

2019

Comparison of Scrupulosity Self-report in Mexico Versus the United States

Johanna E. Hidalgo
University of Central Florida

 Part of the [Psychology Commons](#)

Find similar works at: <https://stars.library.ucf.edu/honorsthesis>

University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by the UCF Theses and Dissertations at STARS. It has been accepted for inclusion in Honors Undergraduate Theses by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Hidalgo, Johanna E., "Comparison of Scrupulosity Self-report in Mexico Versus the United States" (2019). *Honors Undergraduate Theses*. 551.

<https://stars.library.ucf.edu/honorsthesis/551>

COMPARISON OF SCRUPULOSITY SELF-REPORT
IN MEXICO VERSUS THE UNITED STATES

by

JOHANNA HIDALGO

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Psychology
in the College of the Sciences
and in the Burnett Honors College
at the University of Central Florida
Orlando, Florida

Summer Term, 2019

Thesis Chair: Brian Fisak, PhD

Committee Chair: Jeanine Viau, PhD

ABSTRACT

The prevalence rate for Obsessive-Compulsive Disorder (OCD) is between 0.8% to 2%. Many of these individuals experience scrupulosity or religious obsessive-compulsive disorder. Although scrupulosity is a salient theme for those who suffer from OCD, there is a limited amount of research on scrupulosity across cultures. Research is particularly limited in relation to individuals from Latin American countries, including Mexico. In response to this limitation, the purpose of this study is to determine if there is a significant difference in symptoms of scrupulosity in non-referred samples of college students from the United States and Mexico. Results indicated that scrupulosity is a valid and reliable construct in the Mexican sample, not different in structure or intensity relative to an American sample.

Keywords: obsessive-compulsive disorder; scrupulosity; cross-cultural; religiosity; Latin-America

DEDICATION

To my parents and brother for their love, encouragement, and support.

ACKNOWLEDGEMENTS

I want to extend my sincerest gratitude to those of you along the way who helped me pave the successful completion of my thesis. To my thesis chair, Dr. Brian Fisak, I would like to thank for their support and instrumental wisdom in writing and researching this thesis. To my committee chair, Dr. Jeanine Viau, for their willingness to support this endeavor and constructive recommendations on this research. I would also like to thank, Dr. Julia Gallegos Guajardo, for helping make a cross-cultural comparison a possibility and having the time and patience to assist with translations. I would also like to extend a special thanks to J'nelle Stephenson for their encouragement, thoughtful guidance, and mentorship in helping me develop the skillsets to tackle this thesis. I am also grateful to the Burnett Honors College staff for providing students with the opportunity to explore their research interests and support to reach milestones. Last but not least, I would also like to thank my friends and family for their unrelenting support and encouragement through this journey.

TABLE OF CONTENTS

| | |
|---|----|
| CHAPTER 1: INTRODUCTION | 1 |
| Obsessive Compulsive Disorder | 1 |
| Scrupulosity | 1 |
| Scrupulosity and Religions Across Cultures..... | 3 |
| OCD and Religiosity Across Cultures | 6 |
| Religiosity in the Mexican Community | 8 |
| The Focus of the Current Study | 10 |
| CHAPTER TWO: METHODOLOGY | 12 |
| Participants..... | 12 |
| Design and Procedure | 12 |
| Measures | 13 |
| Demographics. | 13 |
| Scrupulosity. | 13 |
| Obsessive Compulsive Symptoms..... | 13 |
| Thought Action Fusion. | 14 |
| Thought Suppression and Intrusion. | 15 |
| CHAPTER THREE: RESULTS | 17 |
| Scrupulosity Based on Nationality..... | 17 |

| | |
|--|----|
| Exploratory Analysis | 17 |
| Severity of OCD Symptoms. | 17 |
| Thought-Action Fusion. | 18 |
| Thought Suppression and Intrusion. | 19 |
| Bivariate Correlations | 19 |
| Scrupulosity and OCD. | 19 |
| Scrupulosity and Thought Suppression/ Intrusions. | 20 |
| Scrupulosity and Thought Action Fusion. | 20 |
| CHAPTER FOUR: DISCUSSION..... | 21 |
| CHAPTER 5: LIMITATIONS AND FUTURE DIRECTIONS | 28 |
| Conclusion | 30 |
| APPENDIX A: IRB APPROVAL LETTER | 33 |
| APPENDIX B: INFORMED CONSENT FORM | 35 |
| APPENDIX C: IRB APPROVAL LETTER (SPANISH VERSION)..... | 38 |
| APPENDIX D: INFORM CONSENT FORM (SPANISH VERSION)..... | 40 |
| APPENDIX E: SAMPLE DEFENSE ANNOUNCEMENT | 44 |
| APPENDIX F: DEMOGRAPHICS QUESTIONNAIRE | 46 |
| APPENDIX G: DEMOGRAPHICS QUESTIONNAIRE (SPANISH VERSION) | 50 |
| APPENDIX H: THE PENN INVENTORY OF SCRUPOLOUSITY- REVISED..... | 53 |

| | |
|---|----|
| APPENDIX I: THE PENN INVENTORY OF SCRUPULOSITY- REVISED (SPANISH VERSION)..... | 56 |
| APPENDIX J: YALE-BROWN OBSESSION COMPULSIVE SCALE | 59 |
| APPENDIX K: YALE-BROWN OBSESSIVE COMPLUSIVE SCALE (SPANISH VERSION) | 65 |
| APPENDIX L: THOUGHT ACTION FUSION | 70 |
| APPENDIX M: THOUGHT ACTION FUSION (SPANISH VERSION) | 73 |
| APPENDIX N: WHITE BEAR SUPPRESSION INVENTORY..... | 77 |
| APPENDIX O: WHITE BEAR SUPPRESSION INVENTORY (SPANISH VERSION) | 80 |
| REFERENCES | 83 |

LIST OF TABLES

| | |
|---|----|
| Table 1. Participant Demographic Information | 31 |
| Table 2. Means (Standard Deviations) and Independent T-Test Comparing Mexico and the United States | 32 |

CHAPTER 1: INTRODUCTION

Obsessive Compulsive Disorder

Obsessive-compulsive disorder (OCD) is a debilitating disorder characterized by obsessive thoughts and compulsive behaviors. Obsessions are described as “recurrent and persistent thoughts, urges, or images that are experienced as intrusive or unwanted” (APA, 2013, p. 235). Further, obsessions may include several different themes, such as thoughts of contamination, illness, harming, morality/religiosity, exactness, and intrusive unwanted disturbing images (McKay et al., 2004; Veale, 2007). Compulsive behaviors are described as “repetitive behaviors or mental acts that an individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly” (APA, 2013, p. 235). Compulsive behaviors typically accompany obsessive thoughts as a means of alleviating the anxiety produced by the thoughts; behaviors may include washing, checking, arranging or ordering, or mental rituals or acts that are considered behaviors of neutralization (APA, 2013; McKay et al., 2004). It is noteworthy that a number of categories of OCD have been classified based on the themes of obsessive thoughts and compulsions (OCCWG, 1997).

Scrupulosity

Scrupulosity, includes religious-themed obsessions and compulsions, including excessive fear of sinning, fear of damnation, and excessive guilt (Abramowitz, Huppert, Cohen, Tolin, & Cahill, 2002; Deacon & Nelson, 2008; Miller & Hedges, 2008). The obsessive thoughts and compulsions are out of proportion with the typical ideology and engagement in religious rituals. For instance, individuals experiencing scrupulosity may exhibit excessive anxiety in response to

relatively harmless behaviors, such as laughing at vulgar jokes or lustfulness (Abramowitz et al., 2002; Deacon & Nelson, 2008). In this case, individuals with scrupulosity may feel severe guilt and conflict with his or her morality, which may, in turn, evoke neutralizing responses to suppress or alleviate the obsessive thoughts and feelings of wrongdoing.

Given that the intrusive thoughts are maladaptive, it is not surprising that these symptoms result in significant distress and impairment. To provide appropriate treatment for those who have a debilitating conflict with religious features of scrupulosity, it is important to highlight the distinction between typical and excessive compulsions and concerns. Greenberg, Witztum, and Pisante (1987) argued that there are four ways to distinguish between typical religiosity and scrupulosity: i) compulsive behaviors above what is expected based on religious law, ii) compulsive behaviors focused on particular aspects of their religion or practices, ii) compulsive behaviors focused on trivial issues of one's religion or practices, and iv) uncomfortable feelings or beliefs that misinterpret biblical truths or rules. Rituals in scrupulosity are similar to OCD compulsions, but they are focused on religious rituals such as excessive confessions, washing/purity, or praying.

Specifically, scrupulous behaviors and concerns are incapacitating and significantly lower the quality of life of those suffering (Huppert, Simpson, Nissenson, Liebowitz, Foa, 2009). Individuals with scrupulosity may be more challenging to treat, as they may perceive their symptoms associated with religion and not a mental health concern (Huppert & Siev, 2010). Therefore, these individuals are more likely to reject mental health treatment, because mental health professionals are perceived as inadequate with interpretations of religious scruples and expectations (Huppert & Siev, 2010). Moreover, when treating individuals, studies have shown

that it is imperative to consider the individual's culture to provide appropriate assessments and improve outcomes (Montenegro & Jankowski, 2017).

Previously studies have noted that the content in OCD-related compulsive behaviors and obsessive thoughts may manifest differently across cultures when affected by external factors such as religion, (i.e., locality and socio-economic status (Akhtar, Varma, Pershad, & Verma, 1978; Fontenelle, Mendlowicz, Marques, & Versiani, 2004). Notably, in countries that have ingrained religious practices (i.e., averting blasphemous thoughts, rituals, religious phasing) into their society, can account for an increase in religious obsessions and compulsions (Okasha, Saad, Khalil, El Dawla, & Yehia, 1994). Despite differences in the presentation of OCD symptoms across cultures, relatively few studies have examined cross-cultural comparisons in scrupulosity. This is particularly the case for Latin American countries even though Latin American culture exhibits high religiosity, where most aspects (i.e., social, health, work performance) of their lives are significantly perceived as influenced by one's spirituality (Garcia & Saewyc, 2007; Wetterneck, Little, Rinehart, Cervantes, Hyde, & Williams, 2012). Consequently, it is vital to evaluate nations that have predominant religious cultures and learn how they are presenting symptoms to provide the level of care that meets their needs.

Scrupulosity and Religions Across Cultures. Given the wide range of prevalence rates across cultures, research is needed to provide a more comprehensive understanding in the differences of the presentation of OCD symptoms in scrupulosity (Greenberg & Huppert, 2010). However, most of the awareness and known research about OCD has come from European countries or the United States (U.S.) (Nicolini, Salin-Pascual, Cabrera, & Lanzagorta, 2018). Far less has been investigated on individuals from Hispanic/Latin American countries. Research is

needed in this area, considering that Latin American countries experience high levels of religiosity in social, personal, and political climates. These factors may lead individuals in Hispanic/Latin American countries to be at an increased risk for scrupulosity (Randall, 2006; Sandoval, 1998). Most notably, Mexico is one of the most Catholic countries in Latin America with higher reports of religious traditions than any other Latino sub-population surveyed (Pew Hispanic Center, 2007). Therefore, it is imperative to examine how groups that have been evaluated from various cultures have experienced the presence of scrupulous symptoms. To provide a comprehensive illustration of how scrupulosity varies depending on the disposition of the individual's cultural nuances and identity.

Related to the idea that nationality and cultural background may be in association to the nature and frequency of scrupulosity, the religious experience may also impact scrupulosity. In particular, Yorulmaz, Gençöz, and Woody (2010) conducted cross-cultural comparisons between Canadian Christians and Turkish Muslims. The researchers found that the degree of religiosity and controlling thoughts of worry appeared to have a significant association with obsessive and compulsive symptoms. Specifically, more religious individuals reported having higher reports of obsessive thoughts of harm and checking compulsions. The Turkish Muslim group exhibited stricter religious themes and morality fusion of thoughts and actions, which increased predictive factors of OCD symptoms relative to the Canadian Christian group. Yorulmaz, Gençöz, and Woody (2009) suggested this was due to a religion that is highly dictated by rules and ritualistic behaviors. Turkish participants were also more likely to report worry, suppressing and controlling thoughts, and fusing thoughts of actions and morality while Canadian participants

report higher levels of self-punishment and thought suppression without issues in control strategies.

Moreover, Yorulmaz and colleagues (2010) argued Turkey – a collectivist culture – reported using internalized coping mechanisms (i.e., thought suppression) and conforming to societal standards, due to findings of collectivism, demonstrating a significant relationship with religiosity, conservative values, and social norms (Çukur, Guzman, & Carlo, 2004). Whereas, participants living in Canada – an individualist culture – were more lenient and struggled less with suppressing thoughts, as a result of a religion with fewer rituals, adaptability to modify values, and allowing for the expression of individuality(i.e., provides external means of coping; Çukur et al., 2004; Tweed, White, & Lehman, 2004;). These findings suggest scrupulosity symptoms manifest with higher degrees of severity for a culture that exhibits more strict ideologies and with religious components that emphasize rituals, cleanliness, and purity (Yorulmaz et al., 2010).

Likewise, a study conducted by Yorulmaz and Işık (2011) showed that individuals with a similar nationality yet different cultures would present obsessions differently. For instance, Turkish participants living in Turkey reported higher concerns with symptoms of scrupulosity (i.e., cleaning, impulses, OCD symptoms and thought-action fusion) relative to Bulgarian participants and migrants from Turkey in Bulgaria. In particular, conflicts with morality-based thoughts were highly correlated with OCD symptoms in the Turkish participants. Moreover, the likelihood of negative thoughts occurring concerning religious dilemmas was much more significantly correlated with OCD. Due to a greater affiliation in ritualistic behaviors, purity in thoughts, and negatively perceiving religious doubts in the Islamic culture, participants from

Turkey often reported higher levels of distress in regard to morality (Yorulmaz et al., 2009). Also, it was suggested there is greater distress with intrusive thoughts and suppression to control them due to the concept of *waswas* in Islam, which is characterized by whispers and visions as a test of faith by evil forces to tempt an individual to doubt religious rituals and beliefs (Asad & Dawood, 2015). On the other hand, in the Bulgarian culture, where the religion is primarily Orthodox Christianity, individuals focus on public worship, conscience, and have fewer behavioral rituals (Inozu, Karanci, & Clark, 2012). Therefore, an individual living in Bulgaria that identifies with the Muslim religion is less exposed to the social pressures of Islamic culture (Yorulmaz et al., 2011).

