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A Systematic Scoping Review of the Literature on Sexual Orientation Obsessive Compulsive Disorder (SO-OCD): Important Clinical Considerations and Recommendations

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Highlights

- A systematic PRISMA review was conducted. A total of eleven studies were identified in this review. Two were cases and nine were empirical studies.
- The studies in this review highlight that although relatively common in individuals with OCD, SO-OCD is frequently misunderstood by both clinicians and patients.
- Clinicians should be aware of the disorder in order to avoid ineffective, or potentially harmful treatment.

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A Systematic Scoping Review of the Literature on Sexual Orientation Obsessive Compulsive Disorder (SO-OCD): Important Clinical Considerations and Recommendations

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Abstract

Obsessive Compulsive Disorder (OCD) is characterised by the occurrence of persistent thoughts, urges, or images that are experienced as intrusive and unwanted (obsessions), and compulsive actions that the individual feels driven to act on in response to an obsession. These actions are carried out by an individual in order to try and prevent or reduce anxiety or distress, or to prevent something terrible from happening (American Psychiatric Association, APA, 2013). The aim of this review was to identify studies which have explored SO-OCD. Because this is a relatively under-researched field, the decision was made for the present systematic review to take an inclusive approach. A systematic PRISMA review was conducted. A total of eleven studies were identified in this review. Two were cases and nine were empirical studies. Overall, the studies in this review highlight that although relatively common in individuals with OCD, SO-OCD is frequently misunderstood by both clinicians and patients. This emphasises the need for education and training (or they are not even aware of the condition).

Keywords: sexual orientation obsessive compulsive disorder; SO-OCD; SO OCD; H OCD; H-OCD; homosexual OCD; homosexual obsessive compulsive disorder

Sexual Orientation Obsessive Compulsive Disorder (SO-OCD)

Obsessive Compulsive Disorder (OCD) is characterised by the occurrence of persistent thoughts, urges, or images that are experienced as intrusive and unwanted (obsessions), and compulsive actions that the individual feels driven to act on in response to an obsession. These actions are carried out by an individual in order to try and prevent or reduce anxiety or distress, or to prevent something terrible from happening (American Psychiatric Association, APA, 2013). OCD now excludes hoarding which is now regarded as a separate disorder (APA, 2013). Some of the typical manifestations of OCD are contamination/cleaning; ordering/symmetry, and unacceptable/taboo thoughts (Bloch, Landeros-Weisenberger, Rosario, Pittenger, & Leckman, 2008). Doubt and checking behaviours and thoughts occurs across all of these symptom domains. Obsessive sexual thoughts are a recognised phenomenon in OCD and are prominent within the unacceptable thoughts' symptom dimension. Some of the typically exhibited include: sexual obsessions concerning unfaithfulness, pedophilia, incest, AIDS, profane thoughts combining religion and sex, and obsessions surrounding one's sexual orientation (Cathey & Wetterneck, 2013). Obsessive sexual thoughts are not a distinct category in the ICD-11 or DSM-V.

Taboo and unacceptable thoughts in OCD is well covered in the literature (e.g., Williams, Whittal, & La Torre, 2022). The unacceptable or "taboo" thoughts that are sexual, aggressive, or religious in nature (e.g., Coles, Lahey, Fawcett, & Fawcett, 2023; Canavan, 2024). Some examples of themes in obsessions which involve unacceptable, taboo or forbidden include: stabbing a relative, incest or blasphemy (Brakoulias, Starcevic et al., 2013). An increasing number of studies have found that primary care and mental health care professionals are less likely to recognise taboo intrusive thoughts as OCD when compared to other subtypes of OCD (e.g., Glazier, Swing, & McGinn, 2015). Another example is homosexual OCD (now called sexual orientation OCD). Williams (2008) definition of "homosexual OCD" was "the obsessive fear of being or becoming homosexual, the experience of intrusive, unwanted mental images of homosexual behavior, and/or the obsessive fear that others may believe one is homosexual" (pp. 197). In some individuals it can also present as being unable to tolerate doubt itself about one's sexual orientation. Initially it was believed that concerns regarding sexual orientation in OCD was when a heterosexual person has unwanted thoughts, urges, or mental images about having a different sexual orientation (i.e., same-sex or bisexual). This was why concerns regarding sexual orientation in OCD was originally referred to as "homosexual OCD" (H-OCD). The term H-OCD evolved out of the online self-help community for individuals with OCD during the early days of the Internet (Williams, 2008). However, it is now well-established that sexual orientation concerns are found in individuals who are heterosexual and also individuals who identifies as part of the LGBTQ (lesbian, gay, bisexual, transgender, or queer/questioning) community (e.g., Williams & Ching, 2016, for a case example see Goldberg, 1984). Therefore, in order to be more inclusive, the term was revised to sexual orientation OCD (SO-OCD; Williams, Slimowicz, et al., 2014; Williams, Wetterneck, Tellawi, & Duque, 2015; Williams, Tellawi, Davis, & Slimowicz, 2015).

In individuals with SO-OCD, some of the related compulsions may involve the individual scanning their body and checking for signs of arousal, engaging in self-assurance or reassurance seeking from others (including online forums) about one's sexual orientation, mentally reviewing

interactions with individuals of the same gender or past experiences, avoiding LGBTQ+ triggers (e.g., television shows, maintaining physical distance from members of the same gender), testing and comparing their physiological arousal to heterosexual and LGBTQ+ pornographic content, and/or engaging in more sexual activity (Pinciotti, Smith, Singh, Wetterneck, & Williams, 2022). Williams (2008) provides some examples. For instance, in a male, the obsession may start as a fleeting thought that a particular man seems attractive which would subsequently lead them to question the meaning of this thought – “If I am having this thought, then does this mean I am actually gay?”. This may then lead him to search for thoughts or physical responses that would either confirm or discredit the validity of the obsession. He may begin to notice people of the same sex more often, and this new preoccupation subsequently provides him with confirmation that he might be gay. The individual may engage in checking behaviours such as seeing if they experience any indications of physical arousal in the presence of an attractive same-sex person, and then misinterpret his feelings of anxiety as confirmation that he is sexually attracted to the same-sex. Additionally, they may also wonder if other people are thinking that he “seems gay” which often leads to confused logic. Specifically, “How can I be attracted to men if I have always loved women? I have only ever dated women before and have never had any thoughts about having a relationship with a man. Thinking about engaging in sexual acts with a member of the same sex repulses me. I cannot possibly be gay. But why I am thinking about men all the time now? That must mean I am gay.” The cycle of doubt starts over again. Individuals with SO-OCD may seek reassurance from others and feel relief but this is short-lived as the doubts always return (Williams, 2008). Other types of reassurance may also be sought such as self-reassurance, the need to confess to others, and compulsively searching the Internet. Excessive demands for reassurance can have an adverse impact on family members and friends (Williams, Crozier, & Powers, 2011).

