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Conceptions of Mental Illness: Attitudes of Mental Health Professionals and the General Public

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Abstract

Objectives—The authors compared attitudes of the U.S. general public and of mental health professionals about the competence and perceived dangerousness of people with mental health problems and the desire for social distance from them. Factors related to negative attitudes and the desire for social distance also were examined.

Methods—Vignettes describing individuals meeting *DSM-IV* criteria for major depression and schizophrenia were included in the 2006 General Social Survey (GSS) and a 2009 study of mental health professionals, and responses were descriptively compared (GSS, N=397 responses to depression vignette, N=373 responses to schizophrenia vignette; 731 mental health professionals responded to both vignettes). Regression analyses examined whether demographic and provider characteristics were associated with perceptions of less competence and perceived dangerousness of the vignette character and with respondents' desire for social distance.

Results—Compared with the American public, mental health professionals had significantly more positive attitudes toward people with mental health problems. However, some providers' conceptions about the dangerousness of people with schizophrenia and provider desire for social distance from clients in work and personal situations were concerning. Younger age, self-identifying as non-Hispanic white, being female, having at least a four-year college degree, being familiar with mental illness, and certain job titles and more years of experience in the mental health field were predictive of more positive conceptions.

Conclusions—Although mental health professionals held more positive attitudes than the general public about people with mental health problems, strong stereotypes persisted in both

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groups, especially concerning schizophrenia. This study identified several demographic and provider characteristics that can inform intervention strategies in both groups.

Surveys in the United States have found that public attitudes toward people with mental disorders are negative (1). Stereotypes that discredit and undervalue individuals with mental health problems are deeply embedded in societal norms (2). The ramifications are that individuals with mental disorders are subjected to prejudice and discrimination in employment, housing, medical care, and social relationships (3–7). This segment of the population may internalize negative stereotypes that affect their well-being (8). Concerns about being subjected to negative stereotypes and discrimination have been implicated in the low uptake of potentially beneficial treatment (9,10). Negative public attitudes may also influence decisions about funding for mental health services (11).

Against this backdrop, it is easy to make the case for also understanding the attitudes of mental health professionals. The extent to which mental health professionals hold stereotypic attitudes and how these attitudes compare with those of the general public is a critical, under-researched area. How people with mental disorders are viewed by treatment providers can have a significant impact on treatment outcomes and on their quality of life (12,13). People with mental disorders engage with mental health professionals at a vulnerable time. Even a small number of professionals engaging in the denigration of people with mental illness or holding low expectations for improvement will translate into numerous negative social interactions in any given year (14). Furthermore, many mental health professionals serve as opinion leaders on mental health matters and educators of future providers.

Research results are mixed about mental health professionals' attitudes toward people with mental disorders (14,15). Several studies have found that mental health professionals hold negative attitudes, for example, in response to a vignette about willingness to interact with a person with mental illness, as indicated in measures of social distance (14). One classic article proposes that the attitudes of mental health professionals are skewed negatively by the fact that they tend to see patients who are symptomatic and need treatment and by limited interaction with clients in recovery (16). On the other hand, it is possible that providers will hold more positive attitudes toward individuals with mental disorders compared with the public based on more regular contact (17,18). A failure to find consistent positive results for the attitudes of mental health professionals underscores the need for more research.

This is the first study of the attitudes of mental health professionals in the United States to include a descriptive comparison group based on public attitudes and identical measures. Case vignettes are used to assess differences in perceptions concerning competence to make financial and treatment decisions, perceived dangerousness to others, and desired social distance.

Our hypothesis for this study was that the attitudes of mental health professionals compared with those of the general public will be more positive across outcomes and that attitudes will be more positive for depression than for schizophrenia. To target interventions to reduce

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harmful stereotyping, associations between demographic and provider characteristics and negative conceptions were also examined. Consistent with prior research, with this study we hypothesized that compared with older, nonwhite, and less educated respondents, those who are younger, non-Hispanic white, and better educated will have more positive attitudes and desire less social distance from people with mental illness as described in vignettes and that these relationships will be consistent in both the public and provider samples (1,19,20). We further hypothesized that those with a personal experience of mental illness will have more positive attitudes than those without personal experience. In addition, we hypothesized that providers with more senior job titles and more years of experience in mental health settings will hold more positive attitudes than those with less senior job titles and years of experience in mental health settings.

