ALEXANDER COLES (BSc Hons)

DEVELOPING A MEASURE OF SHAME IN THE CONTEXT OF UNACCEPTABLE OBSESSIONS IN OCD

Section A: Meta-analysis of Association Between Shame and OCD
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Section B: A Delphi Study Developing a Measure of Shame in the Context of Unacceptable Obsessions in OCD
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CANTERBURY CHRIST CHURCH UNIVERSITY

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Summary

Section A

A systematic literature search and meta-analysis was conducted to explore the association between shame and OCD. 14 relevant studies were identified. The findings indicated a medium sized positive association between scores on measures of shame and scores on measures of OCD (r = .295). However, there are significant methodological limitations associated with the studies included in the meta-analysis, most notably, the use of inappropriate measures to measure the association between shame and OCD. Research and clinical implications are discussed, including the need for a measure specific to shame in the context of OCD.

Section B

A three round Delphi study was used to develop a measure of shame in the context of unacceptable obsessions in OCD. In Round 1 experts on shame in OCD generated items for a questionnaire. In Round 2 experts rated the extent to which they felt the items generated were appropriate for the questionnaire. In Round 3 experts were informed how other participants rated each item and asked to re-rate their answers. 35 items were rated 'appropriate' by more than 83.3% of the participants (this being the criteria for inclusion in the questionnaire that was developed). Clinical and research implications are discussed.

Contents

List of Tables and Figures

Part A.

Tables

Figures

Part B.

Tables

Images

Section C: Appendices

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MAJOR RESEARCH PROJECT

Section A: Meta-analysis of Association Between Shame and OCD

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Abstract

Section A

This section used a systematic literature search and meta-analysis to explore the association between shame and OCD. 14 relevant studies were identified. The findings indicated a significant medium sized positive association between scores on measures of shame and scores on measures of OCD (Hedges-Vevea, $r = .295$ ($k = 14$) (95% Confidence Interval [Lower - 0.238; Higher - 0.349]), $p = .000$). However, there are significant methodological limitations associated with the studies included in the meta-analysis, most notably, the use of imperfect measures to measure the association between shame and OCD. Research and clinical implications are discussed, including the need for a measure specific to shame in the context of OCD.

Keyword(s): OCD, Unacceptable Obsessions, Shame, Meta-Analysis.

Introduction

What is OCD?

The diagnostic criteria for Obsessive Compulsive Disorder (OCD) is:

> "The presence of obsessions and/or compulsions. *Obsessions* are recurrent and persistent thoughts, urges, or images that are experienced as intrusive and unwanted, whereas *compulsions* are repetitive behaviours or mental acts that an individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly" (DSM-V; American Psychiatric Association, 2013, p. 235).

OCD is common, affecting 1.2% of the U.S. population and 1.1-1.8% of the international population according to the American Psychological Association (DSM-V; APA, 2013). The mean age of onset is 19.5 years, and if left untreated remission rates are low (20% after a 40-year follow-up) (DSM-V; APA, 2013).

Those who identify with having OCD experience a wide range of obsessions and compulsions. Abramowitz et al. (2010) report that particular obsessions and compulsions tend to co-occur, and that the most consistently reported associations include; contamination obsessions and cleaning compulsions; obsessions about responsibility for causing harm and checking compulsions; obsessions about order and ordering compulsions; and obsessions perceived as unacceptable (UO's), which often relate to themes of sex, religion, and violence, and subsequent mental ritual compulsions (e.g., thought replacement).

As Ahern & Kyrios (2016) state "individuals with OCD experience obsessions as unwanted, but such obsessions are hard to ignore and difficult to control; thus marked anxiety or distress ensues" (p. 112). As OCD can be associated with such feelings of distress there are many psychological interventions that aim to support people with OCD. Exposure and Response

Prevention (ERP) with Cognitive Behaviour Therapy (CBT) has been approved by the NICE Guidelines (2005; 2006) for the treatment of OCD.

However, a considerable proportion of people do not find psychological interventions helpful. Meta-analyses show that only half of people receiving ERP show clinically significant improvement (Abramowitz, 1998). The 50% recovery rate also applies to both CBT and pure Cognitive Therapy (CT) (Öst et al., 2015). This may be associated with Weingarden and Renshaw's (2015) reflections that traditional cognitive behavioural models of OCD tend to state that for some people unwanted obsessions trigger anxiety, and that compulsions are performed to reduce that anxiety (e.g., Salkovskis, 1999). This focus on anxiety may have been because OCD was historically characterised as an anxiety disorder (DSM-IV, American Psychiatric Association, 1994). Applying an anxiety-based formulation to OCD is likely to lead to interventions that target anxiety-based cognitions and behaviours, and consequently other emotions which may be associated with the development and maintenance of OCD may be overlooked.

Shame in OCD

To address a gap in literature regarding the role of other emotions associated with OCD Weingarden and Renshaw (2015) conducted a conceptual review of shame and its association with OCD. Weingarden and Renshaw (2015) define shame as "a deeply painful self-conscious emotion, experienced when a person judges him- or herself as wholly negative" (p. 2). This differs from guilt which is defined as "when a person judges a behavior negatively" (Weingarden & Renshaw, 2015, p.2). Shame is widely understood to have cognitive, affective, and behavioural aspects (Tangney & Dearing, 2002), and can be both internalised (e.g., negative self-evaluations) (Sedighimornani, 2018) and externalised (e.g., perceived negative evaluations of the self from others) (Matos & Pinto-Gouveia, 2014). It is also widely understood that shame can be both generalised (i.e. shame

about oneself) and contextualised (i.e. shame about an aspect of oneself) (Tangney & Dearing, 2002).

Weingarden and Renshaw's (2015) literature search and conceptual review of 110 articles exploring shame in Obsessive Compulsive and Related Disorders (OCRDs) described (*n*=44) descriptive and empirical papers that associated shame with OCD. They found publications that reported that people with OCD felt shame towards having a mental illness, particularly as a result of having publicly visible compulsions (e.g., Kim et al., 2014); and felt shame towards their OCD symptoms (e.g., Fergus et al., 2010). Weingarden and Renshaw (2015) also found research that suggested shame led to avoidance of treatment and non-disclosure of symptoms (e.g., Marques et al., 2010); and that shame was especially linked to UO's (e.g., Simonds & Thorpe, 2003). As shame is associated with social withdrawal (Tangney & Dearing, 2002) this may explain why people with OCD often delay seeking help, with Belloch et al. (2009) reporting that the mean length of delay in seeking treatment for 26 people with OCD was 39.98 months.

As Weingarden and Renshaw (2015) highlighted, unacceptable obsessions in OCD have been associated with increased feelings of shame. However, research by Rachman and de Silva (1978) found that UO's were common in the general population and that many people were undisturbed by them. This led theorists to question why it was that some people felt distressed by these thoughts and felt a need to engage in compulsions while some people did not. To make sense of this a cognitive understanding of OCD has been applied (Beck, 1976), whereby it is considered that it is not the intrusive thought that causes distress but the meaning given to the intrusive thought.

Applying the cognitive theory of emotional distress, Rachman (1993) proposed that thought-action fusion (TAF), the belief that having a thought is morally equivalent to acting on the thought, may lead to feelings of shame when intrusive thoughts are interpreted by the person as meaning that they are a bad person (e.g., the intrusive thought to hurt someone means they are a violent person). This is supported by the research of Valentiner and Smith (2008) who reported in 690

undergraduates without OCD that thought-action-fusion beliefs mediated the relationship between obsessions and compulsions, particularly in shame-prone participants. Applying cognitive theory Weingarden & Renshaw (2015) hypothesise that if a person interprets their intrusive thoughts as meaning they are a bad person, then they may then engage in compulsions to reduce feelings of shame, and to disprove shame-based cognitions.

Shame in OCD can also be understood from an evolutionary perspective. Gilbert and McGuire (1998) reflect that humans have evolved to live in groups where we learn what is acceptable and unacceptable. Alongside this our brains have evolved to detect social threats which could lead to rejection from our in-group, as social rejection would likely lead to death in hunter-gatherer societies. In response, submission and appeasement may have developed as attempts to avoid rejection. With regards to OCD, evolutionary theory states that if a person believes their intrusive thoughts means that they are a bad person they may fear that this will lead to rejection from their social group and will act in ways to avoid rejection (e.g., avoid disclosing their thoughts and seeking help).

While Weingarden and Renshaw (2015) provide a helpful overview of the research associating shame with OCD, they highlight that the articles they cite are largely clinical, conceptual and anecdotal papers, and that at the time of their review there was a lack of empirical research that tested the association between shame and OCD. In response Cândea and Szentagotai-Tătar (2018) conducted a meta-analysis of empirical papers, exploring the magnitude of the association between shame and OCD. They identified ten relevant publications and reported a medium effect size regarding the association between scores on shame measures and OCD measures ($k = 10$, $r = 0.317$) (95% Confidence Interval [Lower - 0.231; Higher 0.398]), which supported the conclusion of Weingarden and Renshaw's (2015) review that shame was associated with OCD. This has implications for clinicians working with people with OCD, as shame has been associated with a range of negative outcomes, including reduced quality of life (Singh et al., 2016).

Findings that associate shame with OCD may encourage clinicians to explore the presence of shame when working with people with OCD, particularly those who do not appear to be benefitting from anxiety-focussed interventions.

Rationale for Conducting a Meta-Analysis

Weingarden and Renshaw's (2015) review is now seven years old. To decide if a new review was required in order to include more contemporary research Garner et al.'s (2016) decision-making framework was consulted. This was begun by asking if the original review still addressed a current question, whether it was well conducted, and whether it has had good use. Shame associated with OCD continues to be a topic of relevance, the original review was well conducted, and it has been well-cited indicating it is a topic of interest. As it met this criteria, the next question was whether there were any new studies on the topic. To answer this Weingarden and Renshaw's (2015) literature search was replicated with studies limited to those published between January 2014, when Weingarden and Renshaw's (2015) literature search was conducted, and April 2022. The databases PsychInfo and Medline for "shame" and "obsessive compulsive disorder" were searched as per Weingarden and Renshaw (2015). Searches were conducted for these terms within 'all fields' of the publications. 635 publications were returned. A title and abstract screen was applied which left 35 publications relevant to shame in OCD. The next stage was answering Garner et al.'s (2016) question on whether these new studies provided information that would change the original review's findings or credibility. A full text screen of the 35 publications was conducted to respond to this question, and the findings were found to align with those of the original review. For example, research continued to indicate shame was a barrier to treatment (Keyes et al., 2018) and that shame was associated with UO's (Visvalingam et al., 2022). As a result an updated review would be of limited value.

In comparison, Cândea and Szentagotai-Tătar's (2018) meta-analysis searched PsycInfo, PubMed, Scopus and Web of Science, with studies published until March 1st 2016 included in their meta-analysis. They used the search terms "shame", "OCD", "obsessive compulsive", and "obsessive-compulsive" and analysed ten studies of relevance. However there were significant limitations with their meta-analysis. They appear to mis-number effect size correlations between shame and OCD measures, and mis-number sample sizes in some of the studies they include. Using Field and Cartwright-Hatton (2008) as an example, they state r = .246, and n = 559 (Cândea and Szentagotai-Tătar, 2018, p. 92), when r = .264, and n = 507 (Field & Cartwright-Hatton, 2008, p. 214). Furthermore, six years have passed since their literature search and as noted, there have been more studies published on this topic since then. Furthermore, Cândea and Szentagotai-Tătar (2018) failed to critically evaluate the studies they did include. It is important that the papers they included in their review are re-evaluated, so that researchers can be aware whether research on the association between shame and OCD is based on methodologically sound research. Given the methodological limitations of Cândea and Szentagotai-Tătar's (2018) meta-analysis there continues to be a need for a methodologically sound meta-analysis summarising the empirical research on the magnitude of the association between shame and OCD. It is important to understand the magnitude of association between these two constructs as a significant positive association will have implications for the development and evaluation of interventions aimed at reducing shame in OCD.

Review Aims

The aim of this review was to conduct a meta-analysis of empirical studies that had published correlational data on the association between measures of shame and measures of OCD in order to examine the magnitude of the association between shame and OCD**.** A further aim was to assess the reliability and validity of the studies that assess the association between shame and OCD,

and the measures they use to measure this association, to ensure the findings are based on methodically sound research.

Methods

Search Strategy and Inclusion/Exclusion Criteria

A systematic literature search was completed on 28th April 2022 to identify published studies that provided correlational data on the association between measures of shame and OCD. PsycInfo, Medline, Web of Science, and Pubmed databases were searched using the following search terms and Boolean operators: (shame* OR ashamed OR negative self-conscious OR secondary emotion OR shame-prone*) AND (OCD OR obsess* OR instrusi* OR compulsi*) AND (associat* OR correlat* OR effect* OR relat*) with results limited to those in the English language and peer-reviewed. Abstracts were searched to increase the likelihood of finding relevant publications.

The PICOS approach was used for the inclusion and exclusion criteria, and to search for relevant studies on the basis of Population, Intervention, Comparison, Outcome, and Study Design (Liberati et al., 2009) (see Table 1). Population was unspecified, intervention was unspecified, comparison was unspecified, the outcomes required were sample size and an effect size correlation between a measure of shame and a measure of OCD, and study design was specified as quantitative studies. A methodological critique of the studies included in the meta-analysis was also conducted to allow the reader to consider the findings in a balanced way.

Table 1.

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Published in English • Mention shame and OCD • Provide sample size data and an effect size for the correlation between a measure of shame and OCD • Novel empirical research, quantitative. • Peer Reviewed	• Not in English • No mention of either OCD or shame • Do not provide sample size data or an effect size for the correlation between a measure of shame and OCD • Review paper • Not peer reviewed

Summary of Selected Studies

The systematic literature search identified 299 publications. To identify relevant studies all duplicate publications were removed (n = 154). This left 145 relevant publications. These articles were screened by applying the inclusion and exclusion criteria. Those that did not meet the inclusion criteria were excluded. First, the titles and abstracts were screened. From this 130 publications were excluded, leaving 15 relevant publications. The reference list of these 15 publications was then hand searched for further publications of relevance. Nine further publications were found. The full article of these 24 publications were then screened. From this 14 studies (from 11 publications) met the criteria for inclusion in the meta-analysis.

The remaining 13 publications were excluded. While these reported on an association between a measure of OCD and a measure of shame the studies were disparate in design. It is important that the publications included in a meta-analysis are relatively homogenous in design, as too great a difference in this may affect the internal validity of the results (Russo, 2007). Of the 13 papers excluded one publication (Clerkin et al., 2017) provided correlational data but the measure of shame was an Implicit Association Test (Greenwald et al., 1998), in contrast to the use of surveys in the other studies. Eight publications (Kim et al., 2014; Malcolm et al., 2021; Hezel et al., 2012; Kwak et al., 2015; Lochner et al., 2005; Weingarden & Renshaw, 2016; Visvalingam et al., 2022;

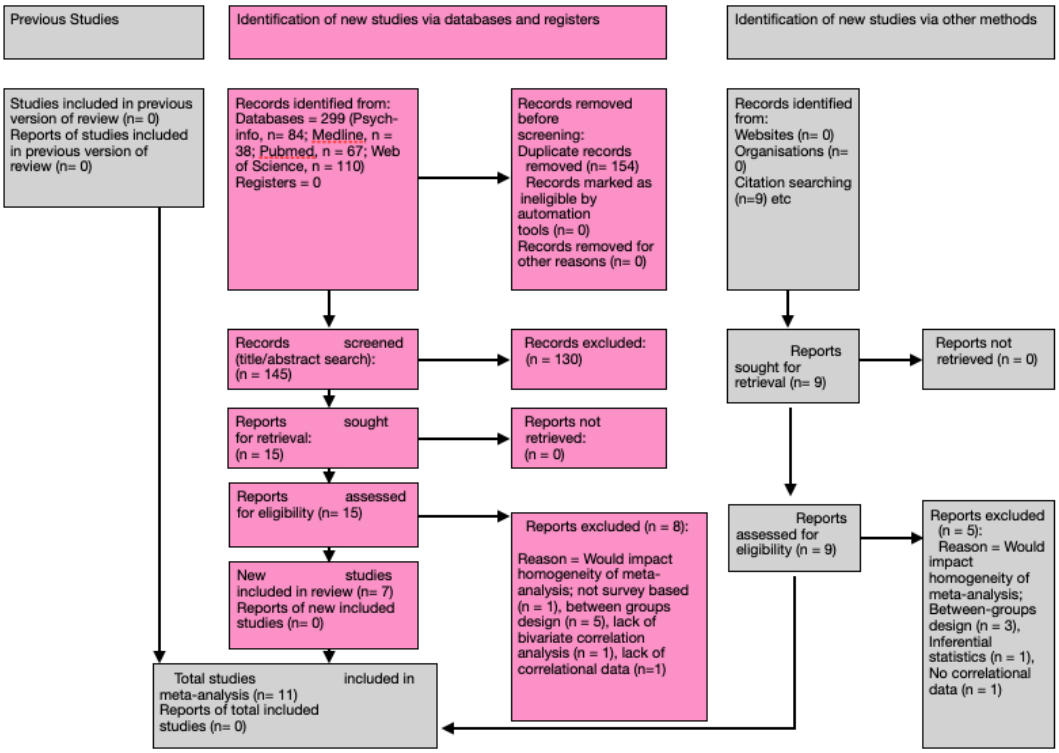
Hennig-Fast et al., 2015) used between group designs and analysis methods rather than providing standard correlations between measures of shame and OCD as in all the other studies. Two publications (Glazier et al., 2015; Parsons & Alden, 2022) provided a descriptive association between measures but failed to provide correlational data to support this as in all the other studies. One publication (Kizilagac & Cerit., 2019) used inferential statistics in comparison to descriptive statistics used in all the other studies. One publication (Valentiner & Smith., 2008) also controlled for the influence of other factors in comparison to the bivariate correlation data provided in the majority of the other studies.

This left 11 publications (and 14 studies) which all provided Pearson's *r* correlational data between a survey-based measure of OCD and a survey-based measure of shame (see Figure 1 for a PRISMA diagram documenting the inclusion/exclusion of papers). The lead author's supervisor checked the inclusion and exclusion of the final studies from the 24 publications that had their full text screened.

Two studies included in Cândea and Szentagotai-Tătar's (2018) meta-analysis (Clerkin et al., 2017; Hezel et al., 2012) were not included, while six new studies were included. Three studies from Tangney and Dearing (2002) were included after searching the reference list of selected publications, a process not used by Cândea and Szentagotai-Tătar (2018). Singh et al. (2016) and Yoosefi et al. (2016) were also included as these were published since Cândea and Szentagotai-Tătar's (2018) literature search. Haaland et al. (2011) was also included, which may have been because Cândea and Szentagotai-Tătar's (2018) literature search was not wide enough in scope.

Figure 1.

PRISMA Diagram (as based on Page et al., 2021).



Meta-analysis

The sample size, and the reported Pearson's *r* correlation effect size between measures of OCD and measures of shame were extracted from the included publications. To ensure accurate data was extracted this was checked by the lead author's supervisor. Bivariate correlations, rather than partial correlations (which control for other factors) were extracted. While all the studies presented bivariate data, only some of the studies provided partial correlations. Aloe and Thompson (2013) state "partial effect sizes should not be combined with bivariate correlations" (p. 400) and that if there is partial and bivariate data two sets of analyses should be presented. However this meta-analysis chose to solely focus on the bivariate association between shame and OCD as the factors that were controlled for in the studies that reported partial correlations were too disparate to be analysed together, and this would have affected the homogeneity and the internal validity of the

results (Russo, 2007). For example, Fergus et al. (2010), Tangney et al. (1992), and Tangney and Dearing (2002) controlled for guilt using the Test of Self Conscious Affect (TOSCA) (Tangney et al., 1989). Wetterneck et al. (2014) controlled for worry using the Penn State Worry Questionnaire (PSWQ) (Meyer et al., 1990). Fergus et al. (2010) also controlled for anxiety using the PWSQ (Meyer et al., 1990) and depression using the Beck Depression Inventory (BDI; Beck et al., 1961).

Using SPSS Version 28.0.1. the overall mean-weighted effect size of the publications was calculated using a random effects model (Hedges & Vevea, 1998). Random effects models assume that the studies included in the meta-analysis are "a random sample of a hypothetical population of studies" (Russo, 2007, p. 640) in comparison to fixed effects models which assume that "studies in the meta-analysis are sampled from a population in which the average effect size is fixed" (Field & Gillett, 2010, p. 672). A random effects model was chosen over a fixed effects model as the studies included in the meta-analysis were quite heterogenous (e.g., multiple measures were used to assess OCD and shame, and the population from which samples were drawn ranged from people with complex OCD to people without OCD). In this context they provide "a more conservative estimate of the combined data, with a wider confidence interval" whereby "the summary statistic is less likely to be significant" (Russo, 2007, p. 640), reducing the risk of a Type 1 error. The Hedges and Vevea (1998) random effects model was chosen over the Hunter and Schmidt (1991) model as research by Field (2001) has shown in Monte Carlo simulations that "in terms of 95% confidence intervals around the population estimate, Hedges' method was in general better at achieving these intervals" (Field & Gillett, 2010) (p. 674). The Hedges-Vevea pooled effect size was calculated using a syntax for SPSS provided by Field and Gillett (2010).

Publication Bias

Russo (2007) states that "meta-analyses are subject to publication bias because studies with negative results are less likely to be published and, therefore, results from meta-analyses may

overstate a… effect" (p. 641). To examine publication bias funnel plots were created in SPSS. Sterne et al.'s (2011) guidance was consulted on how to interpret a funnel plot graph for publication bias. A funnel plot is a "scatter plot of the effect estimates from individual studies against some measure of each study's size or precision" (Sterne et al., 2011, p.1). Asymmetry in the scatter plot around the mean effect size is often interpreted as indicating publication bias, as it indicates studies are missing, with a subsequent possibility of file-drawer bias (Rosenthal, 1979). However, this may also indicate heterogeneity in measures used and populations investigated (Sterne et al., 2011).

Publication bias was also calculated using the fail safe N procedure (Rosenthal, 1991) to estimate the number of missing studies with an effect size of 0 that would reduce the overall effect size to non-significance. According to Rosenthal (1991), if this number is larger than k*5 + 10, one can conclude that the risk of publication bias is negligible (where k is the number of studies included in the meta-analysis).

Homogeneity Test

A chi-square test was conducted to assesses the homogeneity of studies included in the meta-analysis (Field and Gillet, 2010). Russo (2007) states "the test for homogeneity investigates the hypothesis that the size of the effect is equal in all included studies. $p < .1$ is considered to be a conservative estimate" (p.640). Too great a heterogeneity in the studies may indicate the internal validity of the results of the meta-analysis is questionable (Fletcher, 2007; Russo, 2007).

Moderator Analysis

A moderator analysis assesses the underlying associations between two factors (e.g., shame and OCD) (Hansen, et al., 2021). According to Hansen et al. (2021) "to identify moderators… of the relationship of interest, meta-analysts can create subgroups and investigate differences between those groups" (p. 6). Potential moderators in this meta-analysis could have been the influence of

clinical vs. non-clinical population samples, and the influence of measurement variables. However, due to the small amount of studies included in the meta-analysis a moderator analysis was unable to be calculated as moderator analyses require at least ten studies for each of the characteristics explored, which would not have been possible (Pincus et al., 2011).