Some SO-OCD patients who are heterosexual may review all their prior sexual experiences with the opposite sex in order to try to convince themselves none of these previous sexual experiences resulted in any pleasure. They may also engage in avoidance behaviours. For instance, avoiding situations which trigger the unwanted thoughts (e.g., locker rooms, movies that have same-sex themes, people that they perceive to be members of the LGBT community) (Williams et al., 2014). A common pattern of behaviour in SO-OCD is the use of pornography to check arousal. For instance, a heterosexual male might watch male homosexual porn to see if he is aroused by it, which might include monitoring their penis for signs of enlargement or engorgement (or a straight woman may watch lesbian porn to see if they are aroused by it, thus, it would theoretically make women vulnerable to SO-OCD). However, such activity provides only transient, if any, reassurance, and is often followed by intrusive thoughts that maybe, despite visual evidence, there was a degree of arousal whilst watching pornography, and a desire to check again.

The exact prevalence of SO-OCD is unknown (Williams, Wetterneck, et al., 2015). However, a large nationwide study conducted by Ruscio and colleagues (2010) found that 30% of those with OCD reported sexual and/or religious obsessions (NCS-R; Ruscio, Stein, Chiu, & Kessler, 2010). In individuals with lifetime OCD, SO-OCD was endorsed by 10.0–12.0%, including 8.0% who reported currently experiencing obsessions related to SO (Pinto et al., 2008; Williams & Farris, 2011). Williams and colleagues (2018) have also highlighted that the actual numbers of individuals with SO-OCD are likely underestimated as SO-OCD because it is very frequently misunderstood by the individual experiencing it and they are often misdiagnosed as a “sexual identity crisis” by professionals. In one vignette study, findings showed that OCD was misidentified by doctors about 50% of the time. Also, findings indicated that misdiagnosing (i.e., underdiagnosis) occurred most frequently in sexual orientation obsessions (84.6%; Glazier, Swing, & McGinn, 2015).

Research shows that men are twice as likely to experience SO-OCD. However, higher levels of distress associated with SO-OCD are reported in women (Williams & Farris, 2011; Williams et al., 2015). Pinciotti and colleagues (2022) also highlight that the symptoms onset of SO-OCD can coincide with a misinterpretation of a bodily reaction. The onset of SO-OCD symptoms can also occur during sexual development in adolescence. This may be due to the adolescent having less experience and knowledge about sexual identity and experiencing at school anti LGBTQ+ stigma which is coupled with more physiological reactions experiences (Williams & Farris, 2011; Williams & Wetterneck, 2019). Williams and colleagues (2014) have also emphasised that SO-OCD is distinct from individuals who are actually conflicted about their sexuality (Gordon, 2002), from homophobia (Williams, 2008), and from internalised homophobia (where an LGBT person has negative feelings about themselves due to their sexual orientation (Szymanski, Kashubeck-West, & Meyer, 2008; Williams et al., 2015; Fernandez, Sevil, & Moulding, 2021; Fernandez et al., 2021).

Present Review

The aim of this review was to identify studies which have explored SO-OCD. Because this is a relatively under-researched field, the decision was made for the present systematic review to take an inclusive approach. The review will look at empirical studies and also any case studies.

Methodology

A total of four internet-based bibliographic databases were searched on 11th August 2024. Specifically, the search on the databases was carried out on ProQuest One Psychology (15 results); PsycInfo (12 results); APA PsycArticles (0 results) and APA PsycExtra® (0 results). The search followed Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines (see Liberati et al., 2009; Moher et al., 2009). The search was not restricted by date. Search terms were applied to title. The following search criteria were entered into the four databases: "sexual orientation obsessive compulsive disorder*" OR SO-OCD OR "SO OCD" OR "H OCD" OR H-OCD OR "homosexual OCD" OR "homosexual obsessive compulsive disorder*" OR "sexual orientation symptom*" OR "sexual-orientation symptom*" OR "sexual-orientation obsessive compulsive disorder*" OR "sexual orientation obsession*" OR "sexual-orientation obsession*" OR "fears associated with sexual orientation" OR "obsessive-compulsive disorder with sexual orientation". This search returned a total of 27 articles. Following the removal of duplications (n = 14), there were 13 articles remaining, six of which were found not to be relevant for the review resulting in seven relevant papers. Details regarding the papers that were excluded, one was excluded because it was just an abstract (Gardabbou et al., 2023); one was a book chapter (Viscusi & Williams, 2019), two were a commentary/review (Williams, Slimowicz, Tellawi, & Wetterneck, 2014; Pinciotti, Smith, Singh, Wetterneck, & Williams, 2022) and two were not relevant (Pavelko & Myrick, 2015; Woods, Gantt-Howrey, & Pope, 2023). Both authors independently reviewed the returned articles and screened for inclusion to the review. In addition, the reference sections of all relevant papers were screened for potentially relevant articles. The papers that were relevant but did not meet the inclusion criteria of the review because they were reviews, etc, were reviewed and referenced and key points discussed in the later subsections of the discussion section. They contained useful information that is important to capture and highlight.

As well as the searches carried out on the databases listed above, a number of permutations of the search criteria were entered into Google Scholar and searched for any potentially relevant

articles which were not identified in the database searches. For instance, "sexual orientation obsessive compulsive disorder*"; SO-OCD and "homosexual obsessive compulsive disorder*". This resulted in four further studies (Glazier et al., 2015; Melli, Moulding, Gelli, Chiorri, & Pinto, 2016; Safer et al., 2016; Ching et al., 2018) which were identified as being relevant to the present review (see Figure 1, for Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA] Flow Diagram of this process). Therefore, a total of eleven articles were identified in this review. Finally, because this is a relatively under-researched field, the decision was made for the present systematic review to take an inclusive approach. Therefore, no exclusion criteria were applied. No restrictions were put in place for the year of publication.

Results

A total of eleven studies were identified in this review. Two were cases and nine were empirical studies.

Case Studies

Two case studies were identified in this review (Safer, Bullock, & Safer, 2016; Williams, Crozier, & Powers, 2011) and they were both conducted in the United States (US). In the first case study, Williams, Crozier and Powers (2011) presented a case report where a 51-year-old, White, heterosexual male with SO-OCD was given exposure and ritual prevention (EX/RP) therapy - 17 EX/RP sessions which took place two times a week. The OCD symptoms he exhibited included anxiety about the possibility of becoming gay, mental reassurance (from his father and mental health professionals regarding his sexuality), and avoidance of other men (e.g., avoiding one-on-one meetings with males at work and avoiding watching movies or television shows which have masculine characters. Compulsions include: if another man came into the room, particularly in his office at work, in an effort to avoid touching them he would put his hands behind his head). These symptoms led to both depressive symptoms and marital distress. Due to the level of his avoidance, Simon's initial OCD severity score (based on the Yale-Brown Obsessive-Compulsive Scale [Y-BOCS]; Goodman et al., 1989) was within the moderate range, may be an underestimation of his symptom severity. The Y-BOCS is a clinician-rated scale was used to assess the severity of the patient's OCD symptoms. Each of the 10 items is rated from 0 (no symptoms) to 4 (extreme symptoms), with total scores ranging from 0 to 40. Obsessions and compulsions each account for up to half of the total score. Ratings are based on time spent on obsessions or compulsions, perceived distress levels, and degree of interference caused.

