Stigma and Health

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Overcoming the Forbidden: Identification and Stigma of Unacceptable Thoughts in Obsessive–Compulsive Disorder

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Obsessive–compulsive disorder (OCD) is a heterogeneous condition, with lesser known symptom presentations not met with the same acceptance or media/educational focus as contamination or symmetry. Distressing, unwanted, and ego-dystonic thoughts with sexual, aggressive, or religious themes (unacceptable thought OCD; UT-OCD) have been found to be especially misidentified by professionals and the general public alike. The present study explores misidentification of—and stigma toward—UT-OCD through an online survey. Students ($n = 335$) and community members ($n = 77$) were given vignettes describing an individual with religious, aggressive, sexual (child or nonchild focused), or contamination obsessions, followed by a Diagnostic and Attribution Questionnaire. UT-OCD vignettes were significantly more likely to be misdiagnosed (59.9%) and stigmatized than those presenting with contamination OCD (27.1%). People may be less likely to offer help to those with UT-OCD and express more fear if OCD symptom content involves a perceived threat of harm toward others. These findings suggest that not all OCD symptoms are identified or perceived equally. Stigma can be reduced if OCD symptoms are correctly identified. Therefore, education and awareness campaigns should highlight the broad range of prevailing OCD symptom presentations.

Clinical Impact Statement

The present study suggests that unacceptable thought obsessive–compulsive disorder (OCD) is significantly more likely to be misidentified and stigmatized than contamination OCD. Fear/danger and lack of willingness to help contribute most to stigmatizing beliefs. However, identifying symptoms as OCD can help decrease stigma. Education campaigns should address misconceptions surrounding OCD symptom presentations through more versatile representations of OCD in the media and educational settings. Increasing awareness is crucial for those struggling with OCD to minimize barriers to treatment.

Keywords: obsessive–compulsive disorder, unacceptable thoughts, symptom dimensions, stigma, mental health identification

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Obsessive–compulsive disorder (OCD) is a heterogenous mental health disorder defined as the presence of obsessions (i.e., recurrent thoughts, urges, or images that are unwanted and intrusive) and/or compulsions (i.e., repetitive behaviors or mental acts to offset obsessional thoughts) that are distressing and functionally impairing (American Psychiatric Association, 2013). Historically, research has attempted to define the heterogeneity in OCD symptoms by classifying OCD according to predominant symptom domains. For example, the Dimensional Obsessive–Compulsive Scale (Abramowitz et al., 2010) contains four theme-based dimensions: contamination (e.g., obsessions about germs or illness, often accompanied by washing/cleaning compulsions), symmetry/incompleteness (e.g., "just right" obsessions often accompanied by ordering/arranging compulsions), unacceptable thoughts (e.g., violent, sexual, or religious obsessions and rituals or covert neutralizing compulsions), and responsibility for harm (e.g., obsessions about causing a harmful

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Data are available upon request from the corresponding author.

All procedures performed in this study were approved by the Newfoundland and Labrador Health Research Ethics Board (October 27, 2021, No. 2021.174).

Informed consent was obtained from all individual participants included in the study.

The positionality statements follow: We are mindful that our identities can influence our approach to science (Roberts et al., 2020). Thus, the authors wish to provide the reader with information about our backgrounds. Three of the authors identify as White females, while one author identifies as a White male.

The diversity statements follow: Recent work in several fields of science has identified a bias in citation practices such that articles from women and other minority scholars are undercited relative to the number of such articles in the field (Caplar et al., 2017; Dworkin et al., 2020). Here, we provide an overview for the proportion of authors cited to reflect the diversity of the present field. We consider the form of contribution, gender, race, ethnicity,

continued

event through injury or bad luck and checking compulsions). However, the content of obsessions can take on virtually any theme, with lesser known presentations such as relationship OCD (e.g., doubts about the "rightness" of intimate relationships), sexual orientation OCD (e.g., unwanted fears of being a different sexual orientation); perinatal OCD (e.g., fear of stabbing one's baby); and even the colloquially termed "schizophrenia OCD" (e.g., fear of developing psychosis), which are often followed by checking, avoiding, and reassurance-seeking compulsions (Abramowitz & Braddock, 2006; Doron et al., 2014; Fairbrother et al., 2022; Jones, 2022; Pinciotti et al., 2022).

Though adults with OCD most commonly endorse aggressive obsessions (61.9%) over contamination (57.1%) or symmetry obsessions (47.6%; Hunt, 2020), the media popularizes contamination and symmetry symptoms over all other domains of OCD (Fennell & Boyd, 2014). Emphasis on the unacceptable thought OCD (UT-OCD) symptom dimension is similarly diluted in educational settings. A recent Canadian curriculum review showed that over one-third of medical schools did not provide an example of aggressive obsessions during instruction, and only 30% of case studies from recommended texts featured an individual with UT-OCD or responsibility for harm symptoms (Lahey et al., 2023). Importantly, common misrepresentations of OCD in the media and the overemphasis on symmetry and contamination symptom domains may directly impact the identification of OCD.

Although primary care physicians are often the first contact for mental health concerns, research has demonstrated high rates of OCD misidentification in this sample. For instance, a vignette presenting aggressive obsessions was misdiagnosed 80% of the time by primary care physicians in New York medical hospitals (Glazier, Swing, & McGinn, 2015). Other mental health professionals also have high misidentification rates, including a 77% misidentification rate for sexual obsessions among American Psychological Association members (Glazier et al., 2013). This is alarming as approximately 19%–25% of those with OCD report unwanted sexual obsessions (Grant et al., 2006; Hunt, 2020; Williams & Farris, 2011). When misdiagnoses occur, individuals may experience worsening symptoms, delays in proper treatment, inappropriate involvement of authorities, or involuntary admission to mental health facilities (Glazier et al., 2013; Stahnke, 2021; Veale et al., 2009).