Sensitivity Analysis

As the validity of a meta-analysis rests upon the validity of the studies it includes (Prunell-Castañé et al., 2021), it is important to critique the publications included in the meta-analysis. All papers were evaluated using Protogerou and Hagger's (2020) Quality of Survey Studies in Psychology (Q-SSP) (see Appendix A) as this appraisal tool is specific to studies which investigate correlational data between surveys. It contains 20 questions designed to assess quality in the following domains: "introduction (study rationale and variables), participants (sampling and recruitment), data (data collection, analyses, results and discussion), and ethical review (consent, debrief, and funding/conflicts of interest)" (Protogerou and Hagger, 2020, p. 9). Each item is scored either: "yes", "no", "not stated clearly", or "not applicable" (Protogerou and Hagger, 2020, p. 8).

To conduct a sensitivity analysis a bivariate Pearson's *r* correlation was calculated between effect size and study quality. Study quality was measured by calculating the number of items rated "yes" on the Q-SSP (Protogerou and Hagger, 2020). No articles were excluded on the basis of quality, instead the appraisal was to provide readers with an awareness of the methodological limitations of each publication when interpreting the results, and to conduct the sensitivity analysis.

Evaluation of Measures

The validity of survey-based correlational data rests upon the validity of the surveys used. In response, measures of shame used in the meta-analysis were evaluated by consulting Lear et al.'s (2022) systematic review and critique of self-report measures of generalised shame. Lear et al.

(2020) appraised surveys by assessing them with the 'Consensus-based Standards for the selection of health Measurement Instruments (COSMIN)' (Prinsen et al., 2018). This tool assesses the content validity, structural validity, internal consistency, cross cultural validity/measurement invariance, reliability, measurement error, criterion validity, construct validity/hypothesis testing, and responsiveness of measures (p. 3, Lear et al., 2022). Each aspect is rated as having either sufficient, insufficient, indeterminate, or inconsistent evidence (Lear et al., 2022). To evaluate measures of OCD, Grabill et al. (2008) and Overduin et al.'s (2011) review and critique of different measures of OCD was consulted, and their critiques (based on similar principles to Lear et al., 2022) are incorporated into the evaluation of each measure.

Results

Overview of Included Studies

The literature search identified 14 relevant studies from 11 publication sources. This included studies from the U.S.A (*n*=11), the U.K. (*n*=1), Norway (*n* = 1), and Iran (*n* = 1). See Table 2 for the sample size, effect sizes, and key characteristics of all studies included in the meta-analysis. Only information of relevance to the aims of this meta-analysis is included. Studies included in the meta-analysis were published between 1992 and 2016. All studies reported are cross-sectional correlational in design with Pearson's *r* correlational data between two surveys of shame and OCD provided. All of the studies reported a positive correlation between measures of shame and measures of OCD, ranging from *r* = 07. to *r* = .54. Sample sizes ranged from 88 to 507.

Summary of Studies Included in Meta-Analysis

All of the publications included in the meta-analysis provided correlational data on the association between shame and OCD, however for only eight studies was this the primary aim

(Abramowitz & Berenbaum., 2007; Fergus et al., 2010; Tangney et al., 1992 - Study 1 and 2; Tangney & Dearing., 2002 - Study 1, 2, and 3; Wetterneck et al., 2014). All studies included in the meta-analysis found a positive association between measures of shame and measures of OCD, however Fergus et al. (2010) found the small positive correlation between shame and OCD was not present after controlling for scores on anxiety, depression, and guilt-proneness measures. Similarly, Tangney et al. (1992) found proneness to guilt and shame were overlapping for OCD. These findings may be associated with the lack of specificity of the measures of shame from measures of guilt (e.g., TOSCA; Tangney et al., 1989). However Tangney and Dearing (2002) used the same measures and found while OCD was positively associated with shame proneness, it was only negligibly related to guilt proneness. Wetterneck et al. (2014) explored the association of shame-proneness with symptom dimensions of obsessive compulsive disorder (contamination, harm, unacceptable thoughts, and symmetry) and found a significant positive relationship between shame and harm-based obsessions, and shame and symmetry-based obsessions but not shame and unacceptable obsessions.

Two of the publications looked at the influence of early maladaptive schemas (Haaland et al., 2011; Yoosefi et al., 2016) and both found a positive association between the defectiveness/ ashamed schema and OCD. One publication explored the influence of different cognitive processes on social anxiety (Field & Cartwright-Hatton., 2008) and reported that social anxiety was influenced by the interpretation of intrusions, obsessive beliefs, and shame. One publication (Olatunji & Cox, 2015) explored the influence of self-disgust on mediating the associations between shame and OCD, and found self-disgust partially mediated this relationship. One publication (Weingarden & Renshaw., 2014) tested the mediation of shame and guilt on the association between OCD and depression and reported that shame-proneness partially mediated the relationship of obsessive compulsive beliefs with depression, and that shame-proneness may be related to interpretation of symptoms. One publication (Singh et al., 2016) explored the role of shame and

symptom severity on quality of life in OCRDs and found shame was negatively correlated with Quality of Life and more strongly correlated with Quality of Life than OCD symptom severity.

Sample

In total, there were 3500 participants: 504 people with OCD; 440 people with other mental health diagnoses; and 2556 people without a diagnosis. Many of the studies did not report the number of people of different genders who participated, however there were more than 50% of women participating in every study that reported gender, ranging from 54% to 81.4%. Many of the studies also did not report ethnicity, however for each study that reported ethnicity the greatest percentage of participants was always white, ranging from 71% to 95%. Many of the studies did not report a mean age, however from the studies that reported a range in age this ranged from 13 years old to 77 years old.

Table 2.

Key Characteristics of Included Studies including Pearson's r Correlation Effect Sizes and Sample Sizes

Author(s), Date	Sample	Measures	Key Findings (Pearson's correlation *r* effect size)	N / Sample Size
Abramowitz & Berenbaum., 2007	Number of participants = 189 Age = Range -16 to 30 years old. M* -19.16 years. SD* - 1.49 years. n = unknown Gender = 65% female (n unknown) Ethnicity = European Americans (71%), Asian-Americans (11%). 18% unreported (n unknown). Sampling Method = Convenience (148 from a psychology class, 41 from advert). Population = Undergraduate students. Setting = USA	Shame = 5 point Likert Scale of Shame (Abramowitz & Berenbaum., 2007) OCD = OCI (Obsessive Compulsive Inventory; Foa et al.,1998)	Measure of shame positively correlated with measure of OCD (*r* = .13)	189
Fergus et al., 2010	Number of participants = 124 Age = M - 29.2. SD - 13.8. Range - 13 to 77 years. n = unknown Gender = 54% female (n = unknown). Ethnicity = 95% White (n = unknown) 5% Unknown (n = unknown) Sampling Method = Convenience. Population = OCD outpatients. Setting = USA.	OCD = OCI-R (Obsessive Compulsive Inventory Revised; Foa et al., 2002) Shame = TOSCA (Test of Self-Conscious Affect; Tangney et al., 1989)	Measure of shame positively correlated with measure of OCD (*r* = .27) However, not after controlling for depression symptoms, and guilt-proneness.	124

Author(s), Date	Sample	Measures	Key Findings (Pearson's correlation *r* effect size)	N / Sample Size
Field & Cartwright-Hatton., 2008	Number of participants = 507 Age = 150 unknown. Remaining 357 - aged 17 to 57 (M = 22.00. SD 5.40). Gender = 69 unknown. Remaining 81.4% female (n = unknown). Ethnicity = Not stated. Sampling Method = Convenience. Population = Psychology undergraduates. Setting = UK	OCD = III (Interpretation of Intrusion Inventory; Obsessive Compulsive Working Group, 2003) Shame = TOSCA-3 (Test of Self-Conscious Affect 3rd Edition; Tangney et al., 2000)	Measure of shame positively correlated with measure of OCD (*r* = .264)	507
Haaland et al., 2011	Number of participants = 88 Age = M - 34.4 (SD 11.5) Gender = 72.7% female (n = 64); male = not reported Ethnicity = Not reported Sampling Method = Convenience. Referrals in outpatient clinics and adverts. Population = Outpatients with OCD. Setting = Norway	OCD = YBOCS (Yale Brown Obsessive Compulsive Scale; Goodman et al., 1989) Shame = SF-YSQ (Young Schema Questionnaire Short Form; Young., 1999)	Measure of shame positively correlated with measure of OCD (*r* = 0.07)	88
Olatunji & Cox., 2015	Number of participants = 403 Age = M - 19.59 (sd - 2.47) Gender = 67% female Ethnicity = 73.4 white, 21.3% black, 2% asian or pacific islander, 0.2% native american or alaskan native, 1.5% hispanic or latino, 1.2% multiracial. Sampling Method = Unknown. Population = Undergraduate students. Setting = USA	OCD = OCI-R (Obsessive Compulsive Inventory Revised; Foa et al., 2002) Shame = OAS (Other As Shamer Scale, Goss et al., 1994)	Measure of shame positively correlated with measure of OCD (*r* = .34) This relationship was partially mediated by self-disgust.	403

Author(s), Date	Sample	Measures	Key Findings (Pearson's correlation *r* effect size)	N / Sample Size
Singh et al., 2016	Number of participants = 542 Age = 30.3 years (SD = 10.7) Gender = 76.4% female Ethnicity = 82.1% White, 1.8% Black, 3.7% Latino/ His- panic, 4.6% Asian/Eastern Indian, 4.1% Other, and 3.7% Biracial. Sampling Method = Convenience. Population = People with Obsessive Compulsive Related Disorders (152 OCD; 248 trichotillomania; 142 skin picking) . Setting = USA	OCD = DOCS (Dimensional Obsessive Compulsive Scale; Abramowitz et al., 2010) Shame = ESS (Experience of Shame Scale; Andrews et al., 2002)	Measure of shame positively correlated with measure of OCD (*r* = .2) Also found shame was negatively correlated with Quality of Life and more strongly correlated with Quality of Life than OCD symptom severity.	152
Tangney et al., 1992 Study 1	Number of participants = 245 Age = 18 to 55 (M = 21.1) Gender = 71% female. Ethnicity = 77% White, 5% Black, 13% Asian, 6% Other. Sampling Method = Convenience. Recruited from course. Population = University undergraduates. Setting = USA	OCD = SCL-90 OCD Subscale (Symptom Checklist 90 OCD Subscale; Derogatis et al., 1973) Shame = SCAII (Self Conscious Association and Affect Inventory; Tangney et al., 1988)	Measure of shame positively correlated with measure of OCD (*r* = .31)	245
Tangney et al., 1992 Study 2	Number of participants = 234 Age = Range - 17 to 35; M - 19.5 years. Gender = 72% female. n = unknown. Ethnicity = 83% White, 6% Black, 7% Asian, 4% Other. n = unknown. Sampling Method = Convenience. Recruited from course. Population = University undergraduates. Setting = USA	OCD = SCL-90 OCD Subscale (Symptom Checklist 90 OCD Subscale; Derogatis et al., 1973) Shame = TOSCA (Test of Self-Conscious Affect; Tangney et al., 1989)	Measure of shame positively correlated with measure of OCD (*r* = .38)	234

Author(s), Date	Sample	Measures	Key Findings (Pearson's correlation *r* effect size)	N / Sample Size
Tangney & Dearing., 2002. Study 1.	Number of participants = 253/254*** Age = Unknown Gender = Unknown Ethnicity = Unknown Sampling Method = Unknown Population = University undergraduates. Setting = USA	OCD = SCL-90 OCD Subscale (Symptom Checklist 90 OCD Subscale; Derogatis et al., 1973) Shame = TOSCA (Test of Self-Conscious Affect; Tangney et al., 1989)	Measure of shame positively correlated with measure of OCD (*r* = .31)	254
Tangey & Dearing., 2002. Study 2.	Number of participants = 158 Age = Unknown Gender = Unknown Ethnicity = Unknown Sampling Method = Unknown Population = University undergraduates. Setting = USA	OCD = SCL-90 OCD Subscale (Symptom Checklist 90 OCD Subscale; Derogatis et al., 1973) Shame = TOSCA (Test of Self-Conscious Affect; Tangney et al., 1989)	Measure of shame positively correlated with measure of OCD (*r* = .40)	158
Tangney & Dearing., 2002. Study 3.	Number of participants = 252 Age = Unknown Gender = Unknown Ethnicity = Unknown Sampling Method = Unknown Population = University undergraduates. Setting = USA	OCD = SCL-90 OCD Subscale (Symptom Checklist 90 OCD Subscale; Derogatis et al., 1973) Shame = TOSCA (Test of Self-Conscious Affect; Tangney et al., 1989)	Measure of shame positively correlated with measure of OCD (*r* = .34)	252

Author(s), Date	Sample	Measures	Key Findings (Pearson's correlation *r* effect size)	N / Sample Size
Weingarden & Renshaw., 2014	Number of participants = 263 Age = 17 to 54, M - 21.06, SD = 5.28 Gender = 77.6% female. Ethnicity = 54.0% White, 15.2% Asian, 12.5% Black or African American, 6.8% another race or multiracial, 11.4% did not report their race. Sampling Method = Convenience. Population = Undergraduate students Setting = USA	OCD = PI-WSUR (Padua Inventory Washington State University Revised Edition; Burns et al., 1995) Shame = TOSCA-3 (Test of Self-Conscious Affect 3rd Edition; Tangney et al., 2000)	Measure of shame positively correlated with measure of OCD (*r* = .19) Also reported that shame-proneness partially mediated the relationship of obsessive compulsive beliefs with depression, and that shame-proneness may be related to interpretation of symptoms.	263
Wetterneck et al., 2014	Number of participants = 90 Age = M - 35.64 (SD = 13.74, Range = 18 to 67) Gender = 74.7% female (n=67) Ethnicity = 84.6% White, 2.2 Black, 3.3% Asian/ Pacific Islander, 4.4% Hispanic, 5.5% other. Sampling Method = Convenience Population = People with self-reported OCD who responded to an online advert. Setting = USA	OCD = DOCS (Dimensional Obsessive Compulsive Scale; Abramowitz et al., 2010) Shame = TOSCA-3 (Test of Self-Conscious Affect 3rd Edition; Tangney et al., 2000)	Measure of shame positively correlated with measure of OCD (*r* = .25) *r* calculated from the mean effect size between the sub-scales of the Dimensional Obsessive Compulsive Scale (DOCS) (Abramowitz et al., 2010) and the Test of Self-Conscious Affect - 3rd Version (TOSCA-3) (Tangney et al. 2000). Shame was significantly positively correlated with the OCD dimensions of harm and symmetry. A positive but non significant correlation between shame and contamination and unacceptable thoughts was not observed.	90

Author(s), Date	Sample	Measures	Key Findings (Pearson's correlation *r* effect size)	N / Sample Size
Yoosefi et al., 2016	Number of participants = 151 Age = unknown Gender = unknown Ethnicity = unknown Sampling Method = Convenience Population = People with OCD who referred to psychology and psychiatry clinics. OCD (50), anxiety disorders (50), control group (51). Setting = Iran	OCD = PI-WSUR (Padua Inventory Washington State University Revised Edition; Burns et al., 1995) Shame = SF-YSQ (Young Schema Questionnaire Short Form; Young, 1999)	Measure of shame positively correlated with measure of OCD (r = 0.54)	151

*SD (Standard Deviation)

** M (Mean)

*** taken as 254

Pooled Weighted Mean Correlation Between Shame and OCD

The pooled, weighted correlation between measures of shame and measures of OCD was r = .295 (k = 14) (95% Confidence Interval [Lower - 0.238; Higher - 0.349]), p = .000. This was computed from 14 studies from 11 publications, with a total of 3500 participants. Cohen's (1988) categorisation of correlational effect sizes (Gignac & Szodorai, 2016) states: .1 = small effect size; .3 = medium effect size; .5 = large effect size. As r = .295, and p = .000 this indicates a significant medium-sized positive correlation, which means the greater the severity of shame the greater the severity of OCD (or vice versa).

Homogeneity Test

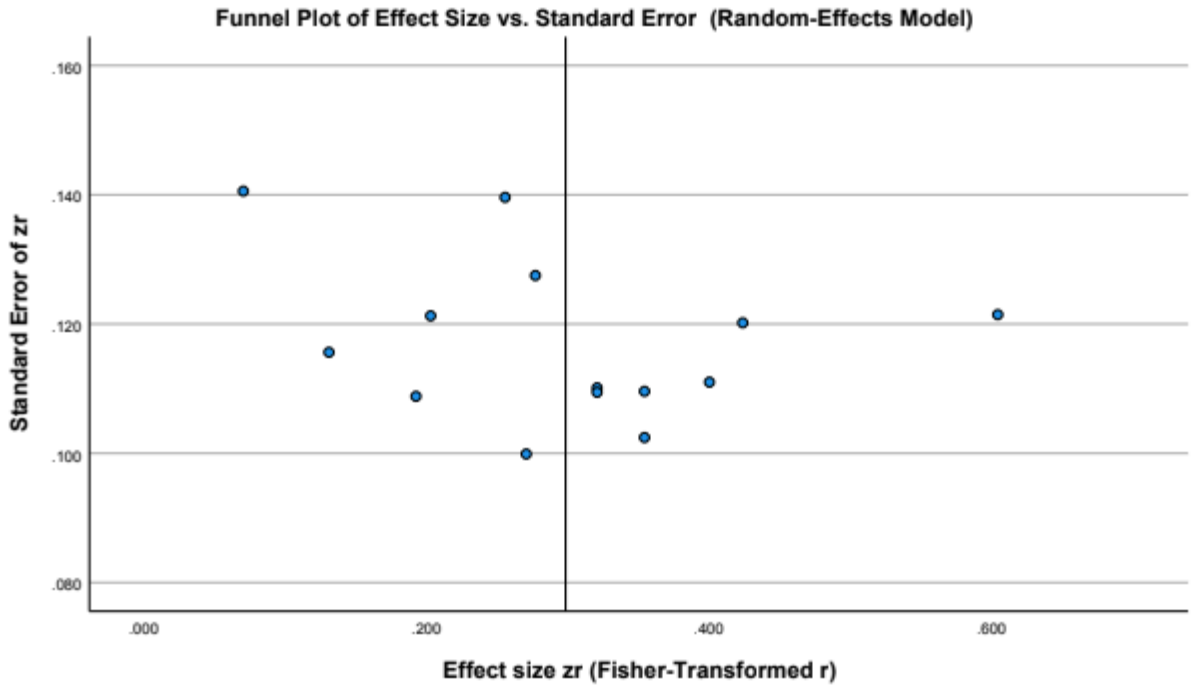
The chi-square test, used to assess the homogeneity of studies included in the meta-analysis (Field and Gillet, 2010) revealed that X^2 (1, N = 14) = 15.386, p = .284. As there was not a statistically significant result this indicates homogeneity, and consequently, the meta-analysis has good internal validity (Fletcher, 2007).

Publication Bias

In the meta-analysis scatter-plot the effect sizes of the 14 studies show a reasonable level of symmetry around the mean effect size (see Figure 2) indicating publication bias is unlikely. Rosenthal's (1991) formula calculated that greater than 80 studies were needed to demonstrate a low risk of publication bias. The fail-safe N revealed there would need to be 1359 nonsignificant unpublished studies not included in the meta-analysis to make the overall effect size nonsignificant (Field & Gillett, 2010).

Figure 2.

*Funnel Plot to Examine Publication Bias**



**line on y axis indicates pooled weighted mean (r = .295)*

Sensitivity Analysis

The quality of the studies included in the meta-analysis were evaluated using Protogerou and Hagger's (2020) Quality of Survey Studies in Psychology (Q-SSP) (see Appendix A). This revealed all of the studies were of questionable quality. This was often due to common reasons including: missing information on participant inclusion criteria (n = 10), no justification provided for the sample size (n = 14), lack of information on attrition rate (n = 13), a lack of measures provided in the report (n = 11), lack of information on duration of study (n = 8), and a lack of information on the debrief procedure (n = 14). Tangney and Dearing's (2002) studies were of particularly low quality due to a lack of information provided on any aspect of these studies apart from sample size, effect size, and measures used (see Appendix A); as such this study is missing a lot of demographic information, information on ethics, its rationale, and its sampling method. This makes it difficult to evaluate its relative strengths and weaknesses, and may affect the internal validity of the meta-analysis, for the results may be based upon methodologically unsound research.

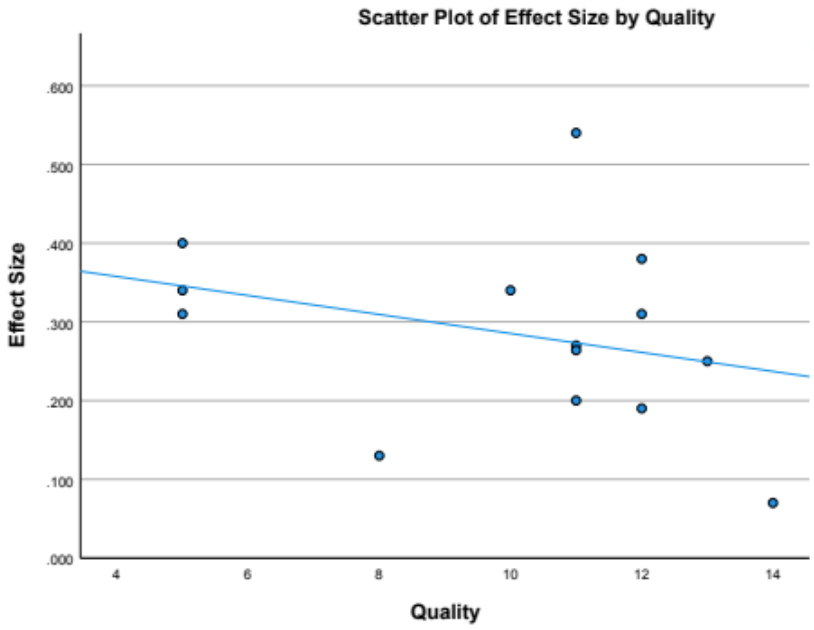
Many of the studies failed to provide participant characteristics (e.g., age, ethnicity, comorbidity data). This missing data is a major limitation of the study findings as it limits generalisability of these publications. Many of the studies also used poor criteria for recruiting participants. For example, the use of online surveys in many of the studies (e.g., Wetterneck et al., 2014) may have increased the likelihood of self-selection sampling biases.

To identify if the quality of the studies included was affecting the meta-analysis a sensitivity analysis was conducted. A bivariate Pearson's correlation was run on SPSS examining the relationship between each studies' effect size and their corresponding scores on the Q-SSP (Protogerou & Hagger, 2020). This revealed a non-significant medium-sized negative correlation between quality and effect size (r = -.309, p = .283, N = 14). See Figure 3 for a scatter plot

representation, which shows that publications of higher quality tended to have lower effect sizes. This is a limitation of the meta-analysis as it indicates that the results of the meta-analysis may have been skewed by poorer quality studies with higher effect sizes.

Figure 3.

Scatter Plot of Effect Size by Quality



Appraisal of Measures

Of the studies included in the meta-analysis there was a great diversity in the measures used to measure shame and OCD. Evaluation of measures of shame was taken from Lear et al.'s (2022) review of measures of shame. Lear et al. (2002) state that one of the measures used showed good measurement invariance (ESS; Andrews et al., 2002). Two measures used showed good internal consistency (OAS; Goss et al., 1994, TOSCA; Tangney et al., 1989), while two measures showed poor internal consistency (SCAAI; Tangney et al., 1988, ESS; Andrews et al., 2002). Two measures showed good structural validity (OAS; Goss et al., 1994, TOSCA; Tangney et al., 1989), while two measures showed poor structural validity (TOSCA-3; Tangney et al., 2000, ESS; Andrews et al.,

2002). Four measures showed high construct validity (OAS; Goss et al., 1994, TOSCA-3; Tangney et al., 2000, SCAAI; Tangney et al., 1988, ESS; Andrews et al., 2002) while one measure showed low construct validity (TOSCA; Tangney et al., 1989). Three measures showed poor reliability (OAS; Goss et al, 1994, SCAAI; Tangney et al., 1988, ESS; Andrews et al., 2002), and two measures showed low content validity (OAS; Goss et al., 1994, SCAAI; Tangney et al., 1988). Furthermore, all failed to include references to OCD. For an overview evaluation of each measure see Table 3.

