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Sexual Orientation Intrusive Thoughts and Well-Being: The Mediating Role of Psychological Inflexibility

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Abstract

Sexual orientation intrusive thoughts are a debilitating form of obsessive compulsive disorder (OCD). The present study aimed to elucidate how psychological inflexibility and dysfunctional beliefs may impact the relationships of sexual orientation intrusive thoughts and obsessive-compulsive (OC) symptoms with well-being. A total of 181 undergraduate students completed measures of sexual orientation intrusive thoughts, OC symptoms, psychological inflexibility, dysfunctional beliefs, and well-being. Results indicated positive correlations between psychological inflexibility, sexual orientation intrusive thoughts, dysfunctional beliefs, and OC symptoms, along with negative correlations between well-being and sexual orientation intrusive thoughts, OC symptoms, dysfunctional beliefs and psychological inflexibility. Psychological inflexibility acted as a mediator between sexual orientation intrusive thoughts and well-being, and between OC symptoms and well-being. Dysfunctional beliefs were not a significant mediator. These results suggest that psychological inflexibility may partially explain the association between OC symptoms and well-being, pointing towards the need for future research on the impact of psychological inflexibility on well-being in the context of OC symptoms.

Keywords: well-being, psychological inflexibility, obsessive compulsive disorder, sexual orientation intrusive thoughts

Introduction

Obsessive-compulsive disorder (OCD) is a debilitating condition associated with lower quality of life and significant impairment (Asnaani et al., 2017). OCD symptoms include repeated intrusive and/or distressing thoughts of varied content (i.e., obsessions), frequently paired with mental or physical behaviors performed in an attempt to neutralize or remove the unpleasant thoughts (i.e., compulsions; American Psychiatric Association, 2013). Obsessions in OCD can cover a wide range of topics. For example, common obsession topics include worries around contamination, symmetry, religion, or other taboo thoughts (e.g., sexual or violent topics). Compulsions frequently include behaviors such as handwashing, checking, repeating, or mental rituals (e.g., internal prayers).

Sexual intrusive thoughts are a common symptom of OCD; they are defined by concerns around sexual subject matter, including obsessions about one's sexual orientation or fear of experiencing same-sex attraction. Between 11- 25% of individuals with OCD struggle with general sexual intrusive thoughts and 84% of the average population experiences them (Siev, Steketee, Fama, & Wilhelm, 2011; Wetterneck, Smith, Hart, & Burgess, 2011; Williams & Farris, 2011). Sexual orientation intrusions are particularly distressing, as they are ego-dystonic, lack the pleasure associated with sexual thoughts, and can provoke stigma-related fears of same-sex attraction (Langlois, Freeston, & Ladouceur, 2000; Siev et al., 2011; Williams, Wetterneck, Tellawi, & Duque, 2015). It is important to emphasize that sexual orientation obsessions are distinct from questioning one's sexuality or the experience of same-sex attraction itself—such obsessions are a common fear- and anxiety-based symptom of OCD and come with distinctive avoidance and compulsive behaviors (Williams et al., 2015). For example, individuals with sexual orientation obsessions may avoid being alone with a member of the same sex for fear of

suddenly becoming attracted to and/or engaging in sexual activity with them. These obsessions are distinct from questioning one's sexuality, where fears are often related to, as one example, possible rejection from family or friends.

Sexual orientation intrusive thoughts can be considered a potential, distinctively impairing OC symptom. However, sexual orientation intrusive thoughts are often combined with violent and/or other taboo obsessions in research studies and are rarely examined separately, despite research indicating that sexual orientation intrusive thoughts may be uniquely debilitating. As one example, sexual orientation intrusive thoughts are particularly problematic for individual medical diagnosis. In one vignette study of physicians, almost 85% of OCD vignettes involving sexual orientation obsessions were misdiagnosed (Glazier et al., 2015). Furthermore, preliminary research highlights the severe distress, even suicidal ideation, provoked by sexual orientation obsessions alone (Williams et al., 2015). Additionally, individuals who experience sexual intrusive thoughts often have poorer outcomes in treatment trials, as well as increased misdiagnosis, when compared to those with other OC symptoms (Glazier, Swing, & McGinn, 2015; Siev et al., 2011). Therefore, it may be especially beneficial to research well-being and sexual orientation intrusive thoughts independently from other forms of taboo intrusive thoughts, particularly because sexual intrusive thoughts are a highly underresearched area of OCD and have a potentially unique impact on the individual (Wetterneck, Siev, Adams, Slimowicz, & Smith, 2015).