Misdiagnosis is facilitated by the fact that OCD can be difficult to differentiate from other disorders, with OCD symptomatology often appearing similar to psychosis. For example, Leung and Palmer (2016) present a case report of a 42-year-old man, misdiagnosed as having schizoaffective disorder after violent intrusive thoughts were believed to be delusions, who was treated with increasing dosages of the antipsychotic medication Clozapine, which resulted in worsening of OCD symptoms and further hospitalization. Failing to recognize the complexity of OCD symptoms can cause considerable suffering and potentially lead to further stigmatization of the individual. For instance, 37% of professionals chose pedophilia as their most common clinical impression when receiving an OCD vignette featuring sexual obsessions about children (Glazier et al., 2013). This label from a health professional would incorrectly communicate to the individual that they potentially are their worst fear: a pedophile. There is no evidence suggesting that individuals diagnosed with OCD are at an increased risk of acting upon their thoughts, which are distressing and ego-dystonic in nature, or cause harm to themselves or others (Fairbrother et al., 2022; McCarty et al., 2017; Veale et al., 2009). Despite this fact, clinicians and the public alike may fear that intrusive thoughts associated with OCD represent an individual's true intentions, disproportionally affecting those with UT-OCD, who may be stigmatized as violent individuals.

According to Link and Phelan (2001), stigma encompasses labeling, stereotyping, distancing, and discriminating against minority groups resulting in the loss of status through social, economic, or political means. Implicitly, society may exclude individuals based on differences, inflicting public stigma through prejudice, and embracing negative stereotypes (P. W. Corrigan et al., 2018). The roots of public stigma can be linked to attribution theory, wherein the more controllable one's mental illness is perceived, the more responsibility and blame are attributed to the individual (P. W. Corrigan, 2006). The theory has been well-supported in demonstrating that specific attributions can lead to differing affects, and therefore, various behavioral responses (see P. W. Corrigan, 2006, for a review). The common stereotype that individuals with mental illness are dangerous can result in

and other factors of authors cited. First, we obtained the predicted gender of the first and last authors of each reference by using databases that store the probability of a first name being carried by a woman (Dworkin et al., 2020; Zhou et al., 2020). By this measure and excluding self-citations to the first and last authors of our present article, our references contain 12.74% woman(first)/woman(last), 22.65% man/woman, 22.85% woman/man, and 41.76% man/man. This method is limited in that (a) names, pronouns, and social media profiles used to construct the databases may not, in every case, be indicative of gender identity and (b) it cannot account for intersex, nonbinary, or transgender people. Second, we obtained predicted racial/ethnic category of the first and last authors of each reference by databases that store the probability of a first and last name being carried by an author of color (Ambekar et al., 2009; Sood et al., 2018). By this measure (and excluding self-citations), our references contain 7.7% author of color (first)/author of color(last), 16.83% White author/author of color, 13.58% author of color/White author, and 61.89% White author/White author. This method is limited in that (a) names, census entries, and Wikipedia profiles used to make the predictions may not be indicative of racial/ethnic identity, and (b) it cannot account for Indigenous and mixed-race authors, or those who may face differential biases due to the ambiguous racialization or ethnicization of their names. We look forward to future work that could help us to better understand how to support equitable practices in science.

Ashlee R. L. Coles played a lead role in writing–original draft and an equal role in conceptualization, data curation, formal analysis, investigation, methodology, project administration, validation, and writing–review and editing. Chelsea A. Lahey played an equal role in conceptualization, data curation, formal analysis, investigation, methodology, project administration, supervision, validation, and writing–review and editing. Emily J. Fawcett played an equal role in conceptualization, data curation, formal analysis, investigation, methodology, project administration, supervision, validation, and writing–review and editing. Jonathan M. Fawcett played an equal role in conceptualization, investigation, methodology, project administration, supervision, validation, visualization, and writing–review and editing.

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discriminative behaviors such as barriers to treatment, housing, jobs, or affiliations (P. W. Corrigan, 2006; Link et al., 1987; Link & Phelan, 2001).

In attempts to quantify public stigma, several measures have been used, primarily in vignette studies, including perceived dangerousness, pity, avoidance, controllability, blame, and willingness to help (Ponzini & Steinman, 2021). Specifically, McCarty et al. (2017) used the fear/dangerousness subscale from the attribution questionnaire (AQ; Brown, 2008; P. Corrigan et al., 2003) and the Social Distance Scale (Link et al., 1987). Similarly, Chaves et al. (2022) incorporated the AQ and Social Distance Scale to assess stigma through a mental health literacy intervention. This line of research has demonstrated that UT-OCD receives the highest level of stigma or negative lay public reaction (Durna et al., 2019; McCarty et al., 2017) compared to other OCD symptom domains, with participants desiring greater social distance from these vignette characters compared to other OCD symptom subtypes in vignette studies (Ponzini & Steinman, 2021). Aggressive obsessions in particular have been met with greater perceived dangerousness compared to other OCD symptom domains assessed (Ponzini & Steinman, 2021).

While there are many dimensions of stigma, perceived stigma is a considerable factor in delayed treatment seeking among individuals with OCD (Glazier, Wetterneck, et al., 2015). For individuals with UT-OCD, feelings of shame and doubt coincide with fears of potentially acting on unwanted thoughts and becoming a true threat, and thus, a greater likelihood of concealing symptoms. UT-OCD may generate higher levels of shame as the thoughts are particularly ego-dystonic (Weingarden & Renshaw, 2015). In clinical OCD samples, individuals experiencing UT-OCD endorsed greater stigma ("ashamed of my problems") and experienced greater concerns about barriers to treatment compared to individuals with contamination or symmetry obsessions (Glazier, Wetterneck, et al., 2015). Further, individuals with more severe violent or sexual obsessions were significantly more likely to fear being hospitalized against their will compared to those with lower obsession severity (Glazier, Wetterneck, et al., 2015).

Public Attitudes and Misidentification of OCD Symptoms

Akin to professional samples, research suggests that in nonprofessional samples, OCD stigma and recognition rates are also dependent on the symptom domain. For example, Durna et al. (2019) found that in a Turkish community sample, religious obsessions fell midrange in terms of desired social distance, which was greater for individuals with sexual and violent obsessions compared to religious, and less for those with checking and contamination obsessions. Similarly, a Texas university sample of students rated sexual obsessions with more social rejection than contamination (Cathey & Wetterneck, 2013). Last, in an online survey of over 700 Americans recruited from Mechanical Turk, McCarty et al. (2017) demonstrated that symmetry and contamination symptoms were more likely to be recognized as OCD compared to UT-OCD and responsibility for harm symptoms. They also found a negative relationship between stigma and identification, with increased stigma associated with greater misidentification of OCD. Thus, having symptoms of OCD containing harm content directed toward others (e.g., sexual and aggressive obsessions) appears to be particularly stigmatizing compared to symptoms containing internalized content (i.e., contamination and symmetry obsessions). With McCarty et al. (2017) only examining stigma and identification for a sexual UT-OCD vignette, it is important to investigate how stigma and identification rates differ across the three obsessional categories of UT-OCD to better understand how and why they often go unrecognized.