Moreover, other studies examining OCD symptoms have demonstrated that even though, religion and culture may impact symptom presentation, the prevalence of OCD remains relatively consistent across cultures (Horwath & Weissman, 2000; Weissmann et al., 1994). However, it remains unknown, what the prevalence or symptomology of scrupulosity is among Latin American countries, specifically in the region of Mexico. There has been some research regarding the exploration of OCD and reports of religious thoughts in OCD presentation, as will be explained in further detail in the following paragraph. Therefore, a specific investigation of scrupulosity factors is needed to better understand the characteristics and severity of the Mexican population.

OCD and Religiosity Across Cultures

Although little is known about scrupulosity in the Mexican culture, levels religiosity and prevalence rates of OCD across cultures may inform predictions and provide insight. Therefore,

due to the limitation of research in the Mexican population, it is necessary for this study to examine the prevalence of OCD and how it may manifest across cultures.

In a study conducted by Nicolini and colleagues (1997) at the National Institute of Psychiatry in Mexico, a 2.3% prevalence rate of OCD was found from a sample of 3,086 patients with 7% reporting religious obsessions. More recently, epidemiological studies have identified a 2%- 4% prevalence rate of OCD; making it the fourth most frequently occurring psychiatric disorder in Mexico (Vargas, Palacios, González, Peña, 2008 ;Wetterneck et. al, 2012).

The findings of comparative studies of the prevalence rates and symptomologies of OCD between Latin American countries and non-Latin American countries have been limited and inconsistent (Wetterneck et al., 2012; Williams & Steever, 2015). For instance, when comparing symptoms of a Costa Rican sample with the U.S. sample, Costa Ricans presented a higher rate of somatic symptoms and contamination obsessions; however, a higher level of severity was found in the U.S. sample (Chavira, Garrido, Bagnarello, Azzam, Reus, & Mathews, 2008). Regarding religiosity, even though the U.S. presented higher at 10%, Costa Rica, reported around at 9.5%. Similarly, Greenberg and Huppert (2010) found a 10% prevalence rate of religious symptoms in the OCD population in Costa Rica.

Another study examined provided a depiction of outcomes in symptoms of OCD that were influenced by varying religiosity and region (Okasha et. al.,1994). Specifically, the authors examined scrupulosity from an outpatient sample within Egyptian and Jerusalem cultures. Reports indicated that 60% of the individuals in the Egyptian group reported religious themes, while 50% of participants reported contamination related themes. Equivalently, in the Jerusalem group, 50% reported religious themes and 40% of participants reported contamination themes.

Both countries held predominant religious issues in diverting blasphemous thoughts and repeatedly conducting behaviors for ritualistic purity. This provides some insight into the impact that a culture's religiosity can increase the risk of developing religious-themed OCD.

Comparatively, in the same study results were compared to British and Indian groups, which was depicted as predominantly struggling with themes of orderliness and aggressiveness.

Similarly, in a systematic review of international clinical studies conducted by Fontenelle and colleagues (2004), Brazilian participants demonstrated predominantly aggression-related themes, and Middle Eastern participants displayed primarily religious themes, while most countries commonly showed distress related to fear of contamination. This information suggests that presentations of OCD symptoms and cognitions may vary depending on the prospective region, socio-cultural influences, and degree of religiosity (Sica, Novara, Sanavio, Dorz, & Coradeschi, 2002). Overall, there seems to be a relationship between culture and the levels of religiosity that are subject to vary depending on their cultural contexts.

With the prevalence and symptomologies that are currently known, it is evident that scrupulous symptoms may vary within individuals of different cultures. These findings suggest that future research should aim to evaluate underserved communities, such as the Mexican and sub-Latino communities, to understand the distinctive effects of their cultures, how it presents symptoms, and promote informed treatment options.

Religiosity in the Mexican Community

Mexico has shown a high affiliation to religious doctrines, and is considered to be one of the most Catholic countries in Latin America, with 81% affiliating with the Catholic religion and 84% of Mexicans reporting that religion is an integral part of their life (Camp, 1994; Pew

Hispanic Center, 2007). According to a study conducted by Camp (1994), the strength of religious habits and religious influence scored at a 7 on a scale of 1-10. This demonstrates a high level of observance for God, respect, and trust for priests and religious institutions rank highly. Additionally, Kemp & Rasbridge (2004) emphasized Mexicans have reliance on faith and religion, especially in their perceptions of illnesses and remedies. Their attitudes in handling life circumstances are centrally focused on magico-religious beliefs, in praying to a saint that specializes on the issues they face.

Additionally, informants from this community have addressed that prayer, rites in anointing the sick, or strength of faith influence their beliefs in the outcome of treatment and health (Zapata, & Shippee-Rice, 1999). Previous research has also addressed how religious beliefs and culture can influence the way that the individuals from Mexico perceive and expresses symptoms of pain and disorders (Juarez, Ferrell, Borneman, 1998; Kemp et. al., 2004, Zapata et. al., 1999). In particular, in a qualitative research on Mexicans between Caucasians and African Americans, participants reported poorer quality of life outcomes and exhibited greater acuities of pain (Juarez, Ferrell, Borneman, 1999). Correspondingly, supporting the significance of religiosity and possible contrast in symptom presentation due to cultural variations in Mexico. More generally, the Latino culture is also seen to have significant beliefs that health is often viewed as an individual's state of compliance with god, fortune, or exemplary behaviors (Sandoval, 1998; Spector, 2004). Specifically, in a study conducted by Pew Hispanic Center (2007), Hispanics are considered as having a more rigid interpretation of the Bible, perceive religion to be important in their lives, have a religious object or alters in the home, and practice religion in public worship more often than the U.S. sample. Overall, within the context of OCD,

persons who report strong religious affiliation in Mexico, may be more likely to develop or demonstrate scrupulosity related symptoms (Gallegos, Sánchez-Jauregui, Hidalgo, Davila-de Gárate, Támez-Díaz, & Fisak, 2018). Given this information, it is important to examine how prevalent scrupulosity may be in accordance with the Mexican culture.

To better understand scrupulosity in the Mexican sample, it may be helpful to compare with Western countries that already established research in factor constructs and symptoms of Scrupulosity (Olson, Vera, & Perez; 2006). Previous findings have shown that, across numerous countries, an average of 26 percent of individuals who suffer from OCD reported religious obsessions and/or compulsions as a presenting problem (Greenberg et al., 2010). Sequentially, this may provide some insight into cross-examining significant markers that have been previously identified, such as high religiosity, obsessive thoughts and thought suppression, compulsive rituals, and feelings of anxiety and depression (Abramowitz et al., 2002; Greenberg, 1987; Wegner & Zanakos, 1994). Furthermore, promoting future research and awareness in underrepresented communities can help contribute to overcoming obstacles in cross-cultural treatment, development of preventative and intervention-based services. Collectively, these factors may place Mexicans at an increased risk for symptoms of scrupulosity within the highly traditional and religious region where literature has examined that these highly religious cultures may have religious themes associated with scrupulosity that can be debilitating (Huppert et al., 2010).

The Focus of the Current Study

The purpose of this study was to examine scrupulosity across Mexico comparatively across the United States (U.S.). The hypothesis was that individuals in the Mexican community

would report higher scores on scrupulosity related measures than individuals in the U.S. In addition to the primary hypothesis, this study also provided an exploratory examination of the association and comparative magnitudes of scrupulosity and thought suppression, thought-action fusion, and OCD symptoms between the two groups. These variables are essential in understanding the degree of scrupulosity in the Mexican community and the differences that culture may contribute.

CHAPTER TWO: METHODOLOGY

Participants

Data for this study was collected from a sample of 348 college students attending the University of Central Florida in Orlando, Florida, United States, and 348 sample of college students from the University of Monterrey, Monterrey, Mexico. The U.S. and Mexican college students were recruited through online platforms, and students were offered extra credit in their courses as an incentive to participate. Participants were not excluded based on race/ethnicity, religious affiliation, sexual orientation, or socioeconomic status. The data of the American samples were derived from a larger data set. Refer to Table 1 for demographic information.

Design and Procedure

Participants recruited at the University of Central Florida and the University of Monterrey completed a self-reported survey packet online. Both studies were approved through the Institutional Review Board (IRB) in their designated countries. An informed consent form was also provided along with the survey that included demographics and various questionnaires.

The data of the U.S. and Mexican samples were randomly chosen to best match participants according to age, religion, and gender. Participants with missing values were replaced with the series mean scores on Statistical Package for the Social Sciences (SPSS).

For the purpose of this study, the Mexican sample completed a Spanish version of the survey, which was translated from English to Latin American Spanish. In the Mexican Sample, participants were monitored to ensure that the survey was not repeated.

Measures

Demographics. A scale of the participant's background history was given to obtain a baseline of their characteristics. This included include gender, age, ethnicity, relationship status, sexual orientation, estimated household income, religion/belief system, religious/sect, class standing, and self-reports of diagnosed psychological disorders.

Scrupulosity. The *Penn Inventory of Scrupulosity Revised* version (*PIOS-R*; Olatunji et al., 2007) was used to measure scrupulosity. The *PIOS-R* is a 15-item self-report scale measuring religious obsessive-compulsive symptoms. All items will be answered on a Likert-type scale (0- never; 1- almost never; 2- sometimes; 3- often; 4- constantly). This measure also includes the subscales: that measures the distress of the perceived punishment they may receive from God (*Fear of God*; *FOG*) and measuring the distress of having committed a religious sin (*Fear of Sin*, *FOS*). In the study conducted by Olatunji and colleagues, both subscales scores indicated to be strong indicators of OCD and moderately significant indicators for scrupulosity. For the current sample in the American *PIOS-R* total scale, the internal consistency was good ($\alpha = 0.92$). See *Appendix H* for a sample of the *PIOS-R*.

For the Spanish-speaking sample, the measures were translated from English to Spanish and back-translated to the English version. The back-translations showed to be nearly identical to the original version of the *PIOS-R* (Gallegos et al., 2018). In the current study for the Spanish speaking sample, the *PIOS-R* total scale showed very good internal consistency ($\alpha = 0.92$). See *Appendix I* for a sample of the *PIOS-R* (Spanish version).

Obsessive Compulsive Symptoms. The *Yale-Brown Compulsive Scale Self Report Scale Revised* version (*Y-BOCS-SR*; Baer, 1991; Goodman, Price, Rasmussen, Mazure, Delgado, et al.,

1989; Ólafsson, Snorrason, & Smári, 2010) was used to measure the presence of obsessive thoughts and/or compulsive behaviors. This measure has also been reported as having good internal consistency by Palm and Strong (2007) ($\alpha = .88$). The *Y-BOCS* is separated into two sections, obsessive thoughts and compulsive behaviors. Each item has specific anchors scored from 0 (no symptoms) to 4 (extreme symptoms). Additionally, the measure included two additional items from the severity scale of the *Brief Obsessive-Compulsive Scale (BOCS)* were modified and added to the *Y-BOCS-SR* to provide for a reliable indicator of OCD severity (Bejerot et al., 2014). In the U.S. sample *Y-BOCS-SR Total (Y-BOCS-SR-T)* score in Bejerot and colleagues study demonstrated good internal consistency, with Cronbach's alpha coefficient ($\alpha = .94$). The *Y-BOCS-SR-T* score for the present study in the U.S. sample, demonstrated good internal consistency, with Cronbach's alpha coefficient ($\alpha = .87$). See *Appendix J* for a sample of the *Y-BOCS-SR*.

In the translated measure given to the Spanish speaking sample the different domains showed good internal consistency *Y-BOCS-SR-T* ($\alpha = .92$). It is noteworthy to state that the internal consistency was collected from all respondents in the Mexican sample to derive this score. Similarly, as indicated with the *PIOS-R*, the measure was translated from the English version to Spanish and back-translated to the original version. See *Appendix K* for a sample of the *Y-BOCS-SR*.

Thought Action Fusion. The *Thought Action Fusion Scale Revised* version (*TAFS-R*; Deacon, Vincent, & Zhang, 2013) is a 24-items that were used to measure participants unwanted, intrusive thoughts associated with OCD. The items included were answered in a 5-point Likert-type scale from (1) strongly disagree to (5) strongly agree. The *TAFS-R* consists of four

subscales: *TAFS- Moral*, which measures aspects of morality, *TAFS likelihood- self*, which measures the belief of harmful events happening to themselves, *TAFS likelihood-others*, which measures the belief of harmful events happening to someone else, and *TAFS Religion*, which measures scrupulosity-related TAFS. In *TAFS-R Total (TAFS-R-T)* scale demonstrated good internal consistency ($\alpha = .93$) (Coefficient alphas are reported from Deacon et al., 2013). For the present study in the U.S. sample, the internal consistency of the *TAFS-R-T* scale domains was ($\alpha = .95$), demonstrating good psychometric properties. See *Appendix L* for a sample of the *TAFS-R*.

Additionally, in the translated measure given to the Spanish speaking sample the total domains showed good internal consistency ($\alpha = .94$). Similarly, as indicated with the *PIOS-R*, the measure was translated from the English version to Spanish and back-translated to the original version. See *Appendix M* for a sample of the *TAFS-R*.

Thought Suppression and Intrusion. To examine thought suppression and intrusion the *White Bear Suppression Inventory (WBSI; Wegner & Zanakos, 1994)* was completed by all participants. The *WBSI* is a 15-item scale that measures obsessive thoughts in anxiety-producing and negative thinking, the higher the score is from 15 to 75. It is composed of a 5-point Likert-type scale from strongly disagree (1) to strongly agree (5). In the previous study, repeated examinations in their sample for test-retest reliability the internal consistency of *WBSI* was good, with Cronbach's alphas ranging from 0.87 to .89. In the current U.S. sample, the internal consistency for the *WBSI* total scale was good ($\alpha = 0.94$). See *Appendix N* for a sample of the *WBSI*.

In the Spanish translated measure, for the current Mexican sample the internal consistency for the suppression scale was good ($\alpha = 0.94$). Similarly, as indicated with the *PIOS-*

R, the measure was translated from the English version to Spanish and back-translated to the original version. See *Appendix O* for a sample of the *WBSI*.