With this in mind, exploring psychological variables associated with sexual orientation intrusive thoughts may offer more precise theoretical models of how well-being is impacted by these symptoms. This study will focus on psychological flexibility and cognitive distortion, ultimately aiming for a preliminary test of a theory for understanding the interrelationship

between sexual orientation intrusive thoughts and well-being. By examining cognitive distortion and psychological flexibility, we hope to discern the importance of the *accuracy of thoughts* (as represented by cognitive distortion) as compared to *responses to thoughts* (as represented by psychological flexibility). This study additionally aims to test how these preliminary models of sexual orientation intrusive thoughts and well-being generalize to OC symptoms more broadly (i.e., does the model replicate when looking beyond sexual orientation intrusive thoughts?)

Psychological flexibility is a crucial treatment target that shows potential to influence the presence and maintenance of sexual orientation intrusive thoughts (Bluett et al., 2014).

Psychological flexibility is the ability to remain in the present moment and respond flexibly to one's internal and external environment (e.g., thoughts) while acting in accordance with one's values (Hayes et al., 2006). A psychologically flexible response to sexual orientation intrusive thoughts may involve acknowledging the thought as a thought or practicing willingness to experience uncomfortable thoughts. However, little research has examined psychological flexibility in the context of sexual orientation obsessions specifically, despite the fact that psychological inflexibility and general OCD symptoms were strongly correlated in a large meta-analysis (Bluett et al., 2014). Additionally, several studies have demonstrated the negative effect of mental control (a form of psychological *inflexibility*) on the presence of sexual intrusive thoughts (Purdon, Rowa, & Antony, 2005; Salkovskis et al., 2003). Furthermore, higher willingness, a form of acceptance and an important aspect of psychological flexibility, was associated with symptom reduction in adults receiving exposure and response prevention (ERP) for OCD, highlighting the importance of developing willingness in OCD treatment (Reid et al., 2017).

Cognitive distortion related to sexual orientation intrusive thoughts is another potential process that may be important to examine. Cognitive distortion can be broadly understood as dysfunctional beliefs around the importance and responsibility associated with one's thoughts—a very common occurrence in OCD (Hezel & McNally, 2016; Obsessive Compulsive Cognitions Working Group, 2001). Cognitive distortion of sexual orientation beliefs may look like overemphasis on the importance or meaning of thoughts (e.g., because the thought occurred, it must be true). There is little research examining how sexual orientation intrusive thoughts and the process of cognitive distortion are related (Julien, O'Connor, & Aardema, 2007). However, misinterpretation of thoughts is theorized to perpetuate OC symptoms. For example, if an individual has an intrusive thought about same-sex attraction, attributes significance to the thought, and works to remove or suppress it, they therefore ironically perpetuate the intrusion (Hezel & McNally, 2016; Salkovskis, 1985). Furthermore, previous findings suggest that dysfunctional beliefs can contribute to lowered quality of life in patients with OCD (Barahmand, Tavakolian, & Alaei, 2014; Jacoby, Leonard, Riemann, & Abramowitz, 2014; Sudhir, Sharma, Mariamma, & Subbkrishna, 2012).

Both psychological inflexibility and cognitive distortion have been explored together and separately in connection to general OC symptoms in previous research. Dysfunctional beliefs have long been associated with OCD, typically across three domains: inflated responsibility and overestimation of threat, over-valuing thoughts, and perfectionism/intolerance of uncertainty (Hezel & McNally, 2016). Psychological flexibility and willingness to experience obsessions are established predictors of obsessional symptoms, particularly unacceptable thoughts like sexual orientation intrusions (Blakey, Jacoby, Reuman, & Abramowitz, 2016; Reuman, Buchholz, & Abramowitz, 2018; Reuman, Jacoby, & Abramowitz, 2016). When compared directly to

cognitive distortion, psychological inflexibility was found as a stronger predictor of OC symptoms but was no longer a significant predictor of unacceptable thoughts once controlling for distress and obsessive beliefs (Reuman et al., 2018). However, to the best of our knowledge, no studies have examined these variables as unique mediators between OC symptoms (e.g., sexual orientation intrusive thoughts) and well-being. It is possible that cognitive distortion and/or psychological flexibility act as mediators between the relationship of OC symptoms and well-being. In other words, how a sexual orientation intrusive thought is treated (i.e., in a psychologically flexible manner or corrected as a distortion) may impact well-being.

