Stigma and Health

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The Stigma of Voice-Hearing Experiences: Religiousness and Voice-Hearing Contents Matter

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Extensive research confirms that people with psychotic disorders suffer high levels of social stigma on average. However, psychotic-like experiences show incredible diversity and cannot reasonably be understood as a monolithic category. It is plausible that voice-hearing experiences with benign content might elicit less stigma than those with negative content, and researchers have hypothesized that culturally or theologically consistent voice-hearing experiences might elicit no stigma at all. The present study evaluated these hypotheses by testing how voice-hearing experiences that varied in terms of valence and the presence or absence of religious content affected stigma responses (i.e., perceived dangerousness and desired social distance) among people who were high or low in religiousness. Participants read vignettes describing two people who hear voices: one with positive content (complimentary, supportive) and the other negative (insulting, homicidal). Via random assignment, half read vignettes that attributed the voice to Abraham Lincoln whereas the other half read vignettes that replaced the words *Abraham Lincoln* with the word *God*. Results suggested that different voice-hearing contents elicited different levels of stigma. More religious participants perceived God-hearers to be less dangerous and desired particularly low levels of social distance from people who were described as hearing the voice of God saying positive things. Religiousness was associated with decreased stigma only in the context of specific voice-hearing experiences, lending support to the hypothesis that the stigma of voice-hearing experiences is determined as a simultaneous function of the contents of the experiences and the cultural context within which they are embedded.

Keywords: stigma, psychosis, auditory verbal hallucinations, schizophrenia, religiousness

People diagnosed with psychotic disorders face substantial social stigma that is functionally debilitating (Corrigan, 2004; Ertugrul & Uluğ, 2004; Lawrence & Kisely, 2010), subjectively distressing (Lloyd, Sullivan, & Williams, 2005; Wahl, 1999), and interferes with recovery (Yanos, Roe, Markus, & Lysaker, 2008). Research suggests that psychosis elicits greater stigma than almost every other mental health condition including major depression (Arkar & Eker, 1992; Marie & Miles, 2008), generalized anxiety disorder (Socall & Holtgraves, 1992), panic disorder (Angermeyer & Matschinger, 1997), obsessive–compulsive disorder (Warman, Phalen, & Martin, 2015), bipolar disorder (Leiderman et al., 2011), and neurological conditions such as brain tumors (Socall & Holtgraves, 1992).

Previous studies of the stigma of psychosis have approached the condition as though it were monolithic, comparing public perceptions of a person with a single set of psychotic symptoms against perceptions of people with other mental health conditions. However, psychosis is in reality an extraordinarily broad category, and the

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relationship between different kinds of psychotic experiences and stigma is not obvious. Authors have suggested that voice-hearing elicits particularly high levels of stigma (see Ando, Clement, Barley, & Thornicroft, 2011), but it seems likely that the contents of voice-hearing experiences are relevant to stigma responses. Voices have been shown to range widely from plausible to bizarre (Cermolacce, Sass, & Parnas, 2010) and from threatening to positive or useful (Honig et al., 1998; Jenner, Rutten, Beuckens, Boonstra, & Sytema, 2008), with many people hearing voices that would best be described as "neutral" (Cottam et al., 2011). Some voice-hearing experiences may be normative and socially adaptive. For example, qualitative research suggests that many Christians believe it is within the range of normal experience to hear God's voice and may even be cause for social esteem (Luhrmann, 2012). In such a case, the term *psychosis* may not even be applicable despite the phenomenological similarity to voice-hearing experiences that are commonly understood to be pathological.

Given that stigma is increasingly viewed as a primary social and public health barrier for voice-hearers, there is a need for a more careful analysis of whether public perceptions vary according to the broad range of experiences that persist in the general population. To study these issues, we presented a group of adults with vignettes describing two people who hear voices: one with positive content (complimentary, supportive) and one with negative content (insulting, homicidal). Participants were randomized such that for half the vignettes attributed the voice to Abraham Lincoln whereas the other half had the words *Abraham Lincoln* replaced with the word *God*. Participants were assessed on measures of stigma toward the voice-hearers described in the vignettes as well as a measure of their own religiousness.

