

# Do Medical Models of Mental Illness Relate to Increased or Decreased Stigmatization of Mental Illness Among Orthodox Jews?

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**Abstract:** Research suggests that attributing mental illness to moral causes and perceiving it as dangerous relates to greater stigma, whereas belief in biomedical factors is associated with less. Within the family-centric Orthodox Jewish community, mental illness is perceived as a risk to family functioning and future generations, and is therefore stigmatizing of the individual and their family. Since biomedical models may exacerbate these concerns, we hypothesized that unlike within the general population, biological causal attributions would relate to increased stigma among Orthodox Jews. Consequently, we also examined the attitudinal correlates of stigmatization of obsessive-compulsive disorder within the Orthodox community, as measured by both social distance and family/marriage concerns. Results indicated that, unlike previous research, biological models were associated with greater marriage/family stigma, and did not predict less social distance. This suggests that biomedical approaches may increase salient aspects of stigma within the Orthodox community, and clinical practice should be sensitive to these concerns.

**Key Words:** Stigma, orthodox, jews, medical model, mental illness.

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Individuals with mental illness have a long history of facing stigmatization, which has several negative consequences such as social rejection, employment and housing discrimination, reduced self-esteem, and disinclination to pursue mental health services (United States Department of U.S. Department of Health and Human Services, 1999). Current research (e.g., Corrigan et al., 2003; Link et al., 1999; Martin et al., 2000) suggests that perceptions of dangerousness and belief in moral causes of mental illness (e.g., the way the individual was raised, bad character) relate to increased stigmatization, whereas belief in medical causes (e.g., stress, genetic/biological causes) is associated with lower levels of discrimination. Consequently, the National Alliance for the Mentally Ill, the National Institute of Mental Health, and the Mental Health Association, among others, have launched efforts to “medicalize” public conceptions of mental illness with the hope of reducing support for moral models that may be used to justify social discrimination. Although this has been a valuable strategy for fighting stigma among the general population (Corrigan and Penn, 1999), there is a danger in applying the same formula across cultures because culture, like many other aspects of mental illness, may influence the attitudes underlying stigmatization and its expression. Therefore, the current

research examines the effect of medical models on the stigmatization of mental illness within a unique religious culture—Orthodox Judaism.

Orthodox Judaism is premised on the divine origination of the *Torah* (Hebrew Bible) and its many commandments, and adherents apply these biblical precepts, interpreted extensively in the *Talmud*, to every facet of their lives (Schnall, 2006). These detailed religious laws including Sabbath observance, dietary restrictions (e.g., not mixing milk and meat), daily communal prayers, and prescriptions for family life, which help to infuse daily life with religious responsibilities and significance. In addition, Orthodox Judaism includes a comprehensive meaning system (Maimonides, 12th century/1990), focusing on belief in a monotheistic God, acceptance of his commandments, and eventual messianic redemption. Furthermore, many Orthodox Jews limit their contact with the secular world (Huppert et al., 2007) by forming cloistered communities centered on this religious ideology. However, Orthodox Judaism is a broad categorization within which exist numerous subgroups defined by dress, language, culture, and religious emphasis. One key distinction is between the more religiously traditional and culturally isolated Ultra-Orthodox and the more moderate Modern Orthodox (Loewenthal and Rodgers, 2004), and both these groups were included in the current research.

It has been widely noted that many Orthodox Jews fail to seek treatment for mental illness, whereas those who do, insist on placing a premium on secrecy (e.g., Loewenthal, 2006; Rosen et al., 2007; Witzum and Buchbinder, 2001). Previous reports attributed this to the strong family-centric value system operating within the Orthodox community (Loewenthal and Rogers, 2004; Margolese, 1998; Schnall, 2006). Of specific importance is the stigma among Orthodox Jews that often focuses on the perceived consequences of mental illness to family functioning, stability, and children. Consequently, the stigma of mental illness often extends to siblings and children of the individual, since they are perceived as being highly affected (Margolese, 1998; Schnall, 2006). These aspects of stigma can also negatively affect marriage prospects, as dating within the Orthodox community is often prearranged after an investigation of family and personal background by both sides (Rosen et al., 2007; Schnall, 2006; Witzum and Buchbinder, 2001). The resulting loss of social status may lead to avoidance of individuals with mental illness and their families (Witzum and Buchbinder, 2001; Rosen et al., 2007). Given these unique cultural factors, belief in medical causes of mental illness may exacerbate stigma among Orthodox Jews, as mental illness attributed to biological causes may be perceived as a threat to family functioning and children.

