

## **THE POWER OF A LABEL: MENTAL ILLNESS DIAGNOSES, ASCRIBED HUMANITY, AND SOCIAL REJECTION**

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Although the stigma of mental illness has been widely documented, the specific processes through which psychiatric labels evoke prejudice and discrimination are not well understood. We examined how ascribing humanity to an individual labeled with mental illness may influence perceptions of dangerousness and motivations for social rejection. Study 1 revealed that a general mental illness label (compared to a general physical illness label) led to reductions in ascribed humanity, which predicted increased perceptions of dangerousness. In Study 2, participants formed impressions about an individual bearing a specific mental illness label (or a specific physical illness label) while normative behavioral information and full remission status were held constant. Under these conditions, the target labeled with mental illness evoked greater ascribed humanity. Further analyses revealed a unique effect for the target bearing the mental illness label: ascribing humanity to the target predicted reductions in perceived dangerousness, which in turn influenced social rejection. A similar mediational path was not found for the target bearing the physical illness label. We discuss the implications of ascribing humanity to people labeled mentally ill for stereotyping and stigma reduction.

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We thank Ziwei Wang, Orly Weltfreid, and Alyssa Wheeler for assistance with data collection, and members of the RASCL and Hinshaw labs for their valuable comments on this research. Andres G. Martinez received support from a National Science Foundation IGERT Fellowship, and Paul K. Piff received support from a National Science Foundation Graduate Research Fellowship.

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The stigma associated with a mental illness label can have devastating social consequences. Individuals bearing such labels experience devaluation and rejection in their communities, effects that exceed those attributable to the symptoms of the mental disorder itself (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997). The stigma associated with a mental illness label may also discourage seeking help when it is needed most. Although 28 percent of the U.S. adults have a diagnosable mental health condition, only 8 percent of people actually seek treatment (U.S. Department of Health and Human Services, 1999). Furthermore, in those relatively rare instances in which treatment is sought, experiencing the stigma associated with being labeled mentally ill can lead to premature treatment termination (Sirey et al., 2001), delaying or impeding the recovery from a mental disorder. By clarifying the social cognitive processes that give rise to such stigma, research may shed light on the mechanisms underlying the social rejection of individuals bearing mental illness labels, ultimately uncovering effective means of encouraging people with psychological distress to seek treatment.

Although a long tradition of research has investigated stigma and prejudice linked to ethnicity and gender, comparatively less attention has been devoted to stigma based on mental illness labels (Hinshaw, 2007; Quinn & Chaudoir, 2009). Research on mental illness stigma has focused on identifying important psychological dimensions underlying the social rejection of those labeled mentally ill (Feldman & Crandall, 2007; Jones et al., 1984; Kurzban & Leary, 2001). Nevertheless, it remains unclear to what extent exclusion and discrimination are driven by active symptoms versus the discrimination evoked by the mere presence of the label. We attempt here to shed light on this ambiguity in the literature through two experiments. First, we aim to isolate the effects of mental illness labels by introducing the label alone in the absence of behavioral information. Second, we further explore the effects of mental illness labels by introducing the label while holding behavioral information and remission status constant. We reason that whereas the symptomatic expression of mental illness shapes social perception and behavior (Hinshaw & Stier, 2008), the power of the label itself will have unique, and independent, consequences.

## MENTAL ILLNESS LABELS AND ASCRIBED HUMANITY

People with mental illness labels belong to an extremely devalued social category. For example, Americans report more comfort with individuals who are deaf or have facial disfigurement than people with mental disorders (see Hinshaw, 2007). In addition, people experience and express disgust when confronted with images of people who are homeless or abusing substances—behaviors that sometimes covary with the active symptoms of mental disorder (Harris & Fiske, 2006). Further, upon exposure to these same individuals, the medial prefrontal cortex—a neural structure involved in processing social information about the self and others—fails to activate, suggesting that perceivers may not think of these targets as belonging to the same human category. The work of Harris and Fiske (2006) suggests that one mechanism underlying responses toward people with mental illnesses may be the degree to which perceivers ascribe them human status. We build on this work by investigating how mental illness labels alone may influence ascriptions of humanity to a target bearing such a label.

Most of the relevant inquiry concerning how perceivers ascribe human status to others has focused on dehumanization, or the denial of aspects of humanity to groups and particular individuals (Haslam, 2006; Haslam, Loughnan, Reynolds, & Wilson, 2007). Recent research and theorizing suggest that humanization exists on a continuum (Demoulin, Saroglou, & Van Pachterbeke, 2008): people may be denied humanity or ascribed humanity beyond normative bounds. In some instances, targets may be animalistically dehumanized, in which they are rendered animal-like in terms of lacking such uniquely human qualities of constraint, complex emotional capacities, and refinement. Alternatively, targets can be seen as possessing an enhanced or exaggerated humanity.

