

# Attitudes Toward Mental Disorders Among College Students

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## ABSTRACT

To investigate the attitudes held by college students toward mental disorders and those who experience them, a random phone survey was conducted of undergraduates at a medium-sized Midwestern state university. Students were read a vignette portraying people experiencing symptoms of either schizophrenia or major depressive disorder. They were then asked what they thought had caused these symptoms; the likeliness that the people portrayed are mentally ill; the likeliness that they would do something violent toward others; and their willingness to interact with them. Students are most likely to attribute the causes of mental disorders to a chemical imbalance in the brain and stressful circumstances. Students are significantly more likely to label people experiencing symptoms of schizophrenia as being mentally ill. Students are significantly more likely to believe that people experiencing symptoms of schizophrenia would do something violent toward others. Students who attribute the cause of mental disorders to a genetic or inherited problem are significantly more willing to interact with people experiencing mental disorders. Students who feel that people who experience mental disorders would do something violent toward others are significantly less willing to interact with them.

## INTRODUCTION

Mental disorders and those who experience them continue to be stigmatized in the United States. The addition of the MacArthur Mental Health Module to the 1996 General Social Survey (GSS) made it possible for researchers to evaluate Americans' current attitudes toward mental disorders and those who experience them (Pescosolido et al. 2000). In a comparison of data obtained in a 1950 national survey conducted by Shirley Star and in the 1996 GSS, Phelan et al. (2000) found that Americans' attitudes toward mental disorders and those who experience them worsened. Phelan et al. found that Americans today are more likely to view a variety of mental problems as mental disorders, and they are less likely to equate mental disorders with psychosis (2000). However, those who equate mental disorders with psychosis are over two times more likely to believe that people who experience mental disorders are dangerous than they were in 1950 (Phelan et al. 2000).

Additional analysis conducted on the 1996 GSS by Link et al. (1999) allowed researchers to gain an understanding of the scope of Americans' willingness to interact with people experiencing mental disorders; their beliefs on the causes of mental disorders; their attribution of the label of mental illness to those experiencing mental disorders; and their beliefs regarding the potential dangerousness of those experiencing mental disorders. Link et al. found that more Americans are unwilling to interact with people experiencing symptoms of schizophrenia than with people experiencing symptoms of major depressive disorder (1999). Americans are significantly less willing to interact with people experiencing symptoms of schizophrenia (Link et al. 1999).

Link et al. found that Americans are most likely to attribute the cause of mental disorders to stressful circumstances (1999). They are more likely to label people experiencing symptoms of schizophrenia as being mentally ill than people experiencing symptoms of major depressive disorder. More Americans feel that it is likely that people experiencing symptoms of schizophrenia would do something violent toward others than people experiencing symptoms of major depressive disorder. Americans are significantly more likely to feel that people experiencing symptoms of schizophrenia would do something violent toward others (Link et al. 1999).

Further analysis conducted on the 1996 GSS data by Martin, Pescosolido, and Tuch (2000) helped illuminate the reasons behind Americans' reluctance to interact with people who experience mental disorders. Americans who believe that a genetic or inherited problem and stress are factors in the development of mental disorders are significantly more willing to interact with people who experience them. Americans who view bad character as a factor in the development of mental disorders are significantly less willing to interact with people who experience them. Americans who label people experiencing mental disorders as being mentally ill are significantly less willing

to interact with them. Finally, Americans who feel that people experiencing mental disorders would do something violent toward others are significantly less willing to interact with them (Martin, Pescosolido, and Tuch 2000).