In sum, this study aims to explore well-being, psychological flexibility, dysfunctional beliefs, sexual orientation intrusive thoughts, and general OC symptoms. The hope of this paper is to provide preliminary information on two models of how best to understand well-being in the context of sexual orientation intrusive thoughts by comparing the importance of the cognitive distortion and psychological flexibility.

Methods

Procedure

Participants completed an online survey via a research credit portal using a secure survey collection website (Qualtrics.com). Participants received research participation credit for completing the survey.

Participants

Participants were undergraduates currently enrolled in a university in the mountain west. A total of 223 undergraduate students responded to the study. Careless responders ($n = 12$) were removed based on survey completion speed and completion percentage (see Statistical Analyses section). Because this study was focusing on sexual orientation (specifically same-sex attraction)

obsessions, participants ($n = 30$) who did not identify as heterosexual were not included in these analyses, leaving 181 total participants. The sample was primarily White (91%), female (66%), and members of the Church of Jesus Christ of Latter-Day Saints (79%), with an average age of 19.97 ($SD = 4.33$). See Table 1 for more detail.

Measures

Sexual Orientation Obsessions and Reactions Test (SORT; Williams et al., 2018). The SORT measures obsessive-compulsive symptoms surrounding sexual orientation. Participants are asked to rate 12 items on a 5-point Likert scale ($0 = \textit{never}$, $4 = \textit{always}$). Example items include “I try to reassure myself that I am not LGBTQ” and “I worry about the thoughts I am having about people of the same sex.” Higher scores indicate greater severity of OC-related sexual orientation concerns; a clinical cut-off of 10 was established in previous research in order to reliably distinguish between sexual orientation OCD and sexual identity exploration (Williams et al., 2018). The SORT has established good reliability and validity in samples with and without OCD (Williams et al., 2018). The Cronbach’s alpha in the current sample was .81.

Dimensional Obsessive Compulsive Scale (DOCS; Abramowitz et al., 2010). The DOCS measures severity of obsessive-compulsive disorder (OCD) symptoms across four domains: contamination, responsibility for harm, symmetry, and unacceptable thoughts. Participants are asked to rank 20 items (5 per domain) on a 4-point Likert scale ($0 = \textit{no symptoms}$, $4 = \textit{extreme symptoms}$) over the last month. Example items include “About how much time have you spent each day thinking about contamination and engaging in washing or cleaning behaviors because of contamination?” and “To what extent have you been avoiding situations, places, objects, and other reminders (e.g., numbers, people) that trigger unwanted or unpleasant thoughts?” Higher scores indicate greater severity, with a clinical cut off of 18 (Abramowitz et

al., 2010). Previous research supports the use of the total DOCS score as a representation for overall OCD symptoms (Thibodeau et al., 2014). The Cronbach's alpha in the current sample was .91.

Mental Health Continuum – Short Form (MHC-SF; Keyes et al., 2008). The MHC-SF measures aspects of well-being, including emotional, psychology and social well-being. Participants are asked to rate 14 items on a 6-point Likert scale (0 = *never*, 5 = *every day*) for the frequency of the feeling in the last month. Example items include “happy,” “that you have something important to contribute to society,” and “interested in life.” Higher scores indicate greater positive mental health and well-being; poor mental health is indicated by a score below 25, average indicated by scores between 25 to 45, and positive mental health indicated by scores greater than 46. Past research has established the good psychometric properties of the MHC-SF (Lamers et al., 2011). The Cronbach's alpha in the current sample was .94.

Acceptance and Action Questionnaire – II (AAQ-II; Bond et al., 2011). The AAQ-II measures psychological inflexibility. Participants are asked to rate seven items on a 7-point Likert scale (1 = *never*, 7 = *always true*) with higher scores indicating greater psychological inflexibility. Example items include “I'm afraid of my feelings” and “Worries get in the way of my success.” Previous research has established adequate reliability and validity of the AAQ-II (Bond et al., 2011). The Cronbach's alpha in the current sample was .91.