Following from work on discrimination toward targets with mental illness labels (see Hinshaw, 2007 for a review), a likely expectation is that labeled individuals will evoke reductions in ascribed humanity. This view is consistent with the prevalent media images of the deranged and out-of-control madman (see Sieff, 2003). Yet it is possible that in other circumstances, individuals with a mental illness label may be seen as possessing humanity beyond normative bounds, an idea that coheres with other stereotypes of persons with mental illness as exceptional or gifted. One example is the book and

film “A Beautiful Mind,” depicting a man ravaged by schizophrenia yet possessing brilliant mathematical abilities. Rather than being solely the object of scorn and derision, the main character, John Nash, is the target of fascination and interest. Furthermore, when perceivers are exposed to such narratives about people’s struggles with, or achievement of, recovery from mental illness—often against seemingly insurmountable odds—this may lead to perceptions that the target has a heightened sense of humanness. Our experiments thus test for both ends the humanization spectrum, in which targets can be seen as less than human as well as more than human.

### **ASCRIBED HUMANITY AND IMPLICATIONS FOR PERCEIVED DANGEROUSNESS AND SOCIAL REJECTION**

Beyond examining the role of ascribed humanity in mental illness stigmatization, we seek to illuminate its consequences. Although most research has focused on the failure to ascribe humanity to others as an important social cognitive process in its own right (Haslam, Bain, Douge, Lee, & Bastian, 2005; Leyens, Demoulin, Vaes, Gaunt, & Paladino, 2007), here we focus on how ascribed humanity may influence downstream perceptions and behavioral tendencies toward a target. A frequent stereotype about persons with mental illness is that they are dangerous, with media portrayals emphasizing an extremely heightened potential for violence (Wahl, 1995). We hypothesize that ascribed humanity may influence perceived dangerousness: the more that a target bearing a mental illness label can be ascribed humanity, the more that perceptions of dangerousness will diminish.

Ascribing humanity to a person bearing a mental illness label may also influence downstream behavioral tendencies. Recent research finds that humanizing ethnic outgroups influences prosocial behavior toward them. For instance, in the context of the aftermath of Hurricane Katrina, the more participants humanized the victims of this natural disaster, the more intent they were to help them (Cuddy, Rock, & Norton, 2007). A parallel process may operate in the domain of mental illness stigma. Specifically, the extent to which participants ascribe humanity to a person with a mental illness label may decrease the motivation to socially reject him or her. These reductions in rejection intentions may result from diminished perceptions of dangerousness (Link, Phelan, Bresnahan, Stueve, & Pesco-

solido, 1999), insofar as recognizing the humanity of people labeled mentally ill influences these perceptions. In the current research, we specifically test whether discrimination tendencies toward people bearing mental illness labels are reduced as a function of social perceivers acknowledgement of the target's underlying humanity.

## OVERVIEW OF THE PRESENT STUDIES

In two studies we examine mental illness labels and ascribed humanity. In Study 1 we investigate whether exposure to a general mental illness label, when contrasted with a general physical illness label, will evoke reductions in ascribed humanity, and whether such ascription will influence perceptions of threat and dangerousness. Assessing ascribed humanity in the presence of a mental illness label alone allows us to test whether dehumanization is the default response. Study 2 extends this work by measuring ascribed humanity in the presence of a specific mental illness label, when contrasted with a specific physical illness label, with identical behavioral information provided to describe each target. Here we test whether ascribed humanity will differ when accompanied by behavior within normative bounds. In addition to assessing the hypothesized humanization-dangerousness link, we also examine whether ascribing humanity to a person labeled mentally ill will influence the social rejection of that individual and whether perceived dangerousness mediates this linkage.

## STUDY 1

In Study 1, participants were exposed to a hypothetical target bearing the label of chronic mental illness or chronic physical illness and asked to form impressions based solely on this general label. We employed three measures to capture different facets of ascribed humanity, which we then aggregated to create a single parsimonious index. After measuring ascribed humanity to the target, we assessed perceptions of threat and dangerousness. We hypothesized that targets bearing mental illness labels would be ascribed less humanity and be perceived as more threatening and dangerous. We also predicted that reductions in ascribed humanity would mediate

the link between the mental illness label and perceptions of threat and dangerousness.