Erving Goffman (1963) defined stigma as “an attribute that is deeply discrediting” (p. 3). Mental disorders comprise one such attribute (Goffman 1963). Link and Phelan (2001), among other researchers, have expanded Goffman’s definition of stigma. Link and Phelan organize the concept of stigma into four different components: labeling, stereotyping, separation, and status loss and discrimination (2001). All four components interact with each other in a person’s experience of stigma. Labeling involves the categorization of people into different groups. The characteristics that determine what group one belongs to differ depending on what society and time period one lives in. Stereotyping involves the association of labels with negative attributes. This association facilitates the separation of labeled persons from everyone else. Separation itself can be used to justify the association of negative attributes to labeled persons. Finally, labeling, stereotyping, and separation lead to the loss of status and the experience of discrimination by the labeled person. A person can experience individual, as well as structural or institutional discrimination. Status loss can also cause a person to experience discrimination. All four components of stigma occur together in a situation in which certain groups of people have power over other groups (Link and Phelan 2001).

In order to investigate the attitudes held toward mental disorders and those who experience them among college students in the United States, I conducted a survey of undergraduate students at a medium-sized Midwestern state university. My study was similar to that conducted by Martin, Pescosolido, and Tuch (2000). I wanted to know what effects the beliefs held about the causes of mental disorders; the labeling of people experiencing mental disorders as mentally ill; and the perceived dangerousness of people experiencing mental disorders have on college students’ willingness to interact with them. I hypothesized that students who attribute biological or social/structural causes to mental disorders would be more willing to interact with people experiencing them. I hypothesized that students who label people experiencing mental disorders as being mentally ill would be less willing to interact with them. I hypothesized that students who view people experiencing mental disorders as potentially dangerous would be less willing to interact with them. I also hypothesized that students would be less willing to interact with people experiencing symptoms of schizophrenia than with people experiencing symptoms of major depressive disorder. A quantitative analysis of the data using univariate, bivariate, and multivariate analyses was conducted to test the research hypotheses.

## **METHOD**

### *Respondents*

60 female and 31 male undergraduate students at a medium-sized Midwestern state university responded to this study. Respondents were chosen via a simple random sample, and surveyed via a telephone survey.

### *Measures*

*Willingness for Social Interaction* was measured using six different items. Respondents were asked to rate their willingness to socially interact in a variety of ways with a person portrayed as experiencing symptoms of either major depressive disorder or schizophrenia. Respondents were asked to rate 1) their willingness to move next door to a person portrayed as experiencing symptoms of major depressive disorder or schizophrenia; 2) their willingness to make friends with a person portrayed as experiencing symptoms of major depressive disorder or schizophrenia; 3) their willingness to spend an evening socializing with a person portrayed as experiencing symptoms of major depressive disorder or schizophrenia; 4) their willingness to have a person portrayed as experiencing symptoms of major depressive disorder or schizophrenia start working closely with them on a job; 5) their willingness to have a group home for people portrayed as experiencing symptoms of major depressive disorder or schizophrenia opened in their neighborhood; and 6) their willingness to have a person portrayed as experiencing symptoms of major depressive disorder or schizophrenia marry into their family. Responses were rated as “definitely willing,” “probably willing,” “probably unwilling,” and “definitely unwilling” and coded from 1 to 4 respectively.

*Vignette Version.* Respondents were read one of four different vignette versions portraying a person experiencing symptoms of a mental disorder. Two of the vignette versions portray either a man or a woman who is experiencing symptoms of major depressive disorder, while two portray either a man or a woman who is experiencing symptoms of schizophrenia. The vignettes were coded from 1 to 4. Vignette versions 1 and 2 portray a man and a woman who are experiencing symptoms of major depressive disorder, respectively, while vignette versions 3 and 4 portray a man and a woman who are experiencing symptoms of schizophrenia, respectively.

### Vignette Versions 1 and 2 (Major Depressive Disorder)

[John/Mary] is a white [man/woman] with a college education. For the past two weeks [John/Mary] has been feeling really down. He/She isn't enjoying things the way he/she normally would. In fact nothing gives him/her pleasure. Even when good things happen, they don't seem to make [John/Mary] happy. He/She pushes on through his/her days, but it is really hard. The smallest tasks are difficult to accomplish. He/She finds it hard to concentrate on anything. He/She feels out of energy and out of steam. And even though [John/Mary] feels tired, when night comes he/she can't go to sleep. [John's/Mary's] family has noticed that he/she hasn't been himself/herself for about the last month and that he/she has pulled away from them. [John/Mary] just doesn't feel like talking.