The Present Study

The present study used clinical vignettes to explore public attitudes and misidentification of OCD symptoms. Specifically, we were interested in the identification of UT-OCD and were the first to examine how stigma differed across the varying obsessional themes of this domain (i.e., aggressive, sexual, and religious) and the factors that increased stigma toward individuals with OCD (e.g., obsessional content involving others vs. self; obsessional content involving children vs. strangers, etc.). We also investigated misidentification rates across each vignette, as well as the disorders that OCD is most mistaken for across each vignette condition.

There were three primary hypotheses:

Hypothesis 1: UT-OCD vignettes would be misidentified at a greater rate and receive more stigma compared to contamination OCD vignettes.

Hypothesis 2: Vignettes depicting obsessions that involve others (e.g., sexual and aggressive obsessions) would be more stigmatized than self-directed obsessional content (e.g., contamination and religious obsessions).

Hypothesis 3: The sexual vignette involving children would elicit more stigma compared to the sexual vignette involving strangers.

Method

Participants

This study was approved by the Newfoundland and Labrador Health Research Ethics Board. Students at Memorial University of Newfoundland (n = 335) were recruited using the Psychology Research Experience Pool (PREP) system and awarded one course credit in exchange for study participation. As a university sample alone may not be generalizable to the lay public (Hanel & Vione, 2016), 77 participants were recruited by targeting various Facebook groups containing a broad range of members more representative of the population (e.g., sports, pets, and buy-and-sell related groups). We avoided recruiting from special interest groups, such as pregnancy-related groups, given the significantly heightened prevalence of OCD in this population (Russell et al., 2013). Sixty participants were excluded from the study: 27 attempted the survey more than once, 13 answered only demographic information, and 20 took less than 4 min to complete the entire survey. The mean age of the final sample (N = 412) was 22.7 (SD = 6.61) ranging from 17 to 71 years (see Table 1, for full demographic characteristics). Informed consent was obtained from all participants before proceeding onto the study. Additionally, data collection ran from November 2021 to August 2022. Raw data were generated at Memorial University and are available from the corresponding author upon request.

Table 1
Demographic Characteristics of Entire Sample After Exclusions Split by Group (N = 412)

	PREP (n = 335)		General public (n = 77)			
Demographic characteristics	*N*	%	*N*	%	Test	*p*
Age *M* (*SD*)	21.2 (4.02)		29.3 (10.6)		−11.0	<.001
Gender						
Female	273	81.5	57	74	5.10	.277
Male	51	15.2	18	23.4		
Other	11	3.3	2	2.6		
Ethnicity						
White	282	84.2	58	74.3	17.3	.027
Asian	13	3.9	3	3.9		
Black	9	2.7	6	7.8		
Indigenous	7	2.1	3	3.9		
Middle Eastern	7	2.1	1	1.3		
East Indian	6	1.8	1	1.3		
Other	11	3.3	6	7.8		
Religion						
Christian	142	42.4	45	58.4	23.9	.199
Atheist	67	20	11	14.3		
Agnostic	46	13.7	5	6.5		
Spiritual	20	6	3	3.9		
Other	60	18	13	16.9		
Geographical region						
Suburban	118	35.2	22	28.6	3.95	.267
Urban	117	34.9	35	45.5		
Rural/remote	98	29.3	20	26		
Prefer not to say	2	.6	0	0		
Education						
Some university	249	74.3	16	20.8	159	<.001
High school	53	15.8	5	6.5		
Bachelor's degree	16	4.8	20	26		
College/trade	12	3.6	16	20.8		
Some college/trade	3	.9	9	11.7		
Masters	1	.3	7	9.1		
PhD	0	0	3	3.9		
Some high school	0	0	1	1.3		
Prefer not to say	1	.3	0	0		
Currently enrolled						
Yes	335	100	36	46.8	198	<.001
No	0	0	39	50.6		
Prefer not to say	0	0	2	2.6		

Note. Education is reported in highest level obtained. PREP = Psychology Research Experience Pool.

Materials and Procedure

Participants were asked to complete a survey that explored their interpretation of specific clinical conditions. All participants completed the study questionnaires online through Qualtrics ($M_{\text{completiontime}}$ = 13 min). After being presented with an informed consent form, participants completed the demographic questionnaire and were randomly assigned to read one of five possible vignettes. Vignettes all depicted a middle-aged man named Jack with various subtypes of OCD (see Supplemental Table S1, for vignette descriptions). Four of the five vignettes depicted an individual with symptoms from UT-OCD (e.g., sexual obsessions involving children, sexual obsessions involving strangers, aggressive obsessions, and religious obsessions), while one vignette described contamination OCD. All vignettes have been used previously by Glazier et al. (2013) except the sexual obsessions concerning strangers vignette, which was taken from McCarty et al. (2017) and modified to fit the structure of vignettes from Glazier et al.

The Diagnostic Questionnaire

After reading one of the five vignettes, participants completed the Diagnostic Questionnaire (adapted from Angermeyer & Matschinger, 2003; Glazier et al., 2013; McCarty et al., 2017) wherein they disclosed the disorder(s) that they believed the character in the vignette were presenting. First, participants were asked to provide an open-ended label (i.e., what they believed Jack would be diagnosed with). Next, participants were provided with a list of 54 possible diagnoses adapted from Glazier et al. (2013) and asked to rank the likelihood of at least three possible diagnoses from the list. The list was modified by adding/excluding psychiatric labels to fit with the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric

Association, 2013), as Glazier et al.'s list was based on the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994). Additionally, we aimed to be more inclusive of possible differential diagnoses by including more clinical labels (e.g., conduct disorder and gambling disorder) and nonclinical labels (e.g., abnormal sexual dysfunction and sex addiction).