Evaluation of measures of OCD was taken from Grabill et al. (2008) and Overduin et al.'s review of measures of OCD (2011). Four of the OCD measures showed good convergent validity (OCI-R; Foa et al., 2002, PI-WSUR; Burns et al., 1995, OCI; Foa et al., 1998, DOCS; Abramowitz et al., 2010). Three showed good discriminant validity (OCI-R; Foa et al., 2002, PI-WSUR; Burns et al., 1995, DOCS; Abramowitz et al., 2010). Two showed poor discriminant validity (YBOCS; Goodman et al., 1989, SCL-90; Derogatis et al., 1978). Four of the measures showed good test re-test reliability (OCI; Foa et al., 1998, OCI-R; Foa et al., 2002, PI-WSUR; Burns et al., 1995, DOCS; Abramowitz et al., 2010). One showed poor test re-test reliability (DOCS; Abramowitz et al., 2010). Five of the measures showed good internal consistency (OCI-R; Foa et al., 2002, OCI; Foa et al., 1998, PI-WSUR; Burns et al., 1995, DOCS; Abramowitz et al., 2010, SCL-90; Derogatis et al., 1978), and one of the measures showed poor construct validity (SCL-90; Derogatis et al., 1978). Furthermore, all failed to include references to shame. For an overview evaluation of each measure see Table 3.

All of the studies included in the meta-analysis used self-report measures of OCD and shame, apart from Haaland et al. (2011) who used the clinician rated version of the YBOCS (Goodman et al., 1989). Research has highlighted that when using self-report measures participants may respond in ways they perceive to be socially acceptable (Van de Mortel., 2008). This may be particularly exacerbated in the case of shame as shame is often associated with non-disclosure of

symptoms (Macdonald & Morley, 2001); consequently, this should be considered when interpreting the results of the meta-analysis.

Multiple studies have also shown that experience-based measures (e.g., ESS; Andrews et al., 2002) and scenario-based measures (e.g., TOSCA; Tangney et al., 1989) are often only moderately correlated (e.g., Luoma et al., 2017), suggesting they are not measuring the same constructs (Lear et al., 2022) and so their inclusion in the meta-analysis as though they are measuring the same construct may affect the internal validity of the results.

Table 3.

Critiques of Measures Used in the Meta-Analysis

Construct	Measure (Authors, Date)	Meta-analysis Studies Used In	Description	Strengths (in context of meta-analysis)	Limitations (in context of meta-analysis)
Shame	Other as Shamer Scale (OAS) (Goss et al., 1994)	Olatunji & Cox., (2015)	An 18 item self-report experience based questionnaire (assess externalised shame).	• Lear et al. (2022) rates the OAS as having sufficient structural validity, internal consistency, and construct validity.	• Lear et al. (2022) rates the OAS as having inconsistent content validity, and indeterminate reliability. • Does not capture internalised shame. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias.
	Test of Self-Conscious Affect (TOSCA) (Tangney et al., 1989)	Fergus et al. (2010), Tangney et al. (1992), and Tangney & Dearing., (2002)	A scenario-based self-report questionnaire (assess shame proneness). Shame sub scale = 15 items.	• Lear et al. (2022) rates the TOSCA as having sufficient structural validity, and internal consistency. • Scenario-based (and does not mention shame) which may reduce self-report bias.	• Lear et al. (2022) rates the TOSCA as having insufficient construct validity. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias. • Situations in TOSCA are related to typical everyday situations and not to situations that relate to unacceptable thoughts (e.g., blasphemy, sexual obsessions, or violence). • The TOSCA is about situations, not obsessions. In OCD it is the obsession not the situation itself that is distressing, which limits its validity.

Test of Self-Conscious Affect 3 (TOSCA-3) (Tangney et al., 2000)	Field & Cartwright-Hatton., (2008), and Weingarden & Renshaw., (2014)	A scenario based self-report questionnaire (assesses shame-proneness). Shame sub scale = 16 items.	• Lear et al. (2022) rates the TOSCA- 3 as having sufficient construct validity.	• Lear et al. (2022) rates the TOSCA- 3 as having insufficient structural validity. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias. • Situations in TOSCA are related to typical everyday situations and not to situations that relate to unacceptable thoughts (e.g., blasphemy, sexual obsessions, or violence). • The TOSCA is about situations, not obsessions. In OCD it is the obsession not the situation itself that is distressing, which limits its validity.
Self Conscious Affect Inventory (SCAII) (Tangney et al., 1988)	Tangney et al. (1992)	A scenario based self-report questionnaire (assess shame proneness) Shame sub scale = 13 items.	• Lear et al. (2022) rates the SCAAI as having sufficient construct validity.	• Lear et al. (2022) rates the SCAAI as having indeterminate content validity, internal consistency, and reliability. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias.
Experience of Shame Scale (ESS) (Andrews et al., 2002)	Singh et al. (2016)	A 25 item experience based self-report questionnaire.	• Lear et al. (2022) rates the ESS as having sufficient construct validity, and measurement invariance.	• Lear et al. (2022) rates the ESS as having indeterminate structural validity, internal consistency, and reliability. • It looks at bodily shame, behavioural shame, and characterological shame, with the total score acting as a measure of generalised shame. The relevance of these sub scales to OCD is limited. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias.
5-point Likert Scale (Abramowitz & Berenbaum., 2007)	Abramowitz & Berenbaum (2007)	A 1 item self-report measure of shame using a 5-point Likert scale	• Quick to administer	• Has not been validated. • The use of a self-report scale such as this may have poor validity for people are often inaccurate in distinguishing shame from related emotions such as guilt (Tangney and Dearing., 2002). • Items which ask people to rate ‘shame’ may also elicit a shame response and so this may affect the validity of peoples responses. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias.

	Young Schema Questionnaire (SF-YSQ) (Young, 1999)	Yoosefi et al. (2016) and Haaland et al. (2011)	A 15 item self-report measure of 'defectiveness/ ashamed' as part of a wider 75 items questionnaire to assess early maladaptive schemas.	• Quick to administer	• Items for shame may also be conflating shame with other emotions (i.e. 'defectiveness/ ashamed' may not be the same as shame). This affects the measures discriminant validity. • Not specific to OCD. • Self-report measure - vulnerable to social desirability bias.
OCD	Obsessive Compulsive Inventory Revised (OCI-R) (Foa et al., 2002)	Olatunji & Cox., (2015), Fergus et al. (2010)	A 18 item self-report questionnaire (assesses OCD symptoms).	• Quick to administer. • Frequently used. • Grabill et al. (2008) reports the OCI-R has demonstrated good internal consistency, test–retest reliability, good convergent validity, and good discriminant validity.	• Does not mention shame. • Grabill (2008) states the OCI-R lacks a separate severity scale, and compulsions are assessed more heavily than obsessions. • Self-report measure - vulnerable to social desirability bias.
	Obsessive Compulsive Inventory (OCI) (Foa et al., 1998)	Abramowitz & Berenbaum (2007)	A 42 item self-report questionnaire (assesses OCD symptoms).	• Abramowitz & Berenbaum (2007) state the OCI has been found to have excellent test–retest reliability and high internal consistency.	• Does not mention shame. • Self-report measure - vulnerable to social desirability bias.
	Padua Inventory Washington State University Revised (PI-WSUR) (Burns et al., 1995)	Weingarden & Renshaw (2014), and Yoosefi et al. (2016)	A 39 item self-report questionnaire (assesses obsessional thoughts about harm to oneself or others, obsessional impulses to harm oneself or others, contamination obsessions and washing, dressing/ grooming compulsions, and checking compulsions).	• Grabill et al. (2008) states the PI-WSUR has demonstrated good internal consistency, adequate six month test-retest data, good convergent validity, and good discriminant validity. Overall it has good psychometric properties.	• Grabill et al. (2008) states the PI-WSUR does not assess as many symptoms as some measures • Does not mention shame. • Self-report measure - vulnerable to social desirability bias.
	Dimensional Obsessive Compulsive Scale (DOCS) (Abramowitz et al., 2010)	Singh et al. (2016)	A 20 item questionnaire that assesses the severity of the four most common OCD symptoms: contamination, harm obsessions, order/arranging, and unacceptable thoughts.	• Overduin et al. (2011) states the DOCS shows excellent internal consistency, moderate adequate test re-test abilities (with undergraduates), good convergent validity, and adequate discriminant validity. • Overduin et al. (2011) states it represents a substantial improvement over other OCD measures in terms of assessing the four most replicated sub-factors.	• Overduin et al. (2011) states there is an absence of test re-test reliability for clinical samples, and that it has not been externally validated. There is also no data on how the DOCS performs in different cultures (outside a USA context). • Does not mention shame. • Self-report measure - vulnerable to social desirability bias.

Yale-Brown Obsessive Compulsive Scale (YBOCS) (Goodman et al., 1989)	Haaland et al. (2011)	A 10 item clinician rated measure of OCD symptom severity.	• It is considered the 'gold standard' for assessing symptom severity (Grabill et al., 2008) • The use of a clinician rated measure of OCD overcomes the limitations of self-report measures being vulnerable to social desirability bias.	• Grabill et al. (2008) states one criticism of the YBOCS is its relatively low discriminant validity, as indicated by high correlations with measures of depression and anxiety. • Another criticism is that Amir, Foa, and Coles (1997) found support for a factor structure comprised of a disturbance factor and a symptom severity factor, rather than the proposed obsessions and compulsions factors which may indicate that it may not measuring what it purports to be measuring. • Does not mention shame.
Symptom Checklist 90 OCD Subscale (SCL-90 OCD Subscale) (Derogatis et al., 1973)	Tangney et al. (1992) and Tangney & Dearing., (2002)	A self-report clinical rating scale. Is a one factor scale comprised of 10 items, rated on 5 point likert scale.	• Grabill et al, (2008) states the OCD SCL-90-R has good internal consistency and modest convergent validity.	• Grabill et al, (2008) states the OCD SCL-90-R has mixed evidence regarding construct validity, and evidence of divergent validity was poor. It correlates more with measures of depression and anxiety than other measures of OCD. • Self-report measure - vulnerable to social desirability bias. • Does not mention shame. • The SCL-90 measures both OCD symptoms and OC personality disorder symptoms, limiting its validity as a measure of OCD (Woody et al., 1995)
Interpretation of Intrusions Inventory (III; Obsessive Compulsive Working Group, 2003)	Field & Cartwright-Hatton (2008)	A 31 item semi-idiographic questionnaire written to reflect immediate appraisals or interpretations of unwanted, distressing intrusive thoughts, images or impulses.	• Demonstrates adequate psychometric properties (Grabill et al., 2008)	• The III is not a measure of general OCD severity but rather a measure of appraisals towards intrusions.

Discussion

Interpretation of Results

The aim of the meta-analysis was to examine the magnitude of the association between measures of shame and measures of OCD. The choice to conduct a bivariate meta-analysis means one cannot make definitive inferences about the relationship between shame and OCD, and what influences the overall effect size. However, the findings of this meta-analysis suggest that shame is significantly and positively associated with OCD with a medium effect size ($r = 0.295$). This meta-analysis includes newly published studies that Cândea and Szentagotai-Tătar's (2018) meta-analysis could not, and addresses some of their methodological limitations (by extracting correct effect sizes and sample sizes, and evaluating the studies included in the meta-analysis). In response, this meta-analysis should now be considered a more accurate representation of the association between measures of OCD and measures of shame.

The findings provide empirical support to the conclusions of Weingarden and Renshaw's (2015) conceptual review that shame is associated with OCD, and support the re-categorisation in the DSM-V (APA, 2013) of OCD as an obsessive compulsive and related disorder and not an anxiety disorder, as the findings suggest that shame is associated with OCD, and not just anxiety.

Reasons for the association that was found are likely to be multifold. Theorists have suggested that thought-action-fusion (TAF) may be connected to the development and maintenance of OCD (Rachman, 1993). This is the belief that having an intrusive thought is as bad as acting on the intrusive thought. Valentiner and Smith (2008) state that "TAF-morality beliefs are thought to lead individuals to interpret intrusive thoughts, such as thoughts of committing a sinful act, as having implications about one's moral character" (p. 714). As shame is an emotion that relates to when a person judges themselves to be wholly negative (Tangney & Dearing, 2002) it may that when people with OCD with strong thought-action-beliefs experience an ego-dystonic intrusion (an intrusion that goes against one's values and sense of self) this may lead to interpretations that they are a bad person and activate subsequent feelings of shame. This follows the cognitive theory of emotional distress (Beck, 1976) which posits that it is the interpretation of intrusive thoughts which

causes distress. This theory is supported by the findings of a study (Weingarden and Renshaw, 2014) included in this meta-analysis which reported that shame-proneness partially mediated the relationship of obsessive compulsive beliefs (but not symptom severity) with depression. This suggests that shame-proneness may be related to interpretations of one's symptoms.

Shame has also previously been associated with intrusive thoughts perceived as unacceptable (Simonds & Thorpe, 2003). A study (Wetterneck et al., 2014) included in this meta-analysis that examined the relationship of shame to different domains of OCD supports that association. They found shame was significantly positively correlated with OCD obsessions regarding harm to others, and that a positive but non-significant correlation was found between shame and unacceptable thoughts. The association between shame and OCD may also be driven by more general shame about having a mental illness, as research has reported this may be particularly exacerbated in OCD due to publicly visible compulsions (Kim et al., 2014).

Strengths and Limitations of the Meta-Analysis

A strength of the meta-analysis was that the test of homogeneity indicated the meta-analysis was relatively homogenous, improving the internal validity of the results (Fletcher, 2007; Russo, 2007). Furthermore, tests of publication bias indicated this was unlikely to be present, improving the likelihood that the results were an accurate representation of the association between shame and OCD and unlikely to be affected by unpublished studies with non-significant results. The meta-analysis also included 3500 participants, a large sample for only 14 studies, improving the generalisability of the findings in comparison to that of the individual studies included. As is a strength of all meta-analyses it also "provides a more precise estimate of the effect size and increases the generalizability of the results of individual studies" (p. 394) (Lee, 2019).

However there are many limitations associated with the meta analysis which means caution must be exercised when interpreting the findings. For example, the findings of one study included

in the meta-analysis (Tangey et al., 1992) found that the TOSCA (Tangney et al., 1989) showed poor discriminant validity from measures of guilt. As the TOSCA (Tangney et al., 1989) was a commonly used measure of shame in many of the meta-analytic studies it may be that other factors such as guilt are driving the association between shame and OCD, and not shame.

There is also a lot of demographic data missing. This reduces the meta-analysis' external validity, and one's ability to understand to whom the findings can be generalised to. Of the participant demographics provided it was found that many of the studies relied upon undergraduate psychology students, with 2556 of the 3500 participants without a diagnosis of OCD or another mental health condition (equivalent to 73.02%). This limits the external validity of the results of the meta-analysis and its ability to be generalised to those who are not undergraduate psychology students.

Of the 14 studies 11 were based in USA. Of the remaining three, two were based in Europe (UK, Norway), with only one study outside of Western cultures (Iran). This may affect the generalisability of the findings to people from non-Western cultures. This is likely to be a consequence of excluding non-English studies. This decision was made as the lead author only speaks English and it would decrease the likelihood of false data being extracted from the original papers. However, it may have led to a biased sample of publications. Rodriguez et al. (2016) state that shame is conceptualised differently in different cultures, and so the insight from this is missing.

A further limitation of the meta-analysis is that the random effects model chosen to estimate the overall effect size of the selected studies does not control for Type 1 errors when fewer than fifteen studies are included in the analysis (Field & Gillett, 2010). The small number of studies also prevented a moderator analysis from being conducted to explore whether the association found was between shame and OCD or whether it was associated with another unknown factor.

Another major limitation of the meta-analysis is that some of the measures refer to different aspects of shame and OCD. For example, the Other as Shamer Scale (Goss et al., 1994) measures

only externalised shame. The Interpretation of Intrusions Inventory (III; Obsessive Compulsive Working Group, 2003) only measures appraisals towards intrusions. The meta-analysis includes all of these measures, despite their heterogeneity, under the banner of shame and OCD. This makes it difficult to infer which subtypes of shame and which subtypes of OCD may be influencing the results of the meta-analysis. Furthermore, not every measure of shame references OCD, and not every measure of OCD references shame. This significantly impairs the findings of the meta-analysis for the findings rest upon studies using measures that were not designed to measure shame in OCD.

Clinical Implications

By highlighting the association between shame and OCD the results of the meta-analysis should encourage clinicians (i.e. therapists) working with people experiencing OCD to be mindful about the role of shame, and to explore shame cognitions (i.e. global negative evaluations of the self). If shame is present, clinicians may wish to tailor interventions to reduce shame, given the negative impact on wellbeing shame is understood to have (Singh et al., 2016). To do this, clinicians could use principles from compassion focused therapy (CFT), such as compassionate other/ compassionate imagery exercises (Gilbert & Procter, 2006). This is hypothesised to be beneficial because CFT aims to develop one's ability to self-soothe which can counteract the threat response that shame cognitions can generate (Gilbert and Procter, 2006). For a helpful overview of ways of working with shame in OCD, Bream et al. (2017) provide guidance. They state an important aspect of working with anyone with OCD involves psycho-education about intrusive thoughts being a common experience, particularly those that are 'taboo'. For those for whom shame is at the core of their distress, Bream et al. (2017) state the importance of including cognitions and behaviours associated with shame as part of their formulation. As shame is often associated with a desire to hide aspects of oneself Bream et al. (2017) state how ERP may be tailored to focus on exposure to

situations that elicit feelings of shame, helping people to become habituated to this, and helping people to challenge beliefs that they need to hide aspects of themselves or to engage in compulsions to reduce feelings of shame. Therapeutic groups may also be helpful for reducing feelings of shame. Spragg and Cahill (2015) ran a CBT group for people with OCD and reported that group members found the group approach de-stigmatising and helpful for reducing shame. Acceptance and Commitment Therapy (ACT) has also been posited as an intervention for shame in the context of OCD (Wetterneck, 2014). ACT may help people to accept UO's rather than trying to push these away, which may have the influence of reinforcing the sense that there is something to be ashamed about. ACT may incorporate elements from mindfulness with Weingarden et al. (2016) stating that "teaching patients to use mindfulness may help them to non-judgmentally observe experiences of shame and subsequent urges to withdraw or hide, without necessarily acting on those urges" (p. 11), however there is no empirical evidence supporting this conclusion. Consequently, this could be an avenue for future research.

To assess the benefits of such interventions, Weingarden and Renshaw (2015) reflect on the need to assess levels of shame at the beginning and end of treatment. As highlighted in the limitations of the meta-analysis there are currently no appropriate measures for addressing shame specifically in the context of OCD and UO's, however the meta-analysis does provide clinicians with an array of measures that have been used to assess shame in OCD previously (e.g., TOSCA, Tangney et al., 1989). Before using existing measures of shame clinicians can use Table 3 as a guide to inform their clinical judgement about the use of such measures with this population due to their lack of specificity to OCD.

At a societal level policy makers should acknowledge and respond to how shame can act as a treatment barrier for many with OCD (Marques et al., 2010). To address this, policy makers may wish to consider advertising campaigns that could document some of the common intrusive thoughts people have, helping to de-stigmatise these. A suicide awareness campaign in the

Netherlands found those who encountered the campaign showed more openness towards seeking professional help (Van der Burgt, 2021). Given how research has suggested that shame leads to avoidance of treatment and non-disclosure of symptoms (e.g., Marques et al., 2010), a similar campaign de-stigmatising OCD may have similar effects.

Research Implications

The limitations of the pre-existing measures of shame and OCD for assessing shame in the context of OCD highlights the value of future research that can develop a measure of shame in the context of OCD. To do this, it will be necessary to consider how shame in the context of OCD is conceptualised, particularly in the context of intrusive thoughts, urges and image perceived as unacceptable as these have been suggested as particularly shame-inducing (Simonds & Thorpe, 2003). This would be in keeping with other disorder specific measures of contextualised shame, such as measures of HIV-related shame (Rivera et al., 2015). The development of this measure would support clinical practice, by providing a measure to evaluate interventions targeting shame in OCD. This could also then be used to evidence which interventions (e.g., CFT, CBT, ERP, and ACT) are best placed for treating shame in OCD.

Conclusion

This meta-analysis reports a significant medium-sized positive correlation between measures of shame and OCD, however the results must be interpreted with caution given the methodological limitations of the studies the meta-analysis is based on. One of the main limitations was that a reliable and valid measure of shame in the context of OCD is currently unavailable, and so the associations in each study are based on imperfect measures. To better explore this association it would be beneficial if a measure specific to shame in OCD was developed. This would also have

clinical applications for clinicians supporting people with OCD as they would be able to assess the efficacy of interventions targeting shame in OCD.

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MAJOR RESEARCH PROJECT

Section B: A Delphi Study Developing a Measure of Shame in the Context of Unacceptable Obsessions in OCD

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Abstract

Shame has been associated with obsessions perceived as unacceptable (UO's) in Obsessive Compulsive Disorder (OCD). However there is a lack of consensus on the cognitive, affective, and behavioural markers of shame associated with UO's in OCD, and clinicians have no measures to evaluate the efficacy of interventions targeting shame associated with UO's in OCD. This project used a three-round Delphi study to develop a self-report questionnaire for shame in the context of UO's in OCD. In Round 1, eight experts by experience, four clinicians, and four researchers (n = 16) were interviewed and generated 69 items for the questionnaire. In Round 2, four clinicians, four researchers, and 11 experts by experience (n = 19) rated how appropriate these items were for the questionnaire. In Round 3, three clinicians, four researchers, and 11 experts by experience (n = 18) re-rated their answers based on their previous rating and the mean group rating for each item in Round 2. Items with high consensus (i.e. more than 83.3% of people rated it 'appropriate') were included in the questionnaire (n = 35). A preliminary measure of shame associated with UO's in OCD was developed; however, its validity and reliability still needs to be tested.

Keyword(s): Shame, OCD, Questionnaire Development, Delphi.

Introduction

Shame in Response to Unacceptable Obsessions

Unacceptable obsessions (UO's) are intrusive thoughts, urges, and images perceived as unacceptable, and these often relate to themes of sex, religion, and violence (Abramowitz et al., 2010). UO's are common in Obsessive Compulsive Disorder (OCD) which is diagnosed by:

> "The presence of obsessions and/or compulsions. *Obsessions* are recurrent and persistent thoughts, urges, or images that are experienced as intrusive and unwanted, whereas *compulsions* are repetitive behaviours or mental acts that an individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly" (DSM-V; American Psychiatric Association, 2013, p. 235).

Abramowitz et al. (2010) report that in OCD particular obsessions and compulsions tend to co-occur, and that UO's tend to be associated with mental compulsions (e.g., thought replacement). Abramowitz et al. (2010) describe UO's and mental compulsions as one of the four dimensions of OCD, and that the other dimensions of OCD include contamination obsessions and cleaning compulsions; obsessions about responsibility for causing harm and checking compulsions; and obsessions about order and ordering compulsions.