Consequently, the current research endeavored to examine the attitudinal correlates of stigmatization of mental illness within the Orthodox Jewish community. Because stigma is a multidimensional construct measured in multiple ways (Link et al., 2004), we used both a traditional measure of stigma—social distancing of the individual with mental illness (Link et al., 2004)—as well as a measure of family/marriage concerns. In addition, we chose to focus on obsessive compulsive disorder (OCD) since previous research suggested that it is stigmatized, subject to a variety of causal

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attributions (e.g., Simonds and Thorpe, 2003), and consequently enables exploration of a wide range of attitudes. Furthermore, OCD is relatively prevalent within the US population (Kessler et al., 2005), and is a frequent target of research and intervention among Orthodox Jews (e.g., Huppert et al., 2007; Pirutinsky et al., 2009). We hypothesized that within the Orthodox community, stigma would correlate with moral causal attributions and perceptions of dangerousness, in a manner consistent with previous research in the general population (Corrigan et al., 2003; Link et al., 1999; Martin et al., 2000). Furthermore, as suggested by Martin et al (2000), we expected that the effect of moral causal attributions on social distance would be indirect, mediated by increased perceptions of dangerousness. Unlike previous findings that indicated belief in biomedical causes is positively correlated with lower levels of stigma (e.g., Link et al., 1999; Martin et al., 2000), we expected that within an Orthodox Jewish sample biomedical causal attributions would be positively correlated with an increased stigmatization of mental illness.

## METHODS

### Materials and Measures

#### Case Vignette

We created a vignette portraying an individual named “Binyomin” (a common Orthodox name) exhibiting moderate to severe symptoms of OCD involving safety concerns and checking. Three experienced researchers/clinicians (all of whom had published peer-reviewed papers on OCD in the past 5 years) reviewed this vignette and indicated that the symptoms described met criteria for a diagnosis of OCD.

#### Attitudes Toward Mental Illness

Drawing on results from previous stigma research (Link et al., 1999), we measured participant’s attitudes towards the vignette in several salient domains. A single item, “How likely do you think it is that Binyamin is experiencing a mental illness?” measured perception of mental illness using a 4-point scale (i.e., very likely, somewhat likely, somewhat unlikely, and very unlikely). To assess causal attributions, participants responded to the question “How likely is it that Binyamin’s situation might be caused by the following?” Response choices consisted of the following: “bad character,” “a chemical imbalance in the brain,” “the way he was raised,” “stressful circumstances in his life,” “a genetic or inherited problem,” and “God’s [Hashem’s] will.” Each of these choices were rated on a four point scale: very likely, somewhat likely, somewhat unlikely, and very unlikely. In addition, a single item—“How dangerous would you feel Binyamin is?” assessed perception of dangerousness using a 9-point scale (ranging from “not at all” to “very much”).

#### Social Distance

Participants completed a previously used 5-item scale (Link et al. (1999), which relates to willingness to socially engage a hypothetical individual with mental illness. Items included “How willing would you be to spend an evening socializing with Binyamin?” and “How willing would you be to start working closely with Binyamin?” Response anchors ranged from “definitely” to “definitely not” on a 4-point scale. Scores on each item were averaged to form a single internally consistent stigma measure ( $\alpha = 0.86$ ).