AQ

The AQ (Brown, 2008; P. Corrigan et al., 2003) was originally designed to assess attitudes and beliefs toward a vignette character with schizophrenia. However, it has been used to assess attitudes toward other mental disorders (e.g., substance use and OCD; Chaves et al., 2022; Johnson-Kwochka et al., 2021; McCarty et al., 2017). The AQ is now composed of 27-items (e.g., I would feel unsafe around Jack; I would share a carpool with Jack every day; if I were in charge of Jack's treatment, I would require him to take his medication) with a 9-point Likert scale ranging from 1 (*not at all*) to 9 (*very much*; Brown, 2008; P. W. Corrigan et al., 2004). The Likert scale anchors from the previous version of the measure were retained for clarity (P. W. Corrigan et al., 2018). Scores range from 27 to 243, with higher scores indicating higher levels of stigma.

The AQ includes six factors: fear/dangerousness, willingness to help, responsibility, forcing treatment, empathy, and negative emotions. Overall, the AQ has been found to possess strong psychometric properties, showing reliable and valid measurements for four out of the six important qualities of stigmatizing attitudes and beliefs toward mental illness (Brown, 2008). Although Brown (2008) found that responsibility and empathy factors lacked adequate psychometric properties, we decided to retain all factors for the sake of completeness and to afford the opportunity for exploratory analyses on individual factors. Furthermore, the full AQ scale demonstrated adequate internal consistency reliability (Cronbach's α subscale factors ranged from .71 to .97; McDonald's ω ranged from .73 to .97).

Exploratory Measures

The online survey also included the Leuven Obsessional Intrusions Inventory-Revised (Ozcanli et al., 2020) and a one-item treatment efficacy question ("In your opinion, how likely is it that Jack's situation will improve with treatment?"), both of which were included in the survey for purposes beyond the present study. In addition, at the end of the survey, we asked participants about their familiarity with OCD, including whether they or anyone they know personally had ever been diagnosed with OCD. Although not pertinent to our main hypotheses, these familiarity questions were utilized below in exploratory analyses. These measures were completed following the diagnostic questionnaire and AQ corresponding to the assigned vignette to ensure participant responses were not primed.

Statistical Analysis

A priori power analyses using G*Power (Faul et al., 2009) evaluating our three hypotheses revealed that 200 participants (160 UT-OCD [combined] and 40 contamination vignettes) was the largest sample size required to ensure adequate statistical power. Specifically, this number of participants is required to reliably (power = .80) detect an effect size (d) equal to .5 with α set at .05 (i.e., Hypothesis 1). All other analyses were met with the same adequate statistical power. Additionally, all binary variables were analyzed via χ^2 tests and continuous variables were analyzed via t tests or analyses of variance. Given that our primary hypotheses are directional in nature, all t tests reported in this section are one-tailed, although using two-tailed tests only altered one exploratory analysis concerning stigma and familiarity with OCD. Lastly, correction for multiple comparisons for disjunctive hypotheses (Rubin, 2021) using the Benjamini–Hochberg method (Blakesley et al., 2009) did not alter any of our conclusions.

Results

Sample Demographics

PREP participants ($n = 335$) compared to the general public ($n = 77$) did not differ in gender, religion, or geographical area ($p > .05$). However, they did differ in age, ethnicity, education, and whether they were currently enrolled in a postsecondary program (see Table 1, for all demographic comparisons). The PREP and general public samples were combined, given that there were no significant changes to our findings or the magnitude of effect sizes with the addition of participants from the general public.

Preliminary and Descriptive Statistics

Most Common Rankings

From the Diagnostic Questionnaire, participants ranked at least three possible psychiatric and nonclinical illnesses that they believed the character in the vignette may be diagnosed with. Only conditions that were ranked more than 25 times (i.e., ∼5%) were considered. The top three rankings commonly selected were OCD, generalized anxiety disorder, and abnormal sexual interest (see Table 2, for a full list).

Misidentification Rates Across the UT-OCD Vignettes

For misidentification analyses, we report open-ended responses (vs. ranked, unless stated otherwise), as results did not differ if we used rankings instead (see Supplemental Table S2), and we were most interested in participant's unprimed selections. Further, across all conditions, 47% of participants guessed OCD correctly in the open-label question, with 51% of participants subsequently selecting the label of OCD. A chi-square analysis was performed with vignette type as a predictor of misidentification. Across the UT-OCD vignettes, the child-sexual focused vignette was most often misidentified (71.3%), followed by the nonchild sexual (65.8%), aggressive (59.3%), and religious (43.9%) vignettes (see Figure 1). The proportion of participants who misidentified the UT-OCD vignettes significantly differed, $\chi^2(3, N = 327) = 14.2$, $p = .003$. Whereas the child-sexual focused vignette was significantly more likely to be misidentified (71.3%) compared to the combination of remaining UT-OCD vignettes (56.3%), $\chi^2(1, N = 327) = 5.64$, $p = .018$, the religious vignette was significantly less likely to be misidentified (43.9%) compared to the other UT-OCD vignettes combined (65.3%), $\chi^2(1, N = 327) = 11.7$, $p < .001$.

Table 2
Common Rankings by Vignette Condition

Common rankings	Child-sexual focused ($n = 80$)	Nonchild sexual ($n = 79$)	Aggressive ($n = 86$)	Religious ($n = 82$)	Contamination ($n = 87$)	Total ($n = 412$)
OCD	25	34	37	47	73	217
GAD	15	16	20	34	33	118
Abnormal sexual interest	56	51	2	0	1	111
Worry	14	10	20	22	19	85
Paranoid PD	4	14	21	27	11	77
OCPD	7	10	18	17	22	74
Specific phobia	4	7	3	4	50	68
Pedophilic disorder	53	6	0	0	0	59
Disorganized thoughts	16	8	17	6	2	49
Delusional disorder	3	11	18	12	5	49
Panic disorder	0	6	5	26	12	49
IAD	2	4	5	6	25	41
Strong religious values	0	0	0	37	0	37
Abnormal sexual dysfunction	13	17	0	0	1	31
Schizophrenia	2	6	12	7	2	29
Brief psychotic disorder	1	2	19	4	1	28
SAD	4	10	3	8	2	27

Note. Total rankings > 25 are shown in the chart based on the second question of the Diagnostic Questionnaire. Because participants could select more than one possible diagnosis, there are more responses than number of participants. OCD = obsessive–compulsive disorder; GAD = generalized anxiety disorder; PD = personality disorder; OCPD = obsessive compulsive personality disorder; IAD = illness anxiety disorder; SAD = social anxiety disorder.