Because of the relative normativity of hearing God's voice among people who are more religious (Luhrmann, 2012), it was hypothesized that participants who were more religious would endorse particularly low desired social distance and low perceived dangerousness with respect to a person who hears God's voice when the voice is positive in content. Because the experience of hearing a deity saying very negative things such as inciting a person to harm or murder another is considered abnormal in mainstream theology (e.g., Judaism and Christianity: Exodus 20:13, Deuteronomy 5:17; Mormonism: D&C 59:6; Islam: Qu'ran 6:151; Buddhism: Anguttara Nikaya 3.71; Hinduism: Bhagavad Gita, 13.8–12), there was no expectation that the vignettes describing a religious hallucination with negative content would receive different levels of stigma between people who are religious versus nonreligious. It was expected that hostile and violent voice-hearing experiences would elicit greater stigma in general when compared with positive voice-hearing experiences because research suggests that perceptions of dangerousness are a major component of stigma (Angermeyer & Matschinger, 1997; Angermeyer & Matschinger, 2004; Jorm & Oh, 2009; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Link & Phelan, 2001) and that there may be a causal relationship between violent descriptions of people with mental health conditions and stigma (Angermeyer & Matschinger, 1996; Dietrich, Heider, Matschinger, & Angermeyer, 2006).

Method

Participants

One hundred forty three participants were recruited from two universities in the American Midwest. To participate in this study, participants had to be older than 18 years of age and speak English fluently. There were no other exclusion criteria. Students received course credit for participating. Seventy-three participants (50.7%) were either majoring or minoring in psychology. Each participant provided informed consent and voluntarily agreed to participate. Participant characteristics are shown in Table 1. The present study was approved by the institutions' institutional review boards.

Procedures

After reporting basic demographic information, participants were presented with vignettes describing a person who hears positive voices (complimentary, encouraging) and a person who hears negative voices (insulting, homicidal), with order of presentation randomly counterbalanced. Participants were randomized into two groups such that for half the vignette referred to the voice as Abraham Lincoln

Table 1
Participant Characteristics

Characteristic	*n*	%
Gender		
Male	24	16.8
Female	118	82.5
Transgender	1	0.7
Race		
Caucasian	121	84.6
Black or African American	7	4.9
Asian/Pacific Islander	3	2.1
Hispanic or Latino	7	4.9
Other	5	3.5
Religious denomination		
"Christian"/nondenominational	54	37.8
Protestant	27	18.9
Catholic	25	17.5
Nonreligious/agnostic	13	9.1
Atheist	10	7.0
Muslim	4	2.8
Jewish	3	2.1
Wiccan/pagan	2	1.4
Episcopal	1	0.7
"Theist"	1	0.7
No response	3	2.1
	M (*SD*)	Min–max
Age, years	20 (1.38)	18–25

whereas the other half had the words *Abraham Lincoln* replaced with the word *God*. All other factors were held constant. After each vignette, participants were assessed on measures of attitudes toward the voice-hearer being described. Participants were also assessed for their own degree of religiousness and previous level of contact with mental illness. Randomization and data collection were performed online using Qualtrics (Provo, Utah) survey software.

Materials

Vignettes. Vignettes described a person who hears positive voices and a person who hears negative voices. Between conditions the vignettes varied only in terms of whether they included the words *Abraham Lincoln* or the word *God*. The vignettes read as follows:

Positive voice. "Nancy often hears the voice of [God/Abraham Lincoln] giving her guidance and advice. The voice says comforting things, and once told her that she has been chosen to spread the word of [God/Abraham Lincoln]. She recently went through some hardships at work, but felt she was able to persevere in part because of the voice's presence in her life."

Negative voice. "Jessica often hears the voice of [God/Abraham Lincoln] talking to her. He often says insulting things and once ordered her to murder someone. She recently quit her job, believing she was acting in accordance with [God's/Abraham Lincoln's] wishes."