#### Family/Marriage Stigma

Culture-specific aspects of stigma were measured using an adaptation of the 13-item Explanatory Model Interview Catalogue Interview for Outpatient Psychiatry and Stigma (Raguram and

**TABLE 1.** Family/Marriage Stigma Scale

If they knew about it, do you think Binyamin’s neighbors, colleagues or others in his community think less of him because of his problem
Do you feel others would avoid Binyamin because of his problem
Would some people refuse to visit his home because of his condition
If they knew about it, would Binyamin’s neighbors, colleagues or others in his community think less of his family because of his problem
If others were to find out about Binyamin’s problem, might it cause any problems for his family
Would Binyamin’s family prefer to keep others from finding out about his condition
If people knew about it, might his problem make it more difficult for Binyamin to marry
Might his condition cause problems in Binyamin’s marriage
Could his problem make it more difficult for someone in Binyamin’s family to marry

Weiss, 1997). This ethnographic interview has been used previously to study the stigma within the Orthodox Jewish community (Rosen et al., 2007), and addresses culture-specific concerns about marriage, family, and social status. In our study, these interview questions were modified to refer to the case vignette. Participants indicated their agreement or disagreement with each resulting statement on a 4-point scale. As this measurement had never been used in a self-report format, we subjected items to a principal components analysis. Of the total items used, 9 (Table 1) loaded on the primary factor representing Orthodox-specific family and marriage concerns, whereas 4 items did not load highly ( $<0.04$ ) on this factor and were therefore excluded. Accordingly, we summed up the 9 items that related to family and marriage concerns and used them to form an internally consistent family/marriage stigma scale ( $\alpha = 0.86$ ).

#### Participants and Procedure

A total of 91 Orthodox Jewish individuals (62 females and 29 males) aged between 18 and 68 years ( $M = 36$ , *Standard Deviation* = 12.04) participated in the study. The vignette and questionnaire were posted online, and participants were recruited through the help of several Internet outlets (e.g., synagogue announcement groups, Orthodox event listings, and religious discussion forums), as well as from several Orthodox Jewish organizations. In addition, participants were asked to inform their friends and family members about the study to aid recruitment. After obtaining informed consent, participants were directed to provide details on items relating to age, gender, and religious affiliation. Analyses were conducted using data from participants who identified themselves as either Modern Orthodox ( $n = 51$ ) or Ultra-Orthodox ( $n = 40$ ) Jews. Participants were then presented with the vignette, and asked to complete the remainder of the questionnaire (e.g., attitudes and stigma) in respect to this vignette.

#### Data Analytic Strategy

We had hypothesized that within the Orthodox Jewish community, stigmatization of mental illness would correlate with an increased endorsement of moral causal models, medical causal models, and perception of dangerousness—findings that were unlike those found within the general population. To explore this hypothesis, we conducted hierarchical regressions (Aiken and West, 1991) in a manner similar to that used by previous researchers (Martin et al., 2000). This procedure allowed for a direct comparison of both the degree and direction of the relationship between each attitudinal variable and stigma. Initially, we explored various causal attributions (Model 1), followed by perception of mental illness (Model 2), and then finally perception of dangerousness (Model 3). This se-

**TABLE 2.** Attitudinal Predictors of Social Distance (Ordinary Least Squares)

	Model 1			Model 2			Model 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
Causal attributions									
Bad character	4.45*	1.18	0.39	4.81*	1.20	0.42	2.14	1.24	0.19
Chemical imbalance	-0.61	0.60	-0.11	-0.75	0.60	-0.14	-0.86	0.54	-0.16
The way he was raised	-0.11	0.39	-0.03	-0.09	0.39	-0.02	-0.33	0.36	-0.09
Stressful circumstances	-0.35	0.50	-0.07	-0.23	0.50	-0.05	-0.05	0.46	-0.01
Genetic problem	0.52	0.50	0.12	0.31	0.51	0.07	0.21	0.46	0.05
God's will	-0.50	0.31	-0.17	-0.54	0.31	-0.18	-0.29	0.28	-0.10
Perception of mental illness	—	—	—	0.78	0.49	0.17	0.57	0.45	0.13
Perceived dangerousness	—	—	—	—	—	—	0.95*	0.22	0.46
$\Delta R^2$		0.20			0.02			0.15	
F for change in $R^2$		3.39**			2.51			18.64*	

\* $p < 0.001$ .  
\*\* $p < 0.01$ .  
SE indicates standard error.