The focus of the imaginal exposure was on a detailed sexual encounter with a man. This subsequently led to physiological arousal and elevated levels of depressive rumination and obsessive thoughts. During the session he was told that the purpose of exposure exercises is to increase anxiety but not depression. He was then asked to draft another imaginal exposure focusing, not on the physical relationship with a man, but more on his perceived negative consequences of being gay. Additional between session contacts was also offered with the therapist if he found that he was experiencing an increase in depressive thoughts. William and colleagues found that Simon's OCD symptoms on the Y-BOCS was 24 at intake but fell to 3 at posttreatment and to 4 at a 6-week follow-up - indicating minimal symptoms. There was also an increase in Simon's mood, quality of life and social adjustment. (Williams, Crozier, & Powers, 2011).

The case study outlined by Safer and colleagues (2016) involves a 20-year-old single, homosexual, African American male. He had no history of psychiatric treatment. He initially presented to his college's counselling services seeking therapy due to interpersonal challenges he was experiencing in his first gay relationship. When he started his therapy it was positive. However, a month into his therapy, he ingested marijuana-infused chocolate at a concert. He prior marijuana use was minimal. He reported having a panic-type reaction that he was transgender and that he needs to undergo sex-change surgery right away. The intrusive thoughts he experienced about maybe being transgender following this increased his feelings of despondency. The on-call therapist at the student health center said that what he was experiencing would not last long and was just an adverse reaction to the cannabis. However, his level of despondency increased and he experienced suicidal ideation (without any evidence that he had specific plans or intent). When the patient presented for his initial psychiatric evaluation About three days following the ingestion of marijuana, he had an initial psychiatric evaluation where is said he was still experiencing unwanted, intrusive thoughts (occurring every 30 minutes to two hours) that he was transgender. When he had these unwanted, intrusive thought he felt intense fear. To certain thoughts or images, he would "test" his reactions in order to "prove" if he is transgender or not. He also engaged in reassurance seeking behaviour. He had no history of uncertainty about his gender identity. The only exception was about two months before he started therapy. While he was watching an online interview of Caitlin Jenner he had a "fleeting thought" he himself might be transgender and his life would be better if he was a woman. When this happened, he had felt very frightened. He shut down his laptop and only thought about it again because of what he was now experiencing. The Y-BOCS was administer by a resident physician. The patient's descriptions of his compulsive checking of his reactions to his obsessions and his reassurance seeking behaviour were not recognised as compulsions. Therefore, compulsions were not assessed only obsessions. He scored 12 out of a total of 20 (instead of 40 because compulsions—which should make up the other half of the score—were not included). This score is in the mild range. However, it is important to note that even scores which are in the mild range, the symptoms still have a significant negative impact. Safer and colleagues state that a patient could have co-occurring OCD and gender dysphoria. Safer and colleagues recommend that in such a case, treating the OCD prior to making any decisions regarding transgender identity and treatment is crucial (Safer, Bullock, & Safer, 2016).

Empirical Studies

Nine empirical studies were identified in this review (Ching, Williams, Siev, & Olatunji, 2018; Coimbra-Gomes & Motschenbacher, 2019; Fernandez, Sevil, & Moulding, 2021; Glazier, Swing, & McGinn, 2015; Melli, Moulding, Gelli, Chiorri, & Pinto, 2016; Melli, Gelli, Moulding, Stopani, & Pinto, 2018; Williams & Farris, 2011; Williams, Wetterneck, Tellawi, & Duque, 2015; Williams, Ching, Tellawi et al., 2018). See Table 1 for study characteristics and main findings. Williams and Farris (2011) findings indicate that obsessions about sexual orientation in OCD may be associated with increased time spent on obsessions, increased levels of distress, more interference, and more avoidance which is important to consider during the assessment and treatment for SO-OCD. For instance, because there is a tendency for earlier onset of OCD symptoms in males, they may experience more distress due to the longer duration of their symptoms (Williams & Farris, 2011). In their Fernandez, Sevil and Moulding (2021) found that general maladaptive beliefs predicted general OCD symptoms, while specific sexual-orientation beliefs predicted SO-OCD. The "feared self" (feared self-beliefs) was found to relate significantly to sexual orientation OCD. Findings showed that beliefs centred on rigid homosexuality perceptions, identity concerns, and the implications of incorrect feelings towards heterosexual individuals, significantly predicted SO-OCD over-and-above more general beliefs. Fernandez and

colleagues point out that because their study had a cross-sectional design with self-report measures no causal explanations for the relationships found can be made (Fernandez, Sevil, & Moulding, 2021).

Melli and colleagues (2018) found that the feared self was a predictor of SO-OCD, when compared to OCD and non-OCD counterparts. No significant differences between SO-OCD and NSO-OCD patients on homophobic beliefs. The findings from the study by Williams, Ching and colleagues (2018) suggest that the SORT is psychometrically sound self-report measure which has shown reliability in disentangling sexual identity crisis concerns from symptoms associated with SO-OCD (Williams, Ching et al., 2018). Ching and colleagues (2018) found that contamination-based disgust, responsibility/threat overestimation beliefs, and their interaction each uniquely predicted OC concerns about sexual orientation. High contamination-based disgust coupled with strong responsibility/threat overestimation beliefs predicted more severe OC concerns regarding sexual orientation. Because the data were collected in a cross-sectional manner, no examination of causality could be made highlighting the need for prospective or longitudinal designs in future related research (Ching, Williams et al., 2018). Williams and colleagues point out that in ethnic and racial minority individuals, the generalisability of the psychometric properties of the SORT is unknown which future research needs to address (Williams et al., 2018).

Interestingly, the study by Williams and colleagues (2015) found that sex was a significant predictor of distress related to sexual orientation obsessions. They found that, compared to males, the females in their sample experienced more distress over same-sex thoughts. In the SO-OCD sample in the study by Williams and colleagues (2015), there were more males than females. One of the explanations they put forward for this is that males may be more likely to be afflicted by SO-OCD but females find their symptoms more upsetting. Among those with SO-OCD, 91 % had levels of distress which ranged from “much” to “suicidal” due to their obsessions around their sexual orientation. This strongly supports the importance of timely recognition and assessment of these symptoms (Williams, Wetterneck et al., 2015). Lastly, Glazier and colleagues (2015) highlighted how the heterogeneous nature of OCD may make this condition at an elevated risk for misidentification. In their study they assessed primary care physicians’ ability to identify OCD. Their findings (e.g., elevated OCD misdiagnosis rates) underscores the need for greater training regarding OCD symptomatology and treatments or interventions which are evidence-based (Glazier et al., 2015).

Discussion

A total of eleven studies were identified in this review. Two were cases and nine were empirical studies. Overall, the studies in this review highlight that although relatively common in individuals with OCD, SO-OCD is frequently misunderstood by both clinicians and patients. This emphasises the need for education and training (or they are not even aware of the condition). The obsessions in individuals with SO-OCD may be misinterpreted by mental health professionals as being fantasies or wishes. The patient may be mental health professionals may also misdiagnose a patient as experiencing anxiety or depressions due to sexual identity conflict (i.e., feeling distressed about “coming out the closet.”) Obsessions or mental compulsions may be erroneously considered to be depressive ruminations. These misconceptions can lead to inappropriate treatment such as treating the patient's sexual activities rather than implementing EX/RP in an individual who is experiencing obsessions about sexual orientation (Williams, 2008; Williams & Farris, 2011). It is critical that people with SO-OCD are properly diagnosed and treated to ameliorate incorrect treatment, incomplete treatment, and/or relapse (Williams & Farris, 2011).