Research by Rachman and de Silva (1978) highlighted that UO's were common in the general population which led theorists to question why it was that some people felt distressed by these thoughts and felt a need to engage in compulsions while some people did not. To make sense of this a cognitive understanding of OCD has been applied (Beck, 1976), whereby it was considered that it is not the obsession that causes distress but the meaning given to the obsession. Applying the cognitive theory of emotional distress, Rachman (1993) proposed that thought-action fusion (TAF), the belief that having a thought is morally equivalent to acting on the thought, may lead to feelings of shame when UO's are interpreted by the person as meaning they are a bad person. Such global

negative self-evaluations are understood to be a defining feature of shame (Tangney & Dearing, 2002; Cândea & Szentagotai-Tătar, 2018), and distinguish it from other emotions such as guilt which are seen as situation-specific. Shame is understood to be comprised of different domains (cognitive, affective, and behavioural), and can be both internalised (thoughts about self) and externalised (thoughts about how others perceive the self) (Tangney & Dearing, 2002).

The theory that UO's are associated with shame was supported by Weingarden and Renshaw's (2015) conceptual review of publications that explored the association between shame and OCD. Weingarden and Renshaw (2015) found research that suggested shame was especially linked to UO's. For example, Simonds and Thorpe (2003) gave undergraduates an OCD vignette with harming obsessions and a vignette with checking or washing obsessions and found they gave the harming vignette greater negative social evaluation scores. Weingarden and Renshaw (2015) also report the findings of Beşiroğlu et al. (2010) who gave people without OCD similar vignettes and found participants would hide aggressive and religious obsessions from loved ones and feel greater shame than in comparison to contamination and symmetry obsessions. In response to feelings of obsession-induced shame Weingarden and Renshaw (2015) hypothesise that some compulsions in OCD are attempts to disprove shame-eliciting obsessions.

There is also empirical research that suggests shame is linked to OCD more generally (e.g., Fergus et al., 2010). This research is summarised by Cândea and Szentagotai-Tătar's (2018) meta-analysis which identified ten publications exploring this association and reported a medium effect size regarding the association between scores on shame measures and OCD measures ($k = 10$, $r = 0.317$). These findings were further supported by a recent meta-analysis ([Redacted] et al., 2022, unpublished) that explored the magnitude of the association between shame and OCD symptom severity and found a significant positive correlation with a medium effect size ($r = .295$, $k = 14$, $p = .000$) (see Part A, p. 23). Although it is not possible to determine the causal relationship between

OCD and shame from these findings, it is consistent with the suggestion that shame may play an important contributory role in OCD, at least for some people.

Treatment of Shame in OCD

In Weingarden and Renshaw's (2015) review of shame associated with OCD they state "shame is damaging in interpersonal relationships and motivates social withdrawal; it is linked with depression and suicide, and it acts as a treatment barrier" (p. 3). This is supported by one of the publications included in [Redacted] et al.'s (2022) unpublished meta-analysis which explored the role of shame and symptom severity on quality of life in Obsessive Compulsive and Related Disorders (OCRDs) and found shame was negatively correlated with Quality of Life and more strongly correlated with Quality of Life than OCD symptom severity (Singh et al., 2016). Research has also associated shame to the avoidance of treatment and non-disclosure of symptoms in people with OCD (Marques et al., 2010).

In response to research such as this, clinicians working with people with OCD are seeking ways to target shame associated with UO's in OCD. Cognitive Behaviour Therapy (CBT) and Exposure and Response Prevention (ERP) are currently the treatments of choice for OCD, being approved by the NICE Guidelines (2005; 2006). However, a considerable proportion of people fail to benefit from these interventions. Meta-analyses show that only half of people receiving ERP show clinically significant improvement (Abramowitz, 1998). The 50% recovery rate also applies to both CBT and pure Cognitive Therapy (CT) (Öst et al., 2015). Weingarden and Renshaw (2015) reflect that traditional cognitive behavioural models of OCD tend to state that for some people obsessions trigger anxiety-based cognitions, feelings and behaviours, and that compulsions aim to reduce that anxiety (e.g., Salkovskis, 1999). This focus on anxiety may have been because OCD was historically characterised as an anxiety disorder (DSM-IV, American Psychiatric Association, 1994). Applying an anxiety-based formulation is likely to lead to interventions that target anxiety-

based cognitions and behaviours; consequently, other emotions which may be associated with the development and maintenance of OCD may be overlooked, including shame.

There have been a variety of therapeutic interventions that have been suggested as potentially beneficial for reducing feelings of shame associated with UO's in OCD. Bream et al. (2017) have recommended the benefits of shame-focused ERP whereby instead of habituating to feelings of anxiety one learns to habituate to feelings of shame. Compassion Focussed Therapy (CFT) has also been suggested by Weingarden & Renshaw (2015). This may be beneficial because CFT aims to develop one's ability to self-soothe which can counteract the threat response that shame cognitions can generate (Gilbert and Procter, 2006). Acceptance and Commitment Therapy (ACT) has also been hypothesised to be helpful (Luoma et al., 2015) as ACT may help people to accept UO's rather than trying to push these away, which may have the influence of reinforcing the sense that there is something to be ashamed about. However this research is currently conceptual in nature. Therapeutic groups may also be helpful for reducing feelings of shame. Spragg and Cahill (2015) facilitated a Cognitive Behaviour Therapy (CBT) group for people with OCD and reported that attendees found the group approach de-stigmatising and helpful for reducing shame. Veale et al. (2015) also proposed the benefits of Imagery Rescripting, suggested to be helpful for updating the meanings associated with intrusive obsessive thoughts perceived as unacceptable, although empirical support for this is still lacking.

Measuring Shame Associated with Unacceptable Obsessions in OCD

There are currently no published measures that would help clinicians to evaluate the efficacy of interventions that target shame associated with unacceptable obsessions in the context of OCD. Such a measure would also support further research into shame associated with UO's in OCD, as one of the limitations cited by [Redacted] et al.'s unpublished meta-analysis is that the current measures used to test the association between shame and OCD are imperfect for testing this

association. Currently, therapists and researchers have to use general measures of shame (e.g., the Test of Self-Conscious Affect, Tangney et al., 1989) but these make no reference to the different domains of shame (cognitive, affective, behavioural, internalised and externalised) in the context of OCD (and in particular to UO's). Likewise, current measures of OCD (e.g., the Obsessive Compulsive Inventory Revised; Foa et al., 2002) fail to make reference to the different domains of shame. As shame has been especially linked to intrusive thoughts, urges, and images perceived as unacceptable in OCD (Simonds & Thorpe, 2003) it would be beneficial if a measure measured shame in this context. A self-report measure would be particularly valued as this will have good ecological validity for clinicians working in NHS mental health services, whereby there is already a culture of using self-report measures to evaluate interventions, for example the Patient Health Questionnaire-9 (PHQ-9) (Kroenke & Spitzer, 2002) to measure depression.

The lack of a specific shame-based measure may be partly explained by the lack of consensus on what the common shame-based cognitions, behaviours, and affective experiences are of shame associated with UO's in OCD. Weingarden and Renshaw's (2015) review of shame in OCD elucidated many of the areas in which shame is associated to OCD (e.g., shame about symptoms, shame about having a mental illness). However, there was a lack of information provided on the common shame based-cognitions, feelings, and behaviours experienced in the context of UO's in OCD. In response, there is a need to find out what the markers of shame in this context are and to develop a measure that is both reliable and valid in measuring shame associated with UO's in the context of OCD, demonstrating a commitment to the NHS value of improving quality of care (Dixon, 2009).

As shame can be both internalised and externalised, and is widely understood to have cognitive, affective, and behavioural aspects (Tangney & Dearing, 2002) the development of a measure of shame in the context of OCD should aim to include references to the aforementioned

domains. In response, the underlying theory on which such a measure would be based is the cognitive theory of emotional distress, as proposed by Beck (1976) which reflects that the meaning people make in certain situations can influence their mood and behaviour (and vice versa).

Research Aims

The aim of this study was to develop a self-report measure of shame in the context of obsessions perceived as unacceptable in OCD. The study addressed the following research questions: a) How can shame in the context of intrusive thoughts, urges and images perceived as unacceptable be conceptualised? b) Which self-report items have good face validity when measuring shame in the context of intrusive thoughts, urges and images perceived as unacceptable? Future research can then test the psychometric properties of the resultant measure.

Method

Design

This project used a Delphi study to develop a measure of shame in the context of intrusive thoughts, urges, and images, perceived as unacceptable in OCD. The Delphi method has previously been used in questionnaire development (e.g., Hepworth & Rowe, 2017; Mengual-Andrés et al., 2016) and provides an ideal method by which items can be generated and evaluated by those with expertise (Boateng et al., 2018). The Delphi method is a multi-stage mixed-methods approach that aims to gain consensus and understanding on a topic to which little consensus exists (e.g., how shame in the context of UO's should be measured) (Thangaratinam & Redman, 2005). From an epistemological position the development of a measure takes a critical realist stance by reflecting that there is a construct that can be measured, while acknowledging the validity of this will be filtered through individual perception.

Participant Recruitment

Delphi studies seek to gain the opinion of experts, defined by Cantrill et al. (1996) as "any individual with relevant knowledge and experience of a particular topic" (p. 69). Hsu and Sandford (2010) state the selection of appropriate participants is considered the most important step in a Delphi study as the quality of results directly links to the quality of the participants involved. This project defined experts as; individuals who self-identified as having lived experience of shame associated with UO's; clinicians with a CBT qualification and experience of working with shame associated with UO's; and researchers who have published papers on shame associated with UO's. Sixteen participants were sought for Round 1 following Hsu and Sandford's (2010) guidance that for the first round of a Delphi study "the number of participants is generally between 15 and 20" (p. 4). To ensure equity of voice to people with lived experience during item generation the study aimed to use purposive sampling to recruit eight experts by experience, and eight experts by education (four clinicians and four researchers) for Round 1. The recruitment strategy was tailored to each group of experts and can be seen in Table 1. There was no upper limit set for the number of participants who could participate in the second and third round. This was to protect against participant dropout, which Iqbal and Pipon-Young (2009) state is a common disadvantage of the Delphi method. The whole recruitment process for participants can be seen in Table 2.

Table 1.

Recruitment Strategy

Recruitment Strategy	Clinicians	Researchers	People with Lived Experience
Recruitment Strategy R1	Advertised to on https:// twitter.com/ using @shameinOCD profile Advertised to on the OCD International Listserv Direct messages sent on Twitter if they referenced being a therapist in their biography and they followed the Twitter page used to advertise the study (@shameinOCD). Snowball sampling was used and those who participated were asked to forward the advertisement to other clinicians, researchers, and people with lived experience with a known interest in the area.	Advertised to on https:// twitter.com/ using @shameinOCD profile Advertised to on the OCD International Listserv Direct emails sent to the corresponding authors of publications on shame associated with UO's in OCD, found through a systematic literature search (see Part A, pg. 9). Snowball sampling was used and those who participated were asked to forward the advertisement to other clinicians, researchers, and people with lived experience with a known interest in the area.	Advertised to on https:// twitter.com/ using @shameinOCD profile Advertised to on: https:// ocdaction.org.uk/ Snowball sampling was used and those who participated were asked to forward the advertisement to other clinicians, researchers, and people with lived experience with a known interest in the area. To incentivise people with lived experience to participate, experts by experience who took part in item generation (Round 1) were reimbursed for their time by way of a £20 online voucher.
Recruitment Strategy R2	Emailed if participated in Round 1	Emailed if participated in Round 1	Emailed if participated in Round 1 or asked to wait until Round 2. To incentivise people with lived experience to participate in Round 2 they were entered into a raffle for a £20 voucher.
Recruitment Strategy R3	Emailed if participated in Round 2	Emailed if participated in Round 2	Emailed if participated in Round 2. To incentivise people with lived experience to participate in Round 3 they were entered into a raffle for a £20 voucher.

Table 2.

Recruitment Process for Participants

Stage	Description
1	Click on link in advert or direct message (see Appendix B). Directed to a qualtrics survey.
2	Complete information sheet (see Appendix C)
3	Complete screening form (see Appendix D)
4	Complete consent sheet (see Appendix E)
5	Complete demographic details (see Appendix F)
6	Provide email address to be contacted on
7	Emailed and asked to participate in Round 1. This was done until eight people with lived experience, four researchers, and four clinicians had been recruited. People who completed the above survey after the Round 1 quota had been filled were emailed and informed that they could not take part in the first round of the Delphi study but would be invited to take part in the second and third rounds of the Delphi study.
8	The participants who had participated in Round 1, and those who wished to participate but were unable to participate in Round 1 were emailed and asked to participate in Round 2.
9	Participants who participated in Round 2 were emailed and asked to participate in Round 3.

Participant Information

In total 33 people expressed an interest in participating (four clinicians, four researchers, and 25 people with lived experience). Twenty-one people participated in at least one round (four clinicians, four researchers, and 13 people with lived experience). Participants' demographic details are reported in Table 3. Iqbal and Pipon-Young (2009) propose that ideally a 70 per cent response rate should be maintained between rounds in a Delphi study. The rate of people continuing from Round 1 to Round 2 (14/16 = 87.5%) and from Round 2 to Round 3 (18/19 = 94.7%) was much higher than what is usually expected in Delphi studies (40-75%, Gordon, 1994).

Table 3.

Demographic Details of all Participants

		Round 1 N=16 n (%)	Round 2 N=19 n (%)	Round 3 N=18 n (%)
Expert category	Clinicians	4 (25%)	4 (21.1%)	3 (16.7%)
	Researchers	4 (25%)	4 (21.1%)	4 (22.2%)
	Lived experience	8 (50%)	11 (57.9%)	11 (61.1%)
Gender	Male	4 (25%)	5 (26.3%)	5 (27.8%)
	Female	10 (62.5%)	13 (68.4%)	12 (66.7%)
	Other (Genderqueer)	1 (6.3%)	1 (5.3%)	1 (5.6%)
	Other (Non-binary / third gender)	1 (6.3%)	0 (0%)	0 (0%)
	Prefer not to say	0 (0%)	0 (0%)	0 (0%)
Age range (years)	18-24	3 (18.8%)	3 (15.8%)	3 (16.7%)
	25-29	3 (18.8%)	1 (5.3%)	1 (5.6%)
	30-34	2 (12.5%)	4 (21.1%)	4 (22.2%)
	35-39	2 (12.5%)	2 (10.5%)	2 (11.1%)
	40-44	2 (12.5%)	2 (10.5%)	2 (11.1%)
	45-49	0 (0%)	0 (0%)	0 (0%)
	50-54	2 (12.5%)	3 (15.8%)	2 (11.1%)
	55-59	1 (6.3%)	2 (10.5%)	2 (11.1%)
	60-64	0 (0%)	0 (0%)	0 (0%)
	65-69	0 (0%)	1 (5.3%)	1 (5.6%)
	70-74	1 (6.3%)	1 (5.3%)	1 (5.6%)
	75-79	0 (0%)	0 (0%)	0 (0%)
	80-84	0 (0%)	0 (0%)	0 (0%)
	85 and over	0 (0%)	0 (0%)	0 (0%)
	Prefer not to say	0 (0%)	0 (0%)	0 (0%)
Ethnicity	White	12 (75%)	14 (73.7%)	14 (77.8%)
	Black, African, Caribbean or Black British	1 (6.3%)	1 (5.3%)	0 (0%)

	Asian or Asian British	1 (6.3%)	1 (5.3%)	1 (5.6%)
	Prefer not to say	0 (0%)	1 (5.3%)	1 (5.6%)
	Other (Middle Eastern)	0 (0%)	1 (5.3%)	1 (5.6%)
	Other (Chinese)	1 (6.3%)	0 (0%)	0 (0%)
	Mixed (German/ Korean)	1 (6.3%)	1 (5.3%)	1 (5.6%)
Country of Residence	USA	5 (31.25%)	5 (26.3%)	5 (27.8%)
	UK	5 (31.25%)	6 (31.6%)	6 (33.3%)
	Australia	2 (12.5%)	2 (10.5%)	2 (11.1%)
	Bahrain	0 (0%)	1 (5.3%)	1 (5.6%)
	Romania	1 (6.3%)	1 (5.3%)	1 (5.6%)
	Canada	2 (12.5%)	3 (15.8%)	2 (11.1%)
	Ireland	1 (6.3%)	1 (5.3%)	1 (5.6%)

Reflexivity

Hsu and Sandford (2010) state that Delphi studies for questionnaire development should be conducted by a team of researchers with knowledge of the target construct and of instrument development. The project was facilitated by a trainee clinical psychologist with lived experience of OCD, supervised by a clinician (and researcher) with experience of measure development and working with OCD, and another clinician (and researcher) with experience of working with OCD. One supervisor was trained in Cognitive Behaviour Therapy which may have influenced the cognitive behavioural focus of the project.

Ethics

Full ethical approval was given by the Salomon's Ethics Committee (see Appendix G). To ensure participants provided informed consent people who clicked on the links in the adverts and direct messages were directed to a Qualtrics page that provided an information sheet (see Appendix

C) that fully documented the nature of the study; the potential risks of participating; their right to withdraw from the process at any stage; and notified them that their data could not be retrospectively redacted (after a two-week period). Participants were also provided with the lead author's contact details and offered the opportunity to ask questions via email and telephone. Participants who still wished to participate were then directed to a consent sheet (see Appendix E) and asked to provide their informed consent electronically.

Regarding privacy and confidentiality, McKenna (1994) states the term 'quasi-anonymity' is the most suitable term for the confidentiality provided in a Delphi study because the respondents need to be known to the researchers for them to be contacted in order to provide feedback in Rounds 2 and 3. To participate, participants needed to consent to this process and the anonymous sharing of their feedback on the items generated with the other participants. Participants were also informed that should they say anything that indicated a risk to themselves or others, including past actions, then confidentiality would need to be broken and supervision sought on how to respond to the given situation. Participants were also informed that they would be audio-recorded in Round 1 using an encrypted dictaphone. These audio recordings were stored securely on a password protected USB. Transcriptions of the recordings were securely stored on a password protected computer. The transcripts used pseudonyms and the matching identities were stored securely in a separate password protected file.

After participation, participants were provided a UK (see Appendix H) or international debrief form (see Appendix I). This provided the contact details of the primary author to address any concerns, information on how to submit complaints, and information on relevant support services. By following such procedures, the study followed the BPS Code of Human Research Ethics (2021), and the HCPC Ethical Standards and Code of Conduct (2016).

Procedure

Round 1

Structured interviews were conducted with experts using video-conferencing software whereby the aim was to generate items for a questionnaire measuring shame in the context of UO's in OCD. Face- to-face interviews were chosen for Round 1 following guidance from McKenna (1994) that this helps to increase the response rates in subsequent rounds. Prior to the interview, participants were emailed the interview procedure (see Appendix J) to prepare their thinking. A brief literature review of publications on shame (e.g., Tangney & Dearing, 2002) revealed that there were different domains of shame (i.e. there are cognitive, behavioural, and affective aspects of shame and that shame can be both internalised and externalised). In response, the interview schedule was tailored to explore these aspects of shame in the context of UO's in OCD. The interview schedule also contained information on how shame differs to guilt, and criteria for valid item generation, as based on guidance from Tsang et al. (2017) (e.g., that items should be short, simple, assess only a single issue, and avoid leading respondents). As per Hasson et al.'s (2020) guidance on how to conduct a Delphi study participants were asked to generate as many items as possible to maximise the likelihood of covering the most important aspects of shame associated with UO's in OCD. The length of interviews in Round 1 ranged from 17 to 55 minutes.

Interviews in Round 1 were audio-recorded and afterwards the items participants generated were transcribed by the lead author. If participants repeated the same item twice, this was only transcribed once. Once transcribed, participants were re-sent the items they generated and offered an opportunity to edit these. Once returned, the generated items were sorted into groups of similarly worded items. The categorisation of items was discussed with the lead author's supervisors for a credibility check to improve reliability (as in South et al., 2016). From this list the lead author applied Tsang et al.'s (2017) guidance on what constitutes a good item and extracted what they

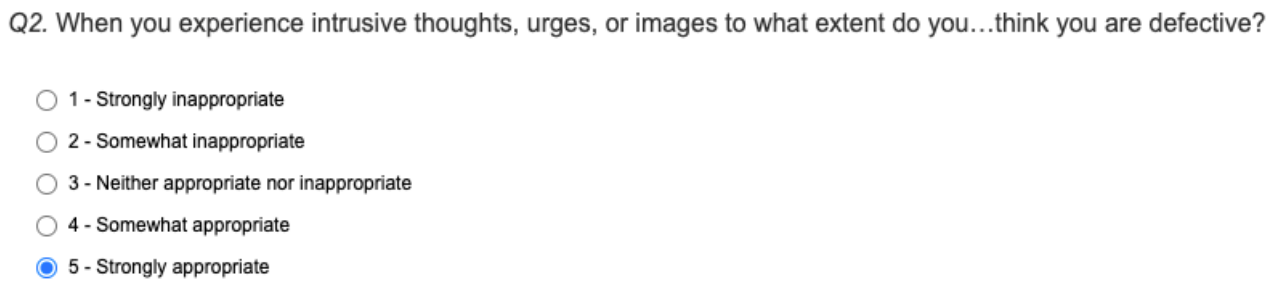
perceived to be the best worded item in each category. These items were included in the questionnaire for Round 2. Items that were not raised by at least three people were excluded. This decision was informed by Whitman (1990) who proposed that to keep the resulting list manageable infrequently occurring items can be omitted.

Round 2

Participants were emailed a link to a Qualtrics questionnaire containing a list of items generated by Round 1. Participants were asked to rate each item on a five-point bipolar Likert scale (Likert, 1932) to indicate how appropriate they felt each item was for a measure of shame in the context of UO's in OCD (see Image 1 for an example). See Appendix K for the Round 2 instructions.

Image 1.

Round 2 Example



Following the structure of the interview schedule, the items were grouped according to the known domains of shame: internalised thoughts (which was split into 'thoughts about self' and 'thoughts about thoughts'); externalised thoughts (which was split into 'thoughts about others thoughts', 'thoughts about others' feelings', and 'thoughts about others' behaviours'); feelings (which was split into 'body sensations', and 'associated feelings'); and behaviours. Hasson et al.