Obsessive Beliefs Questionnaire – 44 (OBQ; Obsessive Compulsive Cognitions Working Group [OCCWG], 2005). The OBQ is a measure of dysfunctional beliefs related to OC symptoms. The OBQ covers three domains of dysfunctional beliefs: importance of and need to control thoughts, perfectionism and intolerance to uncertainty, and responsibility and threat estimation. Participants are asked to rank 44 items on a 7-point Likert scale (1 = *disagree very*

much, 7 = *agree very much*), with higher scores indicating greater dysfunctional beliefs. Example items include “For me, having bad urges is as bad as actually carrying them out” and “Having bad thoughts means I am weird or abnormal.” Previous research has established good validity (OCCWG, 2005). The Cronbach’s alpha in the current sample was .95.

General demographics. Participants completed a general demographics survey including age, gender, sexual orientation, race, and religion.

Statistical Analyses

All analyses were conducted with R in RStudio (R Core Team, 2019; RStudio Team, 2019). The following packages were used in analyses: furniture (Barrett & Brignone, 2017), psych (Revelle, 2018), lavaan (Rosseel, 2012), and MaginalMediation (Barrett, 2018).

Careless responding. Careless responders were identified and removed based on response time and survey completion. A cutoff of 2 seconds per item is recommended for identifying careless responders (Huang, Curran, Keeney, Poposki, & DeShon, 2012). Therefore, we excluded cases that took less than five minutes (298 seconds = 149 items × 2s) for completion. Additionally, surveys not fully completed were removed.

General descriptives and correlations were calculated for all measures. Simple linear regression was used to predict MHC-SF based on SORT. Standardized mediational models were used to test psychological flexibility (AAQ-II) and cognitive distortion (OBQ) as mediators between SORT and MHC-SF. The same analytic process was repeated for predicting MHC-SF based on DOCS. Given the disparity in males ($n = 60$) and females ($n = 121$) in our sample, we also ran the same analyses separated by gender identity. Because no differences were found between the separated and full samples, we report analyses using the full sample only.

Results

Descriptive statistic and correlations

See Table 2 for the descriptive and correlational statistics for all measures. The sample reported average levels of well-being ($M = 41.70$) as compared to past research with undergraduate populations and pre-established cut-offs for the MHC-SF (See measures section; Irfan, 2016; Keyes, 2008). The sample also reported low levels of sexual orientation obsessions ($M = 2.91$ out of maximum score of 48; sample range: 0 - 20) as compared to clinical samples—the clinical cutoff for sexual orientation obsessions on the SORT is 10 (Williams et al., 2018). The sample also reported typical, subclinical levels of OC symptoms ($M = 14.35$) as compared to the clinical cutoff of 21 on the DOCS (Abramowitz et al., 2010) and past research on OC symptoms in undergraduate samples (Blakey et al., 2017). The sample had borderline clinical levels of general psychological inflexibility ($M = 20.51$) and cognitive distortion ($M = 140.71$). These means are comparable to past undergraduate samples in studies examining OC symptoms and psychological inflexibility (e.g., Blakey et al., 2017).

Correlations were calculated between all measures (SORT, MHC-SF, AAQ-II, OBQ, and DOCS). As expected, sexual orientation intrusive thoughts ($p < .001$), general OC symptoms ($p = .007$), and dysfunctional beliefs ($p = .004$) were negatively correlated with well-being and positively correlated with psychological inflexibility ($ps < .001$). Sexual orientation intrusive thoughts and OC symptoms were positively correlated ($p = .002$). Dysfunctional beliefs was positively correlated with sexual orientation intrusive thoughts ($p < .001$) and OC symptoms ($p < .001$). Well-being was negatively correlated with general psychological inflexibility ($p < .001$).

Regression and mediation analyses

Sexual orientation intrusive thoughts. Simple linear regression was used to predict well-being (MHC-SF) based on sexual orientation intrusive thoughts (SORT). A significant

effect was found ($F(1,169) = 11.25, p = .001, R^2 = 0.056$). For every 1 unit increase in SORT, there is a 0.06 decrease in well-being.

Psychological inflexibility (AAQ-II) was tested as a potential mediator between SORT and MHC-SF. The relationship between SORT and MHC-SF was mediated by psychological inflexibility (see Figure 1). The standardized regression coefficients between SORT and AAQ-II and then AAQ-II and MHC-SF were significant ($p < .001$). The coefficient between SORT and MHC-SF (i.e., the “direct effect”) was not significant. The standardized indirect effect was tested using bootstrapping. The bootstrapped standardized indirect effect was $-0.035, p = .001$, suggesting that for a 1 unit increase in SORT, there is a 0.035 standard deviation decrease in MHC-SF through the AAQ-II mediator.

