

Mental Illness Stigma and the Fundamental Components of Supported Employment

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Purpose/Objective: The success of supported employment programs will partly depend on the endorsement of stigma in communities in which the programs operate. In this article, the authors examine 2 models of stigma—responsibility attribution and dangerousness—and their relationships to components of supported employment—help getting a job and help keeping a job. **Research Method/Design:** A stratified and randomly recruited sample ($N = 815$) completed responses to a vignette about “Chris,” a person alternately described with mental illness, with drug addiction, or in a wheelchair. Research participants completed items that represented responsibility and dangerousness models. They also completed items representing 2 fundamental aspects of supported employment: help getting a job or help keeping a job. **Results:** When participants viewed Chris as responsible for his condition (e.g., mental illness), they reacted to him in an angry manner, which in turn led to lesser endorsement of the 2 aspects of supported employment. In addition, people who viewed Chris as dangerous feared him and wanted to stay away from him, even in settings where people with mental illness might work. **Conclusions/Implications:** Implications for understanding supported employment are discussed.

Keywords: stigma, supported employment, discrimination

The disabilities of serious mental illness can block people from obtaining important life goals, including a good job. Several kinds of vocational rehabilitation programs have emerged to address work-related disabilities. Some of these approaches are known as train-place strategies (Corrigan & McCracken, 2005). Through an education-based strategy, in train-place programs, participants must learn prevocational and work readiness skills before they are placed in work settings. These work settings are often sheltered; that is, the job is “owned” by a rehabilitation agency, which can protect participants from stressors (Corrigan, 2001). Alternatively, supported employment is place-train in orientation. People are placed in real-world work and subsequently provided training and support to address problems as they emerge, thereby helping a person to maintain a regular job. The latter group has dominated recent supported employment models for people with psychiatric disabilities (Bond et al., 2001; Bond, Becker, Drake, & Vogler, 1997). Some forms of supported employment recommend rapid placement of people in work settings of interest to them (Becker & Drake, 2003).

Unlike train-place programs, supported employment does not try to protect people with disabilities from the work world (Cor-

rigan, 2001; Corrigan & McCracken, 2005). Instead, providers offer direct support *in vivo*. This kind of approach is more successful in communities where the intent of supported employment is endorsed. Conversely, supported employment is likely to languish in communities where the stigma of mental illness is obvious. Using an analog approach, our purpose in this article is to demonstrate a relationship between stigma and two components of supported employment: help finding a job and help keeping a job.

Research has shown that adults with psychiatric disorders are unable to attain work, housing, and other independent life goals because of stigma and discrimination (Corrigan & Kleinelein, 2005; Link & Phelan, 2001; Page, 1995; Wahl, 1999). Missing from much of the existing research is a theoretical basis for understanding stigma. Nevertheless, two models of the stigma of psychiatric disorders have been examined (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003) and are used in this article. Attribution theory illustrates how causal attributions regarding psychiatric disorders undermine the supported employment components. In addition, beliefs about the dangerousness of mental illness may affect attitudes about supported employment. Each of these models is defined more specifically below.

Attribution theory represents a cognitive–emotional–behavioral process whereby people make attributions about the cause and controllability of an individual’s illness that lead to inferences about responsibility (Weiner, 1995). These inferences yield emotional reactions, such as anger and pity, which affect the likelihood of helping behaviors. According to Weiner (1995), when presented with an event or condition such as “a person with mental illness,” people try to determine whether the individual is responsible for the condition (see Figure 1). Attributing personal responsibility for a negative event (e.g., “That person causes her crazy behavior”) may lead to anger based on the belief that the person should have had better internal resources (e.g., “I’m mad at his lack of moral

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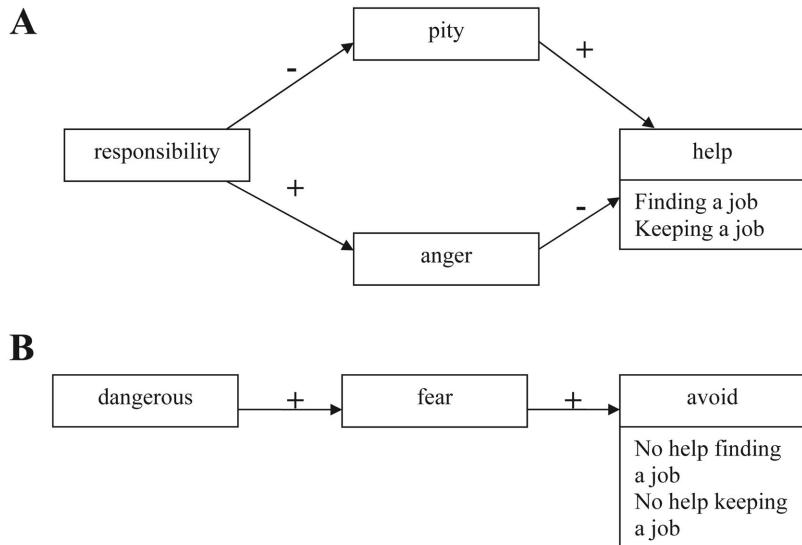