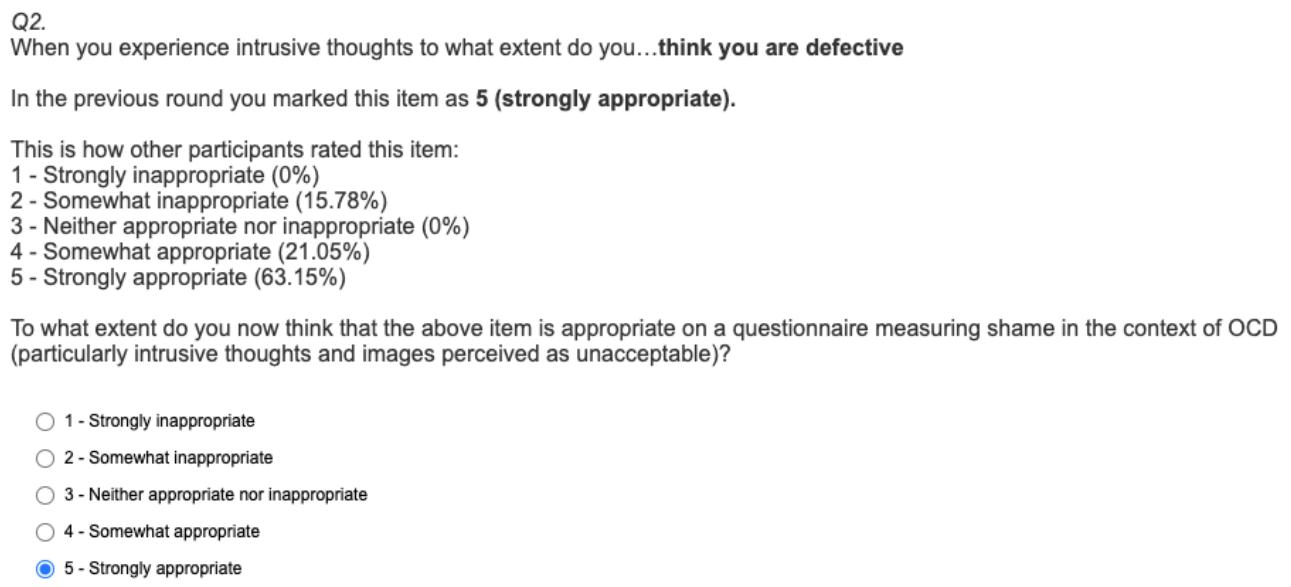
(2000) states the wording used by participants in Round 1 should be as similar as possible when listing items for Round 2. These guidelines were applied, although references to 'I' were changed to 'you' to create consistency across the items (e.g., 'I think I am a bad person' became 'you think you are a bad person'). One item that was accidentally omitted from Round 2 ("not discuss the thoughts with those around you") was included in Round 3 instead. Respondents were given two weeks to respond to the survey, after which time the results were analysed. Round 2 took participants approximately 10 minutes to complete.

Round 3

Each participant in Round 3 was emailed a unique survey tailored to them. For each item, the survey reported the percentage of participant responses for each Likert scale point as well as the participant's rating. Participants were then asked whether they wished to re-rate the item in light of this information (see Image 2 for an example; see Appendix L for the Round 3 instructions). Due to time constraints, respondents were not invited to re-rate the item that was newly introduced in Round 3 in light of the group response. Instead, the first (Round 3) rating for this item was taken as the final response, as is a common approach in Delphi studies in case of respondent attrition (Iqbal & Pipon-Young et al., 2010). Participants were given two weeks to respond before the results were analysed. Round 3 took participants approximately 20 minutes to complete.

Image 2.

Round 3 Example



Data Analysis

For each item in Round 2 and Round 3 the mean rating score was calculated as well as the number (and percentage) of participants who rated each item as 'strongly inappropriate', 'somewhat inappropriate', 'neither appropriate nor inappropriate', 'somewhat appropriate' and 'strongly appropriate'. Percentages were rounded to one decimal place to fit with the consensus categories provided by South et al. (2016). These five categories were also collapsed into three smaller categories 'inappropriate', 'neither appropriate nor inappropriate' and 'appropriate', and the number (and percentage) of participants who rated each item in these categories was calculated.

Consensus

What constituted consensus was defined prior to the administration of the Delphi method as per guidance from Hsu and Sandford (2010). Consensus was defined as more than 50% of participants rating an item as either 'appropriate' or 'inappropriate' (e.g., when 'strongly

appropriate' and 'somewhat appropriate' ratings were collapsed into 'appropriate') (see Table 4 for consensus categories). This was based on examples of prior Delphi studies (e.g., South et al., 2016).

Items would be included in the final questionnaire if they reached a high level of consensus for 'appropriate'. This decision was made as acquiescence bias was expected to influence the results and raise the mean rating score for each item. Acquiescence bias is the tendency for participants to consistently rate items in a certain direction regardless of the 'stem' of the item (Maeda, 2015). Items that did not generate high consensus for the 'appropriate' category were cut from the list of items used to measure shame in the context of OCD. The lead author analysed the data but the findings were shared with their two supervisors for a validity check.

Table 4.

Consensus Categories

	Percentage of people who rated item as 'inappropriate'	Percentage of people who rated item as 'neither appropriate nor inappropriate'	Percentage of people who rated item as 'appropriate'	Excluded or Included
High consensus to exclude item	Greater than 83.3%	Greater than 83.3%		Excluded
Moderate consensus to exclude item	Between 66.8% and 83.3%	Between 66.8% and 83.3%		Excluded
Weak consensus to exclude item	Between 50% and 66.7%	Between 50% and 66.7%		Excluded
No consensus	Less than 50%	Less than 50%		
No consensus			Less than 50%	Excluded
Weak consensus to include item			Between 50% and 66.7%	Excluded
Moderate consensus to include item			Between 66.8% and 83.3%	Excluded

High consensus to include item	Greater than 83.3%	Included

Feedback

Following conclusion of the Delphi study the lead author emailed the findings to the ethics committee that approved the study and to the participants.

Results

Round 1

The 16 participants generated 632 items (researchers: *N*= 181, *M* = 45.25, range = 40 to 67); (clinicians: *N*= 181, *M* = 45.25, range = 38 to 59); (people with lived experience: *N*= 270, *M* = 33.75, range = 18 to 45). Each participant generated an average of 39.5 items (see Appendix M for an example of the items generated).

The 632 items were grouped together with duplicates and near duplicates creating 277 categories of similarly worded items (see Appendix N for an example of the categories created). From these 277 categories, 69 contained items that were repeated by three or more participants. For these 69 categories the best worded item was extracted as per guidance from Tsang et al. (2017) (see Appendix O for a list of the 69 items generated by three or more people). These 69 items were then re-categorised into different domains of shame. 19 items referred to thoughts about the self, 6 referred to thoughts about intrusive thoughts, 10 referred to thoughts about how one will be perceived, 3 referred to thoughts regarding the feelings of other people, 5 referred to thoughts regarding how others will behave. There were 8 items generated regarding body sensations, 6 regarding associated feelings, and 12 items generated regarding one's behaviour in response to UO's.

Round 2

19 participants were asked to rate the extent to which they thought the items generated were appropriate for a questionnaire measuring shame associated with UO's in OCD (see Image 2 for an example). See Appendix P for the results for each item. When collapsed into the three categories of 'inappropriate', 'neither appropriate nor inappropriate' and 'appropriate' it was found that eight items were rated by 50-66.7% of people (weak consensus) as appropriate. 26 items were rated by 66.8-88.3% of people (moderate consensus) as appropriate. 33 items were rated by greater than 88.3% of people (high consensus) as appropriate. Two items were rated by more than 50% of people as inappropriate.

The mean score for all items was 4.2 out of 5. For people with lived experience the mean score was 4.1, for clinicians 4.5, and for researchers 4.1. For all participants the mode rating was 5, and the median rating was 5. Mean scores for individual items ranged from 3.2 to 4.8, while mean scores for participants ranged from 3.4 to 4.9.

Round 3

18 participants were asked to re-rate the extent to which they felt the items generated were appropriate for a questionnaire measuring shame associated with UO's in OCD (see Image 2 for an example). See Appendix Q for the results for each item. When collapsed into the three categories of 'inappropriate', 'neither appropriate nor inappropriate' and 'appropriate, 11 items were rated by 50-66.7% of people (weak consensus) as appropriate. 22 items were rated by 66.8-88.3% of people (moderate consensus) as appropriate. 35 items were rated by greater than 88.3% of people (high consensus) as appropriate. One item was rated by more than 50% of people as inappropriate. See Table 5 for an overview.

The mean score for all items was 4.3 out of 5. For people with lived experience the mean score was 4.3, for clinicians 4.5, for researchers 4.2. For all participants the mode rating was 5, and the median rating was 5. Mean scores for individual items ranged from 3.2 to 4.9, while mean scores for participants ranged from 3.4 to 4.7.

Table 5

Items in Each Consensus Category After Round 3

Consensus Level	Item	Domain	% rated 'appropriate'
High consensus	Think you are not a normal person	Internalised thoughts (about self)	100%
	Think you are a bad person	Internalised thoughts (about self)	100%
	Think that something is wrong with you	Internalised thoughts (about self)	100%
	Think that you are worthless	Internalised thoughts (about self)	100%
	Think that you are unloveable	Internalised thoughts (about self)	100%
	Not want people to find out what you are thinking	Internalised thoughts (thoughts about thoughts)	100%
	Think others will think you are a bad person	Externalised thoughts (thoughts about others thoughts)	100%
	Think you would be judged if other people knew about these thoughts	Externalised thoughts (thoughts about others thoughts)	100%
	Think others will think less of you	Externalised thoughts (thoughts about others thoughts)	100%
	Think others will think there is something wrong with you	Externalised thoughts (thoughts about others thoughts)	100%

Think others will not understand	Externalised thoughts (thoughts about others thoughts)	100%
Not discuss the thoughts with those around you*	Behaviours	100%
Feel embarassed	Feelings (associated feelings)	100%
Think you will be rejected	Externalised thoughts (behaviours)	100%
Think you will be outcast by others	Externalised thoughts (behaviours)	100%
Think others would withdraw from you	Externalised thoughts (behaviours)	100%
Think that if others found out about your thoughts that it would negatively affect your relationship	Externalised thoughts (behaviours)	100%
Think you are defective	Internalised thoughts (about self)	94.4%
Feel hopeless	Feelings (associated feelings)	94.4%
Feel disgust	Feelings (associated feelings)	94.4%
Feel self-contempt	Feelings (associated feelings)	94.4%
Feel self-conscious	Feelings (associated feelings)	94.4%
Think others will feel disgusted	Externalised thoughts (others feelings)	94.4%
Isolate yourself	Behaviours	94.4%
Withdraw from others	Behaviours	94.4%
Think these thoughts are unacceptable	Internalised thoughts (thoughts about thoughts)	94.4%
Feel internally dirty	Feelings (body sensations)	94.4%

	Feel sick	Feelings (body sensations)	94.4%
	Think this is morally wrong	Internalised thoughts (about self)	88.9%
	Think you are to blame for your thoughts	Internalised thoughts (about self)	88.9%
	Think you have to keep this secret	Internalised thoughts (thoughts about thoughts)	88.9%
	Think others would think you are disgusting	Externalised thoughts (thoughts about others thoughts)	88.9%
	Think that others will think that you shouldn't be around people	Externalised thoughts (thoughts about others thoughts)	88.9%
	Feel a pit in your stomach	Feelings (body sensations)	88.9%
	Avoid situations that may trigger thoughts	Behaviours	88.9%
Moderate consensus	Feel anxious	Feelings (associated feelings)	83.3%
	Avoid places that would be associated with the thoughts that you have	Behaviours	83.3%
	Think you are different to the cultural expectations of how you should be	Internalised thoughts (about self)	83.3%
	Think you shouldn't have these thoughts	Internalised thoughts (thoughts about thoughts)	83.3%
	Think you are inadequate	Internalised thoughts (about self)	77.8%
	Think you are different	Internalised thoughts (about self)	77.8%
	Think you are pathetic for not being able to control these thoughts	Internalised thoughts (about self)	77.8%

	Think thinking these thoughts are as bad as doing them	Internalised thoughts (thoughts about thoughts)	77.8%
	Think others will think you are dangerous	Externalised thoughts (thoughts about others thoughts)	77.8%
	Think others will see you as crazy	Externalised thoughts (thoughts about others thoughts)	77.8%
	Feel flushed	Feelings (body sensations)	77.8%
	Try not to think the thoughts	Behaviours	77.8%
	Look the other way when faced with a reminder of the obsession	Behaviours	77.8%
	Feel a need to confess	Behaviours	77.8%
	Think these thoughts are your true self	Internalised thoughts (about self)	72.2%
	Question yourself a lot	Internalised thoughts (about self)	72.2%
	Feel a tightness in your chest	Feelings (body sensations)	72.2%
	Think others will feel afraid	Externalised thoughts (others feelings)	72.2%
	Think others will feel angry	Externalised thoughts (others feelings)	72.2%
	Have to do a certain action	Behaviours	72.2%
	Seek reassurance	Behaviours	72.2%
	Think others may report you to the authorities	Externalised thoughts (behaviours)	72.2%
Weak consensus	Think you are crazy	Internalised thoughts (about self)	66.7%

	Think these thoughts are associated with events from your past in which you should/ shouldn't have done something	Internalised thoughts (about self)	66.7%
	Think others would think your intrusive thoughts are true	Externalised thoughts (thoughts about others thoughts)	66.7%
	Avoid eye contact	Behaviours	66.7%
	Think you want the thought to happen even though you absolutely do not	Internalised thoughts (about self)	61.1%
	Wish you were invisible to others	Internalised thoughts (about self)	61.1%
	Think you are losing control	Internalised thoughts (about self)	55.6%
	Try to pretend that everything is fine	Behaviours	55.6%
	Think the thought is right/true?	Internalised thoughts (thoughts about thoughts)	50%
	Feel hot	Feelings (body sensations)	50%
	Feel heavy	Feelings (body sensations)	50%
No consensus	Feel out of your body	Feelings (body sensations)	33.3%

* Round 2 result from 18 participants

Changes from Round 2 to Round 3

In Round 3 35 items reached high consensus for 'appropriate' in comparison to 33 items in Round 2 (see Appendix R). Eleven participants increased their mean rating score (at two decimal places) for items from Round 2 to Round 3. Five participants decreased their mean rating score.

Two participants scored the same for every item (with a slight decrease in their mean on account of the inclusion of the new item). Researchers and people with lived experience showed an increase in their mean rating score for items from Round 2 to Round 3. Clinicians showed a decrease in their mean rating scale from Round 2 to Round 3. In total, participants showed an increase in their mean rating score for items from Round 2 to Round 3 (see Appendix S).

Preliminary Measure Developed

The 35 items that achieved high consensus as appropriate have been used to develop a preliminary questionnaire that measures shame in the context of OCD, named the Response to Unacceptable Obsessions Scale (RUOS) (see Appendix T). The RUOS will ask respondents to rate the extent to which they agree with the 35 items on a 5 point Likert scale (ranging from strongly disagree to strongly agree). The questionnaire asks respondents to consider how they have responded to unacceptable obsessions over the past two weeks. The past two weeks was chosen as a time frame because this corresponds to other widely used measures of symptom severity such as the PHQ-9 (Kroenke & Spitzer, 2002), and will have good ecological validity for clinicians working in NHS mental health services.

Discussion

Interpretation of Results

The aim of this project was to develop a self-report measure of shame in the context of UO's in OCD, with the objectives for this being to answer: a) How can shame in the context of intrusive thoughts, urges and images be conceptualised? b) Which self-report items have good face validity when measuring shame in the context of intrusive thoughts, urges and images?

In Round 3, 35 items were rated by more than 83.3% of participants as ‘appropriate’ and included in the RUOS. The items generated show good face validity as they are similar to what is already known about shame associated with UO's in OCD. Eight items referred to thoughts about oneself. For example, the item ‘think you are a bad person’ reflects literature on shame which states it is associated with global negative evaluations of the self (Tangney & Dearing, 2002). Three items referred to thoughts about UO’s. For example, ‘not want people to find out what you are thinking’ reflects literature that suggests shame leads to non-disclosure of symptoms (Marques et al., 2010). Seven items referred to thoughts about how others would perceive these thoughts, for example, ‘think you would be judged if other people knew about these thoughts’. One item refers to thoughts about others feelings, for example ‘think others will feel disgusted’. Four items referred to thoughts about others behaviours. For example, ‘think you will be outcast by others’ reflects literature about externalised aspects of shame (Tangney & Dearing, 2002) and suggests this is present in people with UO’s. Three items referred to body sensations, for example ‘feel internally dirty’. This reflects literature which suggests shame has affective aspects (Tangney & Dearing, 2002) and suggests this is present in people with UO’s. Five items referred to associated feelings (e.g., ‘feel disgust’). The finding that shame is associated with disgust reflects the findings of Olatunji and Cox (2015) who found self-disgust mediated the relationship between shame and OCD. Four items referred to behaviours in response to UO’s (e.g., ‘withdraw from others’). This reflects literature on the behavioural aspects of shame (Tangney & Dearing) and how it can have an isolating effect on people (Weingarden & Renshaw, 2015). Items which did not reach high consensus but were still rated by more than 50% of people as ‘appropriate’ included ‘feel a need to do a certain action’ which supports the hypothesis that compulsions can be associated with a desire to reduce shame (Weingarden & Renshaw, 2015). The item 'thinking thoughts are as bad as doing them’ also reflects the theory of ‘Thought Action Fusion’ proposed by Rachman (1993) regarding why people may feel shame about UO’s.

Historically OCD was characterised as an anxiety disorder (DSM-IV, American Psychiatric Association, 1994). The development of the RUOS contests this perspective, and supports the conceptualisation of OCD as a separate Obsessive Compulsive Related Disorder (OCRD) (DSM-V, APA, 2013). By speaking to clinicians, researchers, and people with lived experience it is clear that people with OCD (particularly UO's) can experience shame, and that OCD is a much broader condition than an anxiety disorder.

Our project also develops the cognitive-behavioural formulation of OCD (Beck, 1976; Salkovskis, 1985). This model states that when perceived as unacceptable, intrusive thoughts can trigger a cognitive, affective, and behavioural response, and that compulsions are performed to reduce this feeling. The experts who took part in our project developed and rated shame-specific cognitions (e.g., 'think others will think less of you') as well as shame-specific behaviours (e.g., 'not discuss the thoughts with those around you') as appropriate for the final measure, which validates the cognitive-behavioural aspects of shame associated with UO's in OCD.

A letter documenting the findings with a copy of the RUOS has been sent to the ethics board who approved this study (see Appendix U) and the participants have also been sent a letter documenting the findings (see Appendix V). To disseminate the findings of this research, this project will now be submitted to the Journal of Obsessive-Compulsive and Related Disorders (see Appendix W for author guidelines).

Strengths and Limitations

A major strength of this project was the inclusion of people with lived experience in the generation of items and in assessing the face validity of items. This increases the likelihood that the measure will have good face validity for people with lived experience and that the items will be understood by lay people. This also aligns with the NHS value of working together (Dixon, 2009). Another strength of this project was interviewing participants in Round 1. Often Delphi studies will

use questionnaires in every round (Thangaratinam & Redman, 2005). By offering a video interview this allowed an opportunity to clarify any concerns people had and to check they were clear in what they were being asked to do, and that they were clear on the concepts of shame associated with UO's in OCD. It would have been more difficult to have controlled for this if questionnaire surveys were used. This also likely reduced drop-off effects in subsequent rounds (McKenna, 1994). Another strength was that after Round 1 participants were re-sent the items they generated and offered an opportunity to edit these. Of the 16 participants who participated, only one took the opportunity to make edits. This process increased the likelihood that the items had been transcribed accurately and provided an accurate representation of what participants spoke about. Finally the use of a Delphi study allowed participant anonymity that would not have been gained from a focus group, reducing social desirability effects (Bowles, 1999).

One of the limitations of this project was that participant recruitment lacks replicability. Most of the clinicians and researchers who participated were directly contacted by the lead author (only one clinician responded to the advertisements placed on social media). Attempts were made to make this process replicable (e.g., contacting clinicians who followed the @shameinOCD twitter page, and emailing corresponding authors of papers identified from a systematic literature search). However, there is the potential for researcher bias regarding which clinicians and researchers were contacted first. Furthermore, many of the people with lived experience self-selected from OCD websites and OCD Twitter communities, which may produce a biased sample, as people are likely to come forward who have an interest in the topic. This means this sample may not be representative of all people with OCD.

For all participants there was also no formal confirmation of clinician/researcher qualifications or, for lived experience participants, OCD diagnosis. However, this limitation was mitigated by interviewing each person in Round 1, as from this the lead author was able to

informally verify that every participant demonstrated relevant expertise in the topic area and no participant failed to demonstrate this expertise.

Further limitations of the project included that participants tended to rate the items very highly with a mean rating of 4.18 out of 5 in Round 2, and 4.28 in Round 3. This may reflect the appropriateness of the items generated in Round 1, and the inclusion in Round 2 of only items generated by three or more people. However, it may also reflect a disadvantage of using the Likert scale that was used to assess appropriateness. A known disadvantage of Likert scales is acquiescence bias, which is the tendency for participants to consistently rate items in a certain direction regardless of the 'stem' of the item (Maeda, 2015). This may be evidenced in participant 5's responses as they scored a mean rating of 4.97 in Round 2 which may indicate that they had a tendency to be overly agreeable. However, this participant's responses were not excluded from the analysis as it possible that they believed all the items were highly appropriate. Nonetheless, Likert scales (Likert, 1932) are commonly used in Delphi studies to report feedback (e.g., South et al., 2016) and were deemed preferable to presenting mean scores, as this would have lost insight into the range of participants answers for each item.

As discussed, an advantage of the interview aspect of Round 1 was the opportunity to clarify any queries and misunderstandings. By hosting Rounds 2 and 3 online there was no opportunity for participants to check in and make sure they understood the instructions. To overcome this limitation, participants could have been provided with an optional open question at the end of each survey asking people to raise any queries they may have had.

A limitation of Delphi studies is that there is often a high attrition rate between rounds (Gordon, 1994). To account for this, Rounds 2 and 3 were opened to a wider pool of participants, with no quotas. While in Round 1 parity of voice was given to people with lived experience (n = 8) in relation to experts by training (researchers and clinicians) (n = 8), in Rounds 2 and 3 there were more people with lived experience (n = 11) than clinicians and researchers (n = 8 Round 2, n = 7

Round 3). However, the mean scores of clinicians, researchers, and people with lived experience were relatively similar after Round 3, supporting the consensual view on the final set of items and indicating this was unlikely to have affected the final results.

Regarding participant demographics there is relatively broad diversity with regards to gender, age, and ethnicity (see Table 3). However, countries of residence were almost entirely high income countries and so the translatability of the final survey to people living in low and middle income countries cannot be assumed. As Rodriguez et al. (2016) state, shame is conceptualised differently in different cultures, arguing that in individualistic Western societies shame is often perceived negatively, whereas in Asian collectivist cultures shame is often perceived as adaptive and beneficial. The cultural aspects of shame are reflected in the item 'think you are different to cultural expectations of how you should be'. However, this did not reach high consensus and so will not be included in the RUOS. The scale developed is from a western standpoint and as shame associated with UO's in OCD may be conceptualised differently in non-Western cultures, it would be beneficial if the RUOS could be translated into other languages and its psychometric properties tested to explore similarities and differences with the English language version tested in high income countries. If it is found that the questionnaire does not translate well to other cultures this could provide avenues for future research. For example, the Delphi study method used in this project could be used with a new non-Western sample to generate a separate non-Western scale, or items could be generated and combined with the RUOS to form a more international measure.

It is also important to note that there were no participants below eighteen years of age, or aged 75 and over and so this measure is based on the perspective of those aged 18 to 74. People outside these age ranges may have different experiences of shame in the context of OCD and this should be considered before the measure is applied to people in these age groups.

A further limitation of this project was that by taking a quantitative approach to Round 2 and 3 there was a lack of information on why people chose certain answers. Likewise, it would have

been interesting to have understood why they changed their answers from Round 2 to Round 3, however the approach did not offer insight into this.

Another limitation of our study was that there was no attempt to improve the quality of the items generated. Tsang et al. (2017) provide guidance on what good items for a questionnaire look like and we provided a summarised version of this to participants to help with item generation (see Appendix J). However, some of these rules were not followed and items were generated that did not meet the criteria set by Tsang et al. (2017) (e.g., that items should be short, simple, assess only a single issue, and avoid leading respondents). For example, there are two items which contain two options in "events from past when you should/shouldn't have done something", and "this thought is right/true". Neither of these items generated strong consensus for appropriate, and so were not included in the final questionnaire, but this may have been because they were poorly worded in the first instance, and if separated these items may have reached high consensus for appropriate.