Social Distance Scale. The Social Distance Scale (e.g., Link, Cullen, Frank, & Wozniak, 1987) is a seven-item Likert-style scale used to determine the extent to which a person is unwilling to accept a social relationship (neighbor, friend, spouse, etc.) with a target individual. High scores indicate a desire for greater social distance whereas low scores indicate a willingness for social contact. The measure has been shown to have excellent internal consistency reliability (.97; Link et al., 1987; .90; Angermeyer, Matschinger, & Corrigan, 2004) and construct validity (Link, Yang, Phelan, & Collins, 2004), and it shows resistance to social desirability effects (Norman, Sorrentino, Windell, & Manchanda, 2008). The scale was slightly modified to refer specifically to the characters described in the vignette rather than to a generic person with mental illness.

Perceived Dangerousness Scale. The Perceived Dangerousness Scale is an eight-item Likert-style measure of how dangerous a target individual is perceived to be, with high scores indicating greater perceptions of dangerousness. The measure has been shown to have a strong relationship with labeling and stigma (e.g., Link et al., 1987) and shows good internal consistency (.85; Link et al., 1987; .88; Angermeyer & Matschinger, 2004). As with the Social Distance Scale, modifications were made to refer specifically to the characters in the vignette.

Santa Clara Strength of Religious Faith Questionnaire. The Santa Clara Strength of Religious Faith Questionnaire (SCSRFQ) is a commonly used self-report measure of religiousness. The scale consists of 10 statements of religious faith (e.g., "I pray daily") that the participant states their agreement or disagreement with using a 4-point Likert scale yielding a total score ranging from 10 to 40 (higher scores indicate stronger religious faith; Plante, Yancey, Sherman, Guertin, & Pardini, 1999). When tested on university student samples, the scale has been shown to exhibit excellent validity and reliability (Cronbach's α: .94 to .97,

split-half reliability: .90 to .96; Freiheit, Sonstegard, Schmitt, & Vye, 2006; Plante et al., 1999) with two independent factor analyses confirming a one-factor structure (Freiheit et al., 2006; Lewis, Shevlin, McGuckin, & Navrátil, 2001). In our study sample Cronbach's α for this scale was excellent (α = .975). Following procedures developed by the creators of the SCSRFQ (Plante & Boccaccini, 1997), participants were divided into high and low religiousness groups by calculating the median religiousness score for the sample (*Mdn* = 28) and defining participants with religiousness scores at or above the median as "high" in religiousness and participants below the median as "low" in religiousness.

Level-of-Contact Report. Level of contact with people suffering from mental illness was measured for use as a covariate given findings that the construct tends to be related to lower levels of stigma (Alexander & Link, 2003; Corrigan, Green, Lundin, Kubiak, & Penn, 2001; Link et al., 1999). The Level-of-Contact Report (Holmes, Corrigan, Williams, Canar, & Kubiak, 1999) consists of 12 items describing various levels of exposure to severe mental illness (e.g., "I have a severe mental illness," "A friend of the family has a severe mental illness," etc.) with each item ranked by degree of intimacy. Participants place checkmarks by all of the items that apply to them. Score on the measure is indexed to the rank order of the most intimate situation endorsed by the participant. This scale has been shown to have good reliability and validity in studies of attitudes toward schizophrenia and severe mental illness (Corrigan, Edwards, Green, Diwan, & Penn, 2001; Corrigan, Green, et al., 2001; Holmes et al., 1999).

Analysis Plan

We planned to fit mixed-design analyses of covariance (ANCOVAs) with voice label (Lincoln vs. God) and participant religiousness (high vs. low) as between-subject factors and voice valence (positive vs. negative) as a within-subject factor. Social distance and perceived dangerousness scores were entered as dependent variables. Age, race (White vs. non-White), gender (male vs. nonmale), and level of contact with mental illness were tested to determine need for inclusion as covariates. Follow-up ANCOVAs were used to understand potential interaction effects, again controlling for all covariates.