Figure 1. Two models that explain stigma. A: Responsibility. B: Dangerousness.

backbone!”); this, in turn, yields less help (e.g., “I’m not going to help that lazy person get a job at my shop”). Conversely, believing that persons are not responsible for their condition but may actually experience adverse effects because of it (e.g., “He can’t help himself; he has an illness”) may lead to pity (e.g., “That poor man is ravaged by mental illness”) and the desire to help (e.g., “I think I’ll rent him a room until he’s back on his feet”). Substantial support exists for the attribution model applied to various helping behaviors (Dooley, 1995; Graham, Weiner, & Zucker, 1997; Menec & Perry, 1998; Rush, 1998; Steins & Weiner, 1999; Weiner, Perry, & Magnusson, 1988). In this study, helping represents two elements of supported employment: helping to find a job and helping to keep a job.

Although attribution theory provides an elegant model for understanding stigma, it does not represent the major form of prejudice encountered by people with psychiatric disorders, namely, the belief that people with psychiatric disorders are dangerous (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999; see Figure 1). Perceptions of danger may lead to social rejection because of the fear generated by them. Several studies have found a relationship between believing persons with psychiatric disorders are dangerous and fearing them (Angermeyer & Matschinger, 1996; Levey & Howells, 1995; Link & Stueve, 1995; Wolff, Pathare, Craig, & Leff, 1996). Fear about dangerousness, in turn, yields avoidance behaviors. One study, for example, showed that a fearful reaction to two political assassination attempts attributed to persons with schizophrenia led to greater desired social distance between the public and individuals with mental illness (Angermeyer & Matschinger, 1996). Avoidance is diametrically opposed to the two elements of supported employment described in this study.

So far in this article, we have provided an imprecise description of psychiatric disorders. For this study, we targeted two broad subcategories of psychiatric health conditions: mental illness and drug addiction. Mental illness includes the schizophrenias, affective disorders, anxiety disorders, and personality disorders. Drug

addiction can be specified via the range of substances that people abuse (Link et al., 1999; Weiner et al., 1988). Psychiatric disorders were contrasted with a physical health condition, a person in a wheelchair. Attributions about mental illness and drug abuse were expected to yield more blame (responsibility) and more fear because of perceived danger when compared with the physical health condition. Past research has shown that drug addictions yield greater blame and feelings of dangerousness than do both of the other conditions (Pescosolido et al., 1999).

Method

Data for this study come from the Stigma/ADA study collected by Time-Sharing Experiments for the Social Sciences (TESS). TESS uses a national, online research panel recruited by Knowledge Networks (KN). KN recruits for its sample via list-assisted random digit dialing techniques on a sample frame consisting of the entire U.S. telephone population. Recruits are provided free WebTV access in return for agreeing to complete surveys that are sent to them via weekly e-mail. Human participant concerns were reviewed by the institutional review board at the Illinois Institute of Technology. Consistent with KN policies and principles, informed consent is assumed for individual projects when research participants complete items that compose that project.

For this study, KN randomly identified and solicited 1,141 individuals from its overall panel for the survey administered from April 6 to April 13, 2006; 71.4% completed the survey ($N = 815$). The sample was 50.4% women and had a mean age of 47.7 years ($SD = 16.2$, range = 18–90 years). In terms of race and/or ethnicity, the sample was 72.3% European American, 8.8% African American, 13.4% Hispanic, and 5.5% other. Regarding education, 12.3% of the sample had less than a high school education, 30.1% were high school graduates, 31.2% had completed some college, and 26.5% had a bachelor’s degree or higher degree. Geographically, 17.7% of the sample was from the Northeast, 22.8% from the Midwest, 30.7% from the South, and 28.7% from the West.