Research Implications

Boateng et al.'s (2018) guide to questionnaire development begins with item development, which consists of item generation, and evaluation of the content validity of those items. As this is now complete the next stage of the questionnaire's development is scale development. This consists of pre-testing the questions developed by this project (e.g., using cognitive interviews), survey administration, item reduction analysis (e.g., using inter-total correlations), and extraction of factors (e.g., using factor analysis). This would help identify the factor structure of the RUOS and whether or not there are sub-scales that can be identified. In addition, scale evaluation would consist of tests of dimensionality (e.g., using confirmatory factor analysis), tests of reliability (e.g., using test re-test reliability), and tests of validity (e.g., using content validity, criterion validity, and contrast validity tests). Once this is completed, it would then be helpful to administer the questionnaire to people who do and do not self-report shame in the context of OCD, and to examine group differences to

identify if a clinical cut off score can be proposed. This would be helpful for distinguishing between when someone does and does not meet the threshold for a shame specific intervention for UO's. What was unable to be ascertained during the creation of the questionnaire was whether shame-specific cognitions related to shame-specific behaviours, and this is an area that future research on the questionnaire could also shed light on (through factor analysis), with implications for the development of a shame-specific cognitive-behavioural formulation of OCD.

Once this is completed, the final measure should be ready for use. A measure of shame associated with UO's in OCD will be of value to researchers who wish to evaluate which interventions for shame in the context of OCD are most helpful. Compassion Focused Therapy (CFT) (Gilbert & Procter, 2006), Cognitive Behaviour Therapy (CBT) (Spragg and Cahill, 2015), Exposure and Response Prevention Therapy (ERP) (Bream et al., 2017), Imagery Rescripting (Veale et al., 2015), and Acceptance and Commitment Therapy (ACT) (Wetterneck, 2014) have all been proposed as potentially being beneficial for reducing shame associated with UO's in OCD, however, these suggestions still lack robust empirical support. Research could be conducted whereby participants could be randomised to receive one of the above interventions. Using a between subjects design the RUOS measure could be used to explore differences in efficacy of these different approaches in reducing obsession-related shame and to test whether reductions in shame (as measured by the RUOS) mediate improvements in OCD symptom severity. This could help identify if there are specific intervention approaches that are more or less effective in reducing obsession-related shame and if reductions in shame lead to improvements in OCD symptom severity.

Clinical Implications

This project identified some of the specific thoughts, feelings, and behaviours associated with shame in the context of UO's in OCD. If clinicians hold awareness of these factors when

assessing and working with people with OCD they may be able to consider the role of shame in their formulations, and whether it would be helpful to tailor interventions to target certain shame cognitions and behaviours. For example, approaches such as ERP therapy could be helpful for habituation to shame and overcoming avoidance (Bream et al., 2017).

Although it has not yet been validated, when it is, the RUOS will provide clinicians with the first specific measure to evaluate interventions that target shame in the context of UO's in OCD. Measures such as the TOSCA (Tangney et al., 1989) can be used to measure shame, however these are not specific to OCD. If presented at the beginning and end of treatment the RUOS could be used to measure change. It could also be used to highlight to both clinicians and people experiencing OCD which shame-specific cognitions and behaviours are present and can be targeted. For example, someone may show low internalised shame cognitions, but high externalised shame cognitions for which an intervention targeting internalised shame may be unhelpful.

Conclusion

Through the facilitation of a Delphi study, four clinicians, four researchers and eight people with lived experience generated 632 items for a questionnaire that aims to measure shame in the context of UO's in OCD. These 632 items were reduced to 69 items which were presented to 19 participants (4 clinicians, 4 researchers, and 11 people with lived experience) in order to seek consensus on which items should be included in a questionnaire measuring shame associated with UO's in OCD. Consensus was defined as when over 83.3 % of respondents endorsed an item as 'appropriate'. This process left 35 items which have been used to create the Response to Unacceptable Obsessions Scale (RUOS) which will now be assessed for its psychometric properties. This is the first measure that can be used by clinicians, researchers, and people with lived experience to identify the level of shame a person may be feeling in the context of UO's, and can be used to evaluate the efficacy of treatment. While this study had methodological limitations, it

provides value to clinicians, researchers and people with lived experience by identifying the specific cognitive, behavioural, and affective aspects of internalised and externalised shame in the context of OCD, and developing a preliminary measure of shame in the context of UO's in OCD.

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Section C

Appendices

Appendices

Appendix A.

Critique of Survey Studies Using Protogerou and Hagger's (2020) Quality of Survey Studies in Psychology (Q-SSP)

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Appendix B.

MRP Advert

Canterbury Christ Church University

Measuring shame associated with perceived unacceptable thoughts

What's the study about?

Current treatments for OCD tend to focus on anxiety to the exclusion of shame. Research indicates shame is prevalent in OCD and treating shame can be helpful for those who may not find anxiety based support helpful. There is currently no way to measure if treatment for shame associated with perceived unacceptable thoughts is helpful. Our aim is to create a questionnaire that measures shame associated with perceived unacceptable thoughts in order to improve treatment outcomes for people with OCD.

What will I need to do?

1. Take part in a 30 minute interview about perceived unacceptable thoughts and associated feelings of shame.
2. And/or take part in a follow up survey rating how much you agree that the questions developed through the interview process accurately measure shame associated with perceived unacceptable thoughts.

Can I take part?

You can take part if you are any of the following:

- A clinician who has provided therapy to people with perceived unacceptable thoughts and associated feelings of shame.
- A researcher who has published on perceived unacceptable thoughts and associated feelings of shame.
- A person who has lived experience of perceived unacceptable thoughts and associated feelings of shame.

What will I receive?

- The first seven people with lived experience to participate will be offered a £10 voucher

What should I do if I wish to take part?

Follow this link: https://cccusocialsciences.az1.qualtrics.com/jfe/form/SV_4lQxThZhz3je-AV8

You will be provided an information sheet on the study to read and sign. You will also be asked to confirm you meet the criteria of an expert. You will then be provided a consent sheet to read and sign, and asked to provide your demographic details.

Who should I contact if I want to know more?

[redacted]

Appendix C.

Information Sheet

Information Sheet

Thank you for expressing an interest in our study. We would now like you to read the information sheet.

Introductions:

Hello, my name is [redacted] I'm a Trainee Clinical Psychologist at the Salomons Institute, Canterbury Christ Church University. I am conducting this research for my Major Research Project, a component of the Doctorate in Clinical Psychology. I am co-supervised [redacted]

We would like to invite you to take part in a research study. Before you decide whether to take part, it is important that you understand why the research is being done and what it would involve for you.

What is the purpose of the study?

Currently Cognitive Behaviour Therapy (CBT) with a focus on Exposure and Response Prevention (ERP) is the psychological treatment of choice for Obsessive Compulsive Disorder (OCD). Yet research shows that only half of the people receiving CBT and ERP show clinically significant improvement. ERP targets anxiety, but research has shown that many people with OCD also report high levels of shame. This shame is often related to unacceptable intrusive thoughts, urges, and images (often violent, sexual or religious in nature). Despite this the role of shame in OCD has been largely overlooked in clinical practice.

It is thought that targeting shame in treatment may lead to improved outcomes. To help clinicians to identify if clients are experiencing shame in the context of unacceptable intrusive thoughts a measure that specifically aims to identify this is necessary. This is because current measures of shame and OCD both fail to explore shame in relation to unacceptable intrusive thoughts and images. A measure of this will also help clinicians to evaluate whether interventions that target shame in the context of unacceptable intrusive thoughts, urges, and images are effective.

For this study, we would like to gather the opinion of clinical and research experts and people with lived experience about shame and OCD in order to gain consensus on how to measure shame in the context of unacceptable intrusive thoughts and images.

Why have I been given this information sheet?

You have been given this information sheet as you have responded to one of our adverts and have expressed an interest in taking part in our study. Either you will have lived experience of shame in the context of unacceptable intrusive thoughts, urges, and images, or you will be a clinician with many years of experience supporting those with shame and unacceptable intrusive thoughts and images, or you will be a researcher with publications in this area. More than one of these categories may also apply to you.

Am I able to take part?

If you are someone with lived experience: You will be able to participate if you answer 'yes' to a screening question that will ask if you have experienced or are experiencing feelings of shame in the context of unacceptable thoughts, images, and urges (UI's).

If you are a clinician: You will be able to participate if you answer 'yes' to a screening question that will ask if you have an active and specialist interest in shame in the context of UI's, and/or whether you have supported service users experiencing shame in the context of UI"s, and/or whether you have qualifications in CBT/a third wave CBT model. You will also be asked to supply details regarding your professional qualifications.

If you are a researcher: You will be able to participate if you have published in the area of shame in the context of UI's. You will also be asked to supply details regarding your professional qualifications.

For all groups: If you meet the criteria and agree to take part, we will then ask you to sign a consent form. You are free to withdraw at any time, without giving a reason.

The study is split into three rounds. We require twenty one people to complete the first round. The people who will participate in this first round will be the first seven clinicians, researchers and experts by lived experience to respond. These participants will be able to also participate in the second and third rounds of the study. If you express an interest in participating but are not one of the first twenty one participants you will be invited to take part in the second and third rounds of the study.

What will happen to me if I take part?

If you are selected for the first round of the study you will participate in an interview (up to thirty minutes long) over Skype or telephone with the primary researcher. You will be asked questions about the different aspects of shame in the context of unacceptable intrusive thoughts and images. Using this discussion as a reference point you will then be asked to construct potential items for a measure of shame in the context of unacceptable intrusive thoughts and images. The primary researcher will audio-record your interview and then transcribe your feedback and the feedback of the other participants. The researchers will then remove duplicates or items that do not relate to shame in the context of UI's. The remaining items will form a list of potential items for a questionnaire measuring shame in the context of UI's, and these items will be separated by cognitive, behavioural and affective domains of shame to ensure the final measure captures these areas.

If you are selected for the second and third rounds of the study you will be invited to use an online questionnaire to provide feedback on the items generated by rating on a scale the extent to which you agree with their inclusion in a measure of shame in the context of unacceptable intrusive thoughts and images. This can be completed in your own time.

After analysing every participant's response to this the researchers will then send another online questionnaire for you to see the average rating each item has received from the participants, and to ask whether you wish to review your own rating in response to this. For inclusion in the final questionnaire each item must reach a level of consensus from the participants that they agree it measures shame in the context of unacceptable intrusive thoughts and images. Items that do not generate agreement will be cut from the list of potential items for the final questionnaire.

In this way the process will have three rounds, one for the original interview to generate items, one to provide feedback on the items generated, one to seek agreement on the items generated. This should take place over a three month period. This process is known as a Delphi study and from it the researchers will decide which statements should be included in a questionnaire of shame in the context of unacceptable intrusive thoughts and images.

It is important to note that while shame and unacceptable intrusive thoughts will be discussed you will not need to disclose specific examples of these experiences. Furthermore, as part of the project you will be asked to complete a questionnaire that gathers demographic information (including gender, age and ethnicity). All data you provide will be anonymised and stored securely (see section on confidentiality in part 2).

Expenses and payments

As interviews will be conducted using telephone or Skype expenses for travel will not be paid. Meals, child-care, compensation for loss of earnings, will not be provided. We would like to offer the seven lived experience experts in the first round of the study a £20 voucher. We would also like to enter every lived experience expert who participates in the second and third round of the study into a prize draw for one £20 voucher, for each of the two rounds.

What are the possible disadvantages and risks of taking part?

While efforts have been made to minimise the risk of distress (for example, by not requesting disclosure of the specifics of unacceptable intrusive thoughts and images) you will be asked to engage in discussions about the different aspects of shame in the context of unacceptable intrusive thoughts and images. This could lead to some feelings of distress. I will make every effort to create a safe and comfortable space within the interviews to discuss your experiences, and you will be welcome to take a break or to stop the interview at any time. You will be provided my email address should you wish to speak to me about any distress the project has caused and you are under no obligation to continue the study should you not wish to do so.

What are the possible benefits of taking part?

We cannot promise that the study will help you but we hope the information we get from this study will help improve the treatment of people with unacceptable intrusive thoughts and images. We hope that exploring shame in the context of unacceptable intrusive thoughts and images alongside like-minded experts may also be a de-stigmatising experience. We also hope that participation will provide a sense of purpose and meaning in the knowledge that you are contributing to a currently underdeveloped area of research.

What will happen if I don't want to carry on with the study?

If you decide you no longer wish to participate in the project you will not have to complete an interview if you have not done so already, and will you not need to complete the online surveys if you have not done so already. However, any information that has already been analysed will not be able to be destroyed without affecting the statements created as a result of your feedback and the feedback of the other participants. A two-week period will be provided after each round of data collection for you to request your data not be analysed. If this is not taken the data will be included in the data analysis and any subsequent publications in an anonymised way.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to me and I will do my best to address your concerns. You can contact me by leaving a message on the 24-hour voicemail phone number [redacted] Please leave a contact number and say that the message is for me [redacted] and I will get back to you as soon as possible. You may also contact me at: [redacted]

If you remain dissatisfied and wish to complain formally, you can do this by contacting [redacted]

Should you feel you require support from mental health services for the content discussed or in regards to your complaint we will signpost you to mental health support services, and any relevant faith or community organisations.

Will information from or about me from taking part in the study be kept confidential?

Your feedback in the interview will be audio-recorded using an encrypted dictaphone. These audio recordings will be stored securely on a password protected USB. The recordings will be transcribed and the transcriptions will be securely stored on a password protected computer. The transcript will use pseudonyms, and the matching identities will be stored securely in a separate password protected file. A limited number of authorised people will have access to view this data and any other data files that include participant identity information (this will include the researchers, the sponsors, the regulatory authorities and the Research and Development audit team interview). However, I would be obliged to pass on information from you to a third party if, as a result of something you told me, I were to become concerned about your safety or the safety of someone else, including if this has happened in the past. Otherwise all information which is collected from or about you during the course of the research will be kept strictly confidential, and any information about you will have your name and address removed so that you cannot be recognised. You retain the right to check the accuracy of the data held about you and to correct any errors.

Throughout the project the items you generate and your opinions on the items generated will be anonymously shared with the other attendees. This data may also be used anonymously in future research.

After completion of the project the data will be stored on a password protected CD where it will be stored in the Institute's office in a locked cabinet for 10 years and then destroyed. Data will also be kept in the lead author's possession on a password protected CD for 10 years after the study is completed, after which time it will be destroyed. The data will be disposed of securely by manually destroying physical copies of the data and deleting any files that store relevant data.

What will happen to the results of the research study?

You can opt in to receive a summary of the project upon its completion and how the feedback you provided was used in the formation of a questionnaire measuring shame in the context of unacceptable intrusive thoughts and images. The intention is to publish the results of the study in a scientific journal. You can opt in to be notified if and when this occurs. Any feedback you provide will not allow for your identification in any report or publication. However, anonymised quotes from your interview may be used in published reports. There is a further intention for the anonymised data to be available for use in other studies.

Who is sponsoring and funding the research?

Canterbury Christ Church University.

Who has reviewed the study?

This study has been reviewed and given favourable opinion by the Salomons Ethics Panel, Salomons Institute for Applied Psychology, Canterbury Christ Church University.

Further information and contact details:

If you would like to speak to me and find out more about the study or have questions about it answered, you can leave a message for me on a 24-hour voicemail phone line at [redacted]. If you leave a name and contact number I can get back to you and answer any questions you may have. Alternatively, you can contact me by email at: [redacted]

- ◯ I have read and understood the information, and wish to complete the screening questionnaire
- ◯ I no longer wish to participate

Appendix D.

Screening Form

Screening Form

Thank you for reading the information sheet. We would now like you to complete a screening form.

Please read our inclusion criteria and tick the category to which you best meet the criteria. We are aware that you may meet the criteria for more than one category, but please tick the category which best describes you.

After you confirm you are an expert in this area you will be asked to provide a valid email address. After this you will be asked to read and sign a consent sheet.

It is important that you do not tick any of the boxes if you do not meet the criteria. Unfortunately this will mean that you will be unable to participate in our study, however we thank you for your interest.

Before you answer it may be helpful to understand the following concepts:

Shame: Weingarden and Renshaw (2015) define shame as "a deeply painful self-conscious emotion, experienced when a person judges him- or herself as wholly negative".

Unacceptable intrusive thoughts: Unacceptable intrusive thoughts relate to unacceptable thoughts, urges, and images, and these most often relate to themes of sex, religion, and violence (Abramowitz et al., 2010).

OCD: Obsessive-compulsive disorder is characterised by the presence of either obsessions or compulsions, but commonly both. An obsession is defined as an unwanted intrusive thought, image or urge, which repeatedly enters the person's mind. Compulsions are repetitive behaviours or mental acts that the person feels driven to perform (NICE Guidelines for OCD, 2006).

If you have a question or want to know more please email: [redacted]

Please now read the criteria for taking part. If you meet the criteria please tick the corresponding box. Once complete please click confirm to submit your response. Then please provide supporting information when requested.

Please tick the category to which you best meet the criteria. We are aware that you may meet the criteria for more than one category, but please tick the category which best describes you.

Are you a:

- ○ Clinician who has an active and specialist interest in shame in the context of unacceptable thoughts, images, and urges (UI's), AND has supported service users experiencing shame in the context of UI"s, AND has qualifications in CBT/a third wave CBT model
- ○ Researcher who has published in the area of shame in the context of unacceptable thoughts, images, and urges.
- ○ Person who has experienced/is experiencing feelings of shame in the context of unacceptable thoughts, images, and urges.
- ○ None of the above

Appendix E.

Consent Form

Consent Form

Thank you for completing the screening form. We would now like you to complete the consent form.

(1/11) I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

- ○ I consent
- ○ I do not consent

(2/11) I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

- ○ I consent
- ○ I do not consent

(3/11) I understand that after data has been collected there will be a two-week period when I can request for this data to not be analysed. I understand that it will not be possible to retrospectively remove or destroy data after this date.

- ○ I consent
- ○ I do not consent

(4/11) I agree that any feedback I provide in the interviews can be audio-recorded and transcribed with the purpose of finding themes from the data that represent the construct of shame in the context of unacceptable intrusive thoughts and images.

- ○ I consent
- ○ I do not consent

(5/11) I agree that anonymous quotes I provide in the interviews may be used in published reports of the study findings.

- ○ I consent
- ○ I do not consent

(6/11) (Optional) I agree that my anonymous data can be used in further, ethically approved research studies.

- ○ I consent
- ○ I do not consent

(7/11) I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified (except as might be required by law).

- ○ I consent
- ○ I do not consent

(8/11) I understand that the study will require participation at multiple time points to seek consensus on the constructs of shame in the context of unacceptable intrusive thoughts / images and that my anonymised opinions will be appraised by the other participants.

- ○ I consent
- ○ I do not consent

(9/11) I understand that data gathered in this study will be stored anonymously and securely for ten years before being destroyed.

- ○ I consent
- ○ I do not consent

(10/11) I understand that in the event that I disclose information which may indicate a risk to myself or to others, the researcher(s) will be obliged to break confidentiality and this may require them to release my personal data. I understand that the researcher will endeavour to speak to me about this first.

- ○ I consent
- ○ I do not consent

(11/11) I agree to take part in the above study.

- ○ I consent
- ○ I do not consent

Please sign your name to electronically sign this consent form.

Please provide a valid email address:

Please tick if you wish to receive a copy of the findings (via email):

- ○ Yes
- ○ No

Confirm

Appendix F.

Demographic Questionnaire

Demographic Details

Thank you for competing the consent form. We would now like you to provide your demographic details.

How old are you (in years)?

- ○ 18-24
- ○ 25-29
- ○ 30-34
- ○ 35-39
- ○ 40-44
- ○ 45-49
- ○ 50-54
- ○ 55-59
- ○ 60-64
- ○ 65-69
- ○ 70-74
- ○ 75-79
- ○ 80-84
- ○ 85 and over
- ○ Prefer not to say

What is your gender?

- ○ Female
- ○ Male
- ○ Non-binary / third gender
- ○ Other
- ○ Prefer not to say

What is your ethnicity?

- ○ Black, African, Caribbean or Black British
  - [ ]
- ○ Asian or Asian British
  - [ ]
- ○ White
  - [ ]
- ○ Mixed
  - [ ]
- ○ Other
  - [ ]
- ○ Prefer not to say

What is your country of residence?

[ ]

Appendix G.

Ethical Approval

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Appendix H.

MRP Debrief Form UK

Canterbury Christ Church University

Debrief Sheet:
Measuring shame associated with perceived unacceptable thoughts

Thank you for taking part in our study which aims to develop a questionnaire that measures shame associated with perceived unacceptable thoughts. We hope you have found participation empowering, enjoyable and interesting. We are aware that participation may have also raised some questions, some uncomfortable feelings, and some concerns. We hope to address these below.

How will the data be used?

- The intention is to test and validate the questionnaire that will be created from this study to see whether it accurately measures shame associated with perceived unacceptable thoughts.
- The data will provide the results to the lead author's dissertation report. This report will be submitted in partial fulfilment of the lead author's clinical psychology doctorate at the Salomons Institute of Applied Psychology.
- There is intention to publish the results of the study in a scientific journal. You can opt in to be notified if and when this occurs. Any feedback you provide will not allow for your identification in any report or publication. However, anonymised quotes from your interview may be used in published reports. There is a further intention for the anonymised data to be available for use in other studies.
- The data will be stored on a password protected CD where it will be stored in the Salomons Institute of Applied Psychology's office in a locked cabinet for 10 years and then destroyed. Data will also be kept in the lead author's possession on a password protected CD for 10 years after the study is completed, after which time it will be destroyed. The data will be disposed of securely by manually destroying physical copies of the data and deleting any files that store relevant data.

How can I raise a question or concern?

If you have questions or concerns about any aspect of this study, you should ask to speak to me [redacted] and I will do my best to address your concerns. You can contact me by leaving a message on the following 24-hour voicemail phone number [redacted] Please leave a contact number and say that the message is for me and I will get back to you as soon as possible. Or email me at [redacted]

How can I raise a formal complaint?

If you remain dissatisfied and wish to complain formally, you can do this by contacting Dr [redacted] Clinical Psychology Programme Research Director at the Salomons Institute for Applied Psychology: [redacted]

What support is available?
If you wish to seek support for any distress experienced as a result of participation in the study you can contact the following services:

Organisation	What they do	Contact Details
Samaritans	Confidential telephone support and advice.	116 123
MIND	Advice and support to anyone experiencing a mental health problem.	03001 233393 / info@mind.org.uk
OCD UK	Charity run by and for people with OCD.	03332 127890 / support@ocduk.org
OCD Action	Information and support for people affected by OCD, including online forums and local groups.	08453 906232 / support@ocdaction.org.uk
Your local GP	Can signpost to free psychological therapy services and can assess whether medication would be helpful.	N/A
Your local faith / community group	Can provide support and advice.	N/A

Appendix I

MRP Debrief Form International

Debrief Sheet:
Measuring shame associated with perceived unacceptable thoughts

Thank you for taking part in our study which aims to develop a questionnaire that measures shame associated with perceived unacceptable thoughts. We hope you have found participation empowering, enjoyable and interesting. We are aware that participation may have also raised some questions, some uncomfortable feelings, and some concerns. We hope to address these below.

How will the data be used?