## METHOD

### Participants

A nationwide sample of adult participants was recruited from an email list of individuals who had expressed interest in participating in online studies. In exchange for completing the study, participants were entered into a drawing for a \$50 gift certificate to an online retailer. Data were screened for repeat responders using computer IP and email addresses (Kraut et al., 2004). Of the 148 participants recruited, two participants were excluded because of aberrant completion times (exceeding three standard deviations from the mean). The final sample totaled 146 participants (96 female, one declined to indicate sex). The mean age was 33.53 ( $SD = 10.36$ ) and the mean years of post-secondary education was 4.62 ( $SD = 3.57$ ). The ethnicity of the sample was 72.6% Caucasian/White, 17.8% Asian-American/Pacific Islander, 3.4% African-American, 4.1% Hispanic/Latino, and .7% Indian/Alaska Native, with 1.4% declining to state ethnicity.

### Procedure

Participants were provided with a link to the online experiment described as a study of forming impressions of people with different health conditions. After giving consent, participants were randomly assigned to one of two conditions. In the experimental condition, participants were asked to form impressions of a hypothetical target diagnosed with a chronic mental illness. In the control condition, participants were asked to form impressions of a hypothetical target diagnosed with a chronic physical illness. The specific instructions read:

In this study, we are interested in understanding how people form impressions of others when given limited information. Please take a

moment to imagine meeting someone diagnosed with a chronic mental illness [chronic physical illness]. After you have imagined such a person, please rate your impressions of the person after clicking on the continue button.

No additional individuating information was provided in either condition, so that the only factor varying between conditions was the descriptor of the target's health condition: mental or physical. After rating the target on measures of ascribed humanity and perceived threat, participants answered demographic questions and then thanked and debriefed.

### Measures

*Ascribed Humanity.* To create a measure of ascribed humanity, we employed three indices (animality, humanity, and uniquely human personality characteristics) used in previous studies, before aggregating them to create a single index. To assess (a) animality and (b) humanity, we used measures adapted from prior research (Viki et al., 2006; Zebel, Zimmermann, Viki, & Doosje, 2008), in which participants are asked how much they associated animal-related (wild, animal, beast, untamed) and human-related words (human, citizen, person, humanity) to the target. Words were rated on a 7-point Likert scale (1 = not at all, 7 = totally). To assess (c) uniquely human personality traits, participants rated the target on two of the Big 5 personality traits: openness to experience and conscientiousness (Hodson & Costello, 2007), given that lay observers consider these dimensions more applicable to humans than animals (see also Gosling & John, 1999). These uniquely human personality traits were assessed with items from the Ten Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003), a brief measure of Big-5 dimensions that uses a 7-point Likert scale (1 = disagree strongly, 7 = agree strongly).

After reverse-scoring animality, we standardized each of the three measures and averaged them to capture ascribed humanity in a single index (see Kang et al., 2009 for a similar procedure). Higher scores on this measure reflect greater ascribed humanity. This measure was internally consistent,  $\alpha = .84$ .

*Perceived Threat.* The perceived threat index consisted of the terms *dangerous*, *rational* (reverse-scored), *in-control-of-their-behavior* (reverse-scored), and *predictable* (reverse-scored). Items were presented on a 7-point Likert scale (1 = not at all, 7 = extremely). To reduce social desirability concerns, participants were asked to rate each adjective in terms of how most people would describe the target.<sup>1</sup> The perceived threat measure was internally consistent,  $\alpha = .81$ .

*Perceived Dangerousness.* In addition to analyzing perceived threat, we analyzed the *dangerous* item separately, as this construct is particularly important for the mental illness stigma literature (Link et al., 1999).

## RESULTS

### Contrasts Between Conditions

We compared the two label conditions on ascribed humanity, perceived threat, and perceived dangerousness. As hypothesized, the chronic mental illness label triggered decreased ascribed humanity ( $M = -.37$ ,  $SD = .74$ ) compared to the chronic physical illness label ( $M = .30$ ,  $SD = .67$ ),  $F(1, 143) = 33.14$ ,  $p < .001$ ,  $d = .96$ . In addition, the target labeled with chronic mental illness led to greater perceived threat ( $M = 4.92$ ,  $SD = 1.12$ ) relative to the target labeled with chronic physical illness ( $M = 3.27$ ,  $SD = .88$ ),  $F(1,142) = 97.02$ ,  $p < .001$ ,  $d = 1.65$ . Paralleling the effects of perceived threat, the target labeled with chronic mental illness led to greater perceived dangerousness

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1. We employed the response format of most people for our perceived threat index because this format has been successfully used in prior mental illness stigma research to assess socially undesirable attitudes that respondents may hold but be reluctant to report (Link & Cullen, 1983; see also Devine, 1989, for a similar strategy). To further validate the utility of this method, we conducted a study in which we employed the items of our perceived threat measure in a self-report measure (using the most people format) and an implicit associations test (Greenwald, McGhee, & Schwartz, 1998). In the implicit measure, we employed four exemplars each for the chronic physical and mental illnesses categories. Pilot testing showed that these category exemplars did not significantly differ from each other in valence and severity. As anticipated, the implicit measure and the items prefaced with "most people" were significantly correlated ( $r = .29$ ,  $p = .02$ ). However, the scores from the implicit measure and a direct measure of personally held attitudes using these same items (phrased in terms of what you believe) were unrelated ( $r = .04$ , *ns*).