### Vignette Versions 3 and 4 (Schizophrenia)

[John/Mary] is a white [man/woman] with a college education. Up until a year ago, life was pretty okay for [John/Mary]. But then, things started to change. He/She thought that people around him/her were making disapproving comments, and talking behind his/her back. [John/Mary] was convinced that people were spying on him/her and that they could hear what he/she was thinking. [John/Mary] lost his/her drive to participate in his/her usual work and family activities and retreated to his/her home, eventually spending most of his/her day in his/her room. [John/Mary] was hearing voices even though no one else was around. These voices told him/her what [to] do and what to think. He/She has been living this way for six months.

*Causal Attribution.* Respondents were asked to rate the likelihood that the symptoms experienced by the person portrayed in the vignette are due to a variety of causes. Respondents were asked to rate the likelihood that the symptoms were caused by 1) his or her own bad character; 2) a chemical imbalance in the brain; 3) the way he or she was raised; 4) stressful circumstances in his or her life; 5) a genetic or inherited problem; and 6) God's will. These items are meant to represent genetic/medical causes, social/structural causes, and individual-level causes of mental disorders (Pescosolido et al. 2000). Responses were rated as "very likely," "somewhat likely," "not very likely," and "not at all likely" and coded from 1 to 4 respectively.

*Label of Mental Illness.* Respondents were asked to rate the likelihood that the person portrayed in the vignette is experiencing a mental illness. Responses were rated as "very likely," "somewhat likely," "not very likely," and "not at all likely" and coded from 1 to 4 respectively.

*Potential Dangerousness to Others.* Respondents were asked to rate the likelihood that the person portrayed in the vignette would do something violent toward others. Responses were rated as "very likely," "somewhat likely," "not very likely," and "not at all likely" and coded from 1 to 4 respectively.

## RESULTS

### Univariate Analysis

*Willingness for Social Interaction.* As shown in Table 1, students are most willing to move next door to people portrayed as experiencing symptoms of major depressive disorder, and are most willing to have a group home in their neighborhood for people portrayed as experiencing symptoms of schizophrenia. Ninety percent of students reported being definitely or probably willing to move next door to people portrayed as experiencing symptoms of major depressive disorder, while 97.6% reported being definitely or probably willing to have a group home for people portrayed as experiencing symptoms of schizophrenia opened in their neighborhood. Students are least willing to work closely with people portrayed as experiencing symptoms of both major depressive disorder and schizophrenia. Thirty-eight percent of students reported being definitely or probably willing to work closely with the people portrayed as experiencing symptoms of major depressive disorder, while 43.0% reported being definitely or probably willing to work closely with the people portrayed as experiencing symptoms of schizophrenia.

**Table 1.** Willingness for Interaction. *Note: Percentages represent responses of definitely or probably willing.*

Vignette Version	Interaction					
	Move Next Door	Socialize	Friends	Work Closely	Group Home	Marry Into Family
Major Depressive Disorder	90%	64%	78%	38%	82%	60%
Schizophrenia	78%	73%	66%	44%	98%	61%

*Causal Attribution.* As shown in Table 2, students are most likely to attribute the causes of the symptoms portrayed in the major depressive disorder and schizophrenia vignettes to both a chemical imbalance in the brain and stressful circumstances. Ninety-two percent of students reported that it is very or somewhat likely that the symptoms portrayed in the major depressive disorder vignettes are due to a chemical imbalance in the brain, and 92.0% reported they are due to stressful circumstances. Nearly ninety-three percent of students reported that it is very or somewhat likely that the symptoms portrayed in the schizophrenia vignettes are due to a chemical imbalance in the brain, and 92.7% reported that it is very or somewhat likely that they are due to stressful circumstances. Students are least likely to attribute the symptoms portrayed to God's will. Only 26.0% of students reported that it is very or somewhat likely that the symptoms portrayed in the major depressive disorder vignettes are due to God's will, while only 22.0% reported that it is very or somewhat likely that the symptoms portrayed in the schizophrenia vignettes are due to God's will.