- The intention is to test and validate the questionnaire that will be created from this study to see whether it accurately measures shame associated with perceived unacceptable thoughts.
- The data will provide the results to the lead author's dissertation report. This report will be submitted in partial fulfilment of the lead author's clinical psychology doctorate at the Salomons Institute of Applied Psychology.
- There is intention to publish the results of the study in a scientific journal. You can opt in to be notified if and when this occurs. Any feedback you provide will not allow for your identification in any report or publication. However, anonymised quotes from your interview may be used in published reports. There is a further intention for the anonymised data to be available for use in other studies.
- The data will be stored on a password protected CD where it will be stored in the Salomons Institute of Applied Psychology's office in a locked cabinet for 10 years and then destroyed. Data will also be kept in the lead author's possession on a password protected CD for 10 years after the study is completed, after which time it will be destroyed. The data will be disposed of securely by manually destroying physical copies of the data and deleting any files that store relevant data.

How can I raise a question or concern?

If you have questions or concerns about any aspect of this study, you should ask to speak to me ([redacted]) and I will do my best to address your concerns. You can contact me by leaving a message on the following 24-hour voicemail phone number [redacted] Please leave a contact number and say that the message is for me and I will get back to you as soon as possible. Or email me at [redacted]

How can I raise a formal complaint?

If you remain dissatisfied and wish to complain formally, you can do this by contacting Dr [redacted]

What support is available?
If you wish to seek support for any distress experienced as a result of participation in the study you can contact the following services:

Organisation	What they do	Contact Details
International OCD Foundation	Resources for support with OCD and links to affiliated support groups are available on their website.	https://iocdf.org
Your local family practice	May be able to signpost to psychological therapy services/prescribe medication.	N/A
Your local faith / community group	Can provide support and advice.	N/A

Appendix J

Round 1 Interview Schedule

Introduction:

We are developing a questionnaire to measure shame in the context of OCD and associated intrusive thoughts, urges and images perceived as unacceptable. We would like to find out what you, as an expert, think is important to contain in the questionnaire.

We aim to focus on shame and not guilt. Shame is often defined as judging oneself negatively whereas guilt is often defined as judging one's behaviours negatively.

The research highlights that there are many aspects of shame, and we hope to create a questionnaire that captures the thoughts, the feelings and the behaviours associated with shame in the context of intrusive thoughts perceived as unacceptable.

First I will ask questions that will help you to consider the thoughts, feelings, and behaviours associated with shame in this context. After considering this I will then ask you to generate statements for a self-report questionnaire that measures shame in the context of experiencing intrusive thoughts perceived as unacceptable.

What makes a good statement for a questionnaire?

- Measures what it intends to (shame in the context of perceived unacceptable intrusive thoughts)
- Is easy to understand
- Does not lead responders to give certain answers
- Is specific (and not similar to other items on the questionnaire)
- Can only be interpreted one way
- Only asks one thing
- Does not contain a double negative

How our questionnaire will be rated:

Our questionnaire will ask people to rate the extent to which they agree with statements on a five point scale.
This will range from:
1 - Strongly disagree
2 - Disagree
3 - Neither agree nor disagree
4 - Agree
5 - Strongly agree

We expect statements to start with: *When you experience shame about these thoughts to what extent do you…*

Our aim is for the questionnaire to be able to distinguish the severity of shame response in OCD so that the impact of treatment can be measured.

Interview Questions (answers audio recorded):

Questions about the thoughts associated with shame:

- What thoughts might someone have about themselves if they felt shame in response to perceived unacceptable intrusive thoughts?
- What thoughts might someone have about the intrusive thoughts if they felt shame in response?
- What thoughts might someone think others will think about them / the intrusive thoughts?
- **Based on what you have told me, can you rephrase any of this as statements that could measure the thoughts associated with feeling shame in this context?**

e.g. When you experience shame about these thoughts to what extent do you think…

Questions about what shame feels like:

- What feelings and physiological responses might someone who feels shame in this context experience when they get intrusive thoughts and images associated with shame?
- What feelings and physiological responses might someone who feels shame in this context think that others might feel if they found out someone had intrusive thoughts and images perceived as unacceptable?
- **Based on what you have told me, can you rephrase any of this as statements that could measure the feelings and physiological responses associated with feeling shame in this context?**

e.g. When you experience shame about these thoughts to what extent do you feel …

Questions about behaviours:

- What behaviours might someone who feels shame in this context do or avoid doing?
- What behaviours might someone who feels shame in this context think that others will do in response to finding out someone has intrusive thoughts and images perceived as unacceptable?
- **Based on what you have told me, can you rephrase any of this as statements that could measure the behaviours associated with feeling shame in this context?**

e.g. When you experience shame about these thoughts to what extent do you …

Miscellaneous Questions

Is there anything we haven't covered that you think is important for the questionnaire to include?

What next?

I will send a debrief form to your email address.
I will email you the items you created and ask you to tell me if that feels accurate (a credibility check).
I will send an invite to the next round of the study which will involve rating the extent to which you agree with the statements that all the participants created.

Appendix K.

Round 2 Instructions

Round 2

In Round 1 sixteen people completed a thirty minute interview to develop items for a questionnaire that aims to measure shame in the context of OCD (particularly in the context of intrusive thoughts, images and urges perceived as unacceptable). [redacted]

Where more than one person expressed the same idea the example with the most appropriate wording has been selected. [redacted]

Round 2 involves rating the extent to which you feel the items generated are relevant for measuring shame in OCD.

To do this, it is important to reflect that a valid item on a questionnaire is widely considered to be one which:

- Measures what it intends to (shame in the context of OCD/intrusive thoughts, urges, and images perceived as unacceptable)
- Is easy to understand
- Does not lead responders to give certain answers
- Can only be interpreted one way

We aim to focus on shame and not guilt. Shame is often defined as judging oneself negatively whereas guilt is often defined as judging one's behaviours negatively.

Appendix L.

Round 3 Instructions

Round 3

In Round 2 you were invited to evaluate the extent to which you thought that questions generated for a questionnaire that aims to measure shame in the context of OCD (particularly intrusive thoughts, urges, and images perceived as unacceptable) were appropriate.

In Round 3 (the final round of the research) you will be presented with the questions again, along with how you previously rated the appropriateness of each question. You will also be presented with percentages on how the other participants rated each question (from strongly inappropriate to strongly appropriate).

Based on this information you will then decide whether you wish to re-rate the extent to which you agree that each question is appropriate for a questionnaire that aims to measure shame in the context of OCD (particularly unacceptable intrusive thoughts, urges, and images).

To do this it is important to reflect that a valid item on a questionnaire is widely considered to be one which:

- Measures what it intends to (shame in the context of unacceptable intrusive thoughts)
- Is easy to understand
- Does not lead responders to give certain answers
- Can only be interpreted one way

It is also important to consider that our questionnaire will be based on a five point Likert scale where respondents will be asked the extent to which they agree that they share the experience highlighted by the question. This will range from:

1 - Strongly disagree
2 - Disagree
3 - Neither agree nor disagree
4 - Agree
5 - Strongly agree

Remember, we aim to focus on shame and not guilt. Shame is often defined as judging oneself negatively whereas guilt is often defined as judging one's behaviours negatively.

Based on this information please read the questions provided and state the extent to which you agree that these questions would be appropriate for a questionnaire that measures shame in the context of OCD (particularly intrusive thoughts, urges, and images perceived as unacceptable).

Before you begin please enter the email address you used when you signed the consent sheet:

Appendix M.

Example of Items Developed by a Participant in R1.

This has been removed from the electronic copy

Appendix N.

Example of Categorisation of Items from Round 1

This has been removed from the electronic copy

Appendix O.

Items Presented to Participants in Round 2 (& 3 Except for One Item)

Internalised

Thoughts about self

1. When you experience intrusive thoughts to what extent do you…think you are defective
2. When you experience intrusive thoughts to what extent do you…think you are a bad person
3. When you experience intrusive thoughts to what extent do you…think that something is wrong with you.
4. When you experience intrusive thoughts to what extent do you…think this is morally wrong
5. When you experience intrusive thoughts to what extent do you…think that you are worthless
6. When you experience intrusive thoughts to what extent do you…think you are inadequate
7. When you experience intrusive thoughts to what extent do you…think that you are unloveable
   When you experience intrusive thoughts to what extent do you…think you are losing control
8. When you experience intrusive thoughts to what extent do you…think you are crazy
9. When you experience intrusive thoughts to what extent do you…think these thoughts are associated with events from your past in which you should/shouldn't have done something
10. When you experience intrusive thoughts to what extent do you…think these thoughts are your true self
11. When you experience intrusive thoughts to what extent do you…question yourself a lot
12. When you experience intrusive thoughts to what extent do you… think you want the thought to happen even though you absolutely do not.
13. When you experience intrusive thoughts to what extent do you…think you are different to the cultural expectations of how you should be
14. When you experience intrusive thoughts to what extent do you…think you are different
15. When you experience intrusive thoughts to what extent do you…think you are not a normal person
16. When you experience intrusive thoughts to what extent do you…think you are to blame for your thoughts
17. When you experience intrusive thoughts to what extent do you…think you are pathetic for not being able to control these thoughts
18. When you experience intrusive thoughts to what extent do you…wish you were invisible to others

Thoughts about thoughts

19. When you experience intrusive thoughts to what extent do you…think you shouldn't have these thoughts
20. When you experience intrusive thoughts to what extent do you…think these thoughts are unacceptable
21. When you experience intrusive thoughts to what extent do you…think the thought is right/true
22. When you experience intrusive thoughts to what extent do you…think thinking these thoughts are as bad as doing them
23. When you experience intrusive thoughts to what extent do you…not discuss the thoughts with those around you

24. When you experience intrusive thoughts to what extent do you…think you have to keep this secret
25. When you experience intrusive thoughts to what extent do you…not want people to find out what you are thinking.

Externalised

Thoughts about others thoughts

1. When you experience intrusive thoughts to what extent do you…think you would be judged if other people knew about these thoughts
2. When you experience intrusive thoughts to what extent do you…think others would think your intrusive thoughts are true
3. When you experience intrusive thoughts to what extent do you…think others will think you are a bad person
4. When you experience intrusive thoughts to what extent do you…think others will see you as crazy
5. When you experience intrusive thoughts to what extent do you…think others will think less of you
6. When you experience intrusive thoughts to what extent do you…think others will think you are dangerous
7. When you experience intrusive thoughts to what extent do you…think others will think there is something wrong with you
8. When you experience intrusive thoughts to what extent do you…think others would think you are disgusting
9. When you experience intrusive thoughts to what extent do you…think that others will think that you shouldn't be around people
10. When you experience intrusive thoughts to what extent do you…think others will not understand

Thoughts about others behaviours

1. When you experience intrusive thoughts to what extent do you…think you will be rejected
2. When you experience intrusive thoughts to what extent do you…think you will be outcast by others
3. When you experience intrusive thoughts to what extent do you…think others would withdraw from you
4. When you experience intrusive thoughts to what extent do you…think that if others found out about your thoughts that it would negatively affect your relationship
5. When you experience intrusive thoughts to what extent do you…think others may report you to the authorities

Thoughts about others feelings

1. When you experience intrusive thoughts to what extent do you…think others will feel disgusted
2. When you experience intrusive thoughts to what extent do you…think others will feel afraid
3. When you experience intrusive thoughts to what extent do you…think others will feel angry

Feelings

Body sensations

1. When you experience intrusive thoughts to what extent do you…feel internally dirty
2. When you experience intrusive thoughts to what extent do you…feel a tightness in your chest
3. When you experience intrusive thoughts to what extent do you…feel flushed
4. When you experience intrusive thoughts to what extent do you…feel hot
5. When you experience intrusive thoughts to what extent do you…feel a pit in your stomach
6. When you experience intrusive thoughts to what extent do you…feel sick
7. When you experience intrusive thoughts to what extent do you…feel heavy
8. When you experience intrusive thoughts to what extent do you…feel out of your body

Associated feelings

9. When you experience intrusive thoughts to what extent do you…feel anxious
10. When you experience intrusive thoughts to what extent do you…feel hopeless
11. When you experience intrusive thoughts to what extent do you…feel disgust
12. When you experience intrusive thoughts to what extent do you…feel embarrassed
13. When you experience intrusive thoughts to what extent do you…feel self-contempt
14. When you experience intrusive thoughts to what extent do you…feel self-conscious

Behaviours

1. When you experience intrusive thoughts to what extent do you… try not to think the thoughts
2. When you experience intrusive thoughts to what extent do you…avoid situations that may trigger thoughts
3. When you experience intrusive thoughts to what extent do you…avoid places that would be associated with the thoughts that you have
4. When you experience intrusive thoughts to what extent do you…avoid eye contact
5. When you experience intrusive thoughts to what extent do you…look the other way when faced with a reminder of the obsession
6. Missing Round 3 re-rating: When you experience intrusive thoughts to what extent do you…not discuss the thoughts with those around you
7. When you experience intrusive thoughts to what extent do you… isolate yourself
8. When you experience intrusive thoughts to what extent do you…withdraw from others
9. When you experience intrusive thoughts to what extent do you…have to do a certain action
10. When you experience intrusive thoughts to what extent do you…feel a need to confess
11. When you experience intrusive thoughts to what extent do you…seek reassurance
12. When you experience intrusive thoughts to what extent do you…try to pretend that everything is fine

Appendix P.

Percentage of Responses for Each Item in Round 2

		Likert Scale Response						
Category	Question	Strongly inappropriate n(%)	Somewhat inappropriate n(%)	Inappropriate n(%)	Neither appropriate nor inappropriate n(%)	Somewhat appropriate n(%)	Strongly appropriate n(%)	Appropriate n(%)
Internal - Thoughts - Thoughts About Self	Think you are defective	0	3 (15.8%)	3 (15.8%)	0	4 (21.1%)	12 (63.2%)	16 (84.2%)
	Think you are a bad person	0	1 (5.3%)	1 (5.3%)	0	3 (15.8%)	15 (78.9%)	18 (94.7%)
	Think that something is wrong with you	0	1 (5.3%)	1 (5.3%)	0	7 (36.8%)	11 (57.9%)	18 (94.7%)
	Think this is morally wrong	0	1 (5.3%)	1 (5.3%)	2 (10.5%)	5 (26.3%)	11 (57.9%)	16 (84.2%)
	Think that you are worthless	0	0	0	2 (10.5%)	10 (52.6%)	7 (36.8%)	17 (89.5%)
	Think you are inadequate	0	1 (5.3%)	1 (5.3%)	3 (15.8%)	7 (36.8%)	8 (42.1%)	15 (78.9%)
	Think that you are unloveable	0	0	0	1 (5.3%)	10 (52.6%)	8 (42.1%)	18 (94.7%)
	Think you are losing control	1 (5.3%)	4 (21.1%)	5 (26.3%)	1 (5.3%)	6 (31.6%)	7 (36.8%)	13 (68.4%)
	Think you are crazy	2 (10.5%)	3 (15.8%)	5 (26.3%)	2 (10.5%)	4 (21.1%)	8 (42.1%)	12 (63.2%)
	Think these thoughts are associated with events from your past in which you should/ shouldn't have done something	3 (15.8%)	0	3 (15.8%)	4 (21.1%)	6 (31.6%)	6 (31.6%)	12 (63.2%)

	Think these thoughts are your true self	2 (10.5%)	1 (5.3%)	3 (15.8%)	2 (10.5%)	4 (21.1%)	10 (52.6%)	14 (73.7%)
	Question yourself a lot	1 (5.3%)	2 (10.5%)	3 (15.8%)	3 (15.8%)	2 (10.5%)	11 (57.9%)	13 (68.4%)
	Think you want the thought to happen even though you absolutely do not	3 (15.8%)	1 (5.3%)	4 (21.1%)	4 (21.1%)	6 (31.6%)	5 (26.3%)	11 (57.9%)
	Think you are different to the cultural expectations of how you should be	1 (5.3%)	1 (5.3%)	2 (10.5%)	2 (10.5%)	9 (47.4%)	6 (31.6%)	15 (78.9%)
	Think you are different	1 (5.3%)	0	1 (5.3%)	3 (15.8%)	5 (26.3%)	10 (52.6%)	15 (78.9%)
	Think you are not a normal person	0	1 (5.3%)	1 (5.3%)	1 (5.3%)	7 (36.8%)	10 (52.6%)	17 (89.5%)
	Think you are to blame for your thoughts	0	1 (5.3%)	1 (5.3%)	2 (10.5%)	5 (26.3%)	11 (57.9%)	16 (84.2%)
	Think you are pathetic for not being able to control these thoughts	0	2 (10.5%)	2 (10.5%)	2 (10.5%)	8 (42.1%)	7 (36.8%)	15 (78.9%)
	Wish you were invisible to others	2 (10.5%)	1 (5.3%)	3 (15.8%)	4 (21.1%)	5 (26.3%)	7 (36.8%)	12 (63.2%)
Internal - Thoughts - Thoughts About Thoughts	Think you shouldn't have these thoughts	0	1 (5.3%)	1 (5.3%)	3 (15.8%)	5 (26.3%)	10 (52.6%)	15 (78.9%)

Thoughts	Think these thoughts are unacceptable	0	1 (5.3%)	1 (5.3%)	0	4 (21.1%)	14 (73.7%)	18 (94.7%)
	Think the thought is right/true?	3 (15.8%)	3 (15.8%)	6 (31.6%)	5 (26.3%)	3 (15.8%)	5 (26.3%)	8 (42.1%)
	Think thinking these thoughts are as bad as doing them	2 (10.5%)	3 (15.8%)	5 (26.3%)	1 (5.3%)	5 (26.3%)	8 (42.1%)	13 (68.4%)
	Think you have to keep this secret	0	0	0	5 (26.3%)	2 (10.5%)	12 (63.2%)	14 (73.7%)
	Not want people to find out what you are thinking	0	0	0	0	4 (21.1%)	15 (78.9%)	19 (100%)
External - Thoughts	Think you would be judged if other people knew about these thoughts	0	0	0	0	3 (15.8%)	16 (84.2%)	19 (100%)
	Think others would think your intrusive thoughts are true	2 (10.5%)	1 (5.3%)	3 (15.8%)	4 (21.1%)	6 (31.6%)	6 (31.6%)	12 (63.2%)
	Think others will think you are a bad person	0	0	0	0	6 (31.6%)	13 (68.4%)	19 (100%)
	Think others will see you as crazy	0	1 (5.3%)	1 (5.3%)	3 (15.8%)	5 (26.3%)	10 (52.6%)	15 (78.9%)
	Think others will think less of you	0	0	0	0	6 (31.6%)	13 (68.4%)	19 (100%)

	Think others will think you are dangerous	2 (10.5%)	1 (5.3%)	3 (15.8%)	0	7 (36.8%)	9 (47.4%)	16 (84.2%)
	Think others will think there is something wrong with you	0	0	0	1 (5.3%)	2 (10.5%)	16 (84.2%)	18 (94.7%)
	Think others would think you are disgusting	0	0	0	2 (10.5%)	5 (26.3%)	12 (63.2%)	17 (89.5%)
	Think that others will think that you shouldn't be around people	0	1 (5.3%)	1 (5.3%)	1 (5.3%)	7 (36.8%)	10 (52.6%)	17 (89.5%)
	Think others will not understand	0	1 (5.3%)	1 (5.3%)	1 (5.3%)	3 (15.8%)	14 (73.7%)	17 (89.5%)
Internal - Feelings - Body Sensations	Feel internally dirty	2 (10.5%)	1 (5.3%)	3 (15.8%)	1 (5.3%)	4 (21.1%)	11 (57.9%)	15 (78.9%)
	Feel a tightness in your chest	1 (5.3%)	1 (5.3%)	2 (10.5%)	4 (21.1%)	7 (36.8%)	6 (31.6%)	13 (68.4%)
	Feel flushed	2 (10.5%)	1 (5.3%)	3 (15.8%)	3 (15.8%)	9 (47.4%)	4 (21.1%)	13 (68.4%)
	Feel hot	3 (15.8%)	3 (15.8%)	6 (31.6%)	2 (10.5%)	8 (42.1%)	3 (15.8%)	11 (57.9%)
	Feel a pit in your stomach	1 (5.3%)	1 (5.3%)	2 (10.5%)	3 (15.8%)	4 (21.1%)	10 (52.6%)	14 (73.7%)
	Feel sick	1 (5.3%)	0	1 (5.3%)	2 (10.5%)	7 (36.8%)	9 (47.4%)	16 (84.2%)
	Feel heavy	1 (5.3%)	0	1 (5.3%)	6 (31.6%)	10 (52.6%)	2 (10.5%)	12 (63.2%)
	Feel out of your body	1 (5.3%)	2 (10.5%)	3 (15.8%)	7 (36.8%)	5 (26.3%)	4 (21.1%)	9 (47.4%)

Internal - Feelings - Associated Feelings	Feel anxious	0	2 (10.5%)	2 (10.5%)	2 (10.5%)	5 (26.3%)	10 (52.6%)	15 (78.9%)
	Feel hopeless	1 (5.3%)	1 (5.3%)	2 (10.5%)	1 (5.3%)	6 (31.6%)	10 (52.6%)	16 (84.2%)
	Feel disgust	0	1 (5.3%)	1 (5.3%)	2 (10.5%)	6 (31.6%)	10 (52.6%)	16 (84.2%)
	Feel embarassed	1 (5.3%)	0	1 (5.3%)	0	6 (31.6%)	12 (63.2%)	18 (94.7%)
	Feel self-contempt	0	0	0	0	4 (21.1%)	15 (78.9%)	19 (100%)
	Feel self-conscious	0	0	0	3 (15.8%)	4 (21.1%)	12 (63.2%)	16 (84.2%)
External - Feelings	Think others will feel disgusted	0	0	0	1 (5.3%)	8 (42.1%)	10 (52.6%)	18 (94.7%)
	Think others will feel afraid	1 (5.3%)	2 (10.5%)	3 (15.8%)	2 (10.5%)	6 (31.6%)	8 (42.1%)	14 (73.7%)
	Think others will feel angry	0	3 (15.8%)	3 (15.8%)	1 (5.3%)	9 (47.4%)	6 (31.6%)	15 (78.9%)
Internal - Behaviours	Try not to think the thoughts	1 (5.3%)	1 (5.3%)	2 (10.5%)	3 (15.8%)	5 (26.3%)	9 (47.4%)	14 (73.7%)
	Avoid situations that may trigger thoughts	0	1 (5.3%)	1 (5.3%)	2 (10.5%)	5 (26.3%)	11 (57.9%)	16 (84.2%)
	Avoid places that would be associated with the thoughts that you have	1 (5.3%)	1 (5.3%)	2 (10.5%)	2 (10.5%)	5 (26.3%)	10 (52.6%)	15 (78.9%)
	Avoid eye contact	1 (5.3%)	1 (5.3%)	2 (10.5%)	4 (21.1%)	4 (21.1%)	9 (47.4%)	13 (68.4%)
	Look the other way when faced with a reminder of the obsession	1 (5.3%)	0	1 (5.3%)	4 (21.1%)	7 (36.8%)	7 (36.8%)	14 (73.7%)
	Isolate yourself	0	2 (10.5%)	2 (10.5%)	0	3 (15.8%)	14 (73.7%)	17 (89.5%)

	Withdraw from others	0	1 (5.3%)	1 (5.3%)	1 (5.3%)	3 (15.8%)	14 (73.7%)	17 (89.5%)
	Have to do a certain action	4 (21.1%)	0	4 (21.1%)	1 (5.3%)	4 (21.1%)	10 (52.6%)	14 (73.7%)
	Feel a need to confess	2 (10.5%)	1 (5.3%)	3 (15.8%)	3 (15.8%)	7 (36.8%)	6 (31.6%)	13 (68.4%)
	Seek reassurance	2 (10.5%)	2 (10.5%)	4 (21.1%)	0	5 (26.3%)	10 (52.6%)	15 (78.9%)
	Try to pretend that everything is fine	1 (5.3%)	0	1 (5.3%)	8 (42.1%)	2 (10.5%)	8 (42.1%)	10 (52.6%)
External - Behaviours	Think you will be rejected	0	0	0	0	6 (31.6%)	13 (68.4%)	19 (100%)
	Think you will be outcast by others	0	0	0	1 (5.3%)	5 (26.3%)	13 (68.4%)	18 (94.7%)
	Think others would withdraw from you	0	0	0	1 (5.3%)	7 (36.8%)	11 (57.9%)	18 (94.7%)
	Think that if others found out about your thoughts that it would negatively affect your relationship	0	1 (5.3%)	1 (5.3%)	0	5 (26.3%)	13 (68.4%)	18 (94.7%)
	Think others may report you to the authorities	2 (10.5%)	3 (15.8%)	5 (26.3%)	1 (5.3%)	5 (26.3%)	8 (42.1%)	13 (68.4%)
Internal - Behaviours	New Item: Not discuss the thoughts with those around you	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (16.7%)	15 (83.3%)	18 (100%)

Total	55 (4.3%)	69 (5.3%)	124 (9.6%)	135 (10.4%)	372 (28.8%)	661 (51.2%)	1033 (79.8%)

Appendix Q.