Next, cognitive distortion (OBQ) was tested as a potential mediator between SORT and MHC-SF. The relationship between SORT and MHC-SF was not mediated by cognitive distortion (see Figure 2). The standardized regression coefficient between SORT and OBQ was significant ($p < .001$). The coefficient between SORT and MHC-SF (i.e., the “direct effect”) and the coefficient between OBQ and MHC-SF were not significant. The standardized indirect effect was tested using bootstrapping. The bootstrapped standardized indirect effect was $-0.012, p = .101$, suggesting the OBQ is not a mediator between SORT and MHC-SF.

Obsessive compulsive disorder symptoms. Simple linear regression was used to predict well-being (MHC-SF) based on general OC symptoms (total DOCS score). A significant effect was found ($F(1,168) = 7.51, p = .007, R^2 = 0.037$). For every 1 unit increase in the DOCS, there is a 0.02 decrease in MHC-SF.

Psychological inflexibility (AAQ-II) was then tested as a potential mediator between DOCS and MHC-SF. The relationship between DOCS and MHC-SF was mediated by the AAQ-

II (see Figure 3). The standardized regression coefficients between DOCS and AAQ-II and then AAQ-II and MHC-SF were significant ($p < .001$). The coefficient between DOCS and MHC-SF (i.e., the “direct effect”) was not significant ($p = .45$). The standardized indirect effect was tested using bootstrapping. The bootstrapped standardized indirect effect was -0.026 , $p < .001$ suggesting that for a 1 unit increase in DOCS, there is a 0.026 standard deviation decrease in MHC-SF through the AAQ-II mediator.

Next, cognitive distortion (OBQ) was tested as a potential mediator between DOCS and MHC-SF. The relationship between DOCS and MHC-SF was not mediated by the OBQ (see Figure 4). The standardized regression coefficient between SORT and OBQ was significant ($p < .001$). The coefficient between SORT and MHC-SF (i.e., the “direct effect”) and the coefficient between OBQ and MHC-SF were not significant. The standardized indirect effect was tested using bootstrapping. The bootstrapped standardized indirect effect was -0.007 , $p = .07$, suggesting the OBQ is not a mediator between DOCS and MHC-SF.

Discussion

This study aimed to explore well-being and the role of psychological inflexibility and dysfunctional beliefs within sexual orientation intrusive thoughts and general obsessive-compulsive (OC) symptoms. We found small to moderate correlations between all variables (well-being, sexual orientation intrusions, OC symptoms, psychological inflexibility, and dysfunctional beliefs) in the expected directions. More specifically, we observed negative correlations between well-being and sexual orientation intrusive thoughts, as well as with OC symptoms. Similarly, linear regression analyses indicated that sexual orientation intrusive thoughts and OC symptoms each significantly predict well-being. These findings are consistent with prior research that supports negative relationships of well-being with sexual orientation

intrusive thoughts and OCD symptoms (Asnaani et al., 2017; Williams et al., 2015).

Additionally, sexual orientation intrusive thoughts, OC symptoms, psychological inflexibility, and dysfunctional beliefs were all positively correlated. Similarly, these findings are supported by several studies, as documented in a large meta-analysis reporting a positive relationship between OC symptoms and psychological inflexibility (Bluett et al., 2014), along with aforementioned research documenting the relationship between dysfunctional beliefs and quality of life (e.g., Barahmand et al., 2014). Broadly speaking, these results may be beneficial for clinicians to consider when working with heterosexual clients struggling with sexual orientation intrusive thoughts, as there may be impairments in well-being and functioning.

We also found that psychological inflexibility mediated the relationship between sexual orientation intrusive thoughts and well-being. Thus, higher psychological inflexibility may be part of the pathway through which sexual orientation intrusive thoughts affect well-being. We did not find dysfunctional beliefs as a significant mediator between sexual orientation intrusive thoughts and well-being. While psychological inflexibility has not been previously explored as a mediator between OC symptoms and well-being, these findings are somewhat consistent with past research generally exploring psychological inflexibility and obsessive beliefs. For example, psychological inflexibility and related constructs (e.g., experiential avoidance, cognitive fusion) were found as stronger predictors of unacceptable thoughts than obsessive beliefs (Reuman et al., 2018; Reuman et al., 2016). While our study is examining these constructs as mediators between sexual orientation intrusive thoughts and well-being rather than predictors of unacceptable thoughts, our findings may broadly add to the growing research base exploring the potential importance of psychological inflexibility in OC taboo thoughts. However, after controlling for distress and obsessive beliefs in the aforementioned study, these elements of psychological

inflexibility were no longer significant predictors (Reuman et al., 2018). Our models do not account for this distinction and further research is needed to confirm and expand upon the understanding of psychological inflexibility's role in sexual orientation intrusive thoughts specifically.