( $M = 4.23$ ,  $SD = 1.57$ ) than the target labeled with chronic physical illness ( $M = 2.43$ ,  $SD = 1.31$ ),  $F(1, 143) = 56.67$ ,  $p < .001$ ,  $d = 1.26$ . As can be seen, all effects were large.

### Mediational Analyses

We next tested whether ascribed humanity mediated the link between the mental illness label and perceived threat, as well as the link between the mental illness label and the single-item perceived dangerousness indicator. Accordingly, we conducted two separate mediation analyses (Baron & Kenny, 1986). Condition (0 = chronic physical illness, 1 = chronic mental illness) predicted the outcome variable, perceived threat ( $\beta = .64$ ,  $p < .001$ ), as well as the hypothesized mediator, ascribed humanity ( $\beta = -.43$ ,  $p < .001$ ). When condition and ascribed humanity were entered simultaneously into a regression equation predicting perceived threat, the ascribed humanity mediator was a significant predictor ( $\beta = -.35$ ,  $p < .001$ ). The effect of condition decreased but remained significant ( $\beta = .48$ ,  $p < .001$ ), indicating partial mediation (Sobel  $z = 3.91$ ,  $p < .001$ ). Parallel findings emerged using the perceived dangerousness item as the outcome. Condition predicted perceived dangerousness ( $\beta = .53$ ,  $p < .001$ ), and when condition and ascribed humanity were simultaneously entered into a regression equation, the ascribed humanity mediator was a significant predictor ( $\beta = -.38$ ,  $p < .001$ ). The effect of condition decreased, but remained significant ( $\beta = .37$ ,  $p < .001$ ), again indicating partial mediation (Sobel  $z = 3.84$ ,  $p < .001$ ). Figure 1 displays a diagram of the relationships of this latter model with perceived dangerousness as the outcome variable.

Because we were interested in the unique effects of the mental illness label on the strength of the link between ascribed humanity and perceived dangerousness, we partitioned the data by condition and separately calculated the regression coefficients for these associations. When the data were separated in this way, the chronic mental illness condition showed a numerically stronger association between ascribed humanity and perceived dangerousness attributions ( $\beta = -.47$ ) than did the chronic physical illness label condition ( $\beta = -.32$ ). Although not significantly different, the coefficient in the mental illness label condition represents a 47 percent increase in magnitude over the coefficient in the physical illness condition.

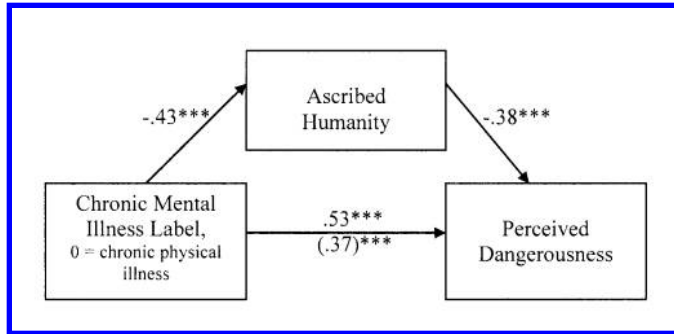


FIGURE 1. Mediation model of the relationships between the chronic mental illness label (versus the chronic physical illness label), ascribed humanity, and the perceived dangerousness in Study 1. Standardized regression coefficients are shown.

Note. \*\*\* $p < .001$ .

## DISCUSSION

Study 1 suggests that when people are confronted with a general label of mental illness, in the absence of other information, their default response is to accord the targeted individual with lowered human status. In other words, the mere label of chronic mental illness triggers dehumanizing responses. This decrease in ascribed humanity in turn is associated with increased perceptions of threat and dangerousness—that is, the less human the mentally ill target was perceived to be, the more threatening and dangerous this target became. Suggesting the unique effects of the mental illness label, the inverse relationship between ascribed humanity and perceived dangerousness was numerically stronger for the label of chronic mental illness than for the label of chronic physical illness.

The findings from Study 1 provide preliminary evidence that decreases in ascribed humanity set into motion a series of negative social consequences for the bearer of such a label. In Study 2, we aimed to build on these findings by moving beyond the global category of “chronic mental illness” and testing responses to a specific mental illness label. Although we did not provide behavioral information about the target in Study 1, leaving open the possibility that participants simply reported on stereotypes, in Study 2 we utilized behavioral descriptions in order to better understand the ways in which mental illness labels influence social perception and behavior.