Postsurvey stratification weights were used to adjust sample demographics to values consistent with figures from the 2000 U.S. Census. Variables used to determine stratification weights included gender, age, race and/or ethnicity, geographic region in the United States, and level of education. Data reported in this article represent weight-corrected cases.

Vignette Conditions

Respondents were randomly assigned to read a vignette that varied across three health conditions: mental illness, drug addiction, or physical disability that requires a wheelchair. Mental illness and drug addiction were chosen for this experiment because they are viewed as behaviorally driven, that is, that the condition is under the control of one's behavior. A person with a wheelchair was provided as the control condition, one to which the public typically does not ascribe blame.

Chris is a person with [health condition] who recently attended a community meeting. The community meeting was a discussion about [health condition] and the role it should play in the work force.

Research participants then read two questions that were proxies for the supported employment elements. First, "Do you agree or disagree that people like Chris should be given assistance finding a job because of his condition?" (called *help finding a job* in the remainder of this article). Second, "people like Chris—[with a health condition]—should receive special help on the job to make sure they are successful. Do you agree or disagree?" (called *help keeping a job* in the analyses). Respondents answered these items using a 9-point agreement scale, with 9 = *strongly agree*. Note also the inverse relationship—disagreeing with help for finding or keeping a job—represents avoidance variables in Figure 1B. Research participants then answered five items about Chris representing the remaining constructs in Figure 2: responsibility for condition, pity, anger, dangerousness, and fear. Survey items are summarized in the Appendix. Participants used a 9-point agreement scale to respond to individual items, where 9 = *strongly agree* and 1 = *strongly disagree*.

Statistical Analyses

Two sets of theoretical paths were hypothesized for this study and are summarized in Figure 1. Path analysis with manifest variables was used to test the theoretical model because this kind of analysis examines both the size and the direction of associations among a set of variables. Specific paths were examined via their corresponding structural equations. Results of these analyses are summarized in Figure 2A for responsibility attribution and Figure 2B for dangerousness. In accord with conventional practices in the causal modeling literature (Bentler, 1980), squares are used in Figure 2 for manifest factors. Unidirectional arrows between squares represent causal paths. All analyses were conducted using the SAS system's CALIS procedure (SAS Institute, 1990) and tested models were covariance structures with indicators for all manifest constructs. Two measurement models were tested each for attribution and dangerousness. A comprehensive model was examined that included the effects of health conditions in the analyses. In addition, the original, more parsimonious models outlined in Figure 1 were examined to contrast the effects of health conditions on original paths.

Analyses yield two sets of indices: direct measures of fit be-

tween the data and hypothesized path model as well as standardized betas reflecting the relationship between individual constructs in the model. Goodness of fit is, in part, examined by a chi-square statistic: Insignificant chi-square statistics support a good fit. Note, however, that the chi-square statistic is very sensitive to sample size and departures from multivariate normality, which will result in the rejection of a well-fitting model. Alternative indices that are more resilient to data distributions have also been developed and include the comparative fit index (CFI) and the normed fit index (NFI; Bentler, 1989; Bentler & Bonett, 1980). These two indices range from 0 to 1 with values greater than .90 supporting fit.

Results

Means and standard deviations of the seven items in Figure 1 are summarized in Table 1. The table also includes the correlation matrix for survey items. Note that significant correlations (with many showing robust effect sizes) are evident for most of the item pairs, except for pity within the attribution model. The lack of correlation with pity seems to contradict current attribution models. This correlation matrix served as input to the SAS path analyses.

Attribution Theory

The comprehensive model for responsibility attributions is summarized in Figure 2A. Exogenous factors (those thought to be original causal constructs) include dummy-coded variables for health condition (with the wheelchair group as the comparison). These factors influence responsibility, which affects the remaining aspects of the attribution model: pity, anger, and the two supported employment indicators, that is, help finding a job and help keeping a job.