Methods

Samples

Two data sets were used for this analysis, a sample of mental health professionals and a general population sample. Seven hundred thirty-one providers completed an online survey that took, on average, 35 minutes to complete. To recruit the sample, the chief executive officers of 25 community mental health agencies distributed a letter about the study to all provider staff. The survey was fielded from April 2009 to June 2009 on the Project Implicit server at Harvard University. We received a 49% response rate (N=731) of the total number of providers contacted for this survey (N=1,500). Participants were sent a $15 gift card after completing the survey. Providers were representative of the gender, race-ethnicity, job titles, and education levels of all mental health professionals in Washington State (data not shown) —trends that mirror the demographic characteristics of the national mental health workforce (21).

The general population sample was from raw data from the 2006 General Social Survey (GSS), a biennial stratified multistage probability survey of household clusters in the United States representing noninstitutionalized adults (age ≥18). The 2006 GSS had a response rate of 71% (N=1,523) with 397 people responding to the depression vignette and 373 people responding to the schizophrenia vignette. The GSS, conducted since 1972 by the National Opinion Research Center at the University of Chicago, monitors the attitudes, beliefs, and behaviors of the American people in regard to critical social issues. Most data were collected with computer-assisted in-person interviews.

Measures

Both the mental health professional and 2006 GSS samples were given identical outcome measures used in the 1996 MacArthur Mental Health module. The vignettes portray persons who are untreated and symptomatic. Designed to circumvent social desirability bias, case vignettes describing the symptoms of individuals meeting *DSM-IV* criteria for depression and schizophrenia were presented. No psychiatric diagnoses were given. The race, ethnicity, and sex of vignette characters were varied across presenting problems to control for the effects of these variables in both studies. In the GSS, respondents were assigned at random to one vignette condition; 373 people completed the schizophrenia vignette, and 397 people

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completed the depression vignette. In the mental health professional sample, respondents completed both vignettes, which were presented in random order in the survey.

Respondents answered a series of questions about their desire for social distance from and perceived dangerousness and competence of vignette characters. Outcomes were coded so that higher scores indicated more negative attitudes. The desire for social distance was assessed by asking respondents how willing they would be to have the person described in the vignette live next door, work closely with them on a job, marry into the family, and live in a nearby group home. Responses—“definitely willing,” coded 1; “probably willing,” coded 2; “probably unwilling,” coded 3; and “definitely unwilling,” coded 4—were summed to yield a variable with a score that could range from 4 to 16. A measure of perceived dangerousness asked respondents how likely it was that the person in the vignette would “do something violent towards other people.” Responses included “not likely at all,” coded 1; “not very likely,” coded 2; and “very likely” and “somewhat likely,” coded 3 and combined because of small sample sizes. Competence was assessed by asking respondents how able the person described in the vignette was to make treatment and financial decisions. Responses—“very able,” coded 1; “somewhat able,” coded 2; “not very able,” coded 3; and “not able at all,” coded 4—were summed to create a variable with a score that could range from 2 to 8.

Respondents’ age (in years), gender (coded 1 for female and 0 for male), and race (coded 1 for white and 0 for non-Hispanic white) were demographic measures common to both studies. For the measure of education attainment, those with bachelor’s and advanced degrees (master’s, doctoral, medical, and other degrees) were coded and compared with those with less than a four-year college degree. It was reasonable to assume that the educational exposure of providers had a greater focus on mental health than the general public sample. Personal experience with mental illness was captured in both studies, but substantially different questions were used due to large amounts of missing data on the most comparable GSS question. For the mental health professional study, the question “Have you ever been told by a health or mental health professional that you have a mental illness?” was asked, and responses were coded 1 for yes and 0 for no. The GSS study included the question, coded 1 for yes and 0 for no, “Leaving yourself aside, have you personally ever known someone who has received treatment for a mental health situation?” Additional provider characteristics were presented for the Washington mental health professionals, including job title and total number of years working in the mental health field.

Analysis

For the GSS sample, statistics were weighted to account for sampling design, including the probability of selection, the number of nonrespondents, the number of adults in the household, and differential nonresponse across areas (22). Sample design characteristics of clustering were also accounted for. All statistics computed from the mental health professional study were unweighted. In the mental health professional sample, missing values among predictor variables were replaced by imputed values derived through a Markov chain Monte Carlo method for arbitrary missing data (SAS 9.2).

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Descriptive statistics—means and standard deviations—were calculated to compare the attitudes of mental health professionals with those in the GSS sample. To visually compare the attitudes of the two groups, three- and four-level response categories were collapsed into two levels for histogram presentation, and confidence intervals were calculated for comparison of proportions.