## STUDY 2

In Study 2 we sought to replicate and extend the previous findings by testing whether ascribed humanity influences perceived dangerousness and intentions to socially reject a target labeled with a mental illness. We also investigated whether such a link between ascribed humanity and rejection intentions is mediated by perceived dangerousness. Because we were interested in the unique effects of the mental illness label, we conducted separate analyses for the mental and physical illness label conditions.

Study 2 extended the methodology of Study 1 in three important ways. First, we employed specific mental and physical illness labels (bipolar disorder and melanoma, respectively), which pilot testing ( $N = 65$ ) showed did not differ on either perceived negativity or severity. Second, we provided a normative behavioral description of a target adapted from previous social cognition research (see Srull & Wyer, 1979), allowing us to test how labels shape ascribed humanity when the target's actions stay within normative expectations. Third, we employed multiple items to enhance our measurement of perceived dangerousness.

## METHOD

### Participants

A different nationwide sample of adult participants was recruited from the email list used in Study 1. In exchange for completing the study, participants were entered into a drawing for a \$50 gift certificate to an online retailer. Data were screened for repeat responders using computer IP and email addresses (Kraut et al., 2004). Of the 119 participants recruited, nine participants were excluded for aberrant completion times (either less than three minutes or greater than three standard deviations above the mean). Eleven participants were excluded for incorrectly identifying the diagnostic label of the target or incorrectly identifying whether bipolar disorder or melanoma were mental or physical illnesses, respectively. Thus, the final sample totaled 99 participants (71 female) and the mean age was 37.74 ( $SD = 12.33$ ). The mean years of post-secondary education was 3.81 ( $SD = 2.63$ ). The ethnicity of the sample was 55.6% Caucasian/White, 14.1% Asian-American/Pacific Islander, 4.0% African-

American, 4.0% Hispanic/Latino, and 4.0% Indian/Alaska Native, with 18.2% stating other.

### Procedure

Participants were provided with a link to the online experiment on forming impressions of people with different health conditions. Participants were randomly assigned to one of two conditions in which they read a vignette about a person named Donald, who was diagnosed with either bipolar disorder (experimental condition) or melanoma (control condition). In both conditions, participants read a behavioral description of a day in the life of Donald, who engages in normative although ambiguously hostile behavior (vignette from Srull & Wyer, 1979). In both conditions, following the mention of the label, the target was described as being in remission, which was then followed by the details of vignette. Thus, the only difference between the experimental and control condition was the presence of a specific mental or physical illness label. The vignette read:

I ran into my old acquaintance Donald the other day, and I decided to go over and visit him, since by coincidence we took our vacations at the same time. Donald is diagnosed with bipolar disorder [melanoma], but he has been in remission for as long as I can remember. Soon after I arrived, a salesman knocked at the door, but Donald refused to let him enter. He also told me that he was refusing to pay his rent until the landlord repaints his apartment. We talked for a while, had lunch, and then went out for a ride. We used my car, since Donald's car had broken down that morning, and he told the garage mechanic that he would have to go somewhere else if he couldn't fix his car that same day. We went to the park for about an hour and then stopped at a hardware store. I was sort of preoccupied, but Donald bought some small gadget, and then I heard him demand his money back from the sales clerk. I couldn't find what I was looking for, so we left and walked a few blocks to another store. The Red Cross had set up a stand by the door and asked us to donate blood. Donald lied by saying he had diabetes and therefore could not give blood. It's funny that I hadn't noticed it before, but when we got to the store, we found that it had gone out of business. It was getting kind of late, so I took Donald to pick up his car and we agreed to meet again as soon as possible.

After reading the vignette, participants rated the target on measures of ascribed humanity, perceived dangerousness, and social rejection.

Participants then answered demographic questions, were thanked, and debriefed.

### Measures

*Ascribed Humanity.* We used the same items from Study 1, except that we replaced the humanity item with civilized to reduce item redundancy. Paralleling Study 1, we used z-scores to create a single aggregate measure, for which higher scores reflect greater ascribed humanity. This measure was internally consistent,  $\alpha = .75$ .

*Perceived Dangerousness.* We measured dangerousness attributions with three items (dangerous, hostile, and aggressive). Items were rated on a 7-point Likert scale (1 = not at all, 7 = extremely),  $\alpha = .76$ . As in Study 1, items were phrased in terms of how “most people” would perceive the target.

*Rejection Intentions.* We assessed rejection intentions with seven items that assessed participants’ willingness to participate in specific social/occupational activities with Donald (Link, Cullen, Frank, & Wozniak, 1987). Representative items included “How would you feel about having someone like Donald as a neighbor” and “How would you feel about a person like Donald being a worker on the same job as you?” The items were on a 4-point scale (1 = definitely unwilling, 4 = definitely willing). To index rejection intentions, we reverse-scored the items and averaged them,  $\alpha = .87$ .