**TABLE 3.** Attitudinal Predictors of Family/Marriage Stigma (Ordinary Least Squares)

	Model 1			Model 2			Model 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
Causal attributions									
Bad character	2.44	2.16	0.12	3.37	2.14	0.16	1.98	2.47	0.10
Chemical imbalance	1.43	1.09	0.15	1.07	1.08	0.11	1.01	1.08	0.10
The way he was raised	0.15	0.72	0.02	0.20	0.70	0.03	0.07	0.71	0.01
Stressful circumstances	0.01	0.91	0.001	0.33	0.90	0.04	0.42	0.90	0.05
Genetic problem	2.79*	0.91	0.35	2.25**	0.92	0.28	2.20**	0.92	0.27
God's will	-0.10	0.56	-0.02	-0.21	0.55	-0.04	-0.08	0.56	-0.02
Perception of mental illness	—	—	—	2.03**	0.88	0.25	1.92**	0.89	0.24
Perceived dangerousness	—	—	—	—	—	—	0.50	0.44	0.13
$\Delta R^2$		0.17			0.05			0.01	
F for change in $R^2$		2.81**			5.27**			1.29	

\* $p < 0.01$ .  
\*\* $p < 0.05$ .  
SE indicates standard error.

quential process allowed for an explicit testing of mediation models previously reported by similar research (Corrigan et al., 2003; Link et al., 1999; Martin et al., 2000), as the relationship between causal attributions and stigma was examined both independently (in Model 1) and also after controlling for perceptions of dangerousness (in Model 3). Furthermore, as seen in the research carried out by Martin et al (2000), we included perception of mental illness in Model 2, thereby allowing examination of the independent negative implications of "labeling" behavior as mental illness, above and beyond causal attributions.

## RESULTS

To explore possible differences between males and females, as well as Modern Orthodox and Ultra-Orthodox groups, we conducted a series of preliminary analyses contrasting groups on all predictor and outcome variables using a series of Bonferroni corrected  $t$  tests. Results indicated that there were no significant differences between males and females or Modern Orthodox and Ultra-Orthodox. However, because a few variables neared significance, we conducted additional regression analyses including gender, religious affiliation, and their interactions

with predictor variables, which yielded analogous results. For the sake of clarity, these additional analyses have not been reported, but are available on request.

To explore our hypothesis that attitudinal correlates of Orthodox Jewish stigmatization of mental illness would differ from those previously found in the general population, we conducted 2 regression analyses (one for social distance and the other for marriage/family stigma) patterned after analysis by Martin et al (2000) of the 1996 General social survey. As reported in Tables 2 and 3, each regression began with a baseline model including variables representing various causal attributions, Model 2 introduced the effect of labeling the vignette as mental illness, and Model 3 assessed the effect of perceptions of dangerousness.

Regarding social distance, in Model 1 the causal attribution of "bad character" emerged as a significant predictor of increased social distance (Table 2), whereas biological and genetic causes were not significantly associated with social distance. Adding perception of mental illness in Model 2 did not significantly increase the amount of variance explained, suggesting that the label of mental illness alone did not increase desire for social distance. However, in

Model 3, perception of “dangerousness” emerged as a highly significant predictor of social distance, whereas “bad character” was no longer a significant predictor of social distance. Furthermore, an additional regression examining the relationship between perception of dangerousness and “bad character,” was found to be significant ( $B = 2.67$ ;  $Standard\ Errors = 0.42$ ;  $p < 0.001$ ). These results meet the 3-step criteria for mediation as outlined by Baron and Kenny (1986), as “bad character” predicted perception of dangerousness (Step 1), “bad character” initially predicted social distance (Step 2; Model 1), and “bad character” no longer significantly predicted social distance once perception of dangerousness was controlled for (Step 3; Model 3). Formal hypothesis tests using both the Sobel test ( $Z = 3.73$ ;  $p < 0.001$ ) and a bootstrapping method (see Preacher and Hayes, 2004 for methodology) indicated that the indirect effect of “bad character” through perception of dangerousness differed significantly from zero. Thus, consistent with previous findings in the general population (Martin et al., 2000), it appears that the proximal attitude underlying social distance was perception of dangerousness, and that the causal attribution of “bad character” indirectly influenced social distance only in this sample of Orthodox Jews. As compared with the general population, endorsement of biomedical causal models did not correlate with lower levels of social distance in this sample.