Results of the same mediational analyses with a general measure of OC symptoms (the DOCS)—instead of sexual orientation intrusive thoughts alone—were similar. Psychological inflexibility was a significant mediator of the relationship between general OC symptoms and well-being. Dysfunctional beliefs were not a significant mediator between general OC symptoms and well-being. As previously discussed, these results fall in line with past research highlighting the importance of psychological inflexibility as a factor to consider alongside OC symptoms broadly (Reuman et al., 2018; Reuman et al., 2016). Furthermore, in a prior study, an individual's willingness to endure OC symptoms (e.g., unacceptable thoughts around sexuality) was a stronger predictor over distress tolerance in a non-clinical sample (Blakey et al., 2016). While we did not measure distress tolerance in the present study, our findings, alongside the work of Blakey (2016) and Reuman and colleagues (2018, 2016), collectively point towards the need for more research on psychological inflexibility in specific theoretical models for OC symptoms like sexual orientation intrusive thoughts. Furthermore, in a recent study, psychological inflexibility was a documented mediator between hoarding symptoms and life satisfaction (Ong, Krafft, Levin, & Twohig, 2018). Because of the close relationship between OCD and hoarding, this result is also important to consider when researching psychological inflexibility as a mediator between OC symptoms and well-being.

Broadly speaking, these results are relatively in line with past understandings of psychological inflexibility. It is possible that psychological inflexibility could be a pathway

through which OC symptoms, particularly obsessions about sexual orientation, may affect well-being. For example, a psychologically inflexible response to a sexual orientation intrusive thought (e.g., avoidance of entertainment or places that may trigger obsessions about same-sex attraction) may contribute to lower well-being as the avoidance in turn impacts important aspects of one's life (e.g., social activities). As the individual becomes preoccupied by psychologically inflexible responses to their internal world, less attention is paid to engaging in important, meaningful behaviors that could potentially boost and/or contribute to their overall well-being. Our preliminary study of a non-clinical, undergraduate sample suggests that this model could be more important to focus on instead of an emphasis on correcting or learning to accurately interpret thoughts. However, future research with clinical populations and larger, more powered samples is necessary for confirmation and/or generalizability.

With the significant limitation of our homogenous and nonclinical sample in mind, this study points towards the potential importance of psychological inflexibility when working with clients struggling with sexual orientation intrusive thoughts. It may be helpful to guide clients to develop more flexible responses to internal experiences (e.g., sexual orientation intrusive thoughts) so that they do not interfere with the client's life or behavior rather than targeting dysfunctional beliefs via challenging or attempting to change thoughts. Therefore, treatment approaches focusing on improving psychological flexibility (e.g., acceptance and mindfulness-based approaches) may be useful. This is further supported by the existing empirical support for acceptance and commitment therapy (ACT), a treatment geared at targeting psychological inflexibility, as a treatment for OCD (Twohig et al., 2015; Twohig, Hayes, & Masuda, 2006). While this study does not necessarily confirm the role of psychological inflexibility in the presence or maintenance of sexual orientation intrusive thoughts, it suggests that enhanced

psychological flexibility may contribute to improving well-being in a non-clinical, undergraduate sample. However, it is important to underscore that these results are ultimately limited by the homogenous sample—further research is needed to broaden the understanding of sexual orientation intrusive thoughts.