## RESULTS

### Contrasts Between Conditions

We compared the label conditions on ascribed humanity, perceived dangerousness, and rejection intentions. In contrast to Study 1, the target labeled with a specific mental illness was ascribed *greater* humanity ( $M = .14$ ,  $SD = .67$ ) than the target labeled with the specific physical illness ( $M = -.15$ ,  $SD = .68$ ),  $F(1, 94) = 4.23$ ,  $p < .05$ ,  $d = .42$ . However, participants did not differ in their perceptions of dangerousness of the target labeled with a specific mental illness ( $M = 4.30$ ,  $SD = 1.17$ ) versus a specific physical illness ( $M = 4.56$ ,  $SD = 1.05$ ),  $F(1, 94) = 1.24$ , *ns*. Finally, participants showed reduced intentions to socially reject a target labeled with a specific mental illness ( $M =$

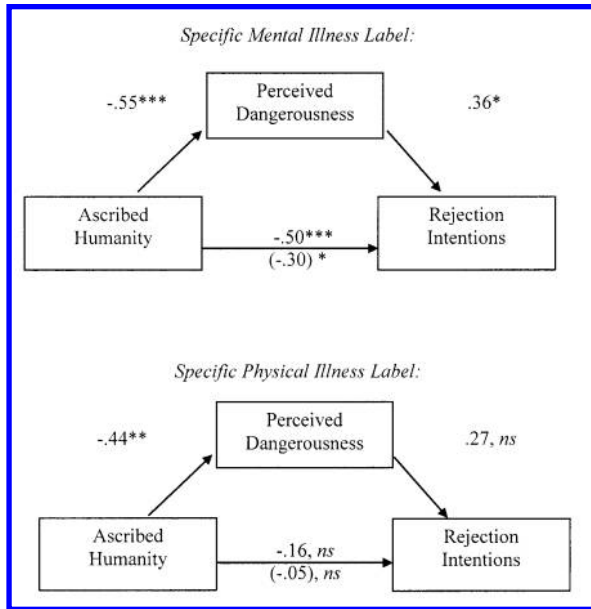


FIGURE 2. Mediation models of the relationships between ascribed humanity, perceived dangerousness, and rejection intentions for Study 2. The first model displays the results for the specific mental illness label condition. The second model displays the results for the specific physical illness label condition. Standardized regression coefficients are shown for both models.

Note.  $*p < .05$ ,  $**p < .01$ , and  $***p < .001$ .

3.33,  $SD = .58$ ) than a target labeled with a specific physical illness ( $M = 3.57$ ,  $SD = .36$ ),  $F(1, 95) = 5.68$ ,  $p < .05$ ,  $d = .49$ .

### Mediation Analyses

Given the focus of our hypotheses, we assessed the link between ascribed humanity and rejection intentions, as well as whether perceived dangerousness mediates this relationship. Because we hypothesized that this process would be especially important for mental illness stigma, we partitioned the sample by label and separately analyzed the mental illness and physical illness label conditions. Given our relatively small sample sizes, we employed bootstrapping with bias corrected and accelerated confidence intervals to test our mediation hypotheses (Preacher & Hayes, 2004, 2008). Each

analysis employed 10,000 resamples. A significant indirect effect is found if the confidence interval does not include zero.

In the mental illness label condition, ascribed humanity predicted both rejection intentions ( $\beta = -.50, p < .001$ ) and our hypothesized mediator, perceived dangerousness ( $\beta = -.55, p < .001$ ). When both ascribed humanity and perceived dangerousness were simultaneously entered into a regression equation predicting rejection intentions, perceived dangerousness was a significant predictor ( $\beta = .36, p < .05$ ). Although the effect of ascribed humanity was reduced in this analysis ( $\beta = -.30, p < .05$ ), it remained significant, indicating partial mediation. The indirect effect was significant, as the bootstrapped 95% confidence interval did not include zero (CI:  $-.38, -.02$ ).

The physical illness condition displayed a divergent, and largely nonsignificant, pattern of results. Here, ascribed humanity did not predict rejection intentions ( $\beta = -.16, ns$ ) but did predict the mediator, perceived dangerousness ( $\beta = -.44, p < .01$ ). However, when both ascribed humanity and perceived dangerousness were simultaneously entered into a regression equation to predict rejection intentions, neither ascribed humanity ( $\beta = -.05, ns$ ) nor perceived dangerousness ( $\beta = .27, ns$ ) were significant predictors. Unlike the mental illness label condition, the bootstrapped 95% confidence interval included zero. Figure 2 displays the results of these analyses.

