understanding of help-seeking processes.

**Educational level.** We also found differences based on educational level. The most highly educated men (i.e., men with graduate education) had significantly more favorable attitudes and exhibited a weaker association between conformity to dominant masculine norms and self-stigma than other men. Roughly 17% of the variance of self-stigma being accounted for by conformity to masculine norms for men with a graduate degree while other men showed 23% to 30% of the variance. This modest decrease for more highly educated men may make sense in light of recent research showing that those with higher levels of education tend to be slightly less gender-typified (Myers & Booth, 2002). As such, men who have gone through postgraduate education are slightly less likely to internalize negative aspects of seeking help and are less likely to view help seeking as incompatible with how they see themselves as a man. Future researchers may want to examine which factors are present for men who pursue postgraduate education that may lessen the impact of conformity to dominant masculine gender roles. Such studies may help create targeted interventions and increase favorable attitudes toward counseling and the likelihood men will seek help earlier.

Interestingly, self-stigma accounted for about half of the variance in graduate-educated men's help-seeking attitudes, while this percentage was about 36% to 40% for men with less education. This suggests that while the men with graduate training in this study may have internalized dominant masculine role messages as self-stigma to a lesser degree than other men, the self-stigmatization they do possess is a stronger predictor of their attitudes toward seeking help than it is for other men. In other words, self-stigma, as opposed to cultural or structural barriers, may be an especially important factor to address within interventions aimed at this population. Such interventions should incorporate a focus on strengthening social support, given its suggested importance in buffering men from the impact of stigma (Rochlen, McKelley, & Whittaker, 2010).

**Income level.** Interestingly, despite finding differences based on education, no differences in the strength of relationships among

the three variables were discovered for income. This implies that the associations among conformity to dominant masculine norms, self-stigma, and attitudes are fairly consistent across income levels. At first, this finding may not seem consistent with studies finding that lower income and unemployment are linked to less frequent use of professional services (Hodgetts & Chamberlain, 2002; Verhaak, 1995). However, it is possible that the reason for differences in service use based on income have less to do with differences in masculinity and stigma and more to do with other factors not related to masculinity, such as knowledge about counseling services and structural factors, including access to services, transportation limitations, and cost barriers (Gulliver, Griffiths, & Christensen, 2010). However, it is also possible that our income categories were not sufficiently sensitive to detect differences. We chose the categories based on U.S. census data regarding median household income; researchers interested in potential differences linked to income may want to specifically target men at the extreme end of the spectrum (i.e., severely economically disadvantaged men) in order to achieve a more sensitive test of this factor. That being said, mean differences in self-stigma and attitudes align with prior research, finding that men with less annual income report greater self-stigma and less favorable attitudes toward counseling. It is important to note that comparisons on the basis of objective social class indices (e.g., income) are inherently limited. For example, stratifying individuals by income implicitly assumes individuals in a given class have similar spending habits and wealth/savings (Liu, Soleck, Hopps, Dunston, & Pickett, 2004). Therefore, future research should examine the impact of subjective social class on the help-seeking process (Liu, Ali, et al., 2004).

In summary, the current results suggest that masculine norms are linked to self-stigma and, in turn, attitudes toward counseling across all male subgroups. Interestingly, though, some important differences in the strengths of the relationships between masculinity and stigma, and between stigma and attitudes, seem to be present. For example, the relationship between masculine norms and self-stigma appears to be about twice as strong for rural men than for other men. In turn, this same relationship is weaker for men with graduate education compared with those with less education. However, no significant variability in these relationships was found between men from different income levels. The current findings help identify sources of variability in the relationships among constructs within a model of help seeking—variability that has engendered confusion among researchers attempting to ascertain the true importance of stigma as a barrier to seeking counseling (e.g., Brown et al., 2010; Shechtman et al., 2010). These findings, like those of prior help-seeking investigations utilizing invariance testing (Liao, Rounds, & Klein, 2005; Ludwikowski et al., 2009; Vogel et al., 2007), demonstrate the importance of accounting for relationship strength differences when seeking to investigate the utility of theories across diverse groups.

### Limitations

The results of this study should be considered within the context of its limitations. First, these results are based upon self-report methods, the limitations of which are well documented, including potential social desirable responding (Lucas & Baird, 2006). However, allowing participants to participate anonymously has been

shown to reduce social desirable responding (Booth-Kewley, Larson, & Miyoshi, 2007). Second, longitudinal and experimental designs are needed to confirm the theory-driven casual ordering among the model variables, as is the case with all structural equation modeling studies based on correlational data. For example, future research may seek to prime men's masculine role norms and measure the impact on reported self-stigma and attitudes toward counseling. Third, all samples derived from online studies, including ours, may be subject to bias, as not all men use the Internet nor visit the Web locations where the study was advertised. However, online studies facilitate more robust sample sizes and yield results with comparable psychometric properties as paper-and-pencil protocols (Birnbaum, 2004).