Stigma Across the UT-OCD Vignettes

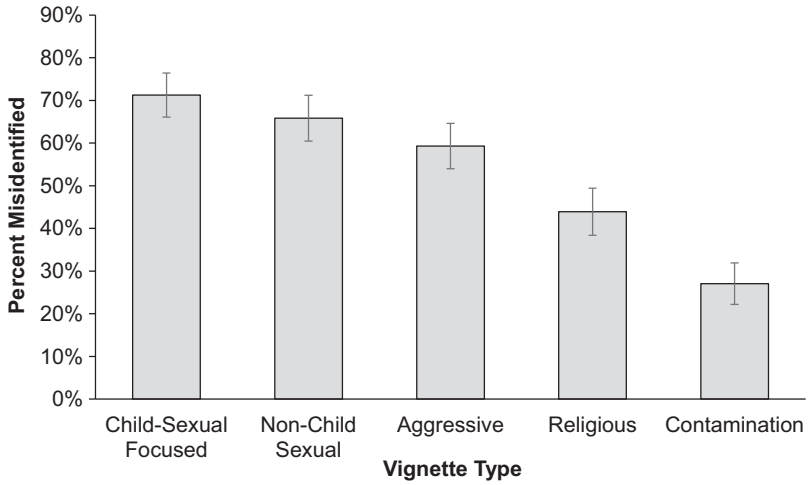
An omnibus one-way analysis of variance compared the effect of vignette type on levels of stigmatization via the AQ. Additionally, removing specific factors from the AQ (i.e., empathy, responsibility) did not make a significant difference in the results for all analyses involving the AQ that follow, thus the total of all AQ factors are reported below.

There was a significant difference among groups regarding stigma, $F(4, 197) = 25.3$, $p < .001$. Post hoc analyses showed that contamination ($M = 65.6$, $SD = 25.0$) had significantly lower levels of stigma according to AQ total scores than any of the UT-OCD vignettes, including child-sexual focused ($M = 107.5$, $SD = 37.9$), nonchild sexual ($M = 99.6$, $SD = 30.8$), religious ($M = 87.2$, $SD = 26.5$), and aggressive ($M = 94.8$, $SD = 32.8$). Of the UT-OCD vignettes, the child-sexual focused vignette showed significantly higher levels of stigmatizing attitudes than aggressive and religious symptoms of OCD (see Figure 2). There were no other significant differences in stigma according to the AQ across vignette types.

Subscale AQ Factors

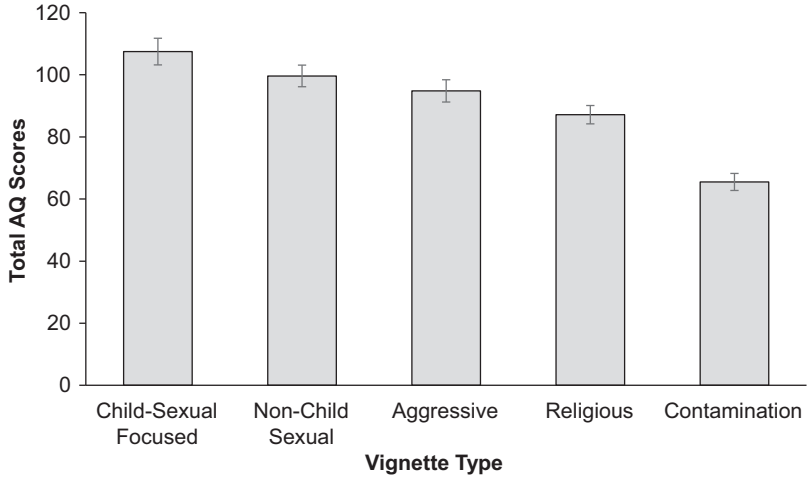
When examining individual factors of the AQ, fear/dangerousness ($M = 21.8$, $SD = 14.5$) and willingness to help/interact ($M = 26.6$,

Figure 1
Total Misidentification by Vignette Condition



Note. Error bars shown as ± SEM of the percentage misidentified OCD by condition. OCD = obsessive–compulsive disorder; SEM = standard error of the mean.

Figure 2
Total Stigma by Vignette Condition



Note. Error bars shown as ± SEM of the total stigma by condition. AQ = attribution questionnaire; SEM = standard error of the mean.

SD = 11.2) had the highest subscale scores, whereas responsibility (*M* = 8.21, *SD* = 4.52) and negative emotions (*M* = 7.54, *SD* = 4.80) had the lowest subscale scores. Thus, fear and danger attributed to the vignette character and a lack of willingness to help/interact were the most salient contributors to stigmatizing attitudes across all vignettes.

Additional exploratory analyses were conducted to determine which aspects of mental health stigma accounted for the different perceptions of UT-OCD vignettes. The aggressive vignette was found to elicit greater fear/dangerousness (*M* = 27.2, *SD* = 15.5) than the religious vignette (*M* = 16.6, *SD* = 9.39), *t*(165) = −5.28, *p* = .008, *d* = −0.82, 95% CI [−1.14, −0.49]. Similarly, both of the sexual vignettes combined (*M* = 27.6, *SD* = 13.91) attributed greater fear/dangerousness than the religious vignette, *t*(236) = −6.40, *p* = .008, *d* = −0.88, 95% CI [−14.39, −7.62]. Help/interact and forcing treatment was also significant for the religious and aggressive comparison, and forcing treatment was significant for the sexual and religious comparison (all *p*s < .05; see Figure 3).[1]

Primary Analyses

Misidentification Rates and Stigma of Vignettes

To determine whether identification differed across the UT-OCD vignette conditions compared to contamination, a chi-square analysis was conducted with vignette type (unacceptable thoughts [combined] and contamination) as a predictor. Supporting our first hypothesis, there was a significant difference in misidentification, $\chi^2(1, N = 412) = 29.3$, $p < .001$, demonstrating that the UT-OCD vignettes were more likely to be misidentified (59.9%) compared to the contamination vignette (27.8%; see Figure 1). Similarly, an independent samples *t* test comparing total AQ scores across vignette type found significantly higher stigma associated with the UT-OCD vignette character (*M* = 97.2, *SD* = 32.9) compared to the contamination vignette character (*M* = 65.5, *SD* = 25), *t*(400) = −8.17, *p* < .001, *d* = −1.01, 95% CI [−1.29, −0.72].