Artificial Intelligence and Pornography

The use of artificial intelligence (AI) is, at the time of writing, exploding. Predictably, it is being used in the generation of pornography, and is increasingly photo-realistic. The progressively easy availability of pornography that can be user generated presents a potentially addictive system for those with sexual OCD to test their own responses. For instance, one could imagine a scenario where those with sexual OCD might test response to one type of pornography, only to retest it with an obsessive thought such as “Maybe if the man/woman doing x was a redhead...”, allowing endless variations in imagery that can be tweaked to test sexual response.

Neurodevelopmental Disorders

People with neurodivergent conditions such as autism spectrum disorder (ASD) or global intellectual disabilities present an additional layer of complexity. Firstly, it is noteworthy that OCD is considerably more common in people with ASD. However, for the clinician on the ground, it is challenging to make the distinction between what is OCD and what is an autistic ritual or special interest. Perhaps the most helpful practical distinction (although not always reliable) is the concept of whether the thought is ego syntonic (that is, something that is viewed as part of the self and/or wanted and desired by the self). Autistic related interests are generally ego syntonic, whilst obsessive thoughts are usually ego dystonic (unwanted, or intrusive). However, people with neurodevelopmental conditions can also have problems with communication, particularly regarding complex or subtle symptomatology, which makes accuracy challenging.

The range of offending type behaviours in people with neurodevelopmental disorders is heterogeneous. However, one reason (or category) can be the “Clumsy” sexual expression; that is, a desire to achieve sexual (or romantic) gratification without a nuanced understanding of what impact this may have on others. The same philosophy is arguably applied to the use of pornography and masturbation; for instance, public masturbation or inadequate safeguards protecting others from viewing personal pornography (for instance, inappropriately sharing pornography).

Another theoretical consideration is the effect of ASD on identity. The incidence of gender dysphoria in people with ASD is approximately eleven times the general population (e.g., Kallitsounaki, & Williams, 2023). The relationship between ASD and gender dysphoria (GD) has been suggested (e.g., van der Miesen et al. 2016). The reasons for this are unclear at this point, although one possibility is that people with ASD have a more “concrete” and rigid view of what a “man” and a “woman” is. Rigid gender stereotyping means that “masculine” traits are less tolerated in a woman, and vice versa. Instead of being, for instance, a tomboy, a biologically female person with ASD (the theory goes) may be more inclined to self-identify as a man, as they have masculine traits. If this theory is correct (or at least, this theory is one of the reasons for the dramatically increased rate of gender dysphoria) then it might be extrapolated to sexual orientation identity. Whilst there is some evidence for increased rates of self-identification as bisexual in women with ASD (May, Pang, & Williams, 2017; Bejerot & Eriksson, 2014) what is less clear is whether people with ASD are able to hold more complex positions; for instance, many self-identified heterosexual men and women will on occasion sleep with their own gender and see sexuality as a fluid and nuanced condition. However, the classic concrete thinking of ASD may be more inclined to utilise the reasoning “I slept with someone of my own gender, therefore I am bisexual, or homosexual”, in other words extrapolate their sexual orientation from their sexual behaviour (in contrast to defining their sexual orientation by internal preference and desire). Or “I slept with an ‘opposite’ gender, therefore I am heterosexual” in the case of homosexual. If so, this presents another potential risk of people with sexual OCD (i.e., erroneously concluding “I viewed pedophilic pornography, therefore I am a pedophile”).

Treatment Considerations and Recommendations

The study by Ching and colleagues (2018) suggests that there may be a “sexual orientation transformation-avoidance” process which underlies SO-OCD (based on their sample of heterosexual college students) which is facilitated by contamination-based disgust and exacerbated by responsibility/threat overestimation beliefs. Targeting these beliefs during treatment is suggested by the authors. The gold-standard behavioural treatment for OCD is widely considered to be exposure and ritual prevention (ERP) (Pinciotti et al., 2022, see Hezel & Simpson, 2019, for a review). ERP, briefly defined, is where the patient learns to approach as opposed to avoid feared stimuli, while intentionally resisting rituals/compulsions, etc. SO- and gender-themed OCD have been treated similarly to other OCD presentations: “by identifying the feared or avoided scenarios and the catastrophic beliefs associated with them and generating exposure ideas to target them” (Pinciotti et al., 2022; pp. 157). In ERP treatment in patients with SO-OCD there is controlled graded exposure to sexual imagery (Pinciotti et al., 2022).

Pinciotti and colleagues (2022) have argued that SO- and gender-themed OCD presents and is treated in a way that can potentially further marginalise an already marginalised community which already experiences prejudice and discrimination (e.g., through the reinforcement of stereotypes and anti-LGBTQ+ stigma). When treating clients with SO- and gender-themed OCD, Pinciotti and colleagues (2022) recommend three target areas in order to limit any harm to the LGBTQ+ community: (a) psychoeducation regarding LGBTQ+ identities, (b) engagement in neutral or positive exposures, and (c) engagement in exposures to uncertainty and core fears (Pinciotti et al., 2022). There are two key functions to providing psychoeducation about LGBTQ+ identities. One is to provide, where needed, corrective information. Another is to provide some exposure to anxiety-provoking content which is accurate and justice oriented. Regarding engagement in neutral or positive exposures, Pinciotti and colleagues recommend that neutral exposures comprise those that target elements of being LGBTQ+ directly but avoiding propagating harmful or hateful stereotypes and misinformation, etc. Neutral LGBTQ+-related stimuli may include things such as: pride flags, neutral media, etc. Creating a hierarchy in the exposures should be nuanced and specific to the individual’s needs.

Regarding, engagement in exposures to uncertainty and core fears, Pinciotti and colleagues recommend that core fear exposures require the use of the downward arrow technique (which is a way of working through the clients’ automatic thoughts in order to find the irrational beliefs or schemas at the base of them) in order to better understand the true fear (the core fear) underlying the surface-level presentation. Pinciotti (2022) recommends that mental health professionals do not use exposures which target identity-based anxiety or OCD. Exposures which target identity-based anxiety or OCD should only be done when it is upon request of the client and it should only be done in a way which is both sensitive and collaborative (Pinciotti et al., 2022). A number of questions to consider when designing gender-themed and SO-OCD exposures has been developed by Pinciotti (2022). For example,

- Does this exposure tokenize LGBTQ+ people?
- Do LGBTQ+ people have agency in participating in the exposure?
- Does this exposure play off stereotypes/stigma/prejudice?
- Can you make this exposure a different way and get the same result?
- Is the client’s anxiety/distress rooted in homophobia/biphobia/transphobia?
- Is the exposure addressing the client’s OCD or anxiety about their own sexual orientation?
- Is it appropriate for the client to have anxiety about this behavior/idea? (Pinciotti et al., 2022).

There are mixed findings with regards to the treatment (e.g., of citalopram) effects in individuals with sexual obsessions (e.g., Alonso et al., 2001; Stein et al., 2007). Attention should be given to covert rituals (e.g., mental compulsions, reassurance-seeking) during treatment in individuals with sexual obsessions (Farris et al., 2010; Williams & Farris, 2011).