Limitations

As previously discussed, this study is limited by its small undergraduate sample that is primarily female and identifying as religious. The large proportion of those who identified as religious may have impacted our findings, particularly given our focus on sexual orientation. We did find a significant difference ($p = .04$) on the AAQ-II between those who identified as religious ($M = 23.0, SD = 8.6$) and non-religious ($M = 19.6, SD = 8.1$). This disparity is important to highlight for generalizability of results between and beyond religious and non-religious undergraduates; however, a four point difference—with both averages below the clinical range—on the AAQ-II is likely not a clinically meaningful one (Bond et al., 2011). Additionally, it is important to note that identified membership in a religion does not indicate engagement in religiosity and/or spirituality, particularly for undergraduates (e.g., Sloane & Petra, 2021). Regardless, future research should focus on exploring psychological inflexibility, dysfunctional beliefs, well-being, and sexual orientation intrusive thoughts in more diverse populations, particularly across sexual orientations, clinical severity, age and religious groups. As another example, little information is known about the mechanisms of sexual orientation intrusive thoughts in non-heterosexual groups (Williams et al., 2018); this study points to the impact that sexual orientation intrusive thoughts can have, highlighting the need to collect diverse perspectives to better understand who these symptoms might be impacting the most.

Additionally, the present data is cross-sectional. Because of evidence suggesting that college environments have lower numbers of sexually active individuals (Raley, 2012), it would be important to track symptoms and experiences across time, through experimental manipulation of some kind, or against groups of differing sexual activity levels. It is an additional limitation that sexual activity was not measured, so this potential confound cannot be confirmed. Similarly, other important confounds in relation to well-being were not assessed (e.g., depressive symptoms), which may have impacted findings. Lastly, the average levels of sexual orientation obsessions in this sample were low and below the recommended clinical cut-off for diagnosing sexual orientation obsessions. The range of SORT scores in the present sample was also significantly limited, suggesting potential floor effects. Thus, the results should be interpreted with caution and further research in clinical samples is necessary. It is possible that these floor effects from the SORT contributed to the lack of significance found in mediational analyses using the OBQ.

Despite limitations, this study provides important preliminary evidence of the importance of psychological inflexibility when considering sexual orientation intrusive thoughts, OC symptoms, and well-being. Future research should explore these relationships in clinical groups in order to best inform treatment practices.

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Table 1

General demographics for entire sample.

	Total sample (<i>N</i> = 181)
Age (SD)	19.97 (4.33)
Gender	
<i>Female</i>	121
<i>Male</i>	60
Race	
<i>White</i>	165
<i>Asian</i>	3
<i>Latinx</i>	7
<i>Middle Eastern</i>	1
<i>American Indian</i>	2
<i>Pacific Islander</i>	1
<i>Multiracial</i>	2
Religion	
<i>Church of Jesus Christ of Latter-Day Saints</i>	144
<i>Catholic</i>	2
<i>Protestant</i>	1
<i>Jewish</i>	1
<i>Not religious</i>	31
<i>Not listed</i>	2

Table 2

Correlations, means, and standard deviations for all measures.

Measure	1	2	3	4	5	<i>M</i>	<i>SD</i>
1. SORT	—	—	—	—	—	2.91	4.01
2. MHC-SF	-.27***	—	—	—	—	55.70	15.79
3. AAQ-II	.28***	-.58***	—	—	—	20.51	8.74
4. OBQ	.34***	-.21**	.48***	—	—	140.71	41.79
5. DOCS	.24**	-.21**	.44***	.45***	—	14.35	9.77

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

Note: SORT = Sexual Orientation Obsessions and Reactions Test; MHC-SF = Mental Health Continuum – Short Form; AAQ-II = Acceptance and Action Questionnaire – II; OBQ = Obsessive Beliefs Questionnaire – 44; DOCS = Dimensional Obsessive Compulsive Scale.

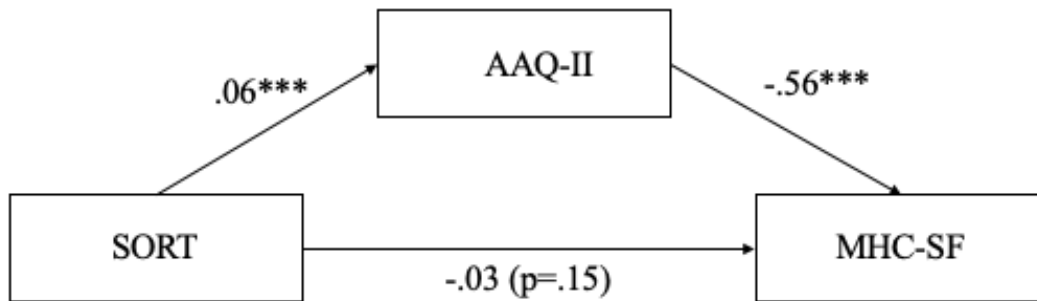


Figure 1. Standardized regression coefficients for the relationship between sexual orientation intrusive thoughts and well-being as mediated by psychological inflexibility.