**Table 2.** Causal Attribution. *Note: Percentages represent responses of very or somewhat likely.*

Vignette Version	Causes					
	Bad Character	Chemical Imbalance	Way Raised	Stress	Genetic/Inherited	God's Will
Major Depressive Disorder	30%	92%	54%	92%	66%	26%
Schizophrenia	32%	93%	61%	93%	76%	22%

*Label of Mental Illness.* As shown in Table 3, students are more likely to label people portrayed as experiencing symptoms of schizophrenia as mentally ill than they are people portrayed as experiencing symptoms of major depressive disorder. One-hundred percent of students reported that it is very or somewhat likely that the people portrayed in the schizophrenia vignettes are experiencing a mental illness, while 88.0% reported that it is very or somewhat likely that the people portrayed in the major depressive disorder vignettes are experiencing a mental illness.

*Potential Dangerousness to Others.* As shown in Table 3, students are more likely to believe that people portrayed as experiencing symptoms of schizophrenia would do something violent toward others than people portrayed as experiencing symptoms of major depressive disorder. Only 14.0% of students reported that it is very or somewhat likely that the people in the major depressive disorder vignettes would do something violent toward others, while 41.5% reported that it is very or somewhat likely that the people in the schizophrenia vignettes would do something violent toward others.

**Table 3.** Likelihood Experiencing a Mental Illness, Potential Dangerous to Others.

Vignette Version	Very or Somewhat Likely Experiencing a Mental Illness	Very or Somewhat Likely to Do Something Violent toward Others
Major Depressive Disorder	88%	14%
Schizophrenia	100%	42%

#### *Bivariate Analysis*

Bivariate analysis was conducted to test the research hypotheses. As shown in Table 4, a significant, positive association was found between attributing the symptoms portrayed in the vignettes to stressful circumstances and willingness to spend an evening socializing with the people portrayed. Significant, positive associations were found between attributing the symptoms portrayed to a genetic or inherited problem and stressful circumstances and willingness to have a group home for the people portrayed opened in one's neighborhood. A strong association ( $p < .01$ ) was found between attributing the symptoms portrayed to stressful circumstances and willingness to have a group home for the people portrayed opened in one's neighborhood. A significant, negative association was found between attributing the symptoms portrayed to a chemical imbalance in the brain and willingness to work closely with the people portrayed in the vignettes.

No significant associations were found between labeling the people portrayed in the vignettes as mentally ill and willingness for interaction with them. A strong, significant negative association ( $p < .01$ ) was found between likelihood the people portrayed would do something violent toward others and willingness to move next door to them. A strong, significant negative association ( $p < .01$ ) was found between likelihood the people portrayed would

do something violent toward others and willingness to have them marry into one's family as well. A significant, negative association was found between the schizophrenia vignette versions and willingness to have a group home for the people portrayed opened in one's neighborhood. A significant, negative association was found between the schizophrenia vignette versions and likeliness the people portrayed are experiencing a mental illness. A strong, significant negative association ( $p < .01$ ) was found between the schizophrenia vignette versions and likeliness the people portrayed in the vignettes would do something violent toward others.