With regards to family/marriage stigma, only the attribution of mental illness to “genetic or inherited causes” significantly predicted increased stigma, whereas moral causes (e.g., “bad character”) were unrelated (Table 3; Model 1). Adding perception of mental illness in Model 2 significantly increased the amount of variance explained, suggesting that the label of mental illness independently increased family/marriage stigma. Unlike for social distance, however, introducing perception of dangerousness (Model 3) did not significantly increase the amount of variance explained. This suggests that in this sample family/marriage stigma was unrelated to both moral causal models as well as perception of dangerousness, and was instead related to an increased endorsement of genetic causal models and the label of mental illness.

## DISCUSSION

Current research suggests that stigma is increased by the perception that individuals with mental illness are dangerous, and that the causes for their illness are moral in nature (e.g., Corrigan et al., 2003; Link et al., 1999; Martin et al., 2000). By contrast, belief in biological/medical causal models of mental illness has been associated with lower levels of discrimination against the mentally ill. However, like many aspects of mental illness, the cultural context may influence the nature of stigma and its relationship to beliefs about etiology.

In particular, previous accounts indicate that stigma within the family-centric Orthodox Jewish community focuses on the perceived consequences of mental illness to family functioning, marital stability, and the well-being of children (Loewenthal and Rogers, 2004; Margolese, 1998; Schnall, 2006). As a result, stigma may extend to siblings and children of the individual (Margolese, 1998; Schnall, 2006), and can negatively affect their marriage prospects (Rosen et al., 2007; Schnall, 2006; Witzum and Buchbinder, 2001). Perceiving mental illness as a function of human biology may engender the belief that the symptoms are durable and unchangeable, require professional treatment, and constitute a genetic threat to the well-being of future generations. Thus, we hypothesized that within the Orthodox Jewish community endorsement of bio-medical causes would relate to increased stigma. Results indicated that the endorsement of a biological causal model (“genetic or inherited causes”) was related to an increased marriage/family stigma among Orthodox Jews. Similarly, we found that as

compared with the general population, biological causes such as “chemical imbalance in the brain” and “genetic or inherited causes” did not significantly decrease social distance, but were instead unrelated; perhaps reflecting increased culture-influenced family/marriage concerns. Aggregate data taken from these findings confirm our hypothesis that unlike within the general population, belief in biological models does not relate to decreased stigma within the Orthodox Jewish community. In fact, genetic explanations and the label of “mental illness” appear to increase a salient and culturally-appropriate measure of stigma—family/marriage concerns.

Accordingly, contrary to previous research carried out within the general population of the United States (e.g., Link et al., 1999; Martin et al., 2000), as well as the assumptions underlying several established destigmatization interventions, our results suggest that a biomedical approach favoring professional treatment may serve to increase key culture-specific aspects of stigma among Orthodox Jews. Consequently, future research and practice sensitive towards family/marriage aspects of stigma are critical to successful mental health care within Orthodox Jewish community. Although we do not suggest that mental health practitioners should avoid all biological or genetic explanations of mental illness when dealing with Orthodox Jews, practitioners must be aware that these explanations may be stigmatizing and further lead to an increase in distress. Thus, extreme sensitivity to the reactions of patients and their families when explaining the medical model of mental illness is necessary. For example, it may be necessary to gauge patient and family attitudes toward medical models of mental illness before engaging in psychoeducation, provide alternative empirically-supported models (e.g., psychosocial or behavioral), and deemphasize determinative biological factors (e.g., genetics) in favor of more dynamic models (e.g., diatheses-stress). Furthermore, caution is warranted when discussing these explanations with family or community members, to avoid further stigmatizing individuals with mental illness and their families.