Multivariate analyses were used to examine the associations between demographic characteristics, provider characteristics, and the social distance, dangerousness, and competence outcome measures. To reflect the varying number of items in each outcome measure, each was standardized with a mean of 0 and a standard deviation of 1. Ordinary least-squares regression models were constructed to test the association of demographic variables on social distance and competence. Multinomial logistic regression was used to assess the association of demographic variables with perceived dangerousness. For the mental health professional sample, we accounted for clustering by agency by using a random-intercept model.

Results

Descriptive analyses

The mean±SD age of Washington's mental health professionals and the nationally representative GSS sample was roughly comparable (44±12 years and 45±19 years, respectively). Washington's mental health professionals were much more likely than the GSS sample to be female (77% compared with 54%) and to self-identify as non-Hispanic white (82% compared with 73%). Among the mental health professionals, 9% had less than a bachelor's degree, 27% had a bachelor's degree, and 57% had a master's degree or higher. By contrast, among the GSS sample, 72% had less than a bachelor's degree, 15% had a bachelor's degree, and 13% had an advanced degree. Job categories among providers consisted of case managers (27%), psychiatric nurses (6%), therapists and psychologists (27%), psychiatrists (3%), program managers and directors (12%), and other job titles (26%). Thirty-two percent of the mental health professionals in the sample reported having a diagnosis of a mental illness. Sixty-three percent of the GSS sample indicated they knew someone who received mental health treatment. The mean± SD number of years mental health professionals reported working in the field was 13.53±9.26.

As shown in Figures 1 and 2, across all outcomes and both vignettes, providers held more positive attitudes and demonstrated less desire for social distance compared with the general population sample. In both samples, attitudes toward major depression were more positive than attitudes toward schizophrenia. Substantial numbers of providers held negative attitudes about vignette characters with symptoms of schizophrenia. For instance, over a third indicated they would be unwilling to have this person as a coworker, and nearly a third said it was likely this individual would use violence toward others.

Regression analyses

Compared with younger, female professionals, the older, male mental health professionals believed vignette characters described as having depression were less competent (Table 1).

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Providers with bachelor's and advanced degrees, compared with those with less education, held more positive attitudes and desired less social distance from vignette characters described as having depression. Across outcomes, there was a consistent relationship between providers told they had had a mental illness and more positive attitudes. Compared with case managers, the program managers, psychiatric nurses, and psychiatrists were more likely to perceive that vignette characters described as having depression were competent. Providers with more total years of experience in mental health settings were less likely to perceive that vignette characters with depression were incompetent and dangerous and were less likely to desire social distance from them.

For the GSS sample, older respondents were more likely than younger respondents to perceive that vignette characters were competent to make treatment and financial decisions, and female respondents were less likely than males to perceive that vignette characters with depression were dangerous. Respondents with advanced degrees were less likely to perceive that vignette characters with depression were dangerous.

With the schizophrenia vignette, older providers compared with younger providers perceived the vignette characters as less competent to make treatment and financial decisions (Table 2). Mental health professionals who self-identified as non-Hispanic white and with more education than those with less than a four-year college degree were more positive about the competence of and desired less social distance from the character with schizophrenia. There was a consistent relationship between providers having had a mental illness and having more positive attitudes about persons described as having schizophrenia. Program managers, compared with case managers, were more likely to perceive that the vignette characters with schizophrenia were competent and were less likely to perceive them as dangerous. Providers with more years of experience in the mental health field were more likely to report that the vignette characters with schizophrenia seemed competent, but the comparison was not significant.

In the GSS sample, older participants perceived vignette characters with schizophrenia as being less competent to make treatment and financial decisions and desired social distance from them. Participants self-identifying as non-Hispanic white were less likely than nonwhite participants to perceive that vignette characters with schizophrenia were dangerous. GSS participants with bachelor's degrees were less likely than those with less education to perceive vignette characters with schizophrenia as dangerous. And knowing someone receiving treatment for a mental illness was associated with reduced perceptions that the vignette character was dangerous.

Discussion

In this study, mental health professionals' conceptions about mental illness were substantially more positive than the general public's. However, providers continued to hold some negative conceptions about the dangerousness of people with schizophrenia, and providers indicated some desire for social distance from people with schizophrenia in work and personal situations. Both the mental health professional and general population samples had more positive attitudes about individuals experiencing symptoms of depression than

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those with symptoms of schizophrenia—an accurate assessment of the degree of impairment and risk of violence posed by individuals by diagnostic group (23,24). Demographic characteristics were related to perceptions about vignette characters. Having personal experience with mental illness, certain job titles, and more years of tenure in mental health settings were predictors of more positive conceptions of mental illness.