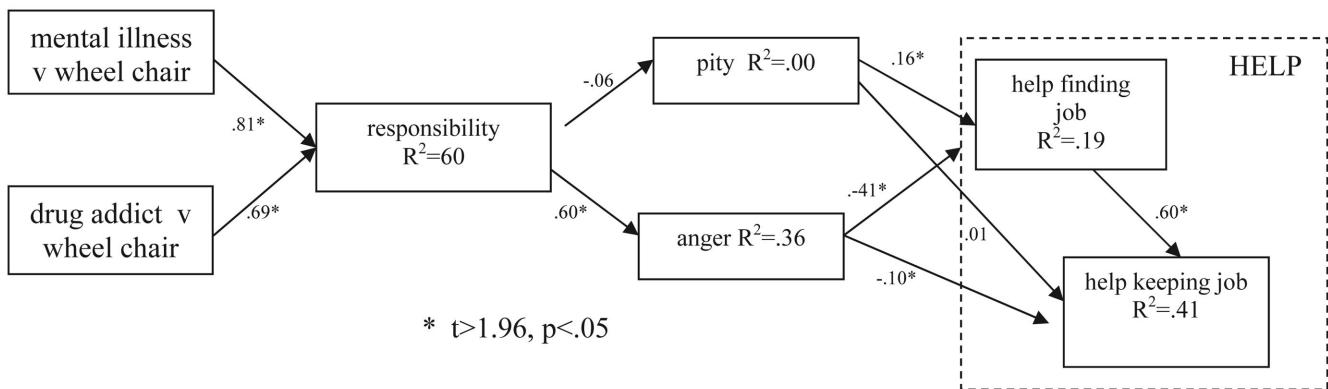
The chi-square analysis for the comprehensive model did not support good fit. The comprehensive model for personal responsibility yields CFI and NFI variables of .89, just missing the .90 criterion. We hypothesized that fitness values were below criterion because of the addition of health conditions as exogenous factors. The original responsibility model as outlined in Figure 1 (without health and controllability conditions) had been supported by several prior studies (Weiner, 1995). Note, however, that omitting health indicators still failed to yield a better fit below the .90 criterion. Nevertheless, standardized path coefficients representing individual relationships among model factors provide interesting information for understanding factors influencing the willingness of individuals to help people with mental illness find and keep jobs. Significant coefficients in Figure 2A are marked with an asterisk. The individual coefficients listed in the figure were taken from the comprehensive model with health conditions.

Most of the coefficients are significant except for relationships that include pity. Zero percent of the variance of pity is explained by responsibility. This finding fails to support pity's role in this variation of attribution theory. We represented help keeping a job as a function of finding a job, anger, and pity. The relationship between finding and keeping a job is significant, with the effect size fairly robust (Cohen, 1977). Anger is inversely and significantly related to keeping a job, whereas pity has no significant relationship. These variables predict 41% of the variance in help keeping a job.

Help finding a job was predicted by pity and anger in accordance with attribution theory. Both path coefficients were significant, although pity's was much smaller than anger's. The two

A

Model	Fit indicators			
	χ^2	df	CFI	NFI
Comprehensive with health and controllability	244.4	15	.89	.89
Original, without health and controllability conditions	147.5	3	.87	.86

**B**

Model	Fit indicators			
	χ^2	df	CFI	NFI
Comprehensive with health and controllability conditions	103.2	11	.90	.89
Original, without health and controllability conditions	44.9	2	.92	.92

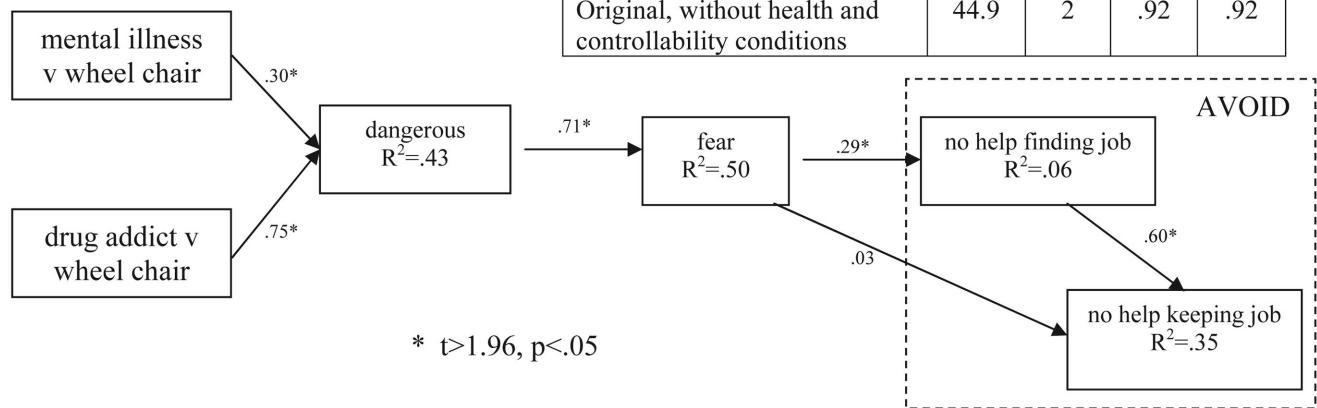


Figure 2. Findings from structural equation models representing two paths: responsibility attribution (A) and dangerousness (B). Results include fit indicators. Exogenous variables of the comprehensive model include health conditions. Squares represent manifest factors; unidirectional arrows between squares represent causal paths. CFI = comparative fit index; NFI = normed fit index.