Regarding moral causes and perceptions of dangerousness, our results indicated that social distancing of individuals with mental illness within the Orthodox Jewish community did correlate with endorsement of causes such as “bad character” and perceptions of dangerousness. Furthermore, a mediation analysis revealed that moral causes only indirectly influenced stigma by increasing perception of dangerousness, findings analogous to those within the general population (Martin et al., 2000). On the other hand, unlike our hypothesis and findings in the case of social distance, marriage/family stigma was unrelated to moral models and perception of dangerousness. This dichotomy is difficult to explain, as danger and social distancing would presumably lead to marriage/family concerns. Nevertheless, we offer 2 speculative possibilities. First, because marriage/family concerns involve the entire family, perceiving the mentally ill as morally responsible for the illness or potentially dangerous does not lead to increased stigmatization of the extended family because Orthodox Judaism strongly endorses personal responsibility and *bechira* (free-will) over moral choices and behaviors. Consequently, a single individual’s moral shortcomings may not be seen to influence the marriage prospects and social status of an entire family. Alternatively, because participants in this study were free to endorse multiple models, moral models may have negatively correlated with biological models, and as a result of this multicollinearity, the effects of individual predictors may have been attenuated (Tabachnick and Fidell, 1996). Future research is therefore necessary to replicate these findings and examine these speculations empirically.

## Limitations and Future Directions

Although we were able to recruit a sizable number of Ultra Orthodox participants, this study was limited by the use of an

internet-based recruitment and participation strategy, which may have excluded the more traditional subgroups of Ultra Orthodox Judaism (Barzilai-Nahon and Barzilai, 2005). However, our findings that a biological explanatory model of mental illness is associated with increased stigma, possibly because of the traditional marriage/family values and patterns, would likely be replicated and perhaps even amplified among these subgroups. Furthermore, our results indicated that both self-defined Modern and Ultra-Orthodox participants expressed a similar pattern of attitudes, suggesting that the degree of traditionality is unrelated to the relationship of medical models and stigmatization. In addition, recent reports suggest that internet use by the ultra-Orthodox is increasing (Hack, 2007), and that both in our experience and also of that of other researchers (e.g., Loewenthal and Rogers, 2004), Orthodox Jews have been extremely reticent to participate in traditional research. Consequently, the total anonymity afforded by the internet may uniquely enable research within this sheltered community.

In addition, our vignette described moderate to severe symptoms of OCD, and it will be important to replicate these findings by using descriptions of other forms of mental illnesses (e.g., Bipolar disorder, Schizophrenia). This study presents an example of a culturally sensitive approach in understanding the stigma of mental illness within the Orthodox Jewish community, whereas previous research has similarly highlighted the importance of culture-influenced patterns within other communities. For example, in a Chinese society the family of the mentally ill is especially stigmatized because of the cultural belief that severe illness is a result of the sins of the ancestors (Mandarin: “zu shien zui”), which thereby assigns a moral “defect” to sufferers and their families (Yang et al., 2007). Furthermore, arranged marriages or those with extensive family involvement such as among many Orthodox Jews, may perpetuate an emphasis on the status of an entire family in evaluating the suitability of its members for marriage (Rosen et al., 2007). In fact, similar associations between the institution of arranged marriage and mental illness have been reported in China (Kleinman, 1988, p 160), and in India for leprosy (Weiss et al., 1992). Consequently, additional research is necessary to better address the attitudinal correlates and negative consequences of stigma within each unique cultural context.

In conclusion, although the pattern of social distancing of individuals with mental illness within the Orthodox Jewish community somewhat parallels that of the general public, like many aspects of mental illness, culture profoundly influences the stigmatization of mental illness. In particular, stigma within the Orthodox Jewish community focuses on the perceived consequences of mental illness on family status, stability, and children; therefore, it entails a divergent set of attitudinal variables. In particular, unlike previous findings within the general population, biomedical models of mental illness appear to increase these salient aspects of stigma among Orthodox Jews. We believe that this difference is not at all unique, but represents a widely prevalent phenomenon. Specifically, culture-influenced stigmatization of mental illness may entail markedly different attitudes from those found within the general population.

## REFERENCES

Aiken LS, West SG (1991) *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park (London): Sage.

Baron RM, Kenny DA (1986) The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J Pers and Soc Psychol*. 51:1173–1182.

Barzilai-Nahon K, Barzilai G (2005) Technology: The Internet and religious fundamentalism. *Inform Soc*. 21:25–40.

Corrigan PW, Markowitz FE, Watson AC, Rowan D, Kubiak MA (2003) Attribution and dangerousness models of public discrimination towards people with mental illness. *J Health Soc Behav*. 44:162–179.

Corrigan PW, Penn DL (1999) Lessons from social psychology on discrediting psychiatric stigma. *Am Psychol*. 54:765–776.

