Obsessive Compulsive Disorder: An Analysis of the Relationship Between Cultural Factors and Cognitive Processes

Jordan Wellsch*

Abstract

Obsessive Compulsive Disorder (OCD) is a debilitating and multifaceted mental illness comprised of both obsessive thoughts and subsequent compulsive actions. The purpose of this paper is to garner a better understanding of how cultural factors impact the presentation of OCD by exploring "naturally" occurring obsessions and rituals, cross-cultural comparisons of Canadian and Turkish OCD samples, as well as by exploring the "culture-bound" variants of OCD referred to as Koro and Anorexia Nervosa with excessive exercise. The findings question the validity of classifying illnesses as "culture-bound" and suggest that cultural factors may have a direct impact on the cognitive processes involved in the presentation of OCD. Future cross-cultural research is needed to better understand the personal narratives and cognitive processes of diverse OCD patients. An interdisciplinary approach which combines the efforts of psychology and anthropology may be well suited for such research.

Keywords: Anorexia nervosa with excessive exercise, cognitive processes, culture-bound syndrome, cultural factors, koro, Obsessive Compulsive Disorder (OCD)

Obsessive-Compulsive Disorder (OCD) is a debilitating mental disorder that can cause significant disruptions in relationships and day-to-day activities. It is made up of two obsessions and compulsions. According to parts: Abramowitz (2017), obsessions are "intrusive and recurring thoughts, images, and impulses that provoke anxiety." Obsessions have several common categories, including "obsessions of contamination, responsibility for harm, symmetry, order and/or unacceptable moral, sexual and violent thoughts" (Abramowitz, 2017). Compulsions are "ritualistic behaviours that are both senseless and excessive." (Abramowitz, 2017) These are often engaged in to temporarily relieve the anxieties caused by obsessions. Compulsions are separated into categories, which include

actions of "decontamination, checking and rechecking, repeating routine activities, ordering and rearranging and mental rituals" (Abramowitz, 2017).

Like most mental illnesses, there are differences in the presentation of this disorder depending on different factors. For instance, a study done by Lochner et al. (2014) found that the disorder occurs earlier in males than in females (p. 109). The study also found that eating disorder variants of OCD occur predominantly in females (Lochner et al., p. 109). Recent studies have found that susceptibility is largely attributed to one's genes. For example, a metaanalysis done by Jiang et al. (2018) concluded: "- α -238G/A gene polymorphism might lead to a decreased risk of OCD susceptibility" (p.1). Little could be found regarding

^{*}Bachelor of Psychology, College of Arts and Science Correspondence: jordan@amberfieldfarms.ca

variances in susceptibly between different groups (i.e., those of different ethnic and economic backgrounds). Further research needs to be done in this domain before such information can be included.

The causation of this mental illness is attributed to many factors. The cognitive behavioural approach of psychology proposes that "unwanted/ intrusive thoughts are a normal experience yet escalate into clinical obsessions when they are appraised as significant and harmful based on dysfunctional beliefs about the importance of thoughts and the need for certainty... Compulsive rituals and avoidance represent efforts to remove intrusions and prevent feared consequences" (Abramowitz, 2017). Essentially, this approach presents OCD as a product of faulty belief systems. Pathologies of this nature respond well to behavioural therapies, and Davis et al. (2012) indeed list "behavioural psychotherapy" as a common form of treatment within their study on the relationship between culture-bound syndromes and OCD (p. 218). Individual belief systems may vary depending on such factors as religiosity and culture, which opens the door for the later discussion on cross-cultural variance in OCD presentation.

A more physiological stance can be found within the following serotonin hypothesis. A study done by Zohar, Sasson, Cohen & Kindler (1996) states that "abnormalities in the neurotransmitter system" are responsible for the onset of OCD (p. 91). This hypothesis is supported by the "effectiveness of serotonin reuptake inhibitors" in treating OCD patients. (Zohar, Sasson, Cohen & Kindler, 1996, p. 91) Essentially, it is a product of faulty "messengers" within the brain, which produce too much of a certain type of brain chemical called serotonin. Both hypotheses are utilized in the diagnosis and treatment of OCD. To better understand this illness, it's important to uncover the biological basis for its existence.