Stigma Inflicted Toward OCD Content Directed at Others

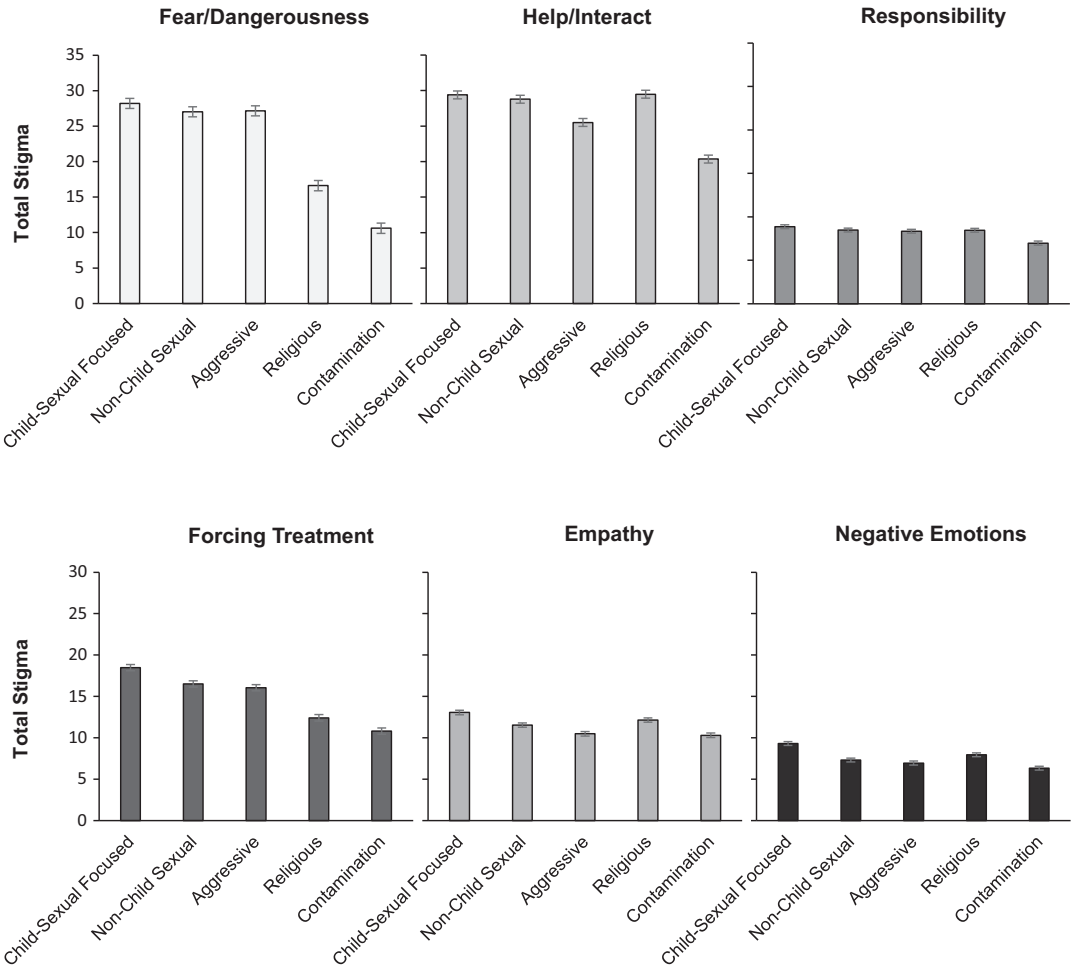
Supporting our second hypothesis, a *t* test analyzing AQ scores as a function of sexual and aggressive vignettes versus contamination and religious vignettes showed greater stigma associated with obsessions involving others (i.e., sexual and aggressive obsessions; *M* = 101, *SD* = 34.0) compared to self-directed obsessions (i.e., religious and contamination obsessions; *M* = 76.1, *SD* = 27.9), *t*(400) = 7.55, *p* < .001, *d* = 0.77, 95% CI [0.56, 0.98]. Given that the child-sexual focused and nonchild sexual vignettes were the most stigmatized vignettes, this analysis should be interpreted with caution as it is likely conflated (as addressed further in the discussion).

Sexual Vignettes and Stigma

Last, counter our third hypothesis, we observed no significant difference in stigmatizing attitudes between sexual obsessions involving children and strangers, *t*(154) = −1.42, *p* = .078, *d* = −0.23, 95% CI [−0.54, 0.09], although the data trended marginally in the predicted direction, with numerically greater stigma associated with sexual obsessions involving children (*M* = 108, *SD* = 37.9) than sexual obsessions involving strangers (*M* = 99.6, *SD* = 30.8).

[1] The Benjamini–Hochberg correction for multiple testing was applied to the aggressive v. religious vignette type and AQ subscale comparisons as well as the sexual (combined) versus religious vignette type and AQ subscale comparisons, controlling for a 5% false discovery rate (Blakesley et al., 2009).

Figure 3
Total Stigma of Each Vignette Split by Each Factor of the Attribution Questionnaire



Exploratory Analyses of Factors Influencing OCD Identification and Stigma

Additional exploratory analyses found that familiarity with OCD was significantly related to OCD misidentification rates. Having familiarity with OCD was also associated with significantly reduced OCD misidentification rates compared to those with no familiarity (47.3% vs. 59.8%), $\chi^2(1, N = 400) = 6.09$, $p = .014$. However, familiarity was not associated with stigma; individuals who did not know anyone with OCD and did not have OCD themselves did not endorse significantly more stigma ($M = 94.1$, $SD = 32.8$) compared to individuals who knew someone with OCD or had OCD themselves ($M = 88.1$, $SD = 34.8$), $t(398) = 1.76$, $p = .079$, $d = 0.18$, 95% CI [−0.02, 0.38], despite a marginal trend suggesting that stigma is reduced if one is familiar with OCD.