**Table 4.** Bivariate Correlations.

	Interaction							
	Move Next Door <sup>d</sup>	Socialize <sup>d</sup>	Be Friends <sup>d</sup>	Work Closely <sup>d</sup>	Group Home <sup>d</sup>	Marry into Family <sup>d</sup>	Likeliness Mentally Ill <sup>a</sup>	Likeliness of Violence <sup>a</sup>
<b>Bad Character<sup>a</sup></b>	-.169	-.119	-.185	.010	-.134	-.055		
<b>Chemical Imbalance<sup>a</sup></b>	.129	-.106	-.052	-.228*	-.092	-.208		
<b>Way Raised<sup>a</sup></b>	-.012	-.047	-.006	-.134	-.109	-.001		
<b>Stress<sup>a</sup></b>	.007	.253*	.121	-.177	.346**	-.050		
<b>Genetic/Inherited<sup>a</sup></b>	.119	.207	.044	.160	.230*	.200		
<b>God's Will<sup>a</sup></b>	.046	-.181	.074	-.011	.004	-.065		
<b>Likeliness Mentally Ill<sup>a</sup></b>	-.093	.045	.085	.008	.093	.016		
<b>Likelihood of Violence<sup>a</sup></b>	-.427**	-.083	-.177	.001	.102	-.276**		
<b>Vignette Version<sup>b</sup></b>	.172	-.085	.158	-.063	-.212*	.014	-.222*	-.310**
<b>Gender<sup>c</sup></b>	.136	-.017	.138	.090	.033	.048	.130	-.043
<b>Year in School</b>	.003	-.062	-.092	-.203	-.124	-.027	-.180	.031
<b>College</b>	-.007	-.053	-.031	-.100	-.036	-.021	.154	-.154

\*  $p < .05$ ; \*\*  $p < .01$

<sup>a</sup> Very or somewhat likely=1

<sup>b</sup> Vignette version, major depressive disorder (m & f)=1

<sup>c</sup> Male=1

<sup>d</sup> Definitely or probably willing=1

#### *Multivariate Analysis*

Eight backward linear regressions were conducted to further test my research hypotheses. Only those models in which two or more associations were revealed will be discussed in this section. As shown in Table 5, 9.1% of the variation in responses to willingness to socialize with the people portrayed in the vignettes can be explained by variation in responses to likeliness the symptoms portrayed are due to stressful circumstances and a genetic or inherited problem. Twenty-four percent of the variation in responses to willingness to work closely with the people portrayed can be explained by variation in responses to likeliness the symptoms portrayed are due to a chemical imbalance in the brain, way raised, stressful circumstances, and a genetic or inherited problem, as well as respondents' year in school.

As shown in Table 5, 22.7% of the variation in responses to willingness to have a group home for the people portrayed in the vignettes opened in one's neighborhood can be explained by variation in responses to likeliness the symptoms portrayed are due to stressful circumstances and a genetic or inherited problem, as well as the schizophrenia vignette versions.

Nearly sixteen percent of the variation in responses to willingness to have the people portrayed marry into one's family can be explained by variation in responses to likeliness the symptoms portrayed are due to a chemical imbalance in the brain and a genetic or inherited problem, as well as likeliness the people portrayed would do

something violent toward others. Finally, 19.1% of the variation in responses to likeliness the people portrayed would do something violent toward others can be explained by variation in responses to likeliness the symptoms portrayed are due to bad character, as well as the schizophrenia vignette versions and respondents' college.

Regression analysis revealed a strong, significant, negative association ( $p < .01$ ) between attributing the symptoms portrayed in the vignettes to stressful circumstances and willingness to work closely with the people portrayed in the vignettes. Attributing the symptoms portrayed to stressful circumstances was, as found in bivariate analysis, significantly, positively associated with willingness to have a group home for the people portrayed opened in one's neighborhood. Attributing the symptoms portrayed to stressful circumstances was very strongly positively associated ( $p < .001$ ) with willingness to have a group home for the people portrayed in one's neighborhood. No significant association was found between attributing the symptoms portrayed to stressful circumstances and willingness to socialize with the people portrayed. A significant, negative association was found between attributing the symptoms portrayed to way raised and willingness to work closely with the people portrayed in the vignettes.