CHAPTER THREE: RESULTS

Scrupulosity Based on Nationality

To test the primary hypothesis, an independent samples t-test was conducted to test the hypothesis that participants from the Mexican group would report higher levels of scrupulosity relative to participants from the U.S. group. Results indicated, that the Mexican group did not report significantly higher scores of scrupulosity than the United States group; at the minimum report $t(694) = -1.38, p = ns$. Furthermore, regarding the subscales of the *PIOS-R*, scores reported by the Mexican students did not differ significantly from the U.S. students regarding characteristics of the *FOS* or *FOG*. These results did not support the hypothesis since the data illustrated that there were no significant differences in scrupulosity between Mexican and U.S. students in this study. See Table 2 for a depiction of the means, standard deviations, and Independent T-Test variations between the U.S. and Mexican samples.

Exploratory Analysis

A series of exploratory analyses were conducted to compare samples on variables often correlated with scrupulosity. Characteristics examined thought-action fusion, thought suppression and intrusion, and obsessive thoughts and compulsive behaviors.

Severity of OCD Symptoms. An independent-samples t-test was conducted on the *Y-BOCS-SR* scores to examine symptom severity of OCD symptoms between the Mexican and U.S. students. Results indicated that the U.S. students significantly reported greater symptom severity in OCD symptoms relative to the Mexican students $t(694) = 23.19, p < .05$. Conversely, as seen in Table 2 the U.S. students did report significantly higher scores on compulsive symptoms than the Mexican students. Results also indicated that the U.S. students reported

significantly higher symptoms of obsessions compared to the Mexican students. The results did not provide significant differences in the Mexican participants when compared to the U.S. participants symptoms presentation of OCD in the exploratory analysis.

Thought-Action Fusion. An independent-samples t-test was conducted on the TAFS-R-T between the two samples of participants to compare the degree to which individuals report thought-action fusion beliefs. Results indicated that the Mexican participants did not present significantly higher scores on thought-action fusion than the U.S. participants. As can be seen in Table 2, students from Mexico were no more likely to believe that experiencing a thought increased the possibility of that thought becoming a reality more so than students from the U.S. Further, scores indicated that Mexican students reported significantly higher scores on thought-action fusion related to the self when compared to U.S. students. These results suggest that students from Mexico were more likely to believe that experiencing a thought about oneself increased the possibility of that thought becoming an action than students from the U.S. Results also indicated, however, that no significant differences were found in scores on thought-action fusion as related to morals for the Mexican students compared to United States students. Similarly, scores on the likelihood for others scale reported by Mexican students were not significantly different from scores reported by the United States students. Mexican students also did not report significantly different scores on thought-action fusion for religious beliefs when compared to the U.S. students.

Overall, the total and most subscales scores did not support a significant difference in the exploratory analysis, however, the subscale for thought action fusion for self, revealed that there

may be differences in thought action fusion presenting higher in the Mexican group than in U.S. students.

Thought Suppression and Intrusion. An independent-samples t-test was conducted on the *WBSI-T* to examine whether the Mexican students would report higher thought suppression and intrusion than the U.S. students. As can be seen in Table 2, results indicated the U.S. students reported significantly higher scores than the Mexican students. This was not in line with the initial hypothesis, suggesting that students from Mexico were not more likely to engage in obsessional thinking with anxious and depressive affect when compared to students from the U.S.

Bivariate Correlations

A series of bivariate correlations were conducted to investigate the association between scores on the *PIOS-R* and other relevant constructs, including thought suppression, thought-action fusion, and OCD symptoms. Overall, the evaluation of the correlations provided support for the exploratory analysis regarding the variables of interest as previously mentioned. Each relationship will be discussed specifically below.

Scrupulosity and OCD. A correlational analysis found a positive and significant relationship between scrupulosity *PIOS-R-T* score and OCD symptoms using the *Y-BOCS-SR-T* score in both the U.S. sample, $r(346) = .37, p < .01$, and the Mexican sample, $r(346) = .25, p < .01$. This is in support that scrupulosity and OCD symptoms are significantly related in both samples. Further, there was no difference in the magnitude of the association between scrupulosity and OCD symptoms, $z = 1.68, p = ns$. This suggests that both the U.S. and Mexican samples

responded similarly in the relationship between scrupulosity and OCD symptoms. This was contrary to what was initially hypothesized.

Scrupulosity and Thought Suppression/ Intrusions. A correlational analysis found a positive and linear relationship between scrupulosity and *WBSI-T* score in the U.S. sample, $r(346) = .38, p < .01$; however, Mexican sample was non-significant, $r(346) = .44, p = ns$. After performing a hypothesis test for significance of thought suppression and intrusions on scrupulosity in both samples, there was sufficient evidence to conclude that thought suppression and intrusions was significant in predicting scrupulosity. When the two samples were compared there was no difference in the magnitude of the association between scrupulosity and thought suppression/intrusions, $z = .90, p = ns$. This suggests that both the U.S. and Mexican samples responded similarly in the relationship between scrupulosity and thought suppression.

Scrupulosity and Thought Action Fusion. A correlational analysis found a positive and significant relationship between scrupulosity *PIOS-R-T* score and *TAFS-R-T*. In the U.S. sample ($r(346) = .43, p < .01$) the linear relationship was given by a correlation coefficient, while in the Mexican sample the correlation coefficient was ($r(346) = .40, p < .01$). This was in support of that scrupulosity and thought action fusion are significantly related. When the two samples were compared there was no significant difference found between the two groups, $z = .33, p = ns$. This suggests that both the U.S. and Mexican samples responded similarly in the relationship between scrupulosity and thought action fusion.

CHAPTER FOUR: DISCUSSION

The purpose of this study was to examine whether individuals from the Mexico would endorse higher levels of scrupulosity when compared to individuals from the U.S. In the current study findings offered notable differences in the degree of scrupulosity and cultural implications that may contribute to these variations. Studies on the prevalence of scrupulosity related OCD symptoms appear consistent across cultures however, cross-cultural studies have shown mixed findings regarding characteristics of scrupulosity and symptom presentation across culture (Fontanelle et al., 2004; Horwath et al., 2000). With this in mind, it is important to emphasize scrupulosity research in underrepresented communities, specifically in the Latin American sub-groups, to investigate the prevalence of this disorder, symptom presentation, and provide culturally competent measures.

Interestingly, this study is the first to conduct a comparative examination of scrupulosity between Mexican and U.S. groups. Although, the hypothesis of the Mexican students reporting higher scores of scrupulosity was not supported. The Mexican participants demonstrated similar patterns of scrupulosity and OCD symptoms when compared to the students from the U.S. Due to limited research of scrupulosity in Mexico and similar Latin American countries, comparative research is not accessible through the examination of scrupulosity. However, prior research shows the U.S. and Latin American regions have shown similar prevalence rates for OCD – between 9% and 10% (Greenberg et al., 2010). Moreover, in terms of religious themes, the findings from the current study may be attributed to the same predominant belief systems and rituals associated with Christianity for both the U.S. and Mexican participants (see Table1).

Given that the study found participants endorsed similar fears of committing a sin and distress in damnation on the *PIOS-R* measure (Abramowitz et al., 2002; Inozu, et al., 2012).

Moreover, the *PIOS-R* scale for scrupulosity appeared to be a valid and reliable measure for the Mexican group. This was apparent with the correlational analysis conducted. The current study found no differences between the nationalities in the magnitude of the association between scrupulosity and OCD symptoms. It was also indicated that there was a significant relationship between reports of scrupulosity and OCD in both samples. This is consistent with previous studies that have found that mental contamination, which is exhibited in OCD, is also significantly associated with scrupulosity (Fergus, 2014). For instance, an individual that may suffer from scrupulosity is conflicted by feelings of dirtiness when struggling with wicked or impure thoughts. Much like the U.S. and Mexican participants, scores indicated significant distress in obsessions and compulsions via scrupulous symptoms. Suggesting that both groups struggle with similar levels of excessive guilt, high degree of ritualistic practices, adhering to glorified ideals, and religious compulsions. As evaluated by Fitz (1990), the severity of the religious involvement coupled with the predisposition to OCD symptoms is attributed to the maladjustment, and anxiety individuals may feel. Likewise, much of the research about scrupulosity has found a similar relationship in the multidimensional construct of OCD and religiosity (Fitz,1990).

Findings from the comparison of obsessive thoughts and compulsive behaviors related to OCD suggested that individuals from the U.S. tend to report more severe OCD related obsessive thoughts and compulsive behaviors than individuals from Mexico. Respectably, most cross-cultural research has also indicated that depending on context of the culture (i.e., the region,

socio-cultural influences, or Latin American subgroup) there are variations in the way obsessions and cognitions are reported (Nicolini et al., 2018; Sica et al., 2002; Olson et al., 2006). Similarly, in a study conducted by Bobes and colleagues (2001) OCD reports with the *Y-BOCS* in the U.S. were correspondingly higher than the Latin American culture (Koran, Thienemann, and Davenport, 1996). These findings also provided that Spaniards report unhealthier quality of life for social functioning and general health in comparison to the Americans. Moreover, it is also notable that the Mexican sample reported lower OCD scores than the participants from Spain. The study proposed that the cultural atmosphere played a role in this aspect, due to a greater emphasis on the social aspect of Spanish culture.

This emphasizes that there is much disparity in understanding the sociocultural differences that Latin American subgroups present and in the variation of the language. For example, in the socio-psychological linguistics of Spanish speaking languages, 54% of the population in Spain reported Castilian as their first language, which was once regarded for those who believed in God, whereas other variations of Spanish languages were regarded as immigrant language and of lower social status (Hidalgo, 1990; Sinner, 2002). Suggesting, that there are cultural variations depending on regional deviations in countries located in Latin America, as well as subgroups of South and Central American regions that most notably speak Latin American Spanish (Hidalgo, 1990). As previously discussed, prevalence rates and symptomologies of OCD across Latin America, and between Latin American subgroups and other populations are limited; with inconsistent results (Wetterneck et al., 2012). Therefore, it is vital that future studies examine variations in culture and psycholinguistic implications in subgroups of Latin American.

Findings also reported that thoughts about one-self as it relates to *TAF*, are significantly more predominant for individuals from Mexico than those from the U.S. However, results did not support a comparative difference *TAF-T* or a variation on *TAF* as it relates to thoughts about others or morals between the two groups. The correlational analysis did support an association in reports of thought-action fusion and scrupulosity. However, there was no significant difference in the magnitude between nationalities since they answered in similar patterns. Nevertheless, it may be helpful to conduct further research to identify factors that may contribute to this difference in *TAF-likelihood* in self between both nationalities.

A possible explanation that has been proposed for the variance in *TAF* subscales is the inclination for superstitions and magical thinking that varies between cultures. Which may affect the way individuals interpret thoughts/one's spirituality having some influence on the physical realm (Nicolini et al., 2018; Millet et al., 2004). Specifically, in a study conducted by Pew Hispanic Center (2007), identify that a vast majority of Hispanics believe that miracles still transpire as they did in ancient times, and those that have a strong faith in God will be blessed with financial prosperity and good health. The U.S. participants also share these beliefs; however, Latinos report a higher certainty that Jesus will return in their lifetime and practice religion at a greater intensity. More specifically, Mexico is known to have a history rich of ancient superstitions, magical thinking, and rituals; which can also cause conflicts in obsessive thoughts and fear of damnation from God if these ancient practices are not following Christian beliefs (Behar, 1987). Superstitions can also become maladaptive when an individual has a predisposition to OCD like behaviors or thoughts. They can promote more considerable anxiety

in the over-estimation of threats in the likelihood of the adverse events occurring (Shams & Milosevic, 2013).

Moreover, in the Mexican participants, it was seen that they score higher for likelihood-self in the *TAFS-R* subscale; this may be due to a greater sense of self-blame and guilt. Notably, a common belief when their thoughts do not align with their cultural values, individuals fear that the repercussions will affect the self negatively in various aspects of their life (i.e., damnation, poor health, financial burden, Sandoval, 1998; Spector, 2004). This suggests that individuals from the Hispanic/ Latin community may endorse higher worries in their of sense of self and harm coming to them if they are not compliant with the standards of their religion or societal/ cultural factors, which could potentially increase risk factors for scrupulosity.

Further, the exploratory analysis also showed that the U.S. students reported higher scores for thought suppression and intrusion. These results are also supported by the correlational analysis conducted, which indicated that there is a significant association between scrupulosity and symptoms of thought suppressions and intrusions. However, there was no significant difference in the magnitude between nationalities. After an exhaustive search, no information could be identified regarding cross-cultural comparisons of thought suppression and the experiences of intrusive thoughts between U.S. and Latin American groups.

It is noteworthy that previous studies have identified that the idea of a collectivist and individualist culture seems to play a significant role in how individuals express symptoms of distress. Within a collectivist country, there were more internalized symptoms (i.e., attempting to control the self), instead of using strategies to externalize feelings (i.e., confronting the issue), as was found in the individualist nation (Tweed et al., 2004; Yorulmaz et al., 2010). Interestingly,

Mexico is known as a collectivist nation; however, in the present study, this was inconsistent with the way that the Mexican participants responded (Nicholls, Lane, & Brechu, 1999). Results indicated that the U.S., known as an individualistic culture, reported higher in internalized feelings by suppressing uncomfortable, intrusive thoughts.

Similarly, a collectivist nation highly regards the sense of belonging more than the individualistic culture, which is known to have higher attributes of confrontation and openness to self-expression as coping strategies (Hofstede, 2011). This would suggest that the United States participants may be more likely to report higher scores in thought suppression and intrusion, due to their openness of self-expression and disclosing distress (Nicholls et al., 1999; Hofstede, 2011). Whereas, the Mexican participants may underreport their experiences of distress in thought suppression and intrusion in order to fit the cultural expectations.

Likewise, according to previous studies, the Mexican community faces various factors in stigma, cultural nuances of the disorders, or male chauvinism that increase underreporting of disorders or aversion of their mental health obstacles (Weller, Baer, Garcia de Alba, and Salcedo Rocha, 2008). Specifically, these obstacles affect how they communicate and express symptoms (Satcher, 2001). For instance, Weller and colleagues cited two of the most commonly reported concepts in the Mexican community “susto” (i.e., fright, described as losing their soul accompanied with feelings of depression) and “nervios” (i.e., nervousness (Glazer, Baer, Weller, Garcia de Alba, & Liebowitz, S., 2004)). These terms are based on folk diagnosis and not the medical names that are associated with clinical disorders. This could potentially lead to misdiagnosing if diagnostic assessments are not applicable to denote cultural perceptions when examining “idioms of distress” and symptom presentation (Liang, Matheson, & Douglas, 2016).