The biological basis of OCD can be understood by exploring the "natural" occurrences of obsessions and compulsions. Both intrusive thoughts and rituals can occur without the OC (obsessive-compulsive) pathology, such as life stage obsessions (e.g., constant worries of an offspring's health and safety), life stage rituals (e.g., maternal "nesting"), cultural rituals (e.g., Octoberfest) and religious rituals (e.g., Baptism). These often vary in their specific manifestations between different societies, as well as between different individuals. For instance, a religious ritual conducted by those of a Christian belief system in Saskatoon, Canada, may differ from a religious ritual performed by those of a Voodoo belief system in Cange, Haiti. This is because accepted thoughts and rituals are often influenced by the belief systems and values of each society, and as such, are universally diverse.

There is a biological purpose for these naturally occurring thoughts and rituals. They may exist to lessen intrusive thoughts or anxieties surrounding topics like existence, morality, and mortality. (Pascal & Boyer, 2007, p. 603) Followers of a Christian faith, for example, may regularly attend church services for cultural reasons, meaning it is the accepted thing for individuals of this faith to do, or perhaps to find solace in a time of grief, or relief from the occurrence of "sinful" thoughts and behaviours. Though regularly attending church services may not be the result of an OCD illness per say, the behaviour may indeed be an attempt to lessen certain intrusive thoughts and anxieties. Thus, there are some loose parallels between the obsessions and compulsions mentioned here and those found within the clinical disorder of OCD. Perhaps it could be argued, then, that the manifestations of OCD are as diverse and influenced by culture and individual belief systems as those "naturally" occurring obsessions and compulsions.

Within their article on ritualized behaviour, Pascal & Boyer (2007) support this thought by saying that obsessions and rituals are a result of and response to "the potential hazard repertoire and precaution repertoire" (p. 603). This means that intrusive thoughts and ritualized behaviour exist as a response to species-specific anxieties that are hardwired into one's biology. These anxieties often coincide with the categories of obsessions mentioned earlier in this paper, and either serve a purpose in one's survival now or served a purpose in the survival of one's ancestors. A daily prayer, then, may indeed act as an abstract safeguard from certain life hazards that are out of one's control. So, what exactly constitutes the pathology in OCD if "naturally" occurring intrusive thoughts and ritualized behaviours serve a biological purpose?

Pascal and Boyer (2007) answer this question by suggesting that there "may be a human capacity to perform cultural rituals that is distorted or hyperactive in individual pathological ritual" (p. 609). This suggests that the relationship between culture and OCD is indeed profound. This theory is supported through an explanation of the "culture-specific" tweaking of OCD within Balinese patients (Pascal & Boyer, 2007, p. 608). These patients often report obsessions involving the supernatural, such as spirits and witches. The accepted belief systems and cultural norms of some Balinese people include these such supernatural factors. It is no accident, then, that these beliefs have contributed to anxieties and subsequently have manifested as obsessions in those with OCD. To further understand this theory, a cross-cultural comparison of patients must be analyzed for differences in OCD manifestations.

A cross-cultural comparison done by Yorulmaz, Gencoz and Woody compares Turkish and Canadian samples of OCD patients to uncover the differences in symptoms between the two. Researchers found that "For OC disorder symptoms, Turkish participants were more likely to utilize worry and thought suppression, while Canadian participants tended to use self-punishment more frequently" (Yorulmaz, Gencoz & Woody, 2010, p.110). Turkey has a collectivist mentality, and despite being an officially secular nation, many of Turkey's people are Muslim. On the other hand, Canada is an individualistic and perhaps more of a secular nation than Turkey. Perhaps these fundamental differences in cultural perspectives may attribute to this difference in OCD symptomology between Canadian and Turkish samples. For instance, it may be more common to find patients suppressing their symptoms, so as not to disrupt the "greater good" mentality of a collectivist society, whereas patients may feel that they alone are responsible for the management of their symptoms in a society that places more emphasis on the individual person. Furthermore, "self-punishment" may manifest more often in those who do not attribute their experiences to powers beyond themselves (e.g., spirits, ghosts or deities), which may be more common within secular nations. The cultural differences, such as those observed in Turkish and Canadian samples, are illustrated further in an analysis of "culturebound" variants of OCD.