variables accounted for only 19% of the variance in help finding a job. Consistent with attribution theory, we hypothesized that pity and anger were influenced by responsibility. As we discussed earlier in this section, the relationship between responsibility and pity was not significant, instead being negligible. The relationship between responsibility and anger was significant and robust, accounting for 36% of the variance in anger.

Of special interest in this article is how responsibility attributions are influenced by health conditions. The two psychiatric health conditions, with the wheelchair group used as the comparison, were

found to significantly influence responsibility attributions. Specifically, describing people as having mental illness or with drug addiction was likely to yield higher responsibility attributions when compared with the responsibility attributions in the wheelchair condition. Health conditions accounted for 60% of the variance in responsibility.

Dangerousness Model

The model for dangerousness is summarized in Figure 2B. The two elements of supported employment were represented as avoid-

Table 1
Means, Standard Deviations, and Intercorrelations for Manifest Variables: Personal Responsibility and Dangerousness Models

Variable	<i>M</i>	<i>SD</i>	Intercorrelations						
			Q1	Q2	Q3	Q4	Q5	Q6	Q7
Q1 (help finding a job)	6.09	2.26	—						
Q2 (help keeping a job)	5.67	2.25	.61*	—					
Q3 (responsibility)	3.86	2.85	-.52*	-.38*	—				
Q4 (pity)	4.33	2.51	.06	.03	.07	—			
Q5 (anger)	2.50	2.21	-.37*	-.29*	.58*	.14	—		
Q6 (dangerous)	3.20	2.36	-.39*	-.27*	.51*	.22*	.54*	—	
Q7 (fear)	2.86	2.19	-.28*	-.15*	.42*	.23*	.53*	.69*	—

Note. Q = Question.

* $p < .01$.

ance behaviors and, therefore, included not helping people find jobs and not helping people keep jobs. As in the attribution model, fit indicators were provided for the comprehensive dangerousness path model (with the three health conditions) and the original without these two conditions. Chi-square was significant for both of these models. The CFI indicator, however, was greater than .90, which supported the model fit indicator for both the comprehensive and the original models. The NFI was not significant for the comprehensive model but surpassed .90 for the original model. Most of the path coefficients were significant and supported the model in the hypothesized directions.

As in the attribution model, not helping to keep a job (because of avoidance) was predicted by not helping to find a job. In addition, not helping to keep a job was expected to be predicted by fear. Path coefficients supported the first association but failed to significantly do so for the second. Fear was expected to be associated with not helping to find a job; this assumption was supported, although the size of the relationship was modest. Only 6% of variance in not helping to find a job was found. Consistent with earlier research (Corrigan et al., 2003), fear was expected to be affected by dangerousness. A significant path coefficient emerged that accounted for 50% of variance in fear. The path model in Figure 2B also represented the influence of health conditions on dangerousness. Viewing the vignette person as mentally ill or addicted to drugs versus in a wheelchair led to perceptions of greater dangerousness, accounting for 43% of the variance of this construct.

Discussion

The purpose of this study was to determine how various proxies of stigma predict attitudes about two fundamental elements of supported employment: helping a person find a job and helping a person keep a job. One factor we hypothesized was relevant to these elements was health condition; namely, how do public attitudes about components of rehabilitation change across psychiatric and physical conditions? We tried to make better sense of the effects of health conditions by examining path models that explain constructs thought to correspond with these conditions. Two path models examined in previous research (Corrigan et al., 2002, 2003) were the focus of this study: responsibility attributions and perceptions of dangerousness. Previous research suggests that responsibility attributions predict helping behavior (in the supported

employment case, helping people find and keep a job) via the emotional mediators—pity and anger—between responsibility and help. Although three indicators failed to support a goodness of fit for the model, associations among model elements suggested candidate pairs that might be supported in future research.