Comparably, this could potentially be the case when individuals from the Mexican community report on religious topics. As was previously established, members of the Latino community are highly devoted to the religious aspects of their lives and associate it with their mental and physical well-being. This suggests that Mexican individuals with a predisposition to OCD may engage in suppressing and averting intrusive thoughts when it pertains to views against religion. Therefore, religious conflicts and symptom presentation may be underreported and culturally vary the descriptions of their problems.

Given that cultural aspects influence our cognitive responses, it is important to address in research the differences that may exist between cultures that exhibit high religiosity and reexamine characterizations of scrupulosity. Previous research has distinguished how culture shapes the mind in comparison to other collectivist and individualist groups, categorizations of disorders, and variation of the degrees of symptomologies exhibited by individuals from those groups (Hofstede, 1980; Satcher, 2001). For instance, both the U.S. and Mexican participants significantly reported similar patterns of scrupulosity. However, the U.S. students reported higher levels of obsessions and compulsions overall compared to the Mexican students. Suggesting that there may be potential markers or constructs that vary depending on cultural differences of scrupulosity.

CHAPTER 5: LIMITATIONS AND FUTURE DIRECTIONS

Findings from the current study should be interpreted within the context of some limitations and directions for future research. Potentially there may also be other factors were not taken into consideration in this investigation that would merit further analyses such as factoring in gender, it is possible that females and males experience OCD related symptoms and scrupulosity differently. Given that males were underrepresented in this study (i.e., 17%) it may be important to conduct this study with males or with an equally divided sample of males to females. Also, given that the sample was predominantly college students, it may be helpful to conduct this study on a community sample. Since, results may generalize as college students to not represent the demographics of the general population.

Moreover, given that most participants identified as Christian, other religions were underrepresented in the sample, further insight may be gained through specific consideration and examination of these constructs in other religious groups in Mexico. This could provide further insight regarding religious groups from Mexico, and how they present symptoms related to scrupulosity. Additionally, and similarly, given that other ethnicities and indigenous groups in Mexico were underrepresented in the samples it may be important to explore better ways to operationally define ethnicities given the cultural differences in identifying one's ethnic and/or racial background.

Due to the lack of research in scrupulosity within the Mexican community and symptomologies in cross-cultural studies, this limits our understanding of the struggles they encounter to provide competent care. It is essential to adapt assessments and further explore factors that may contribute to scrupulosity across cultures; by considering the measure's

construct as it relates to culture, factor analyses, an item by item analysis (Schmidt et al., 2009). Specifically, in the *WBSI*, there is much debate on the appropriate items and factor analyses to distinguish between suppression and intrusion experiences. According to Schmidt and colleagues (2009), discrepancies in the loading of items are identified differently for suppression and intrusion in the translated measure of various cultures. Similarly, the wording of specific questions may be capturing distinct personal characteristics outside of dimensions of the measure.

Correspondingly, in the current study, it is important to consider the limitations of language barriers in the translation and back-translation of measures. Depending on the measure and language, there may be differences in the way items may be interpreted when measures are translated from one language to another. Therefore, future studies should consider reevaluating the psychometric properties of the translated measures, especially across Latin American cultures that speak the same or similar languages, given that cultural diversity differs widely concerning dialect, health practices, beliefs, and lifestyles (Centers for Disease Control and Prevention [CDC], 2012; Hernández, 2002).

Furthermore, through the method of dissemination and implementation by translating measures and gathering research based on linguistic distinctions and cultural interpretations, the impact on the lives of Latin American communities could be much higher with culturally competent assessments and treatment (Campesino, & Schwartz, 2006). Additionally, customized measures for scrupulosity can take into account the unique experiences of syncretism in Hispanic areas (Jimenez-Moreno, 1980). Notably, in the combination of religious, superstitious, and spiritual variations that have existed pre-Columbian times and integrated with catholic beliefs of

an immoral soul (Ginsburg & Silverman, 1996; Oppenheimer, 1992). In turn, this will help improve mental health care services and foster adaptable measures to assist culturally diverse populations.

Conclusion

In the present study, the primary hypothesis of Mexican students reporting higher symptoms of scrupulosity was not supported when compared to the U.S. students. There were similarities in the presentation of the reported scrupulosity scores that provided some insight into the prevalence of this disorder. Significant differences were reported for the representation of thought-action fusion in the self in the Mexican students when compared to the U.S. Although some differences existed between the two groups on OCD symptomology, the U.S. sample most notably presented a combination of obsessions and compulsions, and thought suppression and intrusions. The findings from this study helped provide information about cultural differences, especially given the lack of comparative literature that currently exists for scrupulosity in the Mexican population. Therefore, to bridge the gap between cross-cultural disorders, further research should focus on the development of culturally adaptive measures, accessible services, and resources that can be developed to help assist underserved diverse populations. Hence, a greater understanding of these constructs will provide information that could be designed to encourage the development of culturally sensitive measures to accommodate specific Latino communities such as Central American populations and indigenous groups.

Table 1. Participant Demographic Information

| | Total Sample | United States | Mexico |
|-----------------------------------|---------------------|----------------------|---------------|
| Variables/ Factors | | | |
| Gender | | | |
| n | 696 | 348 | 348 |
| Age | 20.43 (1.60) | 20.43 (1.65) | 20.45 (1.55) |
| Male | 16.7% | 16.4% | 17.0% |
| Female | 83.3% | 83.6% | 83.0% |
| Ethnicity | | | |
| American Indian or Alaskan Native | 0.1% | 0.3% | - |
| Asian/ Pacific Islander | 3.4% | 6.9% | - |
| Black/ African-American | 9.2% | 18.1% | 0.3% |
| Hispanic | 56.9% | 21.8% | 92.2% |
| White/ Caucasian | 27.2% | 46.8% | 7.5% |
| Other | 3.2% | 6.0% | 0.3% |
| Religion | | | |
| Buddhism | 1.7% | 1.7% | 1.7% |
| Christianity | 97.1% | 97.1% | 97.1% |
| Islamic/ Muslim | 0.3% | 0.3% | 0.3% |
| Judaism | 0.9% | 0.9% | 0.9% |

Note. 1, 581 individuals were removed for not meeting inclusion criteria such as inconsistent and/or missing data, or matching component from overall samples. Dashes signify that information was not presented.

Table 2. Means (Standard Deviations) and Independent T-Test Comparing Mexico and the United States

| Variables | Mexico | | United States | | t-test |
|------------------------------|--------|-------|---------------|-------|---------|
| | M | SD | M | SD | |
| n | 348 | | 348 | | |
| PIOS-R Total | 34.97 | 11.66 | 33.75 | 11.66 | -1.38 |
| PIOS- Fear of Sin | 22.95 | 7.58 | 21.85 | 7.65 | -1.91 |
| PIOS-Fear of God | 12.02 | 5.07 | 11.86 | 4.71 | -0.45 |
| Y-BOCS-SR Total | 12.10 | 8.08 | 26.46 | 8.26 | 23.19** |
| Y-BOCS-SR Obsessions | 7.22 | 4.42 | 14.42 | 4.59 | 21.12** |
| Y-BOCS-SR Compulsions | 4.88 | 4.49 | 12.02 | 4.7 | 20.47** |
| TAFS-R- Total | 44.94 | 15.34 | 44.69 | 15.17 | -0.22 |
| TAFS-R-Moral | 30.42 | 10.96 | 31.28 | 11.01 | 1.04 |
| TAFS-R- Likelihood of Others | 7.2 | 3.75 | 7.34 | 3.69 | 0.50 |
| TAFS-R- Likelihood of Self | 7.32 | 3.41 | 6.09 | 3.15 | -4.98** |
| TAFS-R- Religion | 16.83 | 6.42 | 17.57 | 6.84 | 1.47 |
| WBSI- Total | 43.51 | 13.43 | 48.65 | 12.85 | 5.15** |

Note. PIOS=Penn Inventory of Scrupulosity- Revised; Y-BOCS-SR= Yale-Brown Compulsive Scale Self Report Scale Revised Version; TAFS-R= Thought Action Fusion Scale Revised Version, WBSI= White Bear Suppression Inventory. $df=694$. ** $p<01$ (two-tailed).

APPENDIX A: IRB APPROVAL LETTER

APPENDIX A: IRB APPROVAL LETTER



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1
FWA00000351, IRB00001138**

To: **Brian J. Fisak**

Date: **July 14, 2016**

Dear Researcher:

On 07/14/2016, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Repetitive Thinking and Anxiety
Investigator: Brian J Fisak
IRB Number: SBE-16-12374
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

A handwritten signature in black ink that reads "Joanne Muratori".

Signature applied by Joanne Muratori on 07/14/2016 03:34:21 PM EDT

IRB Manager

APPENDIX B: INFORMED CONSENT FORM

APPENDIX B: INFORMED CONSENT FORM



Informed Consent

Study Title: Repetitive Thinking and Anxiety

Principal Investigator: Brian Fisak, Ph.D.

Introduction: You are being asked to participate in a research study titled, “Repetitive Thinking and Anxiety.” This survey-based study is expected to take approximately 30 minutes of your time. Please note that all participants must be 18 years of age or older to participate in this study.

What you should know about a research study:

- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The general purpose of this study is to gain a better understanding of various forms of repetitive thinking and behaviors that relate to anxiety symptoms. The primary form of repetitive thinking that will be examined is scrupulosity, or repetitive thinking involving religious themes.

What you will be asked to do in the study: If you agree to participate in this study, you will be asked to answer a series of questionnaires. You do not have to answer every question or complete every task, and you will not lose any benefits if you skip questions or tasks.

Location: This study will be offered online through SONA, UCF’s psychology research participation system.

Time required: It is expected that this study will take approximately 30 minutes to complete.

Risks: Risks for participation are minimal and unlikely; however, those who participate will be answering questions about personal opinions and beliefs. Although not anticipated, if stress were to arise as a result of participation, you may contact the University of Central Florida Counseling and Psychological Services for assistance at (407) 823-2811 (website: <http://caps.sdes.ucf.edu>). You are also welcome to contact Dr. Brian Fisak, Ph.D., the Principal Investigator of this study at (407) 708-2822 (email: Brian.Fisak@ucf.edu).

Compensation or payment: There is no direct compensation for taking part in this study. It is possible, however, that extra credit may be offered for your participation, but allocation of extra credit points is up to the discretion of your instructor.

Benefits: Benefits include the knowledge that you have contributed to psychological science, including the understanding of repetitive thinking and anxiety. In addition, merely responding to the questions may facilitate insight into one's own thinking patterns and level of anxiety.

Anonymous participation: Responses as part of participation in this study are anonymous. This means that means that your name will not be affiliated with your responses to the survey.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, talk to Dr. Brian Fisak, Ph.D., Department of Psychology, College of Sciences, at (407) 708-2822 or Brian.Fisak@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

I, _____, (print name) agree to participate in this study based on the terms outlined above.

APPENDIX C: IRB APPROVAL LETTER (SPANISH VERSION)

APPENDIX C: IRB APPROVAL LETTER (SPANISH VERSION)



San Pedro Garza García, N.L., México 03 de enero de 2017

Dra. Julia Gallegos
Investigador Principal de Protocolo de Investigación

Estimado Dra. Gallegos:

Ref.: 012017-CIE

A los efectos del cumplimiento de las Buenas Prácticas Clínicas, **el Comité de Investigación y el Comité de Ética en Investigación de la Vicerrectoría de Ciencias de la Salud de la Universidad de Monterrey (CIE), Aprueban** luego de haber examinado el plan, diseño y consideraciones científicas y éticas, el protocolo de investigación intitulado:

"Ansiedad y Pensamiento Repetitivo"

El protocolo fue sometido a evaluación por los **Comités** mencionados con antelación, encontrando que cumple con todos los lineamientos a los que deben sujetarse las investigaciones biomédicas en humanos.

Le requerimos se realicen reportes trimestrales firmados por usted donde se consignen los resultados, incidentes, efectos secundarios y complicaciones que se presenten durante la investigación, y que se reporte en forma inmediata cualquier evento adverso que ponga en riesgo la vida de los participantes en el estudio.

Así mismo, declaramos que todos los datos contenidos en la presente solicitud y la documentación revisada y analizada, corresponden a información verídica, exacta y completa.

Atentamente,


Dr. Pablo Villarreal Guerra
Presidente del Comité de Ética en Investigación


Dr. Gerardo Rivera Silva
Presidente del Comité de Investigación

Av. Marqués Prieto 4500 Pte.
San Pedro Garza García, N.L.
México, C.P. 66238

T. +52 (81) 8215 1000
01 800 801 UDEM
udem.edu.mx

APPENDIX D: INFORM CONSENT FORM (SPANISH VERSION)

APPENDIX D: INFORMED CONSENT FORM (SPANISH VERSION)



Ansiedad y Pensamiento Repetitivo

Consentimiento Informado

Título de estudio: Ansiedad y Pensamiento Repetitivo

Investigadores Principales: Brian Fisak, Ph.D., Universidad de Florida Central
Julia Gallegos, Ph.D., Universidad de Monterrey

Asistentes de Investigación UDEM: Gabriela Sánchez, B.A.

Sara Dávila (estudiante de Psicología)

Gisselle Tamez (estudiante de Psicología)

Introducción: Los investigadores de la Universidad de Monterrey y de la Universidad de Florida Central (UCF) estudiamos diversos temas. Para lograrlo, requerimos el apoyo de personas que accedan a formar parte de un estudio, es por ello que se te está invitando a uno en el que participarán cerca de 400 personas de la UCF y 400 personas de la UDEM. Se te está pidiendo participar porque eres estudiante universitario. Debes tener 18 años de edad o más para formar parte del estudio. Las personas que lo dirigen son el Dr. Brian Fisak, profesor del Departamento de Psicología de la UCF y la Dra. Julia Gallegos, profesora del Departamento de Psicología de la UDEM.

Lo que debes saber sobre el estudio:

- Alguien te dará una explicación sobre él.
- Un estudio es aquél en el que participas voluntariamente.
- Si participas en él o no depende de ti.
- Debes participar en este estudio únicamente si así lo deseas.
- Puedes elegir no participar en el estudio.
- Puedes acceder a participar y cambiar de parecer después.
- La decisión que tomes no se considerará en tu contra.

- Siéntete con la libertad de hacer todas las preguntas que desees antes de tomar una decisión.