## DISCUSSION

The results of Study 2 extended and conceptually replicated the findings of Study 1. Whereas we found in Study 1 that a general mental illness label—when compared to a general physical illness label—evokes decreases in ascribed humanity, Study 2 showed a novel effect. Specifically, in comparison to a specific physical illness label, a specific mental illness label—when accompanied by the same behaviors and identical remission status—evoked *greater* ascribed humanity. Although seemingly counterintuitive, this result converges with recent work by Mendoza-Denton, Park, and O'Connor (2008) finding that to the extent that a target acts counterstereotypically in a behavioral context, their attributes may appear exaggerated. Similarly, the current findings suggest that the counterstereotypic information that the target labeled mentally ill acted innocuously and asymptotically may have exaggerated ascriptions of his underlying humanity. The nature of this intriguing effect warrants future

investigation and points to the need to comprehend both extremes of the stereotyping spectrum, in which targets with mental illness labels can be demonized or romanticized.

Our mediational analyses nevertheless replicate and extend Study 1 in showing the unique importance of ascribed humanity in mental illness stigma. Replicating Study 1, we found an inverse relationship between ascribed humanity and perceived dangerousness. Additionally, ascribed humanity can reduce rejection intentions, an effect that is partially mediated by reduced perceived dangerousness. This pattern obtained for the mental illness label, but not the physical illness label, arguing for the importance of this process in the realm of mental illness stigma. To the extent that persons with mental illness labels are seen as retaining their humanity, perceivers may not be as motivated to reject them. That this humanization-rejection linkage is partially mediated by perceived dangerousness suggests that humanizing a person with a mental illness label may reduce fear and anxiety, thereby motivating approach rather than promoting social exclusion.

## GENERAL DISCUSSION

Across two studies we found evidence for the importance of ascribed humanity in mental illness stigma. In Study 1 we demonstrated that the mere presence of a general mental illness label significantly diminishes ascriptions of humanity to a target. Such dehumanization may be the default response when social perceivers are confronted solely with information that a target is labeled with mental illness. Reduced ascribed humanity was, in turn, associated with greater perceptions of threat and dangerousness. In Study 2 we expanded on this pattern of findings by investigating responses to a specific mental illness label in the context of normative behavioral descriptions and a full remission status. Notably, under these circumstances, the presence of a specific mental illness label led to increases in ascribed humanity.

Beyond the humanization main effect documented in Study 2, we found considerable heterogeneity in responses. We discovered unique effects when we conducted separate analyses on the specific mental and physical illness label conditions. Whereas ascribing humanity to a target labeled mentally ill predicted decreases in social rejection, this association was absent for the physical illness label.



Further, the link between humanization and reduced rejection intentions was partially mediated by perceived dangerousness in the mental illness label condition, but this mediational path was not found in the physical illness label condition. These analyses argue that ascribed humanity may be a particularly important process for mental illness stigmatization. Across studies, humanization influenced stereotypes and discrimination toward those with mental illness labels. Specifically, for mental illness labels, ascribed humanity was important for diminishing perceptions of dangerousness (Studies 1 and 2) and discrimination intentions (Study 2).

#### “LESS THAN HUMAN” VERSUS “MORE THAN HUMAN”

Whereas Study 1 linked mental illness labels with dehumanization, the manipulation in Study 2 induced the opposite effect. These findings raise an intriguing question: Under what conditions will participants dehumanize a target labeled with a mental health condition as opposed to believing such an individual to be “more than human”? We believe that the answer lies in the nature of the accompanying individuating information and prior beliefs about treatability. Based on the findings of Study 1 and previous work on media and stereotypes (Wahl, 1995), it is likely that the default perception about those bearing mental illness labels is one of dangerousness and violence. That we were able to evoke this perception with a mere mention of the chronic mental illness label (Study 1) supports this interpretation. Our findings argue that one mediator of this response is an inability to see the target as fully human. Ascribing animalistic qualities to a target—and seeing the target as devoid of the constraint, deliberateness, and reasoning capacities that characterize humanness—may fuel perceptions of danger and threat.

When people confront a target whose behavior is within normative bounds and has a favorable remission status, a mental illness label may shift dehumanizing propensities in the opposite direction. If participants entered the experiment with the default assumption that people with mental illnesses are dangerous and unresponsive to interventions (as Study 1 suggests), it is likely that encountering a target who behaves normatively and has been in remission for years is both startling and beyond the bounds of ordinary expectation. In this case, the target may appear to have heightened humanity, especially given the perceived rarity of such an outcome. Furthermore,

by violating an initial assumption equating mental illness with dangerousness, such contrasting behavior may have rendered the target that much more intriguing and approachable.