Research Directions

Williams and Farris (2011) pointed out a potential limitation with their study which was examining the patients with lifetime symptoms as the power to examine only those with current sexual orientation symptoms was not adequate. Further studies need to address this limitation, as it is possible that those without current symptoms may be different in some way. Additionally, obsessions about sexual orientation may be associated with other distressing or impairing obsessions or compulsions (e.g., aggressive obsessions) which needs further research attention. An examination of the similarities and differences between different types of sexual obsessions would also be a useful and interesting avenue of future research (Williams & Farris, 2011). Williams and colleagues (2015) have suggested the need to explore other factors that might impact on the level of OCD-related distress such as depression religiosity and culture. There is a need for further studies exploring SO-OCD in adolescents, given that young people tend to have less sexual experience, which may further exacerbate the ability to cope with the confusing and stigmatizing obsessions that are associated with SO-OCD. As Williams and colleagues (2018) pointed out with their own study (but applies to the majority) the binary categories used for sexuality in studies may be limiting and fail to capture the differences in scores on measures of SO-OCD due to within-group differences and stage of sexual identity development. Also, with the research in this field to date, there is a lack of ethnic and racial diversity (Williams et al., 2018).

To date, no studies have investigated whether differential beliefs precede the presentation of SO-OCD symptoms or the other way round. Or explored whether there are other important variables that are contributory. In order to address this, there is a need for research to explore the temporal stability using longitudinal designs (Fernandez, Sevil, & Moulding, 2021). Research is needed to explore the roles of contamination-based disgust and obsessive beliefs in OC concerns about sexual orientation in studies with gay and lesbian individuals (e.g., an affirmed gay man with obsessional fears of “turning heterosexual”) (Ching, Williams et al., 2018). There is also a need for research to explore how to best tailor cognitive-behavioural treatments to patients with So-OCD. Also, there is no research which has explored whether some medications are more effective for sexual orientation obsessions than others (Williams & Farris, 2011). Lastly, to date, there has been no empirical investigation of gender-related OCD, or obsessions centered on one’s gender identity (e.g., doubt regarding one’s gender identity, fear that one will become transgender, and/or fearing that other people will perceive them to be transgender), even though there is conceptual overlap with SO-OCD (Pinciotti et al., 2022). Lastly, further research is needed to explore the prevalence of co-occurring disorders in individuals with SO-OCD (including neurodevelopmental disorders such as autism spectrum disorder).

Clinical Implications and Recommendations

Another measure of SO-OCD is the Sexual Orientation Obsessions and Reactions Test (SORT; Williams et al., 2018). It is a psychometrically sound and validated instrument short self-report measure (12 items) in English to identify SO-OCD symptoms and distinguish them from sexual

orientation concerns unrelated to OCD. Some examples of the questions include: 'I worry that other people will think I am LGBTQ'; 'I just need to know for sure if I am straight'; 'I worry that my sexual orientation may change'; 'I check myself to see if I am aroused by sexual images'; 'I check myself to see if I am sexually aroused around other people'; 'An unwanted sexual thought or image means I really want to do it' and 'I worry a lot if I don't get sexually aroused when I want to'.

A gold standard measure of past and current (i.e., within the past 30 days) OCD symptoms and their severity among clients diagnosed with OCD is The Yale–Brown Obsessive–Compulsive Disorder Scale—Second Edition (Y-BOCS-II; Storch et al., 2010). Williams and Farris (2011) highlighted in their article that a committee in Sweden stated that the YBOCS checklist item which assesses homosexual thoughts should be discontinued due to the fact that there was no corresponding “heterosexual thoughts” item (Ruck & Bergstrom, 2006). It has also been highlighted by Ruck and Bergstrom that the committee did not understand that the YBOCS does not assess sexual orientation. Instead, it assesses unwanted obsessions which are associated with sexual orientation within OCD (Williams & Farris, 2011).

It has also been recommended by Bruce and colleagues (2018) that, as well as adapting a Ex/RP for SO-OCD (instead of contamination-based disgust), mental health professionals should also use cognitive behavior therapy in order to address beliefs regarding the exaggerated likelihood or threat of sexual orientation transformation as a function of disgust reactions and intrusive doubt about one's sexual orientation. It is argued that by decreasing such beliefs, it could decrease or eradicate the relationship between contamination-based disgust and OC concerns relating to sexual orientation. It has also been recommended that mental health professionals and clinicians consider sexual abuse when assessing sexual obsessions (Freeman & Leonard, 2000; Veale, Freeston, Krebs, Heyman, & Salkovskis, 2009).

Conclusion

As we have highlighted SO-OCD is often missed and misunderstood. Clinicians should be aware of the disorder in order to avoid ineffective, or potentially harmful treatment. Whilst not common, it is common enough that education is needed.

Conflicts of Interest

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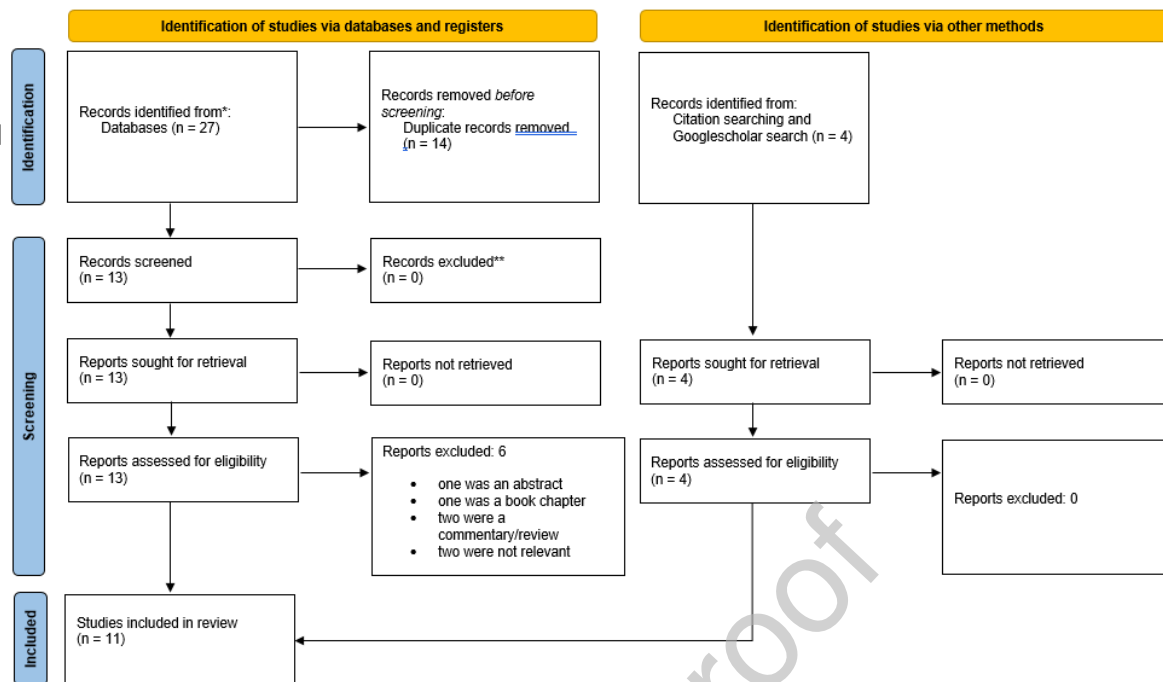
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Figure 1. PRISMA Flow Diagram.