Propósito del estudio: El propósito general de este estudio es adquirir una mejor comprensión de las creencias y conductas relacionadas con la escrupulosidad, una forma del trastorno obsesivo compulsivo.

¿Qué se te pedirá realizar en este estudio? Si accedes a participar en el estudio, se te pedirá contestar una serie de cuestionarios. No tienes que contestar cada pregunta o completar cada tarea. No perderás ningún beneficio si omites preguntas o tareas.

Ubicación: Este estudio se brindará en línea mediante Google Forms en la UDEM y mediante SONA, el sistema de participación para estudios de psicología de la UCF.

Tiempo requerido: Se estima que este estudio tome aproximadamente 30 minutos en completarse.

Riesgos: Los riesgos en la participación son mínimos y poco probables; sin embargo, aquéllos que participen lo harán respondiendo preguntas sobre opiniones y creencias personales. Aunque no se prevé, si se presentara estrés como resultado de la participación puedes comunicarte al Centro de Tratamiento e Investigación de la Ansiedad (Cetia) de la UDEM al teléfono 8215-4500 (cetia@udem.edu.mx), de 8 am a 8 p.m.

Beneficios: No se espera que se te proporcione algún beneficio por tomar parte en este estudio, aparte de tus contribuciones a la comunidad científica.

Compensación o pago: No hay compensación directa por formar parte del estudio. No obstante, es posible que se te otorgue puntos extra por tu participación, aunque se deja a discreción de tu profesor.

Estudio anónimo: Este estudio es anónimo. Eso significa que nadie, ni siquiera el equipo de investigación, sabrá que la información la proporcionaste tú.

Contacto para preguntas del estudio o para reportar un problema: Si tienes preguntas, dudas, quejas o consideras que el estudio te ha afectado de alguna manera, siéntete con la libertad de contactar las 24 horas del día, mientras dure el estudio, a la Dra. Julia Gallegos, una de las investigadoras principales de este estudio, al teléfono 8215-1000 ext. 1472 y/o 044-8115316352 (correo electrónico: julia.gallegos@udem.edu).

Contacto del Comité de Ética para conocer tus derechos en el estudio o reportar una queja: Las investigaciones de la Universidad de Monterrey en las que participan humanos, se realiza bajo la supervisión del Comité de Ética. Este estudio ha sido revisado y aprobado por el Comité de Ética en la Investigación de la Universidad de Monterrey. Para información sobre los

derechos de las personas que participan en él, por favor comuníquese con el Dr. Pablo Villarreal Guerra (pablo.villarreal@udem.edu). También puedes hablar con ellos para cualquiera de lo siguiente:

- Si tus preguntas, inquietudes o quejas no están siendo atendidas por el equipo de investigación.
- Si no puedes localizar al equipo de investigación.
- Si deseas hablar con alguien aparte del equipo de investigación.
- Si deseas obtener información o hacer alguna contribución a la investigación.

Yo, _____, (escribir nombre) acepto participar en este estudio en base a los términos descritos arriba.

APPENDIX E: SAMPLE DEFENSE ANNOUNCEMENT

APPENDIX E: SAMPLE DEFENSE ANNOUNCEMENT

NOTICE OF DEFENSE

Announcing the Defense of Thesis
Of Johanna E. Hidalgo
For Honor in the Major
Psychology

(Thursday, June 6th, 2019)
2:00 P.M.
UP (4001)
Wayne Densch Partnership Center

Thesis Title: **Comparison of Scrupulosity Self-Report in Mexico Versus the United States**

This thesis intends to compare the relationship of scrupulosity in the United States versus the Mexican community. The prevalence rate for Obsessive-Compulsive Disorder (OCD) is between 0.8% to 2%, and many of these individuals experience scrupulosity or religious obsessive-compulsive disorder. Although scrupulosity is a salient theme for those who suffer from OCD, there is a limited amount of research on scrupulosity across cultures, particularly in Latin American countries such as Mexico. In response to this limitation, the purpose of this study is to compare symptoms of scrupulosity between non-referred samples of college students in the United States and Mexico. Findings will be discussed regarding the association of Scrupulosity, Obsessive Compulsions Disorder symptoms, thought suppression, and thought-action fusion between Mexican and United States participants. These constructs are essential in providing a preliminary presence of scrupulosity in a Mexican group and characteristics of scrupulous symptoms that are specific to this community.

Committee:
Dr. Brian Fisak
Dr. Jeanine Viau

Approved By: Brian Fisak

Doc ID: 1c500615f568885745a666c3c9e6416b257083f4

APPENDIX F: DEMOGRAPHICS QUESTIONNAIRE

APPENDIX F: DEMOGRAPHICS QUESTIONNAIRE

Demographic Statistics

Instructions: Please answer the following questions regarding your background.

1. What is your gender?

Male

Female

Transgender

2. What is your age?

18-20

21-23

24-26

27-30

31-35

36-40

41 +

3. What is your ethnicity?

American Indian or Alaskan native

Asian/Pacific Islander

Black/African-American

Hispanic

White/Caucasian

Other_____

4. What is your relationship status?

Single

Married

Divorced

Widowed

5. What is your sexual orientation?

Heterosexual

Homosexual

Bisexual

Asexual

6. What is your estimated household income?

<20,000

20,000- 39,999

40,000- 59,999

60,000-79,999

80,000- 99,999

> 100,000

7. What is your religion/belief system?

Buddhism

Christianity

Confucianism

Hinduism

Islam

Judaism

Sikhism

Taoism

Zoroastrianism

Agnosticism

Atheism

Other please list _____

8. Please describe your religious denomination/sect? _____

9. What is your class standing?

Freshman

Sophomore

Junior

Senior

Graduate

10. Have you ever been diagnosed with any of the following?

Post-traumatic stress disorder

Obsessive-compulsive disorder

Depression

Social phobia/Social anxiety disorder

Generalized anxiety disorder

Specific phobia
Other
None

APPENDIX G: DEMOGRAPHICS QUESTIONNAIRE (SPANISH VERSION)

APPENDIX G: DEMOGRAPHICS QUESTIONNAIRE (SPANISH VERSION)

Estadísticas Demográficas

Instrucciones: Por favor contesta las siguientes preguntas sobre su historial.

1. ¿Cuál es tu género?
 - Masculino
 - Femenino
 - Transexual
 - Otro _____

2. ¿Cuál es tu edad? _____

3. ¿Cuál es tu origen étnico?
 - Indio Americano o Nativo de Alaska
 - Isleño Asiático/del Pacífico
 - Americano Negro/Africano
 - Hispano
 - Blanco/Caucásico
 - Otro _____

4. ¿Cuál es tu estado de relación?
 - Soltero
 - Casado
 - Divorciado
 - Viudo

5. ¿Cuál es tu orientación sexual?
 - Heterosexual
 - Homosexual
 - Bisexual
 - Asexual

6. ¿Cuál es tu ingreso familiar estimado?
 - <\$400,000 pesos
 - \$400,000- \$799,980 pesos
 - \$800,000- \$1,199,989 pesos
 - \$1,200,000-\$1,599,989 pesos
 - \$1,600,000- \$1,888,980 pesos
 - > \$2,000,000 pesos

7. ¿Cuál es tu religión/sistema de creencias?

- | | |
|---|--|
| <input type="checkbox"/> Budismo | <input type="checkbox"/> Cristianismo |
| <input type="checkbox"/> Confucionismo | <input type="checkbox"/> Hinduism |
| <input type="checkbox"/> Islámicos/Musulmanes | <input type="checkbox"/> Judaism |
| <input type="checkbox"/> Sijismo | <input type="checkbox"/> Taoismo |
| <input type="checkbox"/> Zoroastrismo | <input type="checkbox"/> Agnosticismo |
| <input type="checkbox"/> Ateísmo | <input type="checkbox"/> Otros (indíquelo) _____ |

7a. Por favor describe tu denominación religiosa/secta (si es applicable) _____

8. ¿Cuál es tu grado?

- Estudiante de primer año
- Estudiante de segundo año
- Estudiante de tercer año
- Estudiante de cuarto año
- Estudiante de quinto año

9. ¿Alguna vez te han diagnosticado alguno de los siguientes?

- Trastorno de estrés postraumático
- Trastorno obsesivo compulsivo
- Depresión
- Trastorno de fobia social/ansiedad social
- Trastorno de ansiedad generalizada
- Fobia específica
- Otro
- Ninguno

APPENDIX H: THE PENN INVENTORY OF SCRUPULOSITY- REVISED

APPENDIX H: THE PENN INVENTORY OF SCRUPULOSITY- REVISED

Inventory of Scrupulosity of Penn- Revised

Instructions: The following statements refer to experiences that people sometimes have. Please indicate how often you have these experiences using the following scale:

| Never 0 | Almost Never 1 | Sometimes 2 | Often 3 | Constantly 4 |
|------------|-------------------|----------------|------------|-----------------|
|------------|-------------------|----------------|------------|-----------------|

1. I worry that I might have dishonest thoughts
2. I fear I will act immorally
3. I feel urges to confess sins over and over again
4. I worry about heaven and hell
5. Feeling guilty interferes with my ability to enjoy things I would like to enjoy
6. Immoral thoughts come into my head and I can't get rid of them
7. I am afraid my behavior is unacceptable to God
8. I must try hard to avoid having certain immoral thoughts
9. I am very worried that things I did may have been dishonest
10. I am afraid I will disobey God's rules/laws
11. I am afraid of having sexual thoughts
12. I feel guilty about immoral thoughts I have had
13. I worry that God is upset with me
14. I am afraid of having immoral thoughts

15. I am afraid my thoughts are unacceptable to God

APPENDIX I: THE PENN INVENTORY OF SCRUPULOSITY- REVISED
(SPANISH VERSION)

APPENDIX I: THE PENN INVENTORY OF SCRUPULOSITY-REVISED

(SPANISH VERSION)

Inventario de Escrupulosidad de Penn - Revisado

Instrucciones: Las siguientes aseveraciones hacen referencia a experiencias que las personas tienen algunas veces. Por favor indica qué tan frecuentemente tienes estas experiencias utilizando la siguiente escala:

| Nunca 0 | Casi nunca 1 | Algunas veces 2 | Con frecuencia 3 | Constantemente 4 |
|------------|-----------------|--------------------|---------------------|---------------------|
|------------|-----------------|--------------------|---------------------|---------------------|

| | | | | | |
|---|---|---|---|---|---|
| 1. Me preocupa tener pensamientos deshonestos. | 1 | 2 | 3 | 4 | 5 |
| 2. Temo actuar de manera inmoral. | 1 | 2 | 3 | 4 | 5 |
| 3. Siento la necesidad de confesar pecados una y otra vez. | 1 | 2 | 3 | 4 | 5 |
| 4. Me preocupo sobre el cielo y el infierno. | 1 | 2 | 3 | 4 | 5 |
| 5. Sentirme culpable interfiere con mi habilidad para disfrutar lo que me gustaría disfrutar. | 1 | 2 | 3 | 4 | 5 |
| 6. Pensamientos inmorales surgen en mi cabeza y no puedo deshacerme de ellos | 1 | 2 | 3 | 4 | 5 |
| 7. Temo que mi comportamiento no sea aceptado por Dios. | 1 | 2 | 3 | 4 | 5 |
| 8. Tengo que hacer un gran esfuerzo por evitar ciertos pensamientos inmorales. | 1 | 2 | 3 | 4 | 5 |
| 9. Me preocupa mucho que las cosas que he hecho hayan sido deshonestas. | 1 | 2 | 3 | 4 | 5 |
| 10. Temo desobedecer las reglas/leyes de Dios | 1 | 2 | 3 | 4 | 5 |
| 11. Temo tener pensamientos sexuales. | 1 | 2 | 3 | 4 | 5 |
| 12. Me siento culpable por pensamientos inmorales | 1 | 2 | 3 | 4 | 5 |

que he tenido.

- | | | | | | |
|---|---|---|---|---|---|
| 13. Me preocupa que Dios esté molesto conmigo. | 1 | 2 | 3 | 4 | 5 |
| 14. Temo tener pensamientos inmorales. | 1 | 2 | 3 | 4 | 5 |
| 15. Temo que mis pensamientos no sean aceptados por Dios. | 1 | 2 | 3 | 4 | 5 |

APPENDIX J: YALE-BROWN OBSESSION COMPULSIVE SCALE

APPENDIX J: YALE-BROWN OBESESSIVE COMPLUSIVE SCALE

Yale-Brown Obsessive Compulsive Scale: Part I

Obsessive Thoughts

Questions 1-5 are about obsessive thoughts.

Obsessions are unwanted ideas, images, or impulses that intrude on thinking against your wishes and efforts to resist them. They usually involved themes of harm, risk and danger. Sometimes they involve religious themes and morality. Common obsessions are excessive fears of contamination; recurring doubts about danger; extreme concern with order, symmetry, or exactness; fear of losing important things.

Please answer each question by marking the appropriate answer.

1. How much of time do you spend occupied by obsessive thoughts?

0 = None

1 = Less than 1 hr/day or occasional occurrence

2 = 1 to 3 hrs/day or frequent

3 = Greater than 3 and up to 8 hrs/day or very frequent occurrence

4 = Greater than 8 hrs/day or nearly constant occurrence

2. How much do obsessive thoughts interfere with work, school, social, or other important role functioning? Is there anything that you don't do because of them?

0 = None

1 = Slight interference with social or other activities, but no overall performance not impaired

2 = Definite interference with social or occupational performance, but still manageable

3 = Causes substantial impairment in social or occupational performance

4 = Incapacitating

3. How much distress do obsessive thoughts cause you?

0 = None

1 = Not too disturbing

2 = Disturbing but still manageable

3 = Very disturbing

4 = Near constant and disabling thoughts

4. How much of an effort do you make to resist obsessive thoughts? How often do you try to disregard or turn your attention away from these thoughts as they enter your mind?

0 = Try to resist all the time

1 = Try to resist most of the time

2 = Make some effort to resist

3 = Yield to all obsessions without attempting to control them, but with some reluctance

4 = Completely and willingly yield to all obsessions

5. How much control do you have over obsessive thoughts? How successful are you in stopping or diverting obsessive thinking? Can you dismiss them?

0 = Complete control

1 = Usually able to stop or divert obsessions with some effort and concentration

2 = Sometimes able to stop or divert obsessions

3 = Rarely successful in stopping or dismissing obsessions, can only divert attention with difficulty

4 = Obsessions are completely involuntary, rarely able to even momentarily alter obsessive thinking

6. On the average, what is the longest amount of consecutive waking hours per day that you are completely free of obsessions?