Research demonstrates that contact and familiarity with persons who have experience with mental illness improve public attitudes (25–27). Our results were consistent with those findings. A large percentage of mental health professionals (32%) reported having received a diagnosis of mental illness. This personal experience and, to a lesser extent, the regular interactions providers have in their profession with people who have mental disorders appear to positively relate to provider attitudes over time (25–28). Contact has been demonstrated to be most effective when certain criteria are met, such as sharing in equal status and working collaboratively in a variety of social contexts (25,27). Relative to the general population, the attitudes of mental health professionals may continue to improve if these criteria are more fully adopted into clinical and workplace interactions.

Mental health professionals also appear to be vulnerable to certain negative societal messages about mental illness. The fact that in employment situations a sizeable proportion of the surveyed mental health professionals desired social distance from vignette characters described as having schizophrenia symptoms is concerning given the rise in staffing peer support specialists—individuals with mental illnesses who are in recovery and who are paid employees within mental health agencies (29). Many mental health professionals also responded that vignette characters with symptoms of schizophrenia were likely to do something violent to others. The public stereotype of dangerousness of persons with mental disorders that involve psychosis has increased over the past 50 years (30,31), created and perpetuated by news coverage of mass shootings and violent events that implicate mental illness as the cause (32,33). Addressing, in both provider and public realms, the dangerousness stereotype will require interventions that bring the perceived risk of violence in line with the facts about risk. There is also a need to shift the public narrative about violence to a more complex one, whereby mental illness is rarely the sole cause (34).

On the other hand, the fact that providers reported some level of perceived dangerousness when reviewing vignettes involving subjects with schizophrenia may not be altogether surprising. The GSS vignettes portray persons with schizophrenia who are untreated and symptomatic. While conceptions of dangerousness of people with schizophrenia are erroneous at a population level, it is possible that providers have witnessed firsthand examples of violence or other dangerous behavior among untreated, symptomatic patients. Had the vignettes been written about persons with schizophrenia in treatment, then perhaps the attitudes of providers would be less negative.

In terms of targeting interventions to specific groups of providers, the results suggest that providers’ experience on the job is a predictor of more positive attitudes. Providers may enter the mental health sector with the same “cultural baggage” that our society holds regarding people with mental illness. Over time, and similar to the robust findings on the contact hypothesis, providers with more experience have lower levels of negativity. The

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implication is that interventions to raise awareness about negative stereotypes should be targeted to providers early in their careers. Program managers held the least negative attitudes, but case managers, therapists, and psychologists who have substantial one-on-one contact with clients may need additional training to address negative conceptions. Hinshaw (35) discussed additional steps that may be useful in addressing stereotypic attitudes among mental health professionals, including increased status for those working in the mental health field, promoting the cultural competency of professionals through training, engaging in heightened respect for the client's perspective, and meeting providers' own need for psychological support.

Consistent with previous research, demographic characteristics influenced perceptions about mental illness (1,19,20). In particular, being non-Hispanic white, being female, being younger, and having more education were positively associated with improved attitudes in both samples. This finding highlights complexity in how stereotypic attitudes develop and points to the need to consider demographic characteristics in developing interventions targeted to improve attitudes. Of note is the consistency of the association between personal experience with mental illness, more positive attitudes, and less desire for social distance, suggesting that recruitment of individuals with personal experience of mental illness into the mental health profession may be a way to positively affect the provider-client relationship.

The implications of this study should be tempered by its limitations. First, direct statistical comparison of these two cross-sectional studies was not possible because of the use of different sampling frames, time points, and data collection methods. The case vignettes used in the provider study were fielded in an online survey, whereas the face-to-face interviews used in the GSS study are considered optimal for its type of survey format. Given this limitation, we cautiously inspected the precision of our two population response estimates and compared confidence intervals. However, to make more robust comparisons of these two population groups, further data collection is required.

A second limitation is the modest response rate in the provider study, which introduced a potential response bias if the nonresponders were systematically different from those who completed the survey. Third, although the vignettes were designed to circumvent social desirability bias relative to more direct questions to assess attitudes, the extent to which they effectively do so is unknown. Mental health professionals may have a strong investment in not revealing negative attitudes about mental illness, which could lead to underreporting of negative conceptions. These limitations notwithstanding, this study provided an unusual opportunity to compare population-based estimates of public attitudes about mental illness with an unusually large and representative sample of community mental health professionals.