*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

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Table 1. Details and main findings of empirical studies.

Authors	Country Study Took Place	Sample	Aim of the Study	Measures	Main Findings
Ching, Williams, Siev, & Olatunji (2018)	United States	<p>283 self-identified heterosexual college students (152 females, 131 males; mean age = 20.88 years, SD = 3.19).</p> <p>Mean age of the sample was 20.88 years (SD = 3.19). The total sample comprised 221 non-Hispanic Whites, 28 Blacks/African-Americans, 19 Asians/Asian-Americans, 5 Hispanic/Latino Americans, 1 Native American, and 9 individuals of other ethn racial identities.</p>	<p>The aim of the study was to investigate whether the specific domain of contamination-based disgust (i.e., evoked by the perceived threat of transmission of essences between individuals) predicted OC concerns about sexual orientation, and whether this effect was moderated/amplified by obsessive beliefs, in evaluation of a “sexual orientation transformation-avoidance” function.</p>	<p>Disgust Scale—Revised (DS-R; Olatunji et al., 2007b).</p> <p>Obsessive Beliefs Questionnaire-44 (OBQ-44; OCCWG, 2005).</p> <p>Sexual Orientation Obsessions and Reactions Test (SORT; Williams et al., 2017).</p>	<p>Contamination-based disgust ($\beta = .17$), responsibility/threat overestimation beliefs ($\beta = .15$), and their interaction ($\beta = .17$) were found to each uniquely predict OC concerns about sexual orientation, $t_s = 2.22, 2.50,$ and $2.90, p_s < .05$.</p> <p>Post hoc analysis found that high contamination-based disgust accompanied by strong responsibility/threat overestimation beliefs predicted more severe OC concerns about sexual orientation, $\beta = .48, t = 3.24, p < .001$.</p>
Coimbra-Gomes & Motschenbacher (2019)	United Kingdom and Norway	The data was collected from the publicly accessible online platform	This study aims to address a research gap by providing a normativity-oriented analysis	Keyword analysis on data collected from the online platform.	The findings showed that individuals with SO-OCD oriented to heteronormativity

		<p>Psychforums. This platform provides mental health support to its users. It hosts more than 180,000 anonymous members from around the world, who communicate in English about their problems. The platform is divided into several subforums dedicated to a wide range of psychological conditions, including OCD.</p>	<p>of the discursive regimes governing male heterosexuality.</p>	<p>N-gram analysis on the data collected from the online platform.</p> <p>Concordance analysis on the data collected from the online platform.</p>	<p>ty in their posts in the sense that they feel they fall short of embodying the imperatives of male heterosexuality as idealised by them (for instance, having an unquestioned attraction to female people and no attraction at all to male people).</p> <p>Findings also indicate that individuals with SO-OCD construct hypothetical non-heterosexuality (a potential gay identity; potential desires for other men) as their central problem.</p> <p>Findings also indicate that individuals with SO-OCD pick up particular institutionalised discourses of SO-OCD that serve as normative guidelines in order to make sense of their obsessive-compulsive</p>
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					behaviours and sexual identity.
Fernandez, Sevil, & Moulding (2021)	Australia	<p>Final sample were 264 non-clinical English speaking participants. Age range: 18 and 84 (M = 34.65, SD = 12.01; 48.9% males).</p> <p>Residing in the US (n = 111), UK (n = 127), Canada (n = 22), Australia (n = 3), and Ireland (n = 1).</p>	The aim of the study was to further the investigation of the fear of self to different OCD-symptom dimensions, including the understudied dimensions of relationship OCD and sexual orientation OCD, and compare this to prediction by other specific and general OCD-relevant beliefs.	<p>Dimensional Obsessive-Compulsive Scale (DOCS; Abramowitz et al., 2010).</p> <p>Obsessive Beliefs Questionnaire-20 (OBQ-20; Moulding et al., 2011; Obsessive Compulsive Cognitions Working Group [OCCWG], 2005).</p> <p>Relationship Obsessive Compulsive Inventory (ROCI; Doron et al., 2012).</p> <p>Partner-focussed Relationship Obsessive Compulsive Inventory (PROCSI; Doron et al., 2012).</p> <p>Relationship Catastrophisation Scale (RECATS; Doron et al., 2016).</p> <p>Sexual-Orientation-Obsessive Compulsive Scale (SO-OCS; Melli, Moulding, et al., 2016).</p>	<p>General OCD beliefs were found to predict the presentation of general OC symptoms. General OCD belief were not found to predict symptoms of either SO-OCD or ROCD when other beliefs were included.</p> <p>When excluding the homophobic beliefs subscale, sexual-orientation beliefs were predictive of SO-OCD.</p> <p>Relationship-related beliefs were not found to predict ROCD symptoms, where specific beliefs were found to outweigh the contributions of general beliefs only for SO-OCD.</p> <p>Feared self-beliefs were found to predict SO-OCD.</p> <p>Feared self-beliefs were found to be the strongest</p>

				<p>Sexual-Orientation-Obsessive Beliefs Scale (SO-OBS; Melli, Gelli, et al., 2018).</p> <p>Fear of Self Questionnaire (FSQ; Aardema et al., 2013).</p> <p>Depression Anxiety Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995).</p>	<p>predictor of ROCD.</p> <p>Beliefs centred on rigid homosexuality perceptions, identity concerns, and the implications of incorrect feelings towards heterosexual individuals, were found to significantly predict SO-OCD over-and-above more general beliefs.</p>
Glazier, Swing, & McGinn, (2015)	United States	<p>An online, vignette-based survey was emailed to 1,172 physicians from 5 major medical hospitals in the Greater New York Area.</p> <p>208 physicians completed the survey.</p>	The aim of the study was to assess primary care physicians' ability to identify OCD.	<p>The study involved a survey, which consisted of 1 of 8 randomised OCD vignettes; each vignette focused on one of the following common manifestations of OCD: obsessions regarding aggression, contamination, fear of saying things, homosexuality, pedophilia, religion, somatic concerns, or symmetry. Participants provided diagnostic impressions and treatment recommendations for the individual</p>	<p>The overall misidentification rate was 50.5%.</p> <p>Vignette type was the strongest predictor of a correct OCD response (Wald $\chi^2_7 = 40.58$; $P < .0001$).</p> <p>Misidentification rates by vignette were homosexuality (84.6%), aggression (80.0%), saying certain things (73.9%), pedophilia (70.8%), somatic concerns (40.0%), religion (37.5%), contamination (32.3%), and</p>

				described in the vignette.	<p>symmetry (3.70%).</p> <p>Participants who misidentified the OCD vignette were less likely to recommend a first-line empirically supported treatment (cognitive-behavioural therapy [CBT] = 46.7%, selective serotonin reuptake inhibitor [SSRI] = 8.6%) compared to participants who correctly identified the OCD vignette (CBT = 66.0%, SSRI = 35.0%).</p> <p>Antipsychotic recommendation rates were elevated among incorrect versus correct responders (12.4% vs 1.9%).</p>
Melli, Moulding, Gelli, Chiorri, & Pinto (2016)	Italy	<p>Study 1</p> <p>732 (66.9% Female) heterosexual community volunteers (M = 35.76 years; SD = 13.27; range 18–70).</p> <p>Study 2</p>	<p>Study 1</p> <p>The aim of study 1 was to develop an adequate and psychometrically sound measure of sexual orientation obsessions.</p> <p>Study 2</p>	<p>Study 1</p> <p>A preliminary version of the SO-OCS was designed according to recommendations for scale development.</p> <p>Study 2</p>	<p>Study 1</p> <p>The SO-OCS was found to show a unidimensional structure and an acceptable internal consistency.</p> <p>Study 2</p>