Percentage of Responses for Each Item in Round 3

		Likert Scale Response						
Category	Question	Strongly inappropriate N(%)	Somewhat inappropriate N(%)	Inappropriate N(%)	Neither appropriate nor inappropriate N(%)	Somewhat appropriate N(%)	Strongly appropriate N(%)	Appropriate N(%)
Internalised Thoughts - Thoughts About Self	Think you are defective	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	6 (33.3%)	11 (61.1%)	17 (94.4%)
	Think you are a bad person	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	17 (94.4%)	18 (100%)
	Think that something is wrong with you	0 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (44.4%)	10 (55.6%)	18 (100%)
	Think this is morally wrong	0 (0%)	1 (5.6%)	1 (5.6%)	1 (5.6%)	3 (16.7%)	13 (72.2%)	16 (88.9%)
	Think that you are worthless	0 (0%)	0 (0%)	0 (0%)	0 (0%)	12 (66.7%)	6 (33.3%)	18 (100%)
	Think you are inadequate	0 (0%)	2 (11.1%)	2 (11.1%)	2 (11.1%)	4 (22.2%)	10 (55.6%)	14 (77.8%)
	Think that you are unloveable	0 (0%)	0 (0%)	0 (0%)	0 (0%)	11 (61.1%)	7 (38.9%)	18 (100%)
	Think you are losing control	1 (5.6%)	4 (22.2%)	5 (27.8%)	3 (16.7%)	5 (27.8%)	5 (27.8%)	10 (55.6%)
	Think you are crazy	0 (0%)	5 (27.8%)	5 (27.8%)	1 (5.6%)	5 (27.8%)	7 (38.9%)	12 (66.7%)
	Think these thoughts are associated with events from your past in which you should/ shouldn't have done something	3 (16.7%)	0 (0%)	3 (16.7%)	3 (16.7%)	6 (33.3%)	6 (33.3%)	12 (66.7%)

	Think these thoughts are your true self	2 (11.1%)	1 (5.6%)	3 (16.7%)	2 (11.1%)	3 (16.7%)	10 (55.6%)	13 (72.2%)
	Question yourself a lot	1 (5.6%)	1 (5.6%)	2 (11.1%)	3 (16.7%)	1 (5.6%)	12 (66.7%)	13 (72.2%)
	Think you want the thought to happen even though you absolutely do not	4 (22.2%)	0 (0%)	4 (22.2%)	3 (16.7%)	7 (38.9%)	4 (22.2%)	11 (61.1%)
	Think you are different to the cultural expectations of how you should be	1 (5.6%)	1 (5.6%)	2 (11.1%)	1 (5.6%)	10 (55.6%)	5 (27.8%)	15 (83.3%)
	Think you are different	0 (0%)	0 (0%)	0 (0%)	4 (22.2%)	1 (5.6%)	13 (72.2%)	14 (77.8%)
	Think you are not a normal person	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	3 (16.7%)	14 (77.8%)	18 (100%)
	Think you are to blame for your thoughts	0 (0%)	1 (5.6%)	1 (5.6%)	1 (5.6%)	5 (27.8%)	11 (61.1%)	16 (88.9%)
	Think you are pathetic for not being able to control these thoughts	0 (0%)	2 (11.1%)	2 (11.1%)	2 (11.1%)	8 (44.4%)	6 (33.3%)	14 (77.8%)
	Wish you were invisible to others	2 (11.1%)	1 (5.6%)	3 (16.7%)	4 (22.2%)	4 (22.2%)	7 (38.9%)	11 (61.1%)
Internalised Thoughts - Thoughts About	Think you shouldn't have these thoughts	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	3 (16.7%)	13 (72.2%)	15 (83.3%)

About Thoughts	Think these thoughts are unacceptable	0 (0%)	1 (5.6%)	1 (5.6%)	0 (0%)	4 (22.2%)	13 (72.2%)	17 (94.4%)
	Think the thought is right/true?	3 (16.7%)	2 (11.1%)	5 (27.8%)	4 (22.2%)	5 (27.8%)	4 (22.2%)	9 (50%)
	Think thinking these thoughts are as bad as doing them	2 (11.1%)	1 (5.6%)	3 (16.7%)	1 (5.6%)	5 (27.8%)	9 (50%)	14 (77.8%)
	Think you have to keep this secret	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	4 (22.2%)	12 (66.7%)	16 (88.9%)
	Not want people to find out what you are thinking	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
Externalised Thoughts	Think you would be judged if other people knew about these thoughts	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	17 (94.4%)	18 (100%)
	Think others would think your intrusive thoughts are true	2 (11.1%)	1 (5.6%)	3 (16.7%)	3 (16.7%)	8 (44.4%)	4 (22.2%)	12 (66.7%)
	Think others will think you are a bad person	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
	Think others will see you as crazy	0 (0%)	1 (5.6%)	1 (5.6%)	3 (16.7%)	3 (16.7%)	11 (61.1%)	14 (77.8%)
	Think others will think less of you	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	3 (16.7%)	14 (77.8%)	18 (100%)

	Think others will think you are dangerous	3 (16.7%)	1 (5.6%)	4 (22.2%)	0 (0%)	4 (22.2%)	10 (55.6%)	14 (77.8%)
	Think others will think there is something wrong with you	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
	Think others would think you are disgusting	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	3 (16.7%)	13 (72.2%)	16 (88.9%)
	Think that others will think that you shouldn't be around people	1 (5.6%)	1 (5.6%)	2 (11.1%)	0 (0%)	6 (33.3%)	10 (55.6%)	16 (88.9%)
	Think others will not understand	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
Feelings - Body Sensations	Feel internally dirty	1 (5.6%)	0 (0%)	1 (5.6%)	0 (0%)	4 (22.2%)	13 (72.2%)	17 (94.4%)
	Feel a tightness in your chest	2 (11.1%)	0 (0%)	2 (11.1%)	3 (16.7%)	8 (44.4%)	5 (27.8%)	13 (72.2%)
	Feel flushed	1 (5.6%)	0 (0%)	1 (5.6%)	3 (16.7%)	11 (61.1%)	3 (16.7%)	14 (77.8%)
	Feel hot	3 (16.7%)	1 (5.6%)	4 (22.2%)	5 (27.8%)	7 (38.9%)	2 (11.1%)	9 (50%)
	Feel a pit in your stomach	2 (11.1%)	0 (0%)	2 (11.1%)	0 (0%)	7 (38.9%)	9 (50%)	16 (88.9%)
	Feel sick	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	9 (50%)	8 (44.4%)	17 (94.4%)
	Feel heavy	1 (5.6%)	0 (0%)	1 (5.6%)	8 (44.4%)	8 (44.4%)	1 (5.6%)	9 (50%)
	Feel out of your body	2 (11.1%)	0 (0%)	2 (11.1%)	10 (55.6%)	1 (5.6%)	5 (27.8%)	6 (33.3%)

Feelings - Associated Feelings	Feel anxious	0 (0%)	1 (5.6%)	1 (5.6%)	2 (11.1%)	4 (22.2%)	11 (61.1%)	15 (83.3%)
	Feel hopeless	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	5 (27.8%)	12 (66.7%)	17 (94.4%)
	Feel disgust	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	4 (22.2%)	13 (72.2%)	17 (94.4%)
	Feel embarassed	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
	Feel self-contempt	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	2 (11.1%)	15 (83.3%)	17 (94.4%)
	Feel self-conscious	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	3 (16.7%)	14 (77.8%)	17 (94.4%)
Externalised Thoughts - Feelings	Think others will feel disgusted	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	6 (33.3%)	11 (61.1%)	17 (94.4%)
	Think others will feel afraid	1 (5.6%)	2 (11.1%)	3 (16.7%)	2 (11.1%)	4 (22.2%)	9 (50%)	13 (72.2%)
	Think others will feel angry	0 (0%)	2 (11.1%)	2 (11.1%)	3 (16.7%)	11 (61.1%)	2 (11.1%)	13 (72.2%)
Behaviours	Try not to think the thoughts	1 (5.6%)	0 (0%)	1 (5.6%)	3 (16.7%)	4 (22.2%)	10 (55.6%)	14 (77.8%)
	Avoid situations that may trigger thoughts	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	3 (16.7%)	13 (72.2%)	16 (88.9%)
	Avoid places that would be associated with the thoughts that you have	1 (5.6%)	0 (0%)	1 (5.6%)	2 (11.1%)	6 (33.3%)	9 (50%)	15 (83.3%)
	Avoid eye contact	1 (5.6%)	0 (0%)	1 (5.6%)	5 (27.8%)	3 (16.7%)	9 (50%)	12 (66.7%)
	Look the other way when faced with a reminder of the obsession	0 (0%)	1 (5.6%)	1 (5.6%)	3 (16.7%)	7 (38.9%)	7 (38.9%)	14 (77.8%)
	Isolate yourself	0 (0%)	1 (5.6%)	1 (5.6%)	0 (0%)	3 (16.7%)	14 (77.8%)	17 (94.4%)

	Withdraw from others	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	4 (22.2%)	13 (72.2%)	17 (94.4%)
	Have to do a certain action	4 (22.2%)	0 (0%)	4 (22.2%)	1 (5.6%)	7 (38.9%)	6 (33.3%)	13 (72.2%)
	Feel a need to confess	1 (5.6%)	2 (11.1%)	3 (16.7%)	1 (5.6%)	6 (33.3%)	8 (44.4%)	14 (77.8%)
	Seek reassurance	2 (11.1%)	0 (0%)	0 (0%)	3 (16.7%)	6 (33.3%)	7 (38.9%)	13 (72.2%)
	Try to pretend that everything is fine	0 (0%)	0 (0%)	0 (0%)	8 (44.4%)	3 (16.7%)	7 (38.9%)	10 (55.6%)
	New Item: Not discuss the thoughts with those around you	0 (0%)	0 (0%)	0 (0%)	3 (16.7%)	15 (83.3%)	18 (100%)	0 (0%)
Externalised Thoughts - Behaviours	Think you will be rejected	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
	Think you will be outcast by others	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (5.6%)	17 (94.4%)	18 (100%)
	Think others would withdraw from you	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
	Think that if others found out about your thoughts that it would negatively affect your relationship	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (11.1%)	16 (88.9%)	18 (100%)
	Think others may report you to the authorities	1 (5.6%)	3 (16.7%)	4 (22.2%)	1 (5.6%)	5 (27.8%)	8 (44.4%)	13 (72.2%)

Total	55 (4.2%)	69 (5.3%)	124 (9.5%)	135 (10.3%)	375 (28.6%)	676 (51.6%)	1051 (80.2%)

Appendix R.

Number of Items (%) Rated Appropriate with Items that Reached High Consensus in Bold

Category	Question	R2 N (%) rated appropriate, out of 19	R3 N (%) rated appropriate) out of 18	Change
Thoughts Internalised - Thoughts About Self	Think you are defective	**16 (84.2%)**	**17 (94.4%)**	increase
	Think you are a bad person	**18 (94.7%)**	**18 (100%)**	increase
	Think that something is wrong with you	**18 (94.7%)**	**18 (100%)**	increase
	Think this is morally wrong	**16 (84.2%)**	**16 (88.9%)**	increase
	Think that you are worthless	**17 (89.5%)**	**18 (100%)**	increase
	Think you are inadequate	15 (78.9%)	14 (77.8%)	decrease
	Think that you are unloveable	**18 (94.7%)**	**18 (100%)**	increase
	Think you are losing control	13 (68.4%)	10 (55.6%)	decrease
	Think you are crazy	12 (63.2%)	12 (66.7%)	increase
	Think these thoughts are associated with events from your past in which you should/shouldn't have done something	12 (63.2%)	12 (66.7%)	increase
	Think these thoughts are your true self	14 (73.7%)	13 (72.2%)	decrease
	Question yourself a lot	13 (68.4%)	13 (72.2%)	increase

	Think you want the thought to happen even though you absolutely do not	11 (57.9%)	11 (61.1%)	increase
	Think you are different to the cultural expectations of how you should be	15 (78.9%)	15 (83.3%)	increase
	Think you are different	15 (78.9%)	14 (77.8%)	decrease
	Think you are not a normal person	**17 (89.5%)**	**18 (100%)**	increase
	Think you are to blame for your thoughts	**16 (84.2%)**	**16 (88.9%)**	increase
	Think you are pathetic for not being able to control these thoughts	15 (78.9%)	14 (77.8%)	decrease
	Wish you were invisible to others	12 (63.2%)	11 (61.1%)	decrease
Thoughts - Internalised - Thoughts about Thoughts	Think you shouldn't have these thoughts	15 (78.9%)	15 (83.3%)	inrease
	Think these thoughts are unacceptable	**18 (94.7%)**	**17 (94.4%)**	decrease
	Think the thought is right/true?	8(42.1%)	9 (50%)	increase
	Think thinking these thoughts are as bad as doing them	13 (68.4%)	14 (77.8%)	increase
	Think you have to keep this secret	14 (73.7%)	**16 (88.9%)**	increase

	Not want people to find out what you are thinking	**19 (100%)**	**18 (100%)**	same
Thoughts externalised	Think you would be judged if other people knew about these thoughts	**19 (100%)**	**18 (100%)**	same
	Think others would think your intrusive thoughts are true	12 (63.2%)	12 (66.7%)	increase
	Think others will think you are a bad person	**19 (100%)**	**18 (100%)**	same
	Think others will see you as crazy	15 (78.9%)	14 (77.8%)	decrease
	Think others will think less of you	**19 (100%)**	**18 (100%)**	same
	Think others will think you are dangerous	**16 (84.2%)**	14 (77.8%)	decrease
	Think others will think there is something wrong with you	**18 (94.7%)**	**18 (100%)**	increase
	Think others would think you are disgusting	**17 (89.5%)**	**16 (88.9%)**	decrease
	Think that others will think that you shouldn't be around people	**17 (89.5%)**	**16 (88.9%)**	decrease
	Think others will not understand	**17 (89.5%)**	**18 (100%)**	increase
Feelings internalised - body sensations	Feel internally dirty	15 (78.9%)	**17 (94.4%)**	increase

	Feel a tightness in your chest	13 (68.4%)	13 (72.2%)	increase
	Feel flushed	13 (68.4%)	14 (77.8%)	increase
	Feel hot	11 (57.9%)	9 (50%)	decrease
	Feel a pit in your stomach	14 (73.7%)	**16 (88.9%)**	increase
	Feel sick	**16 (84.2%)**	**17 (94.4%)**	increase
	Feel heavy	12 (63.2%)	9 (50%)	decrease
	Feel out of your body	9 (47.4%)	6 (33.3%)	decrease
Feelings internalised - associated feelings	Feel anxious	15 (78.9%)	15 (83.3%)	increase
	Feel hopeless	**16 (84.2%)**	**17 (94.4%)**	increase
	Feel disgust	**16 (84.2%)**	**17 (94.4%)**	increase
	Feel embarassed	**18 (94.7%)**	**18 (100%)**	increase
	Feel self-contempt	**19 (100%)**	**17 (94.4%)**	decrease
	Feel self-conscious	**16 (84.2%)**	**17 (94.4%)**	increase
Feelings externalised	Think others will feel disgusted	**18 (94.7%)**	**17 (94.4%)**	decrease
	Think others will feel afraid	14 (73.7%)	13 (72.2%)	decrease
	Think others will feel angry	15 (78.9%)	13 (72.2%)	decrease
Behaviours Internalised	Try not to think the thoughts	14 (73.7%)	14 (77.8%)	increase
	Avoid situations that may trigger thoughts	**16 (84.2%)**	**16 (88.9%)**	increase

	Avoid places that would be associated with the thoughts that you have	15 (78.9%)	15 (83.3%)	increase
	Avoid eye contact	13 (68.4%)	12 (66.7%)	decrease
	Look the other way when faced with a reminder of the obsession	14 (73.7%)	14 (77.8%)	increase
	Isolate yourself	**17 (89.5%)**	**17 (94.4%)**	increase
	Withdraw from others	**17 (89.5%)**	**17 (94.4%)**	increase
	Have to do a certain action	14 (73.7%)	13 (72.2%)	decrease
	Feel a need to confess	13 (68.4%)	14 (77.8%)	increase
	Seek reassurance	15 (78.9%)	13 (72.2%)	decrease
	Try to pretend that everything is fine	10 (52.6%)	10 (55.6%)	increase
	Not discuss the thoughts with those around you	**18 (100%)**	**18 (100%)**	same
Behaviours Externalised	Think you will be rejected	**19 (100%)**	**18 (100%)**	same
	Think you will be outcast by others	**18 (94.7%)**	**18 (100%)**	increase
	Think others would withdraw from you	**18 (94.7%)**	**18 (100%)**	increase
	Think that if others found out about your thoughts that it would negatively affect your relationship	**18 (94.7%)**	**18 (100%)**	increase

	Think others may report you to the authorities	13 (68.4%)	13 (72.2%)	increase

Appendix S.

Mean Score for Participants in Each Round

Category	Participant	Mean	Change
Researchers	P1 R2	4.33	
	P1 R3	4.49	increase
	P2 R2	3.97	
	P2 R3	4.25	increase
	P3 R2	4.49	
	P3 R3	4.37	decrease
	P4 R2	3.42	
	P4 R3	3.57	increase
Clinicians	P5 R2	4.97	
			missing
	P6 R2	4.29	
	P6 R3	4.72	increase
	P7 R2	4.06	
	P7 R3	4.10	increase
	P8 R2	4.86	
	P8 R3	4.65	decrease
Lived Experience	P9		missing
	P10 R2	4.57	
	P10 R3	4.56	same/decrease
	P11 R2	3.93	
	P11 R3	4.25	increase
	P12		missing
	P13 R2	4.09	
	P13 R3	4.07	decrease
	P14 R2	4.81	
	P14 R3	4.53	decrease

	P15 R2	4.45	
	P15 R3	4.59	increase
	P16 R2	4.04	
	P16 R3	4.56	increase
	P17 R2	3.97	
	P17 R3	4.01	increase
	P18 R2	4.45	
	P18 R3	4.59	increase
	P19 R2	3.57	
	P19 R3	4.62	increase
	P20 R2	3.36	
	P20 R3	3.34	same/decrease
	P21 R2	3.88	
	P21 R3	3.79	decrease
Totals	Researchers Total R2	4.05	
	Researcher Total R3	3.00	increase
	Clinicians Total R2	4.54	
	Clinicians Total R3	4.49	decrease
	Lived Experience Total R2	4.10	
	Lived Experience Total R3	4.26	increase
	Total R2	4.18	
	Total R3	4.37	increase

Appendix T.

Response to Unacceptable Obsessions Scale (RUOS)

Name:

Age:

Ethnicity:

Country of residence:

Gender:

Instructions: The following statements are thoughts, feelings, and behaviours that many people experience in response to intrusive thoughts that they perceive as unacceptable (often of a violent, religious, or sexual nature). Consider how you have responded to such intrusions over the past two weeks, and then please tick the corresponding box.

All statements begin with:

When you experience intrusive thoughts, urges, or images (that you perceive are unacceptable) to what extent do you…

Category	Question	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
Internalised Thoughts (Thoughts About Self)	1. Think you are defective					
	2. Think you are a bad person					
	3. Think that something is wrong with you					
	4. Think this is morally wrong					

	5. Think that you are worthless					
	6. Think that you are unloveable					
	7. Think you are not a normal person					
	8. Think you are to blame for your thoughts					
Internalised Thoughts (Thoughts About Thoughts)	**9. Think these thoughts are unacceptable**					
	10. Think you have to keep this secret					
	11. Not want people to find out what you are thinking					
Externalised Thoughts	**12. Think you would be judged if other people knew about these thoughts**					

	13. Think others will think you are a bad person					
	14. Think others will think less of you					
	15. Think others will think there is something wrong with you					
	16. Think others would think you are disgusting					
	17. Think that others will think that you shouldn't be around people					
	18. Think that others will not understand					
Feelings (Body Sensations)	**19. Feel internally dirty**					
	20. Feel a pit in your stomach					
	21. Feel sick					

Feelings (Associated Feelings)	**22. Feel hopeless**					
	23. Feel disgust					
	24. Feel embarrassed					
	25. Feel self-contempt					
	26. Feel self-conscious					
Externalised Thoughts (Feelings)	**27. Think others will feel disgusted**					
Behaviours	**28. Avoid situations that may trigger the thoughts**					
	29. Isolate yourself					
	30. Withdraw from others					
	31. Not discuss the thoughts with those around you					
Externalised Thoughts (Behaviours)	**32. Think you will be rejected**					
	33. Think you will be outcast by others					

	34. Think others would withdraw from you					
	35. Think that if others found out about your thoughts that it would negatively affect your relationship					

Scoring:

Strongly Disagree = -2
Somewhat Disagree = -1
Neither Agree nor Disagree = 0
Somewhat Agree = 1
Strongly Agree = 2

For a full scale score total all the items: /x

For a sub-scale score of internalised shame total items in the categories labelled internalised thoughts, feelings, and behaviours: /x

For a sub-scale score of externalised shame total items in the categories labelled externalised thoughts (thoughts, feelings, and behaviours), : /x

Thoughts:

For a sub-scale score of internalised thoughts total items categorised as internalised thoughts: /x

For a sub-scale score of externalised thoughts about the thoughts of others total items categorised as externalised thoughts: /x

For a sub-scale score of externalised thoughts about the feelings of others total items categorised as externalised thoughts (feelings): /x

For a sub-scale score of externalised thoughts about the behaviour of others total items categorised as externalised thoughts (behaviours): /x

Feelings:

For a sub-scale score of feelings total items categorised as feelings: /x

Behaviours:

For a sub-scale score of behaviours total items categorised as behaviours: /x

Appendix U.

Feedback Submitted to Salomons Ethics Panel on Outcome of MRP

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Appendix V.

Feedback Submitted to Participants on Outcome of MRP

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Appendix W.

Author Guidelines for Journal of Obsessive-Compulsive and Related Disorders

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