Conclusions

Mental health professionals appear to hold more positive attitudes about mental illness than the general public. Providers in this study held some concerning attitudes about violence and about their own desire for social distance from persons described in vignettes as having schizophrenia. How people with mental disorders are viewed by treatment providers and the general public can have a significant impact on treatment outcomes and the quality of life of clients. There is a need to invest in developing interventions that shift providers' and public attitudes.

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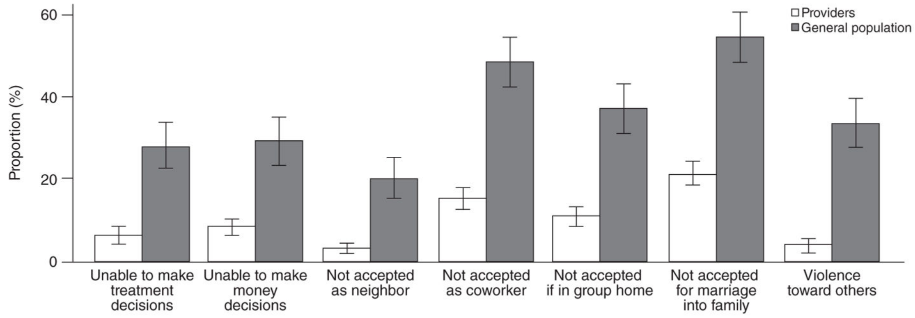

Figure 1.

Attitudes of Washington State mental health professionals and the general population toward vignette character with depression[a]

[a] Respondents to the 2006 General Social Survey constituted the general population sample. The 95% confidence intervals (error bars) were computed separately for each proportion within its sample to facilitate informal comparison.

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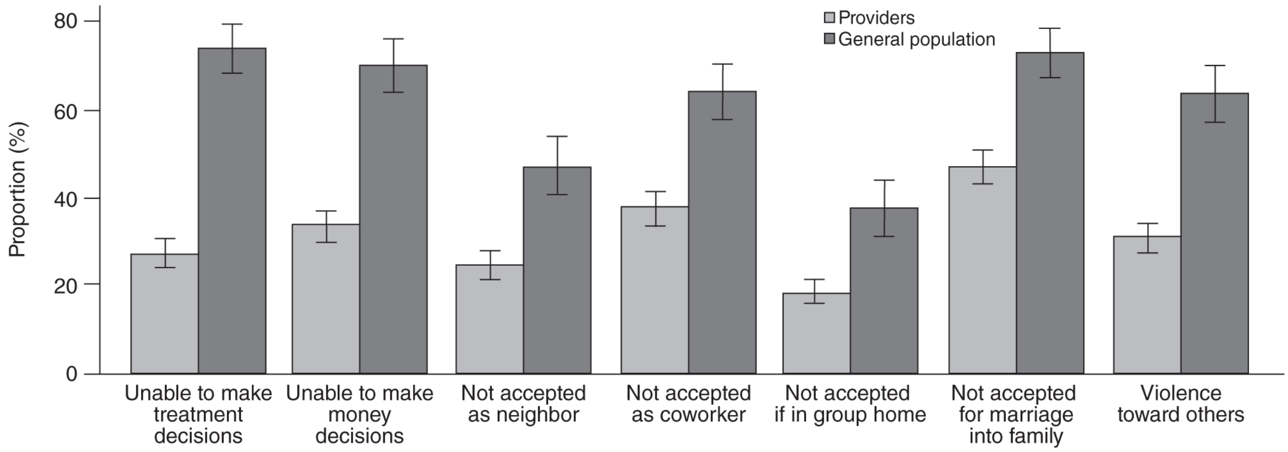

Figure 2.

Attitudes of Washington State mental health professionals and the general population toward vignette character with schizophrenia[a]

[a] Respondents to the 2006 General Social Survey constituted the general population sample. The 95% confidence intervals (error bars) were computed separately for each proportion within its sample to facilitate informal comparison.