		<p>397 heterosexual adults which comprised of 52 adults diagnosed with OCD who reported sexual orientation-related symptoms or concerns as a primary complaint (SO-OCD group), 51 adults who met the diagnostic criteria for primary OCD, but who did not report these symptoms or concerns as primary complaint (NSO-OCD group), and 294 non-clinical participants (NCP group) recruited from the general population – independently of those of Study 1.</p>	<p>The aim of study 2 was to assess the psychometric properties of the SO-OCS questionnaire within clinical samples.</p>	<p>Anxiety Disorder Interview Schedule-IV (ADIS-IV; Brown, Barlow, & Di Nardo, 1994) and the Yale-Brown Obsessive-Compulsive Scale-Second Edition (Y-BOCS-II; Melli et al., 2015b, Storch et al., 2010) to establish diagnoses.</p> <p>Sexual Orientation Obsessive-Compulsive Scale (SO-OCS).</p> <p>Obsessive-Compulsive Inventory-Revised (OCI-R; Foa et al., 2002).</p> <p>Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990).</p> <p>Beck Anxiety Inventory (BAI; Beck & Steer, 1990).</p> <p>Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996).</p>	<p>The SO-OCS was found to have a unidimensional structure and good internal consistency. It was also found to have strong construct validity.</p> <p>It showed an excellent criterion validity and diagnostic sensitivity, as it was able to discriminate between those with SO-OCD and all other groups of participants.</p> <p>Findings also showed evidence of temporal stability of the SO-OCS in a non-clinical subsample.</p>
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Melli, Gelli, Moulding, Stopani, & Pinto (2018)	Italy	421 Italian heterosexual adults, including 263 participants who self-reported that they had received a diagnosis of SO-OCD by a qualified clinician (licensed psychiatrist or clinical psychologist; SO-OCD group), a small control group composed of 42 participants who self-reported that they had received a diagnosis of OCD by a qualified clinician (licensed psychiatrist or clinical psychologist) but who did not report SO-OCD symptoms or concerns (NSO-OCD group), and 116 non-clinical participants (NCP group) recruited from the general population.	The aim of the study was to test the role of specific and general beliefs potentially involved in the genesis and maintenance of SO-OCD.	<p>Sexual Orientation-Obsessive Beliefs Scale (SO-OBS).</p> <p>Sexual Orientation Obsessive-Compulsive Scale (SO-OCS; Melli, Moulding et al., 2016).</p> <p>Dimensional Obsessive-Compulsive Scale (DOCS, Abramowitz et al., 2010).</p> <p>Fear of Self Questionnaire (FSQ; Aardema et al., 2013).</p> <p>Depression Anxiety Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995).</p> <p>Obsessive Beliefs Questionnaire-20 (OBQ-20).</p>	<p>The final SO-OBS consisted of 12 items and showed a four-factor structure and a very good internal consistency.</p> <p>The Sexual Orientation-Obsessive Beliefs Scale (SO-OBS) generally related to more severe SO-OCD symptoms, with the exclusion of homophobic beliefs. Feared Self beliefs, and all of the belief domains from the cognitive model (threat, responsibility, importance of thoughts, perfectionism) correlated with the severity of SO-OCD symptoms in the group of individuals who had self-diagnosed with this variant of OCD, with feared self and the importance of thoughts domain being significant predictors when these variables were considered concurrently.</p>
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					<p>The specific beliefs predicted SO-OCD symptoms over-and-above more general beliefs noted in the OCD model, with feared self and the OBQ beliefs not emerging as separate specific predictors.</p> <p>All of the SO-OBS beliefs were more strongly endorsed by the SO-OCD group vs. non-clinical controls, and all of the belief domains except for homophobic beliefs differed between individuals with SO-OCD vs. other variants of OCD.</p>
Williams, Ching et al. (2018)	United States	<p>Study 1.</p> <p>A non-diagnosed, non-referred (i.e., nonclinical) sample of 1,673 self-identified heterosexual or LGBTQ students who were enrolled in introductory</p>	<p>Study 1.</p> <p>The aim of study 1 was to refine and evaluate a self-report measure of SO-OCD symptoms (i.e., the Sexual orientation Obsessions and Reactions Test; SORT).</p> <p>Study 2.</p>	<p>Study 1.</p> <p>Sell Assessment of Sexual Orientation (Sell, 1996).</p> <p>Sexual Orientation Obsessions and Reactions Test (SORT) – Preliminary Version.</p> <p>Wetterneck-Hart OCD Screener</p>	<p>Study 1.</p> <p>The results revealed a two-factor solution for the measure. Inspection of item loadings suggested that the two components represented: (a) obsessive fears of changing sexual orientation and</p>

		<p>psychology courses in a large university in Kentucky participated in this study for course credit. The authors focused on four different groups: (1) LGBTQ students without OCD symptoms (n = 180); (2) heterosexual students without OCD symptoms (n = 895); (3) heterosexual students with SO-OCD symptoms (n = 33); (4) heterosexual students with other OCD symptoms (n = 471). Students who did not fit into one of these groups were excluded from analysis (n = 94).</p> <p>Study 2.</p> <p>The sample (N = 197) comprised of 50 LGBTQ community participants without OCD symptoms, 76</p>	<p>The aim of study 2 was to assess the psychometric properties of the SORT within a sample comprising nonclinical LGBTQ and heterosexual community participants, SO-OCD patients, and other-OCD patients.</p>	<p>(WHOS; Hong et al., 2017).</p> <p>Yale-Brown Obsessive-Compulsive Scale-First Edition-Self-Report Version (Y-BOCS-SR) Checklist Item 22 (Goodman et al., 1989; Steketee et al., 1996).</p> <p>Sell Assessment of Sexual Orientation (Sell, 1996).</p> <p>Reactions to Homosexuality Scale (RHS; Ross & Rosser, 1996).</p> <p>Modern Homonegativity Scale (MHS; Morrison & Morrison, 2002).</p> <p>Study 2.</p> <p>Sell Assessment of Sexual Orientation (Sell, 1996).</p> <p>Sexual Orientation Obsessions and Reactions Test (SORT) – Final Version.</p> <p>Wetterneck-Hart OCD Screener (WHOS; Hong et al., 2013).</p>	<p>reassurance (Transformation Fears; 8 items); and (b) compulsive somatic checking and related worries (Somatic Checking; 4 items).</p> <p>Mean SORT total scores were significantly different between groups, $F(3, 1575) = 35.63$, $MSe = 38.01$, $p < .001$. Pairwise comparisons indicated that heterosexual students with SO-OCD symptoms endorsed significantly higher SORT scores than the other three groups, $ps < .001$</p> <p>Study 2.</p> <p>The two-factor solution and evidence of validity and reliability were supported in these samples. The cut-off points were implemented in order to distinguish</p>
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		heterosexual community participants without OCD symptoms, 33 SO-OCD patients, and 38 patients with other forms of OCD participated in this study.		<p>Reactions to Homosexuality Scale (RHS; Ross & Rosser, 1996).</p> <p>Modern Homonegativity Scale (MHS; Morrison & Morrison, 2002).</p> <p>Yale-Brown Obsessive-Compulsive Scale-Second Edition-Severity Scale (Y-BOCS-II-SS; Storch et al., 2010).</p> <p>Obsessive-Compulsive Inventory-Revised (OCI-R; Foa et al., 2002).</p> <p>Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990)</p> <p>Beck Anxiety Inventory (BAI; Beck & Steer, 1990).</p> <p>Beck Depression Inventory-Second Edition (BDI-II; Beck, Steer, & Brown, 1996).</p>	<p>between community members and SO-OCD sufferers, as well as between those experiencing SO-OCD and other types of OCD.</p> <p>Findings revealed group differences in SORT total scores and the SORT was able to assess SO-OCD symptoms as distinct from sexuality concerns in heterosexual and LGBTQ individuals.</p>
Williams, Wetterneck, Tellawi, & Duque (2015)	United States	Participants included 1,176 adults who completed an online survey	The aim of the study was to gain a greater understanding of SO-OCD to	The survey consisted of demographic questions, OCD status, distress,	Sexual orientation obsessions in OCD were related to