0 = No symptoms

1 = Long symptom-free interval, more than 8 consecutive hrs/day symptom-free

2 = Moderately long symptom-free interval, more than 3 and up to 8 consecutive hrs/day symptom-free

3 = Short symptom-free interval, from 1 to 3 consecutive hrs/day symptom-free

4 = Extremely short symptom-free interval, less than 1 consecutive hr/day symptom-free

7. Have you been avoiding doing anything, going any place or being with anyone in order to avoid obsessions?

0 = No deliberate avoidance

1 = Mild, minimal avoidance

2 = Moderate, some avoidance; clearly present

3 = Severe, much avoidance; avoidance prominent

4 = Extreme, very extensive avoidance; I do almost everything I can to avoid triggering symptoms

The next several questions are about compulsive behaviors.

Yale-Brown Obsessive Compulsive Scale: Part II

Compulsive Behaviors

Compulsions are urges that people have to do something in order to lessen feelings of anxiety or other discomfort. Often they do repetitive, purposeful, intentional behaviors called rituals. The behavior itself may seem appropriate, but it becomes a ritual when done to excess. Washing, checking, repeating, straightening, hoarding, and many other behaviors can be rituals. Some rituals are mental. For example, thinking of saying things over and over under your breath.

1. How much time do you spend doing compulsive behaviors? How frequently do you do rituals?

0 = None

1 = Less than 1 hr/day, or occasional performance of compulsive behaviors

2 = From 1 to 3 hrs/day, or frequent performance of compulsive behaviors

3 = More than 3 and up to 8 hrs/day, or very frequent performance of compulsive behaviors

4 = More than 8 hrs/day, or near constant performance of compulsive behaviors (too numerous to count)

2. How much do compulsive behaviors interfere with work, school, social, or other important role functioning? Is there anything that you don't do because of compulsions?

0 = None

1 = Slight interference with social or other activities, but overall performance not impaired

2 = Definite interference with social or occupational performance, but still manageable

3 = Causes of substantial impairment in social or occupational performance

4 = Incapacitating

3. How would you feel if prevented from performing compulsions? How anxious would you

become?

0 = None

1 = Only slightly anxious if compulsions prevented

2 = Anxiety would mount but remain manageable if compulsions prevented

3 = Prominent and very disturbing increase in anxiety if compulsions interrupted

4 = Incapacitating anxiety from any intervention aimed at modifying activity

4. How much of an effort do you make to resist compulsions?

0 = Always try to resist

1 = Try to resist most of the time

2 = Make some effort to resist

3 = Yield to almost all compulsions without attempting to control them, but with some reluctance

4 = Completely and willingly yield to all compulsions

5. How strong is a drive to perform compulsive behaviors? How much control do you have over compulsions?

0 = Complete control

1 = Pressure to perform the behavior but usually exercise voluntary control over it

2 = Strong pressure to perform behavior, can control it only with difficulty

3 = Very strong drive to perform behavior, must be carried to completion, can only delay with difficulty

4 = Drive to perform behavior experienced as completely involuntary and over-powering, rarely able to even momentarily delay activity.

6. On the average, what is the longest amount of consecutive waking hours per day that you are completely free of compulsions?

0 = No symptoms

1 = Long symptom-free interval, more than 8 consecutive hrs/day symptom-free

2 = Moderately long symptom-free interval, more than 3 and up to 8 consecutive hrs/day symptom-free

3 = Short symptom-free interval, from 1 to 3 consecutive hrs/day symptom-free

4 = Extremely short symptom-free interval, less than 1 consecutive hr/day symptom-free

7. Have you been avoiding doing anything, going any place or being with anyone in order to avoid compulsions?

0 = No deliberate avoidance

1 = Mild, minimal avoidance

2 = Moderate, some avoidance; clearly present

3 = Severe, much avoidance; avoidance prominent

4 = Extreme, very extensive avoidance; patient does almost everything he/she can to avoid triggering symptoms

APPENDIX K: YALE-BROWN OBSESSIVE COMPLUSIVE SCALE
(SPANISH VERSION)

APPENDIX K: YALE-BROWN OBSESSIVE COMPLUSIVE SCALE

(SPANISH VERSION)

Escala de Yale-Brown para el Trastorno Obsesivo-Compulsivo: Parte I

Pensamientos Obsesivos

Las obsesiones son ideas, imágenes o impulsos indeseables que invaden el pensamiento en contra de tus deseos y esfuerzos por resistirte a ellos. Generalmente, involucran temas como daño, riesgo o peligro. Algunas veces, involucran temas religiosos y de moralidad. Algunas obsesiones comunes son el miedo excesivo a la contaminación; dudas recurrentes sobre el peligro; preocupación extrema por el orden, simetría o precisión o miedo de perder cosas importantes.

Por favor subraya la respuesta adecuada.

1. ¿Qué tanto tiempo dedicas a tener pensamientos obsesivos?

0 = Nada

1 = Menos de 1 hora al día o caso esporádico

2 = De 1 a 3 horas al día o con frecuencia

3 = Más de 3 horas y hasta 8 horas al día o caso muy frecuente

4 = Más de 8 horas al día o caso prácticamente constante

2. ¿Qué tanto interfieren los pensamientos obsesivos con el trabajo, escuela, vida social u otra función o rol? ¿Hay algo que no realices debido a ellos?

0 = Nada

1 = Interferencia leve con actividades sociales u otras actividades, pero sin ninguna deficiencia en el desempeño general

2 = Interferencia definida con el desempeño social o laboral, aunque manejable

3 = Causa deficiencia sustancial en el desempeño social o laboral

4 = Imposibilitan

3. ¿Qué tanto te angustian los pensamientos obsesivos?

0 = Nada

1 = No es tan alarmante

2 = Es alarmante pero manejable

3 = Es muy alarmante

4 = Cercano a pensamientos constantes que imposibilitan

4. ¿Qué tanto te esfuerzas por rechazar los pensamientos obsesivos? ¿Qué tan frecuentemente intentas evadir o desviar tu atención de estos pensamientos cuando vienen a tu mente?

- 0 = Trato de rechazarlos todo el tiempo
- 1 = Trato de rechazarlos la mayor parte del tiempo
- 2 = Me esfuerzo un poco para rechazarlos
- 3 = Cedo a todas las obsesiones sin hacer ningún intento por controlarlas, aunque siendo un poco renuente
- 4 = Cedo a todas las obsesiones completamente y por voluntad propia

5. ¿Qué tanto control tienes sobre los pensamientos obsesivos? ¿Qué tan capaz eres para frenar o alejar pensamientos obsesivos?

- 0 = Control total
- 1 = Generalmente puedo frenar o alejar las obsesiones con un poco de esfuerzo y concentración
- 2 = Algunas veces puedo frenar o alejar las obsesiones
- 3 = Rara vez puedo frenar o hacer caso omiso a las obsesiones; difícilmente puedo desviar la atención
- 4 = Las obsesiones son completamente involuntarias; rara vez puedo modificar el pensamiento obsesivo, ni siquiera por un momento

6. En promedio, ¿cuál es la mayor cantidad de horas consecutivas durante el día en que estás completamente libre de obsesiones?

- 0 = Sin síntomas
- 1 = Intervalo largo sin síntomas, más de 8 horas consecutivas al día sin síntomas
- 2 = Intervalo moderado sin síntomas, más de 3 horas y hasta 8 horas consecutivas al día sin síntomas
- 3 = Intervalo corto sin síntomas, de 1 a 3 horas consecutivas al día sin síntomas
- 4 = Intervalo extremadamente corto sin síntomas, menos de 1 hora consecutiva al día sin síntomas

7. ¿Has estado evitando hacer algo, ir a algún lugar o estar con alguien con el propósito de evadir las obsesiones?

- 0 = Evasión no deliberada
- 1 = Evasión leve, mínima
- 2 = Evasión moderada, poca; con clara presencia
- 3 = Evasión severa, mayor; evasión prominente
- 4 = Evasión extrema, prolongada; hago todo lo posible por evitar provocar los síntomas

Escala de Yale-Brown para el Trastorno Obsesivo-Compulsivo: Parte II

Conductas Compulsivas

Las compulsiones son ganas incontrolables de hacer algo que tienen las personas para disminuir sensaciones de ansiedad u otro malestar. A menudo, tienen conductas repetitivas, con propósito e intencionales, las cuales se conocen como rituales. El comportamiento en sí puede parecer apropiado, pero se convierte en un ritual cuando es excesivo. Lavar, revisar, repetir, arreglar, almacenar y muchas otras conductas pueden ser rituales. Algunos de ellos, son mentales. Por ejemplo, pensar en decir cosas con o sin aliento.

1. ¿Qué tanto tiempo dedicas a tener comportamientos compulsivos? ¿Con qué frecuencia tienes realizas rituales?
 - 0 = Nunca
 - 1 = Menos de 1 hora al día o práctica ocasional de comportamientos compulsivos
 - 2 = De 1 a 3 horas al día o práctica frecuente de comportamientos compulsivos
 - 3 = Más de 3 horas y hasta 8 horas al día o práctica muy frecuente de comportamientos compulsivos
 - 4 = Más de 8 horas al día o práctica casi constante de comportamientos compulsivos (muy numerosos para contarse)

2. ¿Qué tanto interfieren los comportamientos compulsivos con tu funcionamiento laboral, escolar, social u otro importante rol? ¿Hay algo que no realices debido a las compulsiones?
 - 0 = Nunca/Nada
 - 1 = Interferencia leve con actividades sociales u otras actividades, pero sin ninguna deficiencia en el desempeño general
 - 2 = Interferencia definida con el desempeño social o laboral, aunque manejable
 - 3 = Causa deficiencia sustancial en el desempeño social o laboral
 - 4 = Imposibilitan

3. ¿Cómo te sentirías si te impidieran tener compulsiones? ¿Qué tan ansioso te pondrías?
 - 0 = Nada
 - 1 = Sólo ansioso de forma leve si me impidieran tener compulsiones
 - 2 = Si me impidieran tener compulsiones, la ansiedad aumentaría pero sería manejable
 - 3 = Si me impidieran tener compulsiones, la ansiedad aumentaría de forma notable y alarmante
 - 4 = La ansiedad me volvería inoperante a raíz de una intervención para modificar esta actividad

4. ¿Qué tanto te esfuerzas por rechazar las compulsiones?
 - 0 = Siempre intento rechazarlas
 - 1 = Trato de rechazarlas la mayor parte del tiempo

- 2 = Me esfuerzo un poco en rechazarlas
3 = Cedó a todas las obsesiones sin hacer ningún intento por controlarlas, aunque siendo un poco renuente
4 = Cedó a todas las obsesiones completamente y por voluntad propia
5. ¿Qué tan fuerte es el impulso por tener comportamientos compulsivos?
0 = Control total
1 = Siento presión por tener ese comportamiento, pero generalmente ejerzo control sobre ello de manera voluntaria
2 = Siento fuerte presión por tener ese comportamiento; puedo controlarlo con dificultad
3 = Siento un impulso muy fuerte por tener ese comportamiento y por llevarlo a cabo hasta el final; puedo demorarlo con dificultad
4 = Impulso por tener ese comportamiento de manera involuntaria y abrumadora; rara vez me es posible demorar dicha actividad, ni siquiera por un momento.
6. En promedio, ¿cuál es la mayor cantidad de horas consecutivas durante el día en que estás completamente libre de compulsiones?
0 = Sin síntomas
1 = Intervalo largo sin síntomas, más de 8 horas consecutivas al día sin síntomas
2 = Intervalo moderado sin síntomas, más de 3 horas y hasta 8 horas consecutivas al día sin síntomas
3 = Intervalo corto sin síntomas, de 1 a 3 horas consecutivas al día sin síntomas
4 = Intervalo extremadamente corto sin síntomas, menos de 1 hora consecutiva al día sin síntomas
7. ¿Has estado evitando hacer algo, ir a algún lugar o estar con alguien con el propósito de evadir las compulsiones?
0 = Evasión no deliberada
1 = Evasión leve, mínima
2 = Evasión moderada, poca; con clara presencia
3 = Evasión severa, mayor; evasión prominente
4 = Evasión extrema, prolongada; el paciente hace todo lo posible por evitar provocar los síntomas

APPENDIX L: THOUGHT ACTION FUSION

APPENDIX L: THOUGHT ACTION FUSION

Thought Action Fusion Scale

Instructions: Below are 24 statements. Please use the following scale to indicate how strongly you agree or disagree with each statement. Please choose your answer using the following scale:

| | | | | |
|------------------------|---------------|--------------|------------|---------------------|
| Strongly Disagree 1 | Disagree 2 | Neutral 3 | Agree 4 | Strongly Agree 5 |
|------------------------|---------------|--------------|------------|---------------------|

1. Thinking of making an extremely critical remark to a friend is almost as unacceptable to me as actually saying it
2. If I think of a relative/friend losing their job, this increases the risk that they will lose their job
3. Having a blasphemous thought is almost as sinful to me as a blasphemous action
4. Thinking about cursing at someone else is almost as unacceptable to me as actually cursing
5. If I think of a relative/friend being in a car accident, this increases the risk that he/she will have a car accident
6. When I have a nasty thought about someone else, it is almost as bad as carrying out a nasty action
7. If I think of a friend/relative being injured in a fall, this increases the risk that he/she will have a fall and be injured
8. Having violent thoughts is almost as unacceptable to me as violent acts
9. If I think of a relative/friend falling ill this increases the risk that he/she will fall ill
10. When I think about making an obscene remark or gesture in a place of worship, it is almost as sinful as actually doing it
11. If I wish harm on someone, it is almost as bad as doing harm
12. If I think of myself being injured in a fall, this increases the risk that I will have a fall and be

injured

13. If I think about making an obscene gesture to someone else, it is almost as bad as doing it

14. If I think of myself being in a car accident, this increases the risk that I will have a car accident

15. When I think unkindly about a friend, it is almost as disloyal as doing an unkind act

16. If I think of myself falling ill, this increases the risk that I will fall ill

17. If I have a jealous thought, it is almost the same as making a jealous remark

18. Thinking of cheating in a personal relationship is almost as immoral to me as actually cheating

19. Having obscene thoughts in a place of worship is unacceptable to me

20. If I have a blasphemous thought, God will punish me as severely as if I had done a blasphemous action

21. Having obscene sexual thoughts is as unacceptable to God as engaging in obscene sexual activity

22. If I have sinful thoughts in a place of worship, God will view me as harshly as if I had engaged in sinful behaviors

23. When I think about violent action, God will view me as harshly as if I had committed a violent action

24. In God's eyes, wishing harm on someone is almost as bad as doing harm

APPENDIX M: THOUGHT ACTION FUSION (SPANISH VERSION)