Being able to correctly identify OCD appeared to have a stigma-reducing effect, with those who correctly identified the vignettes as OCD endorsing less stigma ($M = 73.8$, $SD = 26.9$) compared to individuals who misidentified the vignette ($M = 106$, $SD = 32.5$), $t(400) = 10.36$, $p < .001$, $d = 1.06$, 95% CI [0.84, 1.28]. Finally, even when OCD was identified correctly, participants still demonstrated greater stigma toward UT-OCD than contamination. Of only those who correctly identified OCD, individuals who correctly identified UT-OCD were more likely to stigmatize the vignette character ($M = 97.18$, $SD = 32.93$) than individuals who received the contamination vignette ($M = 65.48$, $SD = 24.99$), $t(400) = -8.17$, $p < .001$, $d = -1.01$.

Discussion

The aim of the present study was to investigate lay public identification of and stigma toward UT-OCD. This was the first study to examine how stigma differed across the content of this domain (i.e., aggressive, sexual, or religious obsessions) and factors that may increase stigma toward individuals with OCD (e.g., obsessional content involving others vs. self; obsessional content involving children vs. strangers; familiarity with the condition).

The hypothesis that misidentification and stigma rates would be most prominent when vignettes depicted UT-OCD was supported. Participants presented with the UT-OCD vignettes endorsed more stigma toward the character and were more likely to misidentify the vignette as something other than OCD. Indeed, approximately 60% of participants misidentified the UT-OCD vignettes compared to about 28% of participants misidentifying contamination OCD.

These findings are consistent with prior research demonstrating lower levels of recognition and increased stigma for UT-OCD compared to contamination OCD (Cathey & Wetterneck, 2013; Durna et al., 2019; Glazier et al., 2013; McCarty et al., 2017; Ponzini & Steinman, 2021), with our findings showing that the child-sexual focused vignette was the most stigmatized of all UT-OCD vignettes.

Despite previous research indicating that perceived fear and dangerousness were salient in UT-OCD and produced heightened stigma (McCarty et al., 2017), religious themes have been found to be less stigmatizing than sexual or violent obsessional themes (Durna et al., 2019). Consistent with our hypothesis, sexual and aggressive vignette characters featuring content directed at others were more stigmatized relative to the religious and contamination vignette characters (i.e., self-directed content). Thus, religious obsessions may be viewed similarly to contamination obsessions despite being characteristic of UT-OCD. Notably, the AQ revealed that the religious vignette character was perceived as less fearsome and dangerous, whereby participants were less likely to force treatment, and more likely to help, and show empathy toward the individual compared to the sexual and aggressive vignette characters. Despite the fact that avoidance is a common compulsion across all OCD symptom dimensions (Radomsky et al., 2014), the lay public may misinterpret avoidance compulsions that are typically associated with unacceptable thoughts as a preventative or required measure individuals take to reduce their risk of harm (e.g., avoidance of children), thereby increasing perceptions of dangerousness for sexual and aggressive obsessions (Lee & Kwon, 2003).

Likewise, findings from the AQ subscales demonstrated that one's willingness to help and interact with an individual was the most stigmatizing factor. This aligns with P. W. Corrigan's (2006) path model on stigma. For instance, those who view symptoms of mental illness as controllable tend to inflict punishing behaviors, such as limiting employment or housing opportunities. Conversely, when participants were explicitly asked about the vignette character's responsibility for their condition, they tended to score low on stigma, reflecting a social desirability bias. However, when specific items from the help/interact subscale were presented (e.g., would you interview, share a carpool, or rent an apartment with/to Jack), participants were apprehensive to help the individual. Similarly, the fear/dangerousness subscale was salient in provoking stigma. Because UT-OCD is not as identifiable, individuals may endorse prejudice and incorrectly fear those with UT-OCD. As a result, unwillingness to help those with UT-OCD may look like depriving individuals of opportunities through punishment or avoidance.

Although a marginal difference was observed with the child-sexual focused vignette trending in the direction of eliciting more stigma than the nonchild sexual vignette, the label pedophilia was considerably high for the child-sexual vignette. In fact, pedophilic disorder was the second most common ranking (66.2%) for the child-sexual focused vignette, following closely behind abnormal sexual interest, which was selected among 70% of participants. This suggests that individuals may view symptoms of sexual obsessions as ego-syntonic as opposed to ego-dystonic. The ambiguity over these conditions contributes to individuals often concealing their intrusive thoughts or delaying disclosure, leading to increased stigma and misidentification (Glazier et al., 2013; McCarty et al., 2017; Steinberg & Wetterneck, 2017; Stephens et al., 2021). Even clinicians are sometimes unable to differentiate between sexual obsessions in OCD, paraphilias, and nonparaphilic sexual disorders (Vella-Zarb et al., 2017). Distressing thoughts alone are often insufficient to distinguish these diagnoses and can result in misdiagnoses or unnecessary reporting of clients to authorities. Instead, a holistic consideration of symptomology should be applied, given the overlap in pathology.

While repetitive thoughts and rituals are characteristics of OCD, paraphilias, and nonparaphilic sexual thoughts, there is an absence of arousal and pleasure associated with sexual thoughts in relation to OCD (Vella-Zarb et al., 2017). Specifically for OCD, the focus is on avoiding harm projected onto others and reducing distress and doubt. In contrast, individuals with paraphilias and nonparaphilic sexual disorders are primarily concerned with consequences for themselves and may seek pleasure through masturbation to avoid negative affect (see Vella-Zarb et al., 2017, for a review). Additionally, these individuals may experience ego-syntonic feelings, deriving enjoyment, and sexual arousal from their thoughts of children. On the other hand, pedophilic-obsessive–compulsive disorder (P-OCD) involves ego-dystonic thoughts and impulses related to a fear of being or becoming a pedophile (Bruce et al., 2018; Vella-Zarb et al., 2017). OCD tends to attack what one values most, causing fear and doubt in one's self-concept and making ego-dystonic obsessions a hallmark of the disorder (Rowa et al., 2005). For example, a father changing his daughter's diaper may think he touched their child's genitals the "wrong" way. In turn, individuals begin doubting their intentions and wonder what kind of person they are for having these thoughts. Alternatively, they may engage in checking, reviewing, or reassurance seeking to alleviate the distress associated with thoughts of being a pedophile (Bruce et al., 2018). Thus, those who have intrusive pedophilic thoughts but are also highly invested in being a good parent or family member may be at most risk of these thoughts being misinterpreted.