Hack J (2007) Taming technology: Ultra-Orthodox Jewish families and their domestication of the internet. n: R Mansell, B Cammaerts (Eds), *MEDIA@LSE Electronic MSc Dissertation Series*. London (United Kingdom): London School of Economics and Political Science.

Huppert JD, Siev J, Kushner ES (2007) When religion and obsessive-compulsive disorder collide: Treating scrupulosity in Ultra-Orthodox Jews. *J Clin Psychol*. 63:925–941.

Kessler RC, Chiu WT, Demler O, Walters EE (2005) Prevalence, severity and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Arch Gen Psychiatry*. 62:617–627.

Kleinman A (1988) *The Illness Narratives: Suffering, Healing and the Human Condition*. New York (NY): Basic Books.

Link BG, Phelan JC, Bresnahan M, Stueve A, Pescosolido BA (1999) Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *Am J Public Health*. 89:1328–1333.

Link BG, Yang LH, Phelan JC, Collins PY (2004) Measuring mental illness stigma. *Schizophr Bull*. 30:511–541.

Loewenthal KM (2006) Strictly Orthodox Jews and their relations with psychiatry and psychotherapy. *World Cult Psychiatry Res Rev*. 1:128–132.

Loewenthal KM, Rogers MB (2004) Culture-sensitive counselling, psychotherapy, and support groups in the Orthodox-Jewish community: How they work and how they are experienced. *Int J Soc Psychiatry*. 50:227–240.

Maimonides M (12th century/1990) *Pirush HaMishnaos L'HaRambam* [Tractate Sanhedrin, Chapter 10]. Jerusalem (Israel): Vagshal Publishing.

Margolese HC (1998) Engaging in psychotherapy with the Orthodox Jew: A critical review. *Am J Psychother*. 52:37–53.

Martin JK, Pescosolido BA, Tuch SA (2000) Fear and loathing: The role of ‘disturbing behavior,’ labels, and causal attributions in shaping public attitudes toward people with mental illness. *J Health Soc Behav*. 41:208–223.

Pirutinsky S, Rosmarin DH, Pargament KI (2009) Community attitudes towards culture-influenced mental illness: Scrupulosity vs. non-religious OCD among Orthodox Jews. *J Community Psychol*. 37:949–958.

Preacher KJ, Hayes AF (2004) SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*. 36:717–731.

Raguram R, Weiss MG (1997) EMIC interview for outpatient psychiatry and stigma. Instrument for collaborative research. National Institute of Mental Health and Neuro Sciences, Bangalore, India and Swiss Tropical Institute, Basel, Switzerland. Revised December 1997.

Rosen DD, Greenberg D, Schmeidler J, Shefler G (2007) Stigma of mental illness, religious change, and explanatory models of mental illness among Jewish patients at a mental-health clinic in North Jerusalem. *Ment Health Relig Cult*. 11:193–209.

Schnall E (2006) Multicultural counseling and the Orthodox Jew. *J Counsel Dev*. 84:276–292.

Simonds LM, Thorpe SJ (2003) Attitudes toward obsessive-compulsive disorders: An experimental investigation. *Soc Psychiatry Psychiatr Epidemiol*. 38:331–336.

Tabachnick BG, Fidell LS (1996) *Using multivariate statistics* (3rd ed.). New York: Harper Collins.

US Department of Health and Human Services (1999) *Mental Health: A Report of the Surgeon General*. Bethesda (MD): US Department of Health and Human Services.

Weiss MG, Doongaji DR, Siddhartha S, Wypij D, Pathare S, Bhatawdekar M, Bhawe A, Sheth A, Fernandes R (1992) The Explanatory Model Interview Catalogue (EMIC). Contribution to cross-cultural research methods from a study of leprosy and mental health. *Br J Psychiatry*. 160:819–830.

Witzum E, Buchbinder JT (2001) Strategic culture sensitive therapy with religious Jews. *Int Rev Psychiatry*. 13:117–124.

Yang L, Kleinman A, Link B, Phelan J, Lee S, Good B (2007) Culture and stigma: Adding moral experience to stigma theory. *Soc Sci Med*. 64:1524–1535.