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Table 1

Multivariate associations between demographic and other characteristics and conceptions of depression between mental health professionals and the general public

	Mental health professionals (N=706–731)									2006 General Social Survey sample (N=325–397)								
	Less competence			Perceived dangerousness			Desire for social distance			Less competence			Perceived dangerousness			Desire for social distance		
Characteristic	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**
Age	.02	<.01	<.01	<.01	.01	ns	<.01	.01	ns	.01	<.01	.03	<.01	.01	ns	<.01	<.01	ns
Female (reference: male)	−.26	.09	<.01	−.33	.20	ns	−.14	.09	ns	−.02	.02	ns	−.27	.08	<.01	−.19	.05	ns
White (reference: nonwhite)	−.12	.10	ns	<.01	.22	ns	−.17	.10	ns	−.37	.34	ns	−.95	.53	ns	−.17	.19	ns
Education (reference: <bachelor’s degree)																		
Bachelor’s degree	−.34	.14	.02	−.65	.31	.04	−.36	.14	.01	<.01	.11	ns	−.45	.49	ns	.08	.17	ns
Advanced degree	−.47	.14	<.01	−1.08	.30	<.01	−.29	.14	.04	−.01	.09	ns	−.26	.08	<.01	−.23	.10	ns
Has a mental illness	−.20	.09	.03	−.53	.18	<.01	−.49	.09	<.01	—	—		—	—		—	—	
Knows someone who has received mental health treatment	—	—		—	—		—	—		.16	.10	ns	−.04	.25	ns	−.15	.09	ns
Job title (reference: case manager)																		
Psychiatric nurse	−.48	.18	<.01	−.35	.37	ns	−.25	.18	ns	—	—		—	—		—	—	
Therapist or psychologist	−.10	.11	ns	−.11	.23	ns	.06	.11	ns	—	—		—	—		—	—	
Psychiatrist	−.72	.24	<.01	−.50	.52	ns	−.14	.24	ns	—	—		—	—		—	—	
Program manager	−.28	.14	<.05	−.21	.29	ns	−.26	.14	ns	—	—		—	—		—	—	
Other professional	−.12	.11	ns	−.13	.24	ns	−.19	.11	ns	—	—		—	—		—	—	
Total years in mental health	−.02	<.01	.02	−.03	.01	.04	−.01	.01	ns	—	—		—	—		—	—	

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Table 2

Multivariate associations between demographic and provider characteristics and conceptions of schizophrenia between mental health professionals and the general public

	Mental health professionals (N=706–731)									2006 General Social Survey sample (N=325–397)								
	Less competence			Perceived dangerousness			Desire for social distance			Less competence			Perceived dangerousness			Desire for social distance		
Characteristic	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**	**β**	**SE**	**p**
Age	.01	<.01	<.01	<.01	<.01	ns	<.01	.01	ns	<.01	<.01	<.01	<.01	<.01	ns	<.01	<.01	.03
Female (reference: male)	−.13	.09	ns	.13	.19	ns	−.02	.09	ns	−.09	.13	ns	.30	.51	ns	−.04	.17	ns
White (reference: nonwhite)	−.22	.10	.04	−.35	.21	ns	−.26	.10	.01	−.18	.12	ns	−.88	.15	<.01	−.12	.09	ns
Education (reference: <bachelor’s degree)																		
Bachelor’s degree	−.38	.14	<.01	−1.15	.30	<.01	−.30	.14	.03	.21	.15	ns	−.58	.09	<.01	.19	.04	ns
Advanced degree	−.38	.13	<.01	−.92	.28	<.01	−.15	.14	ns	.18	.33	ns	.01	.02	ns	−.06	.13	ns
Has a mental illness	−.22	.09	<.01	−.23	.18	ns	−.32	.09	<.01	—	—		—	—		—	—	
Knows someone who has received mental health treatment	—	—		—	—		—	—		.24	.11	ns	.15	.01	<.01	.25	.27	ns
Job title (reference: case manager)																		
Psychiatric nurse	−.32	.17	ns	−.07	.36	ns	−.15	.18	ns	—	—		—	—		—	—	
Therapist or psychologist	.05	.11	ns	−.33	.23	ns	.25	.11	.02	—	—		—	—		—	—	
Psychiatrist	−.77	.24	<.01	−.59	.51	ns	−.05	.24	ns	—	—		—	—		—	—	
Program manager	−.45	.14	<.01	−.95	.29	<.01	−.20	.14	ns	—	—		—	—		—	—	
Other professional	−.01	.11	ns	−.17	.23	ns	−.17	.11	ns	—	—		—	—		—	—	
Total years in mental health	−.01	<.01	ns	−.01	.01	ns	<.01	.01	ns	—	—		—	—		—	—	