*** $p < .001$

Note: SORT = Sexual Orientation Obsessions and Reactions Test; MHC-SF = Mental Health Continuum – Short Form; AAQ-II = Acceptance and Action Questionnaire – II.

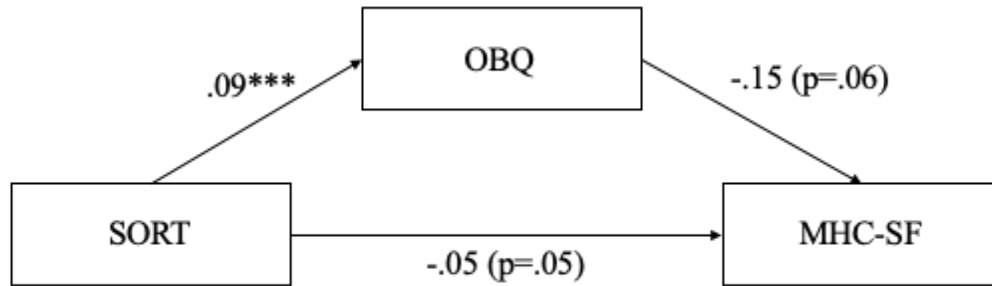


Figure 2. Standardized regression coefficients for the relationship between sexual orientation intrusive thoughts and well-being as mediated by cognitive distortion.

*** $p < .001$

Note: SORT = Sexual Orientation Obsessions and Reactions Test; MHC-SF = Mental Health Continuum – Short Form; OBQ = Obsessive Beliefs Questionnaire – 44.

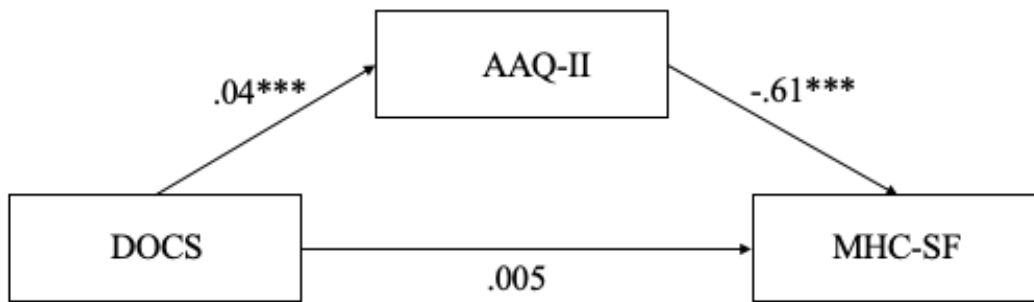


Figure 3. Standardized regression coefficients for the relationship between OC symptoms and well-being as mediated by psychological inflexibility.

*** $p < .001$

Note: MHC-SF = Mental Health Continuum – Short Form; AAQ-II = Acceptance and Action Questionnaire – II; DOCS = Dimensional Obsessive Compulsive Scale.

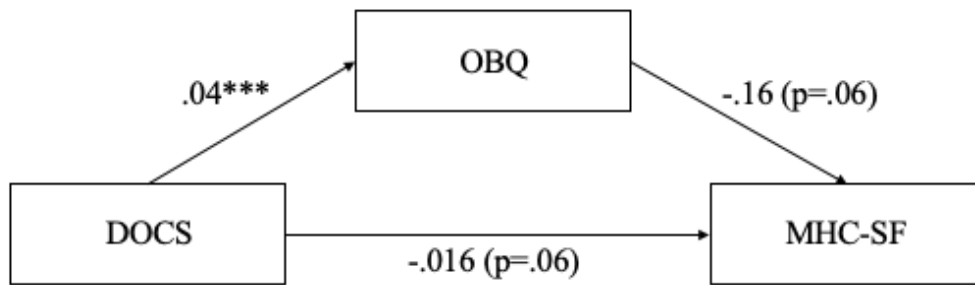


Figure 4. Standardized regression coefficients for the relationship between OC symptoms and well-being as mediated by cognitive distortion.

*** $p < .001$

Note: MHC-SF = Mental Health Continuum – Short Form; OBQ = Obsessive Beliefs Questionnaire – 44; DOCS = Dimensional Obsessive Compulsive Scale.