Results

Preliminary Analyses

Age, race, and gender were tested to see whether they were significantly related to social distance and perceived dangerousness. Age was significantly related to social distance for voices with positive valence, $r(142) = .162$, $p = .05$, and to perceived dangerousness for voices with positive valence, $r(142) = .186$, $p = .03$. Therefore, age was entered as a covariate for analyses of social distance and perceived dangerousness. Because only one participant indicated their gender as transgender, *t* tests were performed between male and female only and revealed no significant effect of gender on any of the outcome variables. Because Whites composed a large majority of the sample, race was tested by dichotomizing between White and non-White. There was a significant difference between White and non-White participants on overall perceived dangerousness, $t(142) = 2.25$, $p < .05$, and for perceived dangerousness of voice-hearers in negative valence conditions, $t(142) = 3.016$, $p = .003$, but not for social distance scores. (Non-White participants had generally greater perceptions of dangerousness, $M = 21$, $SD = 5.05$, than did White participants, $M = 18.07$, $SD = 5.72$.) Therefore, race was entered as an additional covariate for analyses of perceived dangerousness. Level of contact was also examined and was found to relate to social distance desired from the target with a negative voice, $r(140) = -.222$, $p = .008$, and perceived dangerousness of the target with a negative voice, $r(141) = -.185$, $p = .027$; therefore, it was entered as a covariate for analyses of social distance and perceived dangerousness.

Social Distance

Participants' social distance scores are reported in Figure 1 and ANCOVA results in Table 2. Consistent with hypotheses, a significant three-way interaction was measured among participant religiousness, voice label, and voice valence. Follow-up tests revealed that, when voice valence was negative, participants' level of desired social distance did not significantly

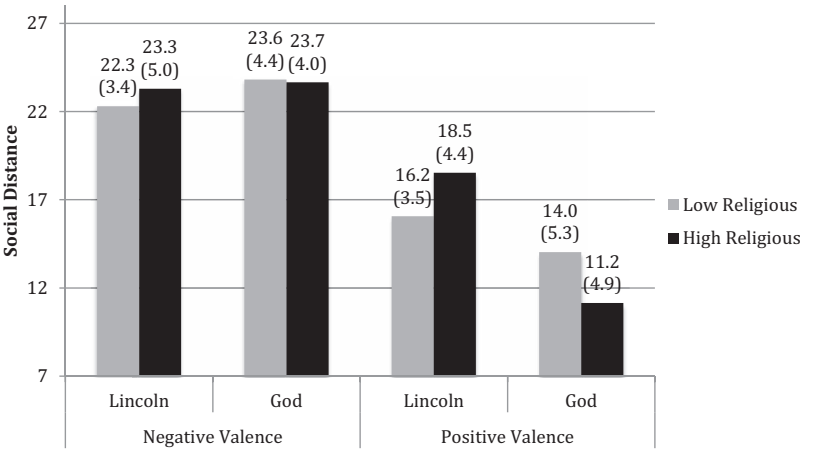

Figure 1. Social distance scores. Scale range 7–28. Values presented as *M* (*SD*).

differ by voice label, $F(1, 136) = 1.946$, $p = .165$, $\eta^2 = .014$, or participant religiousness, $F(1, 136) = 0.12$, $p = .73$, $\eta^2 = .001$, nor did these variables interact, $F(1, 136) = 0.633$, $p = .428$, $\eta^2 = .005$. However, when voice valence was positive, a significant two-way interaction was measured between voice label and participant religiousness, $F(1, 137) = 13.432$, $p = .0005$, $\eta^2 = .089$. For positive valence voices, participants high in religiousness desired substantially less social distance from God-hearers ($M = 11.15$, $SD = 4.97$) than from Lincoln-hearers ($M = 18.53$, $SD = 4.39$), $F(1, 74) = 58.515$, $p < 10^{-11}$, $\eta^2 = .44$. On the contrary, participants low in religiousness did not desire significantly different levels of social distance according to whether the voice was labeled as Abraham Lincoln ($M = 16.15$, $SD = 3.53$) or

Table 2
Results From Mixed-Design ANCOVAs for Social Distance and Perceived Dangerousness

Variables	$F(1, 137)$	p	η^2
Social Distance			
Voice Valence**	19.77	.00001	.127
Voice Label**	11.23	.001	.076
Participant Religiousness	0.029	.864	.0002
Label × Valence**	37.258	10^{-8}	.215
Label × Participant Religiousness**	8.752	.004	.06
Participant Religiousness × Valence	0.524	.47	.004
Label × Valence × Participant Religiousness*	5.55	.02	.039
Perceived Dangerousness			
Voice Valence**	18.829	.00005	.122
Voice Label**	8.643	.004	.06
Participant Religiousness*	5.836	.018	.041
Label × Valence**	24.087	.00001	.15
Label × Participant Religiousness	3.846	.05	.028
Participant Religiousness × Valence*	3.954	.49	.028
Label × Valence × Participant Religiousness	1.104	.339	.008

Note. One participant was dropped from social distance analyses because of incomplete responses and therefore F-tests for Social Distance had 136 residual degrees of freedom.
* $p < .05$. ** $p < .01$.