"Culture-bound syndrome" is an illness that appears to be specific to certain groups of people in certain areas. For instance, koro remains classified as a culturebound syndrome in the DSM-5 (the most recent diagnostic and statistical manual of mental disorders), as it predominantly impacts areas of Asia (Davis et al., 2012, p. 214). Koro is a predominantly male illness, characterized by fears of one's genitalia receding into one's body and is accompanied by persistent preventative behaviours, such as tugging on one's genitals (Davis et al., 2012 p. 214). Within non-clinical settings, spiritual rituals are conducted in the treatment of koro. When an epidemic broke out in rural areas of China, for example, "rituals and exorcisms were employed to drive out 'evil spirits' inhabiting the souls of many of the villagers" (Davis et al., 2012, p. 217). Within clinical settings, however, koro responds well to serotonin reuptake inhibitors, much like OCD. It is for this reason that Davis et al. (2012) propose a close relationship between the two mental illnesses (p. 218).

Anorexia nervosa with excessive exercise is also an example of a "culture-bound syndrome," as it is found predominantly in those western societies with higher obesity ratings and where slender body types and selfcontrol are highly valued. (Davis & Kaptein, 2005, p. 209) The high rates of obesity found in these societies may be attributed to an incorporation of mass consumerism and overindulgence into the accepted beliefs and practices. Davis and Kaptein (2005) regard this illness as a "modern variant of OCD" because of the similar characteristics and causations between the two (p. 209). Anorexia nervosa with excessive exercise may be a variant of OCD where obsessions about the body and compulsions to restrict calories and engage in excessive physical activity are a response to modern anxieties regarding societal pressures to maintain a particular body shape. This suggests that not only do manifestations of OCD vary between societies, culture, and belief systems, but they may also vary between individuals within the same society, who hold similar belief systems, and may even evolve over time.

The similarities between the two "culture-bound syndromes" described above and the description provided for OCD calls to question the validity of characterizing illnesses as "culture-bound." OCD is predominantly understood in western contexts, but is not classified as a "culture-bound syndrome." Anorexia nervosa with excessive exercise is found predominantly in western societies, yet is not explicitly classified as a "culture-bound syndrome." Meanwhile, koro is indeed classified as such. This raises the question of why illnesses outside of a western context are more likely to be viewed as "culturebound." Cultures are known to be fluid and ever-mixing in this increasingly globalized world. So, to identify an illness as "bound to a culture" is to ignore the diversity of the human experience. Perhaps looking at OCD from an individual-specific framework would allow for the many diverse belief systems and subsequent manifestations of this illness to be identified and respected within their cultural contexts.

From this brief description, it could be argued that OCD is a multifaceted illness that may indeed be influenced by cultural factors. The question then becomes; does culture have a direct impact on the cognitive processes responsible for OCD, or are the effects of culture limited to the diverse expressions of symptoms? In their cross-cultural comparisons between Turkish and Canadian samples of OCD, Yorulmaz, Gencoz, and Woody (2009) provide a possible answer to this question by stating "Cultural features may be operative in cognitive processes relevant to OC symptoms" (p. 110). This means that culture may directly impact the processes within the brain responsible for the expression of OCD. However, future research is needed to provide a more in-depth understanding of the interactions between the cultural and the biological processes involved. Perhaps a good place to start would be in researching the manifestations of OCD patients within diverse geographical and cultural locations.