Attributing the symptoms portrayed to a genetic or inherited problem was significantly, positively associated with willingness to socialize and work closely with the people portrayed in the vignettes, as well as have them marry into one's family. Attributing the symptoms portrayed to a chemical imbalance in the brain was significantly, negatively associated with willingness to have the people portrayed marry into one's family. A significant, negative association was again found between attributing the symptoms portrayed to a chemical imbalance in the brain and willingness to work closely with the people portrayed. Attributing the symptoms portrayed to a chemical imbalance in the brain was strongly negatively associated ( $p < .01$ ) with willingness to work closely with the people portrayed in the vignettes.

**Table 5.** Linear Regressions.

	Socialize <sup>c</sup>		Work Closely <sup>c</sup>		Group Home <sup>c</sup>		Marry into Family <sup>c</sup>		Likeliness of Violence <sup>a</sup>	
	b	$\beta$	b	$\beta$	b	$\beta$	b	$\beta$	b	$\beta$
<b>Bad Character<sup>a</sup></b>									.245	.258*
<b>Chemical Imbalance<sup>a</sup></b>			-.524	-.274**			-.463	-.249*		
<b>Way Raised<sup>a</sup></b>			-.202	-.202*						
<b>Stress<sup>a</sup></b>	.366	.201	-.539	-.282**	.417	.366***				
<b>Genetic/Inherited<sup>a</sup></b>	.225	.220*	.237	.217*	.136	.212*	.253	.242*		
<b>Likeliness of Violence<sup>a</sup></b>							-.256	-.235*		
<b>Vignette Version<sup>b</sup></b>					-.103	-.175			-.270	-.307**
<b>Year in School College</b>			-.055	-.183					-.071	-.209*
<b>SE</b>		.452		.446		.265		.452		.402
<b>R</b>		.302		.490		.476		.399		.437
<b>R<sup>2</sup></b>		.091		.240		.227		.159		.191

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

<sup>a</sup> Very or somewhat likely=1

<sup>b</sup> Vignette version, major depressive disorder (m & f)=1

<sup>c</sup> Definitely or probably willing=1

## DISCUSSION

My first hypothesis was partially supported by my research findings. Students who attribute biological or social/structural—over individual-level—causes to mental disorders are, in general, more willing to interact with people who experience mental disorders. Students who attribute the cause of mental disorders to a genetic or inherited problem are significantly more willing to interact with people experiencing mental disorders. They are significantly more willing to socialize with and have a group home for people experiencing mental disorders opened in their neighborhood. They are also significantly more willing to work closely with people experiencing mental disorders and have them marry into their family. These findings support those of previous research (Martin, Pescosolido, and Tuch 2000).

Students who attribute the cause of mental disorders to stressful circumstances are also significantly more willing to want to interact with people experiencing mental disorders. They are significantly more willing to have a group home for people experiencing mental disorders opened in their neighborhood. This supports previous research findings (Martin, Pescosolido, and Tuch 2000). Students who attribute the cause of mental disorders to stressful circumstances are significantly less willing to work closely with people experiencing mental disorders, however. Students who attribute the cause of mental disorders to a chemical imbalance in the brain are also significantly less willing to work closely with people experiencing mental disorders and have them marry into their families. These findings do not support those of previous research (Martin, Pescosolido, and Tuch 2000). Even if students do not attribute mental disorders to individual-level causes (i.e.: blame the victim), they are still unwilling to work closely with people experiencing mental disorders. Work is an essential component of Americans' lives, and it is one area that students may be reluctant to potentially disrupt through interaction with people experiencing mental disorders.

My second hypothesis was not supported by my research findings. Students who label people experiencing mental disorders as being mentally ill are not significantly less willing to interact with them. Most students labeled the people portrayed in the vignettes as being mentally ill and were not significantly less willing to interact with them. This does not support previous research findings (Martin, Pescosolido, and Tuch 2000). Labeling has been identified as an important component in the process of stigmatization (Link and Phelan 2001). The fact that students were not significantly less willing to interact with people labeled as being mentally ill suggests that the concept of mental illness may carry with it fewer negative stereotypes among college populations than it does among the general public. This does not mean that students do not label the behaviors portrayed in the vignettes as different or as deviating from the norm, however.