God ($M = 14.03$, $SD = 5.28$), $F(1, 61) = 3.563$, $p = .064$, $\eta^2 = .055$.

Perceived Dangerousness

Participants' perceived dangerousness scores are reported in Figure 2 and ANCOVA results are reported in Table 2. All two-way interactions were statistically significant; however, no significant three-way effect emerged. Follow-up tests revealed that God-hearers were viewed as significantly less dangerous than Lincoln-hearers only when voice valence was positive, $F(1, 136) = 28.936$, $p < 10^{-7}$, $\eta^2 = .175$. Participants low in religiousness did not significantly adjust their ratings of dangerousness according to whether the voice was labeled as coming from God or Abraham Lincoln, $F(1, 60) = 0.687$, $p = .410$, $\eta^2 = .011$. However, participants higher in religiousness generally perceived God-hearers to be significantly less dangerous ($M = 17.42$, $SE = .833$) than Lincoln-hearers ($M = 21.97$, $SE = .855$), $F(1, 73) = 14.468$, $p < .0005$, $\eta^2 = .165$. It is interesting to note that follow-up analyses of the interaction between voice valence and participant religiousness suggested that targets hearing voices with negative valence were perceived as more dangerous by participants high in religiousness ($M = 26.3$, $SD = 6.96$) than by participants low in religiousness ($M = 21.9$, $SD = 7.57$), $F(1, 138) = 10.425$, $p < .005$, $\eta^2 = .07$. Participant religiousness was not associated with differing levels of perceived dangerousness when the voice had a positive valence, $F(1, 138) = 0.089$, $p = .765$, $\eta^2 = .001$.

Discussion

Previous research has established that psychotic symptoms such as auditory verbal hallucinations tend to provoke a high degree of stigma in the general population that affects social functioning and quality of life (Corrigan, 2004; Ertugrul & Uluğ, 2004; Lawrence & Kisely, 2010; Lloyd et al., 2005; Wahl, 1999; Yanos et al., 2008). However, researchers have not previously tested how the specific contents of voice-hearing experiences might moderate stigma reactions. The present study evaluated how people high or low in religiousness perceived voice-hearing experiences that varied in terms of their valence (positive or negative) and label (God or Abraham Lincoln).

Overall, it appeared that the specific content of the voice-hearing experience was relevant to judgments and attitudes toward the voice-hearer. Consistent with hypotheses, more religious participants desired significantly lower social distance from positive voice-hearers who heard God rather than Abraham Lincoln. Par-

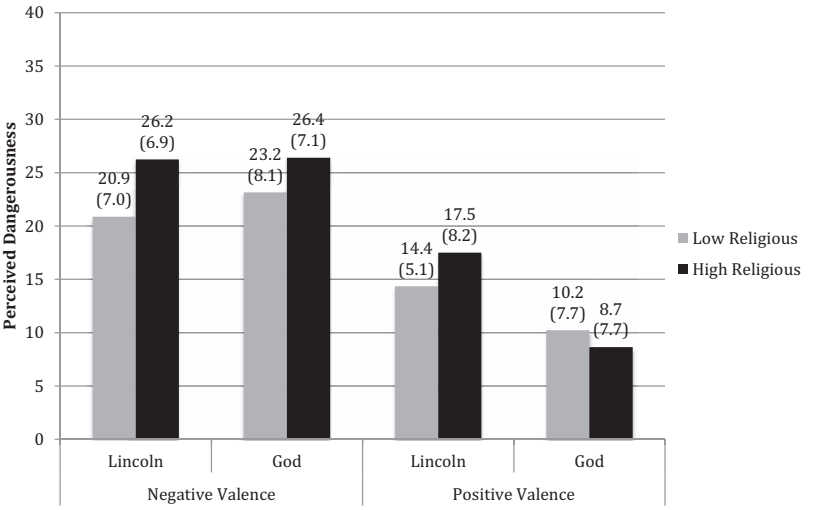

Figure 2. Perceived dangerousness scores. Scale range 0–40. Values presented as *M* (*SD*).