Factors Mitigating Stigma

Given the high prevalence (94%) of intrusive thoughts endorsed by the general public (Moulding et al., 2014; Radomsky et al., 2014), exploratory analyses examined if individuals empathized with the vignette character based on whether they had a diagnosis of OCD themselves or knew of a close friend or family member with the condition. Having familiarity with OCD was found to significantly improve recognition rates and marginally reduce stigma levels. This finding further emphasizes how education can assist with understanding the complex intricacies of the condition and dispelling common myths.

An additional exploratory analysis replicated McCarty et al.'s (2017) finding of a stigma-reducing effect when able to properly identify OCD, which was irrespective of symptom presentation. These findings suggest that individuals understand that OCD consists of intrusive thoughts and/or compulsions as opposed to the disorder being defined by specific obsessional content (McCarty et al., 2017). However, this has not been directly tested, and it is possible that individuals recognize familiar themes of OCD without fully understanding the implications of the disorder. Further, when isolating only those who correctly identified OCD, we found significantly greater stigma for the UT-OCD vignettes than the contamination vignettes. This finding supports our hypothesis that UT-OCD receives greater stigma than contamination OCD,

suggesting that stigmatizing attitudes differ across OCD symptom domains and are not a result of solely mistaking OCD for another condition (e.g., psychotic disorder or personality disorder). Thus, the ego-dystonic nature of thoughts in OCD may be misinterpreted as intentions, even though individuals with OCD are not at an increased risk of harming others. Nonetheless, stigma may be reduced if individuals can identify the hallmarks of OCD versus other conditions, highlighting again that education may be an effective intervention.

Misperceiving OCD as a personality disorder may be another contributing factor to stigmatization, as the general public may view personality disorders as less treatable and more pervasive, which tends to generate further stigma (Paris, 2015; Sheehan et al., 2016). Whereas paranoid personality disorder was commonly selected for UT-OCD, obsessive–compulsive personality disorder was confused for contamination OCD, indicating that the lay public may view characteristics of OCD akin to eccentricities or personality traits (e.g., perfectionism, which is highly comorbid with OCD; American Psychiatric Association, 2013). Similarly, paranoid personality disorder, disorganized thoughts, delusional disorder, schizophrenia, and brief psychotic disorder were selected as possible diagnoses across all vignettes but particularly frequent for aggressive or religious obsessions. Viewing a person with OCD as having serious delusional or psychotic symptoms may be a further indication of stigmatization as literature highlights exacerbated rates of public stigma for schizophrenia (e.g., dangerousness, responsibility, desire for social distance; Angermeyer & Dietrich, 2006; Rüsch et al., 2005; Valery & Prouteau, 2020). Thus, it is paramount to improve mental health education to increase recognition and literacy rates of mental illnesses. Similarly, research exploring these differential diagnoses can aid in stigma reduction by examining the disparities between common beliefs and accurate symptomology.

Limitations and Future Directions

It is important to note the limitations of the present study. Aside from associated problems with self-reported measures and biases in responses (e.g., social desirability), the sample was just over 80% White females which could have led to a bias in responding. Further, these results are not representative of the lay public as 81% of participants were recruited from Memorial University, and 46% of the sample were psychology students. However, this makes the results of the present study interesting as a sample of generally well-educated participants exhibited stigmatizing attitudes toward a person with OCD. Additionally, vignettes cannot depict complex symptom presentations and are quite different from reviewing a case history or watching a mock intake interview between a clinician and client. For example, participants who received the child-sexual vignette may have misinterpreted the reference to visual imagery as the vignette character having a photo of a child, which would likely invoke a different connotation. As well, the vignette depictions only describe an example of how OCD symptom presentations can manifest and are not inclusive of everyone's experience.

The current analysis of obsessional content that is self-directed compared to directed toward others should be interpreted with caution given that obsessions directed at others were the most stigmatized. The vignette content of self versus other directed may have been conflated, such that sexual and aggressive obsessions were more stigmatizing than contamination and religious obsessions, regardless of whom the obsessions were directed toward. Given that the content of any OCD symptom domain could be self or other directed (e.g., contamination fears could be directed at the self or based on fears of contaminating others; relationship OCD could be focused on the partner's flaws or doubt about the individual's true feelings for their partner), future research should directly examine whether stigmatizing attitudes are higher when obsessions are directed at others rather than self-directed across each of the major symptom domains. It may be the case that the level of perceived threat for sexual and aggressive obsessions directed at others supersedes that of all other symptom dimensions.

Although the vignettes were adopted from previous studies, the use of different descriptions from each theme may yield different findings as we were unable to verify the construct validity for each and cannot be sure how participants interpreted each description. However, a clinician did review each vignette to minimize threats to external validity and ensure they matched real-life experiences.

We also did not examine sex differences in various symptom presentations based on the vignette descriptions. Importantly, the sex of the vignette character coupled with our dependent measure of stigma may have influenced our findings. For example, a male vignette character being imagined in the child-sexual focused vignette condition may have provoked greater perceived dangerousness, less empathy, and greater negative emotions on the AQ compared to imagining a female vignette character. Hegemonic masculinity (Van Doorn & March, 2021) may help to fuel associations and stereotypes that men are more aggressive, dangerous, inconsiderate, and misogynistic than women, thereby increasing stigmatizing attitudes. Thus, future studies may wish to examine if the sex of the vignette character presenting with UT-OCD affects stigma and misidentification and build on these findings.

Conclusions

Overall, these findings provide evidence that in a predominantly student population, UT-OCD was significantly more stigmatized and less likely to be identified than traditional representations of OCD (i.e., contamination). Educating the lay public on the multifaceted ways that symptoms of OCD can manifest is imperative, with increased awareness of the lesser known OCD symptom domains reducing barriers to treatment. More versatile representations of OCD are required in the media and in educational and training materials for clinicians in training. Differentiation between ego-dystonic and ego-syntonic thoughts is also required to highlight that those with OCD are not at risk for acting on their thoughts or becoming violent. Ultimately, individuals living with OCD should be able to disclose their thoughts without fear of social rejection, judgment, or, in extreme cases, unnecessary psychiatric hospital admissions.

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