APPENDIX M: THOUGHT ACTION FUSION (SPANISH VERSION)

Escala de Fusión Pensamiento-Acción

Instrucciones: A continuación, se enumeran 24 afirmaciones. Por favor utiliza la siguiente escala para indicar si estás de acuerdo o en desacuerdo con cada una de ellas.

| En completo desacuerdo 1 | En desacuerdo 2 | Neutral 3 | De acuerdo 4 | De acuerdo completamente 5 |
|--------------------------------|--------------------|--------------|-----------------|----------------------------------|
|--------------------------------|--------------------|--------------|-----------------|----------------------------------|

| | | | | | |
|--|---|---|---|---|---|
| 1. Pensar en hacer una observación extremadamente crítica a un amigo es casi igual de inaceptable como decirlo. | 1 | 2 | 3 | 4 | 5 |
| 2. Pensar que un pariente/amigo perderá su trabajo aumenta el riesgo de que suceda. | 1 | 2 | 3 | 4 | 5 |
| 3. Para mí, tener un pensamiento blasfemo es casi igual de pecaminoso como la acción de la blasfemia en sí. | 1 | 2 | 3 | 4 | 5 |
| 4. Para mí, pensar en maldecir a alguien es casi igual de inaceptable como en verdad maldecirlo. | 1 | 2 | 3 | 4 | 5 |
| 5. Pensar que un pariente/amigo tendrá un accidente de auto aumenta el riesgo de que suceda. | 1 | 2 | 3 | 4 | 5 |
| 6. Tener un pensamiento desagradable sobre alguien, es casi igual de malo que llevar a cabo una acción desagradable. | 1 | 2 | 3 | 4 | 5 |
| 7. Pensar que un pariente/amigo se lastimará en una caída aumenta el riesgo de que la caída suceda y se lastime. | 1 | 2 | 3 | 4 | 5 |
| 8. Para mí, tener pensamientos violentos es casi igual de inaceptable que llevar a cabo acciones violentas. | 1 | 2 | 3 | 4 | 5 |
| 9. Pensar que un pariente/amigo se enfermará aumenta el riesgo de que la enfermedad suceda. | 1 | 2 | 3 | 4 | 5 |
| 10. Cuando pienso en hacer una observación o gesto obsceno en un lugar de oración, es casi igual de | 1 | 2 | 3 | 4 | 5 |

pecaminoso que realmente hacerlo.

| | | | | | |
|---|---|---|---|---|---|
| 11. Desear que alguien se haga daño es casi igual de malo que causar el daño en sí. | 1 | 2 | 3 | 4 | 5 |
| 12. Si yo pienso en que me haré daño en una caída, esto aumenta el riesgo de que me caiga y me lastime. | 1 | 2 | 3 | 4 | 5 |
| 13. Si yo pienso en hacerle un gesto obsceno a alguien, es casi igual de malo que en verdad hacerlo. | 1 | 2 | 3 | 4 | 5 |
| 14. Si yo pienso que tendré un accidente automovilístico, va a aumentar el riesgo de que tenga un accidente automovilístico. | 1 | 2 | 3 | 4 | 5 |
| 15. Pensar cruelmente sobre un amigo es casi igual de desleal que llevar a cabo un acto cruel. | 1 | 2 | 3 | 4 | 5 |
| 16. Si yo pienso que me voy a enfermar, aumenta la posibilidad de que me vaya a enfermar. | 1 | 2 | 3 | 4 | 5 |
| 17. Si tengo un pensamiento de celos, es casi igual de malo que hacer un comentario de celos. | 1 | 2 | 3 | 4 | 5 |
| 18. Para mí, pensar en engañar a una persona con la que se tiene una relación amorosa, es casi igual de inmoral que en verdad engañarla. | 1 | 2 | 3 | 4 | 5 |
| 19. Para mí, es inaceptable tener pensamientos blasfemos en un lugar de oración. | 1 | 2 | 3 | 4 | 5 |
| 20. Si pienso en algo blasfemo, Dios me castigará con la misma dureza como si hubiera llevado a cabo una acción de la blasfemia. | 1 | 2 | 3 | 4 | 5 |
| 21. Tener pensamientos sexuales obscenos, es igual de inaceptable para Dios que tener una actividad sexual obscena. | 1 | 2 | 3 | 4 | 5 |
| 22. Si tengo pensamientos pecaminosos en un lugar de oración, Dios me juzgará con la misma dureza como si hubiera tenido una conducta pecaminosa. | 1 | 2 | 3 | 4 | 5 |
| 23. Si pienso en una acción violenta, Dios me juzgará | 1 | 2 | 3 | 4 | 5 |

con la misma dureza como si hubiera realizado una acción violenta.

24. A la vista de Dios, desear el mal a alguien es casi igual de malo que hacer el mal. 1 2 3 4 5

APPENDIX N: WHITE BEAR SUPPRESSION INVENTORY

APPENDIX N: WHITE BEAR SUPPRESSION INVENTORY

Suppression of White Bear Thought Inventory (WBSI)

Please indicate the degree to which you agree with each of the following items using the following scale:

| | | | | |
|------------------------|---------------|--------------|------------|---------------------|
| Strongly Disagree 1 | Disagree 2 | Neutral 3 | Agree 4 | Strongly Agree 5 |
|------------------------|---------------|--------------|------------|---------------------|

1. There are things I prefer not to think about
2. Sometimes I wonder why I have the thoughts I do
3. I have thoughts that I cannot stop
4. There are images that come to mind that I cannot erase
5. My thoughts frequently return to one idea
6. I wish I could stop thinking of certain things
7. Sometimes my mind races so fast I wish I could stop it
8. I always try to put problems out of mind
9. There are thoughts that keep jumping into my head
10. Sometimes I stay busy just to keep thoughts from intruding my mind
11. There are things I prefer not to think about
12. Sometimes I really wish I could stop thinking
13. I often do things to distract myself from my thoughts
14. I have thoughts that I try to avoid

15. There are many thoughts that I have that I don't tell anyone

**APPENDIX O: WHITE BEAR SUPPRESSION INVENTORY (SPANISH
VERSION)**

APPENDIX O: WHITE BEAR SUPPRESSION INVENTORY (SPANISH VERSION)

Inventario de Supresión del Pensamiento del Oso Blanco

Por favor indica el grado concordancia o discrepancia con los elementos de la siguiente escala:

| En completo desacuerdo 1 | En desacuerdo 2 | Neutral 3 | De acuerdo 4 | De acuerdo completamente 5 |
|--------------------------------|--------------------|--------------|-----------------|----------------------------------|
|--------------------------------|--------------------|--------------|-----------------|----------------------------------|

| | | | | | |
|---|---|---|---|---|---|
| 1. Hay cosas en las que prefiero no pensar. | 1 | 2 | 3 | 4 | 5 |
| 2. Algunas veces me pregunto por qué tengo los pensamientos que tengo. | 1 | 2 | 3 | 4 | 5 |
| 3. Tengo pensamientos que no puedo detener | 1 | 2 | 3 | 4 | 5 |
| 4. Hay imágenes que vienen a mi mente que no puedo borrar. | 1 | 2 | 3 | 4 | 5 |
| 5. Mis pensamientos vuelven a una misma idea Frecuentemente. | 1 | 2 | 3 | 4 | 5 |
| 6. Desearía poder dejar de pensar en ciertas cosas. | 1 | 2 | 3 | 4 | 5 |
| 7. Mi mente se acelera tanto algunas veces que desearía poder detenerla. | 1 | 2 | 3 | 4 | 5 |
| 8. Siempre trato de apartar los problemas de mi mente. | 1 | 2 | 3 | 4 | 5 |
| 9. Existen pensamientos que continúan surgiendo en mi cabeza. | 1 | 2 | 3 | 4 | 5 |
| 10. Algunas veces me mantengo ocupado para evitar que ciertos pensamientos interfieran en mi mente. | 1 | 2 | 3 | 4 | 5 |
| 11. Hay cosas en las que prefiero no pensar. | 1 | 2 | 3 | 4 | 5 |
| 12. Algunas veces solo quisiera dejar de pensar. | 1 | 2 | 3 | 4 | 5 |
| 13. Hago cosas con frecuencia para distraerme | 1 | 2 | 3 | 4 | 5 |

de mis propios pensamientos.

- | | | | | | |
|--|---|---|---|---|---|
| 14. Tengo pensamientos que trato de evitar. | 1 | 2 | 3 | 4 | 5 |
| 15. Hay muchos pensamientos que tengo que no comparto con nadie. | 1 | 2 | 3 | 4 | 5 |

REFERENCES

- Abramowitz, J. S., Huppert, J. D., Cohen, A. B., Tolin, D. F., & Cahill, S. P. (2002). Religious obsessions and compulsions in a non-clinical sample: The Penn Inventory of Scrupulosity (PIOS). *Behaviour Research and Therapy*, *40*(7), 825-838.
[https://doi.org/10.1016/S0005-7967\(01\)00070-5](https://doi.org/10.1016/S0005-7967(01)00070-5)
- Akhtar, S., Varma, V. K., Pershad, D., & Verma, S. K. (1978). Socio-cultural and clinical determinants of symptomatology in obsessional neurosis. *International Journal of Social Psychiatry*, *24*(3), 157-162. doi:10.1177/002076407802400301
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.
- Asad, S., & Dawood, S. (2015). Attachment orientation, obsessive beliefs, and symptom severity in patients with obsessive compulsive disorder. *Pakistan Journal of Psychological Research*, *30*(2), 208-212. Retrieved from
<http://www.pjprnip.edu.pk/pjpr/index.php/pjpr/article/view/338>
- Baer, L. (1991). *Getting control: Overcoming obsessions and compulsions*. Boston, MA: Little Brown.
- Behar, R. (1987). Sex and sin, witchcraft and the devil in late-colonial Mexico. *American Ethnologist*, *14*(1), 34-54. doi:10.1525/ae.1987.14.1.02a00030
- Bejerot, S., Edman, G., Anckarsäter, H., Berglund, G., Gillberg, C., Hofvander, B., ... Frisén, L. (2014). The Brief Obsessive–Compulsive Scale (BOCS): A self-report scale for OCD and obsessive–compulsive related disorders. *Nordic Journal of Psychiatry*, *68*(8), 549-559. doi:10.3109/08039488.2014.884631.

- Bobes, J., González, M. P., Bascarán, M. T., Arango, C., Sáiz, P. A., & Bousoño, M. (2001). Quality of life and disability in patients with obsessive-compulsive disorder. *European Psychiatry, 16*(4), 239-245. doi:10.1016/s0924-9338(01)00571-5
- Camp, R. A. (1994). The cross in the polling booth: Religion, politics, and the laity in Mexico. *Latin America Research Review, 29*(3), 69-99. Retrieved from <http://www.jstor.org/stable/2503943>
- Campesino, M., & Schwartz, G. E. (2006). Spirituality among Latinas/os implications of culture in conceptualization and measurement. *Advances in Nursing Science, 29*(1), 69-81. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2758774/pdf/nihms119823.pdf>
- Centers for Disease Control and Prevention. (2012). *Building our understanding: culture insights communicating with Hispanic/Latinos*. Retrieved from https://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/tools/pdf/hispanic_latinos_insight.pdf
- Chavira, D. A., Garrido, H., Bagnarello, M., Azzam, A., Reus, V. I., & Mathews, C. A. (2008). A comparative study of obsessive-compulsive disorder in Costa Rica and the United States. *Depression and Anxiety, 25*(7), 609-619. <https://doi.org/10.1002/da.20357>
- Çukur, C.S., Guzman, M.R., & Carlo, G. (2004). Religiosity, values and horizontal and vertical individualism- collectivism: A study of Turkey, USA and Philippines. *Journal of Social Psychology, 144*, 613–634. <https://doi.org/10.3200/SOCP.144.6.613-634>
- Deacon, B., & Nelson, E. A. (2008). On the nature and treatment of scrupulosity. *Pragmatic Case Studies in Psychotherapy, 4*(2), 39-53. doi:10.14713/pcsp.v4i2.932

- Deacon, B. J., Vincent, A. M., & Zhang, A. R. (2013). Lutheran clergy members' responses to scrupulosity: The effects of moral thought–action fusion and liberal vs. conservative denomination. *Journal of Obsessive-Compulsive and Related Disorders*, 2(2), 71-77. <https://doi.org/10.1016/j.jocrd.2012.12.003>
- Fitz, A. (1990). Religious and familial factors in the etiology of obsessive-compulsive disorder: A review. *Journal of Psychology and Theology*, 18(2), 141-147. <https://doi.org/10.1177/009164719001800204>
- Fergus, T. A. (2014). Mental contamination and scrupulosity: Evidence of unique associations among Catholics and Protestants. *Journal of Obsessive-Compulsive and Related Disorders*, 3(3), 236-242. <http://dx.doi.org/10.1016/j.jocrd.2014.05.004>.
- Fontenelle, L. F., Mendlowicz, M. V., Marques, C., & Versiani, M. (2004). Trans-cultural aspects of obsessive–compulsive disorder: a description of a Brazilian sample and a systematic review of international clinical studies. *Journal of Psychiatric Research*, 38(4), 403-411. <https://doi.org/10.1016/j.jpsychires.2003.12.004>
- Gallegos, J., Sánchez-Jauregui, G., Hidalgo, J., Davila-de Gárate, S. M., Támez-Díaz, O. G., & Fisak, B. (2018). The validation of a Spanish version of the Pennsylvania Inventory of Scrupulosity – revised. *Mental Health, Religion & Culture*, 21(2), 194-203. <https://doi.org/10.1080/13674676.2018.1432582>
- Garcia, C. M., Saewyc, E. M. (2007) Perceptions of mental health among recently immigrated Mexican adolescents. *Issues in Mental Health Nursing*, 28(1), 37–54. doi: 10.1080/01612840600996257
- Ginsburg, G. S., & Silverman, W. K. (1996). Phobic and anxiety disorders in Hispanic and

- Caucasian youth. *Journal of Anxiety Disorders*, 10(6), 517-528.
[http://dx.doi.org/10.1016/S0887-6185\(96\)00027-8](http://dx.doi.org/10.1016/S0887-6185(96)00027-8)
- Glazer, M., Baer, R. D., Weller, S.C., Garcia de Alba, J. E., & Liebowitz, S. (2004.) Susto and soul-loss in Mexicans and Mexican-Americans. *Journal of Cross-Cultural Research*, 38(3), 270-288. <https://doi.org/10.1177/1069397104264277>
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., . . . Charney, D. S. (1989). The Yale-Brown Obsessive Compulsive Scale: I. development, use, and reliability. *Archives of General Psychiatry*, 46(11), 1006-1011.
<http://dx.doi.org/10.1001/archpsyc.1989.01810110048007>
- Greenberg, D., Witztum, E., & Pisante, J. (1987). Scrupulosity: Religious attitudes and clinical presentations. *British Journal of Medical Psychology*, 60(1), 29-37.
<http://dx.doi.org/10.1111/j.2044-8341.1987.tb02714.x>
- Greenberg, D., & Huppert, J. D. (2010). Scrupulosity: A unique subtype of obsessive-compulsive disorder. *Current Psychiatry Reports*, 12(4), 282-289.
<https://doi.org/10.1007/s11920-010-0127-5>
- Hernández, J.E. (2002). Accommodation in a dialect contact situation. *Filología y Lingüística XXVIII*, 28(2): 93-110. Retrieved from
<https://pdfs.semanticscholar.org/e5f7/a1dc111cab0ca96ce5cb8b7fdcf4c7c890d.pdf>
- Hidalgo, M. (1990). The emergence of standard Spanish in the American continent: Implications for Latin American dialectology. *Language Problems and Language Planning*, 14(1), 47-63. doi:10.1075/lplp.14.1.04hid
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values.