ticipants lower in religiousness did not endorse differing levels of stigma according to whether the voice was described as God as opposed to Lincoln. When voices were negative in content, the source/label of the voice had no effect on levels of desired social distance regardless of participant religiousness. Similar, although not identical, patterns were found with respect to perceived dangerousness, with positive God-hearers perceived as being least dangerous. In addition, whereas less religious participants' perceptions of dangerousness were unaffected by the presence or absence of religious content, more religious participants perceived God-hearers to be less dangerous than Lincoln-hearers. Overall, these findings suggest that voice-hearing experiences with positive religious themes may elicit less severe stigma reactions among people who are more religious. Given the specificity of the between-group experimental manipulation—a single word adjusted between otherwise identical vignettes—the observed effect sizes were remarkable. Future studies of attitudes toward psychosis will need to be more mindful of the specific content of the psychotic experience they intend to study because these results suggest that public perceptions of anomalous experiences can vary dramatically according to their specific contents.

It is interesting to note that religiousness was not associated with lower stigma overall and was in fact related to heightened perceptions of dangerousness with respect to people hearing voices with negative valence. One possible explanation for this finding involves a cognitive bias called thought–action fusion, which describes the tendency for people to believe that negative cognitions lead causally to negative outcomes (e.g., that thinking about a car crash increases the chances that you will get into an accident; Berle & Starcevic, 2005). Research suggests that people who are more religious tend to have a stronger thought–action fusion bias than people who are less religious (Berman, Abramowitz, Pardue, & Wheaton, 2010; Rassin & Koster, 2003). Given the homicidal content of the negative valence voices used in this study, it is possible that more religious participants had stronger concerns that these voice-hearers would act on the voices telling them to hurt other people. Although there is little evidence that command hallucinations by themselves lead to heightened risk of violence (Coid et al., 2013), public perceptions of dangerousness may nevertheless be strongly affected by the presence of violent voice-hearing content. Future research could evaluate this hypothesis by isolating the effect of command voices on stigma. For example, researchers might compare negative command voices against other kinds of negative voices, such as those that are purely insulting rather than threatening.

The design of this study had strengths and weaknesses. The sample was primarily young and female, and all were university students, limiting generalizability. Although gender does not appear to show a consistent relationship with social distance or perceived dangerousness (Jorm & Oh, 2009; Jorm, Reavley, & Ross, 2012), research suggests that younger (Jorm & Oh, 2009; Lauber, Nordt, Falcato, & Rössler, 2004) and more educated (Corrigan, Edwards, et al., 2001) people may endorse generally lower levels of stigma toward people with mental illness; therefore, the present findings may underestimate the degree of stigma faced by people with different voice-hearing experiences. In addition, the sample was mostly Christian and Protestant. Different religious denominations have been shown to endorse differing levels of stigma toward people with mental illness (Wesselmann & Graziano, 2010); therefore, the present results may not generalize well across religious groups. Conceptions of religious voice-hearing experiences likely also differ between religious groups. Although research suggests an association between religiousness and voice-hearing (Peters, Day, McKenna, & Orbach, 1999) and a possible relationship between religiousness and more positive perceptions of voice-hearing (Davies, Griffin, & Vice, 2001), it is not unlikely for people who score similarly on measures of overall religiousness to hold different beliefs about the normativity of religious voice-hearing experiences. The scale of religiousness used for this study did not include items reflecting beliefs about voice-hearing, and we did not separately query participants to determine whether they believe voice-hearing is a normative element of religious experience. It is also important to note that the scale was specifically a measure of religiousness rather than spirituality. We were most interested in religiousness for the purposes of this study because the construct refers to the social

and behavioral aspects of religion that may be most proximal to the social stigma faced by voice-hearers, whereas spirituality refers to personal transcendent experiences and beliefs (Mohr, Brandt, Borras, Gilliéron, & Huguelet, 2006). However, future studies should explore both constructs because each may be relevant, and any implications of the current results should be understood as limited in scope to religiousness.