The specific consequences of counterstereotypic information about a target labeled mentally ill demands further research. Although recovery and remission occur with some regularity, the public is not routinely exposed to this reality (Jamison, 2006). People who have sought and benefited from mental health services may generally be unwilling to disclose their experiences, and the potential repercussions for such disclosure, such as job loss, may further entrench this pattern. Although counterstereotypic information has the potential to erode prejudice (Bodenhausen, Schwarz, Bless, & Waenke, 1995), research also suggests that such individuals may be subtyped instead (Kunda & Oleson, 1997), perhaps as "the exceptions proving the rule." This may leave the stereotypes and expectancies about the behavior and treatability of mental illness in general unchanged. In recent years, professional individuals who have sustained long-term recoveries from mental illness have written about their experiences (e.g., Jamison, 1995; Saks, 2007), but it is unclear how the public reacts to such disclosures. Future research should examine whether such stories of success can positively impact mental illness stigma or, alternatively, whether people discount these experiences as exceptions that prove the rule that mental illnesses are immutable and untreatable conditions.

Future research should also investigate the hypothesis that counterstereotypic exemplars might influence service utilization patterns. Such an effect may arise through a belief in the treatability of mental illness. To the extent that people come to view mental illnesses as manageable conditions that are responsive to intervention, they may be more willing to see a clinician in times of distress.

#### ASCRIBED HUMANITY, BIOLOGIZATION, AND DISCRIMINATION

In Study 2 we found that increases in the ascribed humanity of a target labeled with mental illness reduced behavioral tendencies to discriminate against him. However, this association did not hold when the target was labeled with a physical illness. This finding argues for the unique importance of humanization in the realm of mental illness. Humanization may be especially important in this domain be-

cause, as we found, the default response in the absence of corrective information is dehumanization. This cognitive default may be the indirect effect of the ascendancy of biological and genetic perspectives in modern mental health theory and treatment (see Hinshaw, 2007). This perspective on mental health places great weight on the biological underpinnings of mental disorders. Previous experimental research argues that the adoption and promulgation of this perspective may be problematic. For example, research by Mehta and Farina (1997) suggests that when an individual's mental illness is attributed to biological causes, perceivers will respond punitively toward him or her (even while professing attitudes of blamelessness), perhaps as a function of attributions of subhumanity. To the extent that psychiatric labels are now spontaneously equated with biogenetic influences thereby rendering those labeled with mental illness as categorically different (Read, 2007), dehumanizing propensities may follow close behind. However, if persons with mental illness labels are humanized, this may lead to an acknowledgement of a "common ground"—rendering perceivers less threatened and fearful—and activate greater approach behavior.

#### LIMITATIONS AND FUTURE DIRECTIONS

Future research should build on the current investigation in several ways. We measured ascribed humanity with measures employed in previous research (Hodson & Costello, 2007; Vicki et al., 2006; Zebel et al., 2008), but we relied exclusively on self-report. We may have found stronger effects if we had assessed ascribed humanity with response latency measures (Greenwald et al., 1998). A further limitation is our use of a rejection intentions measure instead of a behavioral outcome variable. If ascribed humanity does indeed lead to approach behavior, this tendency should manifest itself in concrete, observable action. Future work should measure overt behaviors such as gaze, physical distance, and posture to determine if humanizing a person labeled with mental illness does indeed predict prosocial engagement behavior toward him or her. Additional work should also generalize our findings to other mental and physical illness labels. For instance, depression or attention deficit disorder, rather than bipolar disorder, may yield different effects. Finally, future studies should vary the behavioral information and remission status information of the target labeled with mental ill-

ness. Although we employed vignettes showing behavior within normative bounds, further studies might employ behaviors that violate social norms. Under these circumstances, mental illness labels may diminish ascribed humanity.

## CONCLUSION

The stigma surrounding mental illness labels can have substantial social costs. For those experiencing psychological distress, fear of being labeled may deter seeking needed treatment; for those who have received a label, stigma may reduce treatment adherence (Link & Phelan, 2006). We focused on how ascribing humanity to a target labeled with mental illness may influence stereotyping and discrimination. The default response to a target labeled with mental illness, in the absence of corrective information, may be dehumanization. However, if the target is described as remitted and behaves within normative bounds—thereby undermining the view equating mental illness labels with dangerousness—people may accord him an enhanced sense of humanness. The consequences of such attributions for stereotyping and discrimination deserve further research attention. Beyond these main effects, we found that the extent to which perceivers ascribe humanity to a person labeled with mental illness can diminish motivations for social rejection. This humanization may promote a sense of “common ground” that assuages perceivers’ feelings of threat, thereby initiating approach rather than avoidance. Interventions targeting beliefs about the underlying humanity of those labeled with mental illness may therefore constitute a promising avenue for stigma reduction.

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