Fourth, the large percentage of participants reporting symptoms of depression in this sample may have been due to sampling method, as the study was advertised as an investigation into depression, among other constructs. Overall, having a larger sample of depressed individuals is a potential strength, as the help-seeking decisions are likely more relevant to those currently experiencing a mental health concern. However, the specific effect on the results of having a largely depressed sample is not fully clear from previous research. Some researchers have shown that those who are not distressed report similar help-seeking attitudes and decisions as those currently distressed (Vogel et al., 2007). Other studies have shown that participants experiencing higher levels of depression report greater self-stigma of mental illness than those reporting lower levels of depression in outpatient samples (Yen et al., 2005). Given these mixed findings, we thought it was important include depression as a covariate in the analysis to allow for the relationship between all other variables to be over and above the effects of depression. We would not expect the current findings to change considerably if a less-depressed sample was used in subsequent research.

### Clinical Implications

The central clinical implication of our findings is that self-stigma is an important barrier to seeking professional mental health services for men across community size, education, and income lines. While mental health interventions designed to decrease men's conformity to traditional masculine norms can be successful, such interventions have not been shown to significantly improve help-seeking attitudes (Smith et al., 2008). Therefore, addressing stigma as a primary mediator of, and more proximal antecedent to, help-seeking attitudes appears worthwhile.

Several recommendations for both prevention and intervention stem from these findings. First, mental health marketing efforts, such as the National Institute of Mental Health's "Real Men Real Depression" campaign, should seek to directly address men's self-stigma by normalizing and providing information about mental health issues, providing corrective information about therapy (e.g., clients will maintain autonomy and enter into a collaborative relationship; research shows therapy works and is worth the cost), and reframing the act of seeking help as courageous and proactive (Addis & Mahalik, 2003; Griffiths, Christensen, Jorm, Evans, & Groves, 2004; Hammer & Vogel, 2010). Supplying male-tailored antistigma material in medical waiting rooms, where men are more likely to seek initial assistance, is also recommended (Andrews et al., 2001; Dew, Bromet, Schulberg, Parkinson, & Curtis, 1991). If



possible, channeling men into single-session groups, where they can experience counseling first-hand for a brief time, has documented effectiveness in reducing self-stigma (Wade, Post, Cornish, Vogel, & Tucker, 2011). Second, addressing self-stigma with new clients may help prevent premature termination and improve treatment adherence (Sirey, Bruce, Alexopoulos, Perlick, Friedman, et al., 2001; Sirey, Bruce, Alexopoulos, Perlick, Raue, et al., 2001). Working to build greater trust in the therapeutic relationship may also reduce the perceived threat of seeking help to clients' self-esteem and confidence (Wade et al., 2011).

A final clinical implication of this study is that, while self-stigma appears relevant to each group studied, demographic background did influence the relationships among conformity, self-stigma, and attitudes for these men. Because culturally tailored interventions outperform general interventions, clinicians are advised to consider adapting their approach when advertising their services and working with men from these different groups (Ryan & Lauer, 2002). For example, a clinician working with a rural male client may want to explore how the client conceptualizes masculinity and the implications for dealing with mental illness and pursuing treatment. Utilizing a structured strengths-based, problem-solving approach may better facilitate their comfort in therapy (Hammer & Good, 2010). Furthermore, nontraditional therapeutic approaches, such as adventure therapy (Scheinfeld, Rochlen, & Buser, 2011) and online counseling (Rochlen, Land, & Wong, 2004), may be especially useful in circumventing rural men's stigma around seeking help. In contrast, focusing on the influence of masculine role conformity on graduate-educated men's self-stigma may be less productive, due to the lesser relationship between these two constructs found in the current study.

### Future Research

The path coefficients reveal that other mediators beyond self-stigma may account for some of the relationship between conformity to masculine norms and attitudes for each of the groups. Future research is required to identify these mediators and incorporate them into the overall model. For example, research has found that conforming to masculine norms increases the perception of barriers to seeking help, such as distrust of caregivers and prohibitive practical constraints (e.g., time, money, transport), in addition to increasing the perceived need for emotional control, self-reliance, and problem minimization (Mansfield, Addis, & Courtenay, 2005). Thus, modeling these factors in concert with self-stigma may help better account for the full masculinity-attitudes association. Moreover, embedding Pederson and Vogel's (2007) mediation model within a larger Theory of Planned Behavior (TPB; Ajzen, 1991) framework may increase the model's ability to fully account for the role that masculine socialization plays in help-seeking behavior (Smith et al., 2008). In a recent TPB study, in addition to attitudes, personal confidence in the ability to seek help and perception of subjective norms around seeking help both uniquely predicted help-seeking intentions (Mo & Mak, 2009). Beyond the delineation of additional mediators, incorporating moderators such as general self-efficacy, perceived normativeness, ego-centrality of the presenting issue, and social groups to which men belong is also recommended to increase the utility of the model (Addis & Mahalik, 2003; Boman & Walker, 2010).

### Conclusions

In conclusion, the impact of conformity to dominant masculine norms on self-stigma, and their joint influence on attitudes toward seeking professional mental health services help, appears to be a salient process for men across community size, educational background, and income level. However, the relationships among these factors vary as a function of demographic background; these variations warrant reflection in the tailored prevention and intervention provided to men by psychologists. Future research should seek to embed Pederson and Vogel's (2007) mediation model within larger theoretical frameworks that account for other factors related to masculine socialization, self-stigma, and attitudes toward therapy.

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