The nature of the vignettes used in this study may also limit its external validity. The vignettes were by design very black and white: voices were clearly labeled as God or Abraham Lincoln, and differences between valences were extreme, ranging from benign encouragements on the one hand to homicidal themes on the other. In the real world voice-hearing experiences tend to be far more ambiguous and typically exist somewhere on the continuum between these extremes. Upward of 80% of people with schizophrenia have both positive and negative voice-hearing experiences (Honig et al., 1998), and voice-hearing experiences are for many people relatively neutral (Cottam et al., 2011). In one study of Christians with schizophrenia, the majority reported hearing voices with religious content, but only approximately one quarter described the voice as God's (Cottam et al., 2011). In other words, voice-hearing experiences exist on continuums between positive and negative, religious and nonreligious. This study's findings concerning stigma toward people hearing very positive versus very negative voices with religious versus nonreligious content may not generalize neatly to the majority of voice-hearers whose experiences fall across the spectrum of religiosity and emotional valence, such that the same person may hear voices that are religious and nonreligious and positive and negative. Future research should explore a more complete range of voice-hearing experiences, including those that are more neutral. In addition, researchers should test stigma toward positive voice-hearing experiences that have negative functional effects because many people with psychosis report subjectively positive delusions and hallucinations that nevertheless have a deleterious effect on social functioning (Knowles, McCarthy-Jones, & Rowse, 2011).

With replication, these findings may have clinical implications. Spiritual counselors and other clinicians have often advocated for the introduction of spiritual explanatory frameworks into the course of psychotherapy for religious patients, such as suggesting possible theological causes for mental health conditions (Mijares & Khalsa, 2005; Sutherland, 1996), and some evidence suggests that religious patients with psychotic disorders often articulate their clinical challenges in religious terms (Heilman & Witztum, 2000). The current study provides some support for the potential efficacy of these practices because theologically consistent voice-hearing experiences appeared to be subject to particularly low levels of stigma. It may be possible for voice-hearers to achieve greater social integration and support when they are able to frame their voice-hearing experiences within a preexisting theological and/or cultural framework. However, it should be emphasized that some Christian voice-hearers report voices that are predominantly negative (Cottam et al., 2011), and the results of the present study are consistent with the hypothesis that negative voice-hearing experiences are not received well regardless of whether they contain religious content.

Implications of the present study for mental health outreach should also be considered. Past research has suggested that by the time patients with religious delusions are admitted to psychiatric hospitals, their symptoms tend to be significantly more severe than patients with nonreligious psychosis (Siddle, Haddock, Tarrier, & Faragher, 2002; Siddle, Haddock, Tarrier, & Faragher, 2004). It is possible that patients with religious psychosis are less likely to cause alarm and be hospitalized when compared with patients with nonreligious psychoses. For example, a teenager who reports to his parents that he hears the voice of Brad Pitt telling him to move to the Vatican would likely be taken to a psychologist for evaluation and possible hospitalization despite the positive valence of the experience. In contrast, a teenager who reports to his parents that he hears the voice of God encouraging him to go on a pilgrimage to the Vatican may not cause the same panicked reaction, particularly within the context of a very religious family. Religious psychotic-like experiences may lead to impaired functioning and mental health outreach only when they are particularly distressing and threatening. Clinicians should be careful to evaluate the normativity of re-

ported voice-hearing experiences and consider the possibility that superficially similar voice-hearing experiences could have dramatically different consequences for the social functioning of the voice-hearer.

The importance of the precise content of voice-hearing experiences has previously been ignored in research on mental health stigma. The present study quantitatively demonstrates that the stigma of voice-hearing experiences varies as a simultaneous function of the content of the voices and the larger doxastic context. The very large effect sizes observed in the present study suggest the need for researchers and clinicians to pay greater attention to the contents of voice-hearing experiences when developing clinical conceptualizations, research designs, and theoretical models.

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