My third hypothesis was partially supported by my research findings. Students who view people experiencing mental disorders as potentially dangerous are less willing to interact with them. They are less willing to move next door to people they feel would do something violent toward others, and they are less willing to have them marry into their family. These findings support those of previous research (Martin, Pescosolido, and Tuch 2000). The attribution of negative stereotypes to labeled people is another important component in the process of stigmatization conceptualized by Link and Phelan (2001). Negative stereotyping of labeled people has been identified as leading to a desire for separation from them (Link and Phelan 2001).

My fourth hypothesis was partially supported by my research findings as well. Students are significantly more likely to label people experiencing symptoms of schizophrenia as being mentally ill than people experiencing symptoms of major depressive disorder. Students are also significantly more likely to believe that people experiencing symptoms of schizophrenia would do something violent toward others. These findings support those of previous research (Link et al. 1999). Behaviors associated with schizophrenia are more likely than behaviors associated with major depressive disorder to be designated by students as representative of mental illness. People displaying behaviors associated with schizophrenia are more likely than people displaying behaviors associated with major depressive disorder to be seen by students as potentially dangerous. This does not mean that students are less willing to interact with people experiencing symptoms of schizophrenia. Bivariate analysis revealed that students are significantly more willing to have a group home for people experiencing symptoms of schizophrenia opened in their neighborhood than they are for people experiencing symptoms of major depressive disorder. This does not support previous research findings (Link et al. 1999). Regression analyses did not reveal any significant associations between the schizophrenia vignette versions and willingness for interaction, however.

## LIMITATIONS

Results obtained from this study may not be applicable to other undergraduate students in the United States due to a lack of racial, ethnic, and social class diversity among respondents. Because the study was limited to students, the results may not be applicable to the general public.

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**REFERENCES**

- Goffman, Erving. 1963. *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Link, Bruce G. and Jo C. Phelan. 2001. "Conceptualizing Stigma." *Annual Review of Sociology* 27: 363-385. Retrieved December 14, 2004 (EBSCOhost Academic Search Premier).
- Link, Bruce G., Jo C. Phelan, Michaeline Bresnahan, Ann Stueve, and Bernice A. Pescosolido. 1999. "Public Conceptions of Mental Illness: Labels, Causes, Dangerousness, and Social Distance." *American Journal of Public Health* 89: 1328-1333. Retrieved October 2, 2004 (EBSCOhost MasterFile Premier).
- Martin, Jack K., Bernice A. Pescosolido, and Steven A. Tuch. 2000. "Of Fear and Loathing: The Role of 'Disturbing Behavior,' Labels, and Causal Attributions in Shaping Public Attitudes Toward People with Mental Illness." *Journal of Health and Social Behavior* 41: 208-223. Retrieved September 18, 2004 (JSTOR).
- Pescosolido, Bernice A., Jack K. Martin, Bruce G. Link, Saeko Kikuzawa, Giovanni Burgos, Ralph Swindle, and Jo Phelan. 2000. *Americans' Views of Mental Health and Illness at Century's End: Continuity and Change*. Bloomington, IN: Indiana Consortium for Mental Health Services Research. Retrieved October 9, 2004 (<http://www.indiana.edu/~icmhsr/amerview1.pdf>).
- Phelan, Jo C., Bruce G. Link, Ann Stueve, and Bernice A. Pescosolido. 2000. "Public Conceptions of Mental Illness in 1950 and 1996: What is Mental Illness and Is It to be Feared?" *Journal of Health and Social Behavior* 41: 188-207. Retrieved September 18, 2004 (JSTOR).