		<p>about sexual anxieties, behaviours, and cognitions. Of these, 74.6 % were male and 25.4 % were female. The mean age was 25.7 years (SD=8.76). In terms of sexual orientation, 72.0 % identified as heterosexual, 3.1 % as homosexual, 3.0 % as bisexual, and 21.9 % as unsure. In terms of mental health history, 25.9 % had a previous OCD diagnosis, 71.9 % did not, and 2.2 % did not disclose.</p>	<p>facilitate future clinical investigations. The authors developed and deployed a survey of items about sexual orientation concerns to explore relationships between symptoms of SO-OCD, distress, and demographic characteristics, to better understand factors uniquely related to distress in this population.</p>	<p>and asexuality questionnaire that was developed for the purposes of this study by the authors. Distress surrounding sexual orientation concerns (“On the scale below, how much distress have your thoughts about sexual orientation caused you?”) was rated on a scale of 0–6, with 0 representing “none” and 6 indicating “suicidal” levels of distress. Participants were asked to choose their sexual orientation based on a nominal scale - homosexual, heterosexual, bisexual, and not sure.</p> <p>The sexuality questionnaire consisted of 70 items which was developed by psychologists with extensive experience treating OCD. Items were based on the clinical observation that</p>	<p>severe distress, including suicidal ideation.</p> <p>The authors used principal components factor analysis (PCA) with a Promax (oblique) rotation. The main themes of the components centered on worries about one’s sexual orientation changing (Factor 1: Worry about Sexuality; 12 items), experience and desires for same sex partners (Factor 2: Desire Same Sex; 11 items), experience and desires for others ex-partners (Factor 3: Desire Other Sex; 5 items), beliefs that a same-sex preference is wrong or immoral (Factor 4: Sexual Immorality; 4 items), beliefs that one needs to avoid other’s judgments of sexual orientation (Factor 5: Avoidance Judgment), and</p>
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				<p>people with SO-OCD tend to have worries in three main areas:</p> <p>(1) fears of becoming or being LGBT</p> <p>(2) worries that others may think one is LGBT</p> <p>(3) experiencing unwanted same-sex thoughts (Williams, 2008).</p> <p>Each item was rated on a scale of 1–5.</p>	<p>sexual orientation shame or dissatisfaction (Factor 6: Orientation Shame; 3 items). Cronbach's alphas ranged from excellent (.93, .91, .81, .78, .79, and .73, respectively).</p> <p>In the people with SO-OCD (N=237), the level of distress was found to be most strongly correlated with Worry about Sexuality, and moderately correlated with Avoidance of Other's Judgment and Sexual Immorality. Although endorsing being heterosexual, there was a significant relationship between Same Sex Desires and Opposite Sex Desires. However, the magnitude was small. This finding may indicate that there is an ambivalence of uncertainty</p>
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					<p>surrounding sexual orientation obsessions.</p> <p>Most individuals with SO-OCD (91 %) reported high levels of distress related to same sex thoughts, with 2 % reporting little distress, 2 % reporting some distress, 5 % reporting moderate distress, 19 % reporting much distress, 51 % reporting extreme distress, and 21 % reporting a level of distress which was “suicidal”.</p> <p>Only the first component was found to be significant different between males and females, Worry About Sexuality (becoming LGBT). Specifically, males ($M=27.31$, $SD=10.98$) scored significantly higher when compared to females ($M=22.74$, $SD=9.84$) [$t(1,$</p>
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					235) = 2.70, p=.004].
Williams & Farris (2011)	United States	<p>Participants (n = 431) were treatment-seeking adults recruited from five different OCD specialty clinics (Medical College of Pennsylvania, Yale University, Columbia University, Massachusetts General Hospital, and Brown University) and two additional centers (Clarke Institute and Emory University). Data on OCD severity were missing for some patients. Therefore a final sample of 409 was used. Patients were excluded if other diagnoses were primary (e.g., substance use/dependence), or if English was not spoken.</p>	<p>The aim of this study was to report the rates and related characteristics of individuals with sexual orientation obsessions in a clinical sample.</p>	<p>Patients were initially screened over the telephone, and if deemed appropriate (i.e., a probable diagnosis of OCD), were scheduled for a structured clinical diagnostic assessment with an evaluator familiar with OCD.</p> <p>Yale–Brown Obsessive Compulsive Symptom Checklist and Severity Scale (YBOCS).</p>	<p>8% (n = 33) of the sample reported current obsessions about sexual orientation, and 3.9% (n = 16) endorsed past symptoms. Therefore, a total of 11.9% (n = 49) of patients endorsed lifetime symptoms.</p> <p>Current and past sexual obsessions were reported by 16.8% (n = 69) and 9.5% (n = 39) respectively. Patients with a lifetime history of obsessions about sexual orientation (either current or past) had moderate OCD severity on the Y-BOCS and were found to be twice as likely to be male than female (p = 0.048).</p> <p>Internal consistency of the Y-BOCS Severity Scale (10 items) was found to be excellent</p>

					<p>(Cronbach's alpha = 0.92).</p> <p>Findings showed that three of the items on the obsession subscale of the YBOCS (time, interference, and distress) were significantly and positively correlated with obsessions about sexual orientation, such that these patients reported significantly more time on an average day being occupied by obsessive thoughts ($p = 0.031$), more interference from obsessions ($p = 0.007$), and more distress from obsessions ($p = 0.001$). Avoidance was positively correlated at a trend level ($p = 0.055$).</p> <p>Findings showed a trend toward greater avoidance due to OCD symptoms (YBOCS item 12; $p = 0.055$).</p>
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Conflicts of Interest

The authors have no conflicts of interest to declare.

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