Beverly Hills, CA: Sage.

- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede Model in context. *Online Readings in Psychology and Culture*, 2(1), 3-26. doi:10.9707/2307-0919.1014
- Horwath, E., & Weissman, M. M. (2000). The epidemiology and cross-national presentation of obsessive-compulsive disorder. *Psychiatric Clinics of North America*, 23(3), 493-507. [https://doi.org/10.1016/S0193-953X\(05\)70176-3](https://doi.org/10.1016/S0193-953X(05)70176-3)
- Huppert, J. D., Siev, J. (2010). Treating scrupulosity in religious individuals using cognitive-behavioral therapy. *Cognitive and Behavioral Practice*, 17(4), 382-392. doi: 10.1016/j.cbpra.2009.07.003
- Huppert, J. D., Simpson, H. B., Nissenon K. J., Liebowitz M. R., Foa, E. B. (2009) Quality of life and functional impairment in obsessive-compulsive disorder: a comparison of patients with and without comorbidity, patients in remission, and healthy controls. *Depress Anxiety*. 26(1), 39-45. doi:10.1002/da.20506
- Inozu, M., Karanci, A. N., & Clark, D. A. (2012). Why are religious individuals more obsessional? The role of mental control beliefs and guilt in Muslims and Christians. *Journal of Behavior Therapy and Experimental Psychiatry*, 43(3), 959-966. doi: 10.1016/j.jbtep.2012.02.004
- Jimenez-Moreno, W. (1980). Syncretism, identity, and patrimony in Mesoamerica. In S. J. Wilkerson (Ed.), *Cultural traditions and Caribbean identity: The question of patrimony* (pp. 353-373). Gainesville: Center for Latin American Studies.
- Juarez, G., Ferrell, B., & Borneman, T. (1998). Influence of culture on cancer pain management in Hispanic patients. *Cancer practice*, 6(5), 262-269. Retrieved from

<https://doi.org/10.1046/j.1523-5394.1998.00020.x>

Juarez G, Ferrell B, Borneman T. (1999). Cultural considerations in education for cancer pain management. *Journal of Cancer Education*, 14(3), 168–173.

doi:10.1080/08858199909528610

Kemp, C. & Rasbridge, L. A. (2004). *Mexico. In refugee and immigrant health: A handbook for health professionals* (pp. 260-270). Cambridge, UK: Cambridge University Press.

Koran, L.M, Thienemann, J.M.L., Davenport, M. A. (1996). Quality of life for patients with obsessive-compulsive disorder. *American Journal of Psychiatry*, 153(6), 783-788.

doi:10.1176/ajp.153.6.783

Liang, J., Matheson, B. E., & Douglas, J. M. (2016). Mental health diagnostic considerations in racial/ethnic minority youth. *Journal of child and family studies*, 25(6), 1926–1940.

doi:10.1007/s10826-015-0351-z

McKay, D., Abramowitz, J. S., Calamari, J. E., Kyrios, M., Radomsky, A., Sookman, D., ... & Wilhelm, S. (2004). A critical evaluation of obsessive–compulsive disorder subtypes: symptoms versus mechanisms. *Clinical Psychology Review*, 24(3), 283-313.

<https://doi.org/10.1016/j.cpr.2004.04.003>

Millet, B., Kochman, F., Gallarda, T., Krebs, M. O., Demonfaucon, F., Barrot, I., ... Hantouche, E. (2004). Phenomenological and comorbid features associated in obsessive–compulsive disorder: influence of age of onset. *Journal of Affective Disorders*, 79(1-3), 241-

246. doi:10.1016/s0165-0327(02)00351-8

Miller, C. H., & Hedges, D. W. (2008). Scrupulosity disorder: An overview and introductory analysis. *Journal of Anxiety Disorders*, 22(6), 1042-1058.

<https://doi.org/10.1016/j.janxdis.2007.11.004>

Montenegro, E., & Jankowski, N. (2017). *Equity and assessment: Moving towards culturally responsive assessment (Occasional Paper No. 29)*. Urbana: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.

Nicholls, C. E., Lane, H. W., & Brechu, M. B. (1999). Taking self-managed teams to Mexico. *Academy of Management Perspectives*, 13(3), 15-25. doi:10.5465/ame.1999.2210310

Nicolini, H., Orozco, B., Giuffra, L., Páez, F., Mejía, J., de Carmona, M. S., ... & De la Fuente, J. R. (1997). Age of onset, gender and severity in obsessive-compulsive disorder. A study on a Mexican population. *Salud Mental*, 20(2), 1-4. Retrieved from http://www.revistasaludmental.mx/index.php/salud_mental/article/view/644

Nicolini, H., Salin-Pascual, R., Cabrera, B., & Lanzagorta, N. (2018). *Influence of culture in obsessive-compulsive disorder and its treatment*. *Current Psychiatry Reviews*, 13(4), 285-292. doi:10.2174/221155600766618011510593

Obsessive-Compulsive Cognitions Working Group. (1997). Cognitive assessment of obsessive-compulsive disorder. *Behaviour Research and Therapy*, 35(7), 667-681. doi:10.1016/S0005-7967(97)00017-X

Okasha, A., Saad, A., Khalil, A. H., El Dawla, A. S., & Yehia, N. (1994). Phenomenology of obsessive-compulsive disorder: A transcultural study. *Comprehensive psychiatry*, 35(3), 191-197. doi: 10.1016/0010-440X(94)90191-0

Ólafsson, R. P., Snorrason, Í, & Smári, J. (2010). Yale-Brown Obsessive Compulsive Scale: psychometric properties of the self-report version in a student sample. *Journal of Psychopathology and Behavioral Assessment*, 32(2), 226-235. doi:10.1007/s10862-009-

9146-0.

- Olatunji, B. O., Abramowitz, J. S., Williams, N. L., Connolly, K. M., & Lohr, J. M. (2007).
Scrupulosity and obsessive-compulsive symptoms: Confirmatory factor analysis and
validity of the Penn Inventory of Scrupulosity. *Journal of Anxiety Disorders*, 21, 771-
787. doi:10.1016/j.janxdis.2006.12.002.
- Olson, T., Vera, B., & Perez, O. (2006). Preliminary study of OCD and health disparities at the
US-Mexico border. *Hispanic health care international: the official journal of the
National Association of Hispanic Nurses*, 4(2), 89-99. doi: 10.1891/hhci.4.2.89
- Ólafsson, R. P., Snorrason, Í, & Smári, J. (2010). Yale-Brown Obsessive Compulsive Scale:
Psychometric properties of the self-report version in a student sample. *Journal of
Psychopathology and Behavioral Assessment*, 32(2), 226-235. doi:10.1007/s10862-009-
9146-0.
- Oppenheimer, M. (1992). Alma's bedside ghost: Or the importance of cultural similarity.
Hispanic Journal of Behavioral Sciences, 14(4),496-501.
<https://doi.org/10.1177/07399863920144007>
- Palm, K. M., & Strong, D. R. (2007). Using item response theory to examine the White Bear
Suppression Inventory. *Personality and Individual Differences*, 42(1), 87-98.
<https://psycnet.apa.org/doi/10.1016/j.paid.2006.06.023>
- Pew Hispanic Center. (2007). *Changing faiths: Latinos and the transformation of American
religion*. Washington, DC: Pew Research Center.
- Randall, L. (2006). *Changing structure of Mexico: Political, social, and economic prospects*. (2nd
ed.). Armonk, NY: M.E. Sharpe

- Sandoval, A. (1998). *Homegrown healing: Traditional home remedies from Mexico*. Berkeley, CA: Berkeley Books.
- Satcher, D. (2001). *Mental health: Culture, race, and ethnicity—a supplement to mental health: A report of the surgeon general*. Washington, DC: U.S. Department of Health and Human Services
- Shams, G., & Milosevic, I. (2013). Obsessive-compulsive cognitions, symptoms and religiousness in an Iranian population. *International Journal of Clinical Medicine*, 4(11), 479-484. Retrieved from <http://dx.doi.org/10.4236/ijcm.2013.411084>
- Sica, C., Novara, C., Sanavio, E., Dorz, S., & Coradeschi, D. (2002). Obsessive compulsive disorder cognitions across cultures. In R. O. Frost & G. Steketee (Eds.), *Cognitive approaches to obsessions and compulsions: theory, assessment and treatment* (pp. 371-384). Oxford, LDN: Pergamon.
- Sinner, C. (2002). The construction of identity and group boundaries in Catalan Spanish. Pragmatics and beyond new series. In A. Duszak (Eds.) *Us and others: Social identities across languages, discourses and cultures* (pp.159-186). Amsterdam, NL: John Benjamins Publishing Company.
- Schmidt, R. E., Gay, P., Courvoisier, D., Jermann, F., Ceschi, G., David, M., Brinkmann, K., & Van der Linden, M. (2009). Anatomy of the White Bear Suppression Inventory (WBSI): a review of previous findings and a new approach. *Journal of Personality Assessment*, 91(4), 323–330. doi: 10.1080/00223890902935738

- Spector, R. (2004). *Cultural diversity in health & illness* (6th ed). Upper Saddle River, NJ: Pearson Prentice Hall.
- Tweed, R. G., White, K., & Lehman, D. R. (2004). Culture, stress and coping: Internally and externally-targeted control strategies of European Canadians, East Asian Canadians and Japanese. *Journal of Cross-Cultural Psychology*, 35(6), 652-668.
<http://dx.doi.org/10.1177/0022022104270109>
- Veale, D. (2007) Cognitive-behavioural therapy for obsessive-compulsive disorder. *Advances in Psychiatric Treatment*, 13(6), 438-446. <https://doi.org/10.1192/apt.bp.107.003699>
- Vargas, Á. L. A., Palacios, C. L., González, T. G., Peña, O. F. (2008). Trastorno obsesivo compulsivo en niños y adolescentes: Una actualización. Primera parte [Obsessive-compulsive disorder in children and adolescents: An update. First part]. *Salud Mental*, 31(3), 173-179. Retrieved from <http://www.medigraphic.com/cgi-bin/new/resumenI.cgi?IDARTICULO=16779>.
- Weisman, M. M., Bland, R. C., Canino, G. J., Greenwald, S., Hwu, H. G., Lee, C. K., ... & Wittchen, H. U. (1994). The cross national epidemiology of obsessive-compulsive disorder. *Journal of clinical Psychiatry*, 55(3), 5-10. doi:10.1017/s1092852900007136
- Weller, S. C., Baer, R. D., Garcia de Alba Garcia, J., & Salcedo Rocha, A. L. (2008). *Susto and nervios: Expressions for stress and depression. Culture, Medicine, and Psychiatry*, 32(3), 406-420. doi:10.1007/s11013-008-9101-7
- Wegner, D. M., & Zanakos, S. (1994). Chronic thought suppression. *Journal of Personality*,

- 62(4), 615-640. <https://doi.org/10.1111/j.1467-6494.1994.tb00311.x>
- Wetterneck, C. T., Little, T. E., Rinehart, K. L., Cervantes, M. E., Hyde, E., & Williams, M. (2012). Latinos with obsessive-compulsive disorder: mental healthcare utilization and inclusion in clinical trials. *Journal of obsessive-compulsive and related disorders, 1*(2), 85-97. <https://doi.org/10.1016/j.jocrd.2011.12.001>
- Williams, M. T., & Steever, A. (2015). *Cultural manifestations of obsessive-compulsive disorder*. In C. W. Lack (Eds.), *Obsessive-compulsive disorder: etiology, phenomenology, and treatment* (63-84). United Kingdom: Onus Books.
- Yorulmaz, O., Gençöz, T., & Woody, S. (2009). OCD cognitions and symptoms in different religious contexts. *Journal of Anxiety Disorders, 23*(3), 401-406.
[doi:10.1016/j.janxdis.2008.11.001](https://doi.org/10.1016/j.janxdis.2008.11.001)
- Yorulmaz, O., Gençöz, T., & Woody, S. (2010). Vulnerability factors in OCD symptoms: cross-cultural comparisons between Turkish and Canadian samples. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, 17*(2), 110-121.
<https://doi.org/10.1002/cpp.642>
- Yorulmaz, O., & Işık, B. (2011). Cultural context, obsessive-compulsive disorder symptoms, and cognitions: A preliminary study of three Turkish samples living in different countries. *International Journal of Psychology, 46*(2), 136-143.
[doi:10.1080/00207594.2010.528423](https://doi.org/10.1080/00207594.2010.528423)
- Zapata, J., & Shippee-Rice, R. (1999). The use of folk healing and healers by six Latinos living in New England: A Preliminary Study. *Journal of Transcultural Nursing, 10*(2), 136-142.
[doi:10.1177/104365969901000207](https://doi.org/10.1177/104365969901000207)