Consistent with attribution theory, we expected help finding a job and help keeping a job to be associated with pity and anger. Anger yielded significant and direct effects on finding a job and on keeping a job. Pity also showed significant effects on finding a job but little relationship with keeping a job. Further challenging pity's role in the attribution model, the relationship between responsibility and pity failed to reach significance. Negative findings of pity may reflect an alternative perspective, namely, that viewing people with psychiatric disorders sympathetically leads to less personal empowerment (Rogers, Chamberlin, Ellison, & Crean, 1997). As one advocate put it, people with mental illness and drug addiction want parity, not pity. Pity produces pathetic perceptions that lead to disrespect, not a positive perspective when a person is seeking work.

Findings for the dangerousness model seemed more robust compared with the attribution model. Fit indicators were significant for both the comprehensive model and the original model where the exogenous variables were removed. Not helping to keep a job was significantly associated with the prior event of not helping to find a job. Fear was not found to be significantly associated with helping to keep a job but was significant with helping to find a job. These findings suggest that the construct of not helping to find a job mediates the role of fear in the construct of not helping to keep a job. As shown in previous research (Corrigan et al., 2003) and replicated here, dangerousness was highly associated with fear. Specifically, people with mental illness or with drug addiction are more likely to be blamed than people in a wheelchair. This finding is consistent with previous research that shows psychiatric conditions are associated with dangerousness. Perceiving a person as blameworthy may also yield perceptions or beliefs of dangerousness.

Some limitations to this study may need to be addressed in future research. Despite efforts to attain a true probability sample, there are limits to the KN approach. Most prominent of these is restricting the sample to phone-bearing households that do not have Internet access but wish to have access via WebTV. Note, however, that KN's evaluations have shown that random samples adjusted by poststratification weights are comparable to samples

identified by random digit dialing. Fit indicators were mixed, with many not meeting criterion. Data from future research may more strongly support the paths examined in this study.

In addition, the items analyzed in this study represent behavioral intentions rather than actual behaviors. Future researchers should consider behaviors that will more closely parallel helping behavior related to finding and keeping a job. In a related manner, researchers need to distinguish stigmatizing attitudes about health policy from attitudes about people who are the object of this policy (Moss, Swanson, Ullman, & Burris, 2002). In this study, we cannot unequivocally distinguish negative attitudes about supported employment versus negative attitudes about people labeled psychiatrically disordered. Finally, data in this study were cross-sectional. Addressing causal models requires collection of panel data (Scheid, 1999), which should be a primary goal of future research.

What implications do these findings have for understanding the impact of stigma on supported employment? The relationship between stigmatizing attributions, discriminatory intentions, and supported employment may be understood in terms of public stigma. Public stigma represents the impact of the general public's attitudes on policies that promote the rights and opportunities of people with psychiatric disorders. The variables in Figure 1—responsibility, pity, anger, dangerousness, and fear—are one set of stigmatizing attitudes. As illustrated in Figure 1, the greater the stigma, the less the willingness to help and the greater the avoidance shown by the group. Methods for addressing public stigma have been examined in previous research (Corrigan & Penn, 1999). The methods include protest; framing public stigma as a social injustice and instructing people to suppress these kinds of thoughts; education, contrasting the myths and facts of psychiatric disorders with the assumption that more knowledge about these conditions will diminish endorsement of stigma; and contact, enhancing interactions between people with psychiatric disorders and the public. Briefly, contact seems to yield the strongest effects on stigma, with the effects of education and protest being significantly weaker (Corrigan et al., 2002). Thus, these findings suggest that one way to enhance endorsement of supported employment is to use contact. Stigma change strategies are most effective when targeting a discrete power group rather than the general public (Fiske, 1993). Hence, advocates are more likely to advance aspects of supported employment when targeting the group for which endorsement is most important, namely, employers.

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Appendix

Item Wording for Constructs in the Path Diagram in Figure 1

Research participants responded to individual items using a 9-point scale, where 9 = *strongly agree* and 1 = *strongly disagree*.

Chris is responsible for [becoming mentally ill, becoming drug addicted, being in a wheelchair].

I pity Chris for being [mentally ill, drug addicted, in a wheelchair].

I am angry at Chris for being [mentally ill, drug addicted, in a wheelchair].

I fear Chris because Chris is [mentally ill, drug addicted, in a wheelchair].

I believe Chris is dangerous because Chris is [mentally ill, drug addicted, in a wheelchair].

In addition, participants responded to the following items representing participation in supported employment:

Do you agree or disagree that people like Chris should be given assistance finding a job because of his condition?

The state representative also said that people like Chris—[mentally ill, drug addicted, in a wheelchair]—should receive special help on the job to make sure they are successful. Do you agree or disagree?

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