Future research using an interdisciplinary approach to uncover both the personal narratives and the cognitive processes of patients diagnosed with Koro in China and patients diagnosed with Anorexia Nervosa with excessive exercise in Canada may help in cultivating this more indepth understanding. Patients participating in this future research will fall into one of three categories. These categories will include patients within clinical settings, meaning a professional healthcare institution, at home patients who are successfully managing their illness through treatments received by a healthcare practitioner, and patients self-diagnosed as suffering from one of the two illnesses and who are not yet receiving treatment.

Medical anthropologists will interview participants using the interpretive methodology. These interviews will begin with questions regarding personal interpretations of the illness, including descriptions of symptoms, theories on the causation of the illness, and, where applicable, opinions regarding the healthcare settings and subsequent treatments. Questions will also pertain to the effects of this illness, such as subsequent fears, anxieties and expectations surrounding OCD and how everyday life and social relations have been affected. Lastly, questions to uncover personal belief systems will be asked, such as questions about religious beliefs, cultural beliefs, and perceptions of the patient's social and personal roles.

Cognitive psychologists will then conduct interviews to gain insight into the cognitive processes responsible for the OC pathology in these individual patients. The results of these interviews may then be integrated and interpreted using a bio-cultural theoretical perspective. According to Joralemon (2017), this perspective allows anthropologists to "consider both the biological and cultural components of health and sickness" (p.124). Individual frameworks of culture-illness interactions will provide a better understanding of the role of cultural factors on the cognitive processes of OCD.

The author was unable to find existing literature along the specific framework proposed above; however, there may indeed be benefits to using such an interdisciplinary approach. Arthur Kleinman (1987) discusses the importance of integrating anthropological approaches into cross-cultural and international research on psychiatry in the article Anthropology and Psychiatry: The Role of Culture in Cross-cultural Research on Illness. Specifically, Kleinman discusses the importance of grounding cross-cultural research in the local ethnographic context to avoid committing "category fallacies" (p. 453). What Kleinman means by this is cross-cultural research relying on psychiatric frameworks alone may overvalue certain constructs, such as certain diagnostic categories, without first testing their validity in different cultural (Moldavsky, 2004). For example, settings anthropological approach may compliment cross-cultural psychiatric research on OCD by ensuring cross-cultural validity of the DSM-5's criteria for OCD.

Whitehouse and Laidlaw (2007) also argue the benefits of an interdisciplinary approach by pointing out the "similarities in the kinds of problems" that typically perplex both cognitive scientists and interpretive anthropologists (p. 247). According to Whitehouse and Laidlaw, the types of answers the two disciplines produce would hold stronger explanatory power if they were integrated with one another (p. 247). Essentially, by combining the efforts of cognitive psychology and interpretive anthropology certain questions (e.g., what are the effects of cultural factors on the cognitive processes responsible for OCD?) may be answered more effectively. Thus, future cross-cultural research on the cognitive processes of OCD may boast greater explanatory power by integrating both interpretive anthropology and cognitive psychology.

In conclusion, Obsessive Compulsive Disorder is a debilitating and multifaceted mental illness. This paper explored naturally occurring obsessions and rituals, crosscultural comparisons of OCD in Canadian and Turkish samples and the "culture-bound" variants of OCD referred to as Koro and Anorexia Nervosa with excessive exercise. This was done to garner a better understanding of the effects of cultural factors on the presentations of OCD. The findings question the validity of classifying illnesses as "culture-bound", as well as suggest that culture may directly impact the cognitive processes involved in OCD. To further support this suggestion, future research is needed to uncover the personal narratives and individual cognitive processes of culturally and geographically diverse OCD patients. This may aid in increasing cultural competency concerning mental illnesses within healthcare institutions and ultimately improve the outcomes for OCD patients.

References

Abramowitz, J. (2017). Obsessive-Compulsive Disorder. Retrieved from http://psychology.oxfordre.com/view/10.1093/acrefore /9780190236557.001.0001/acrefore-9780190236557-e-

81 Boyer, P., & Lienard, P. (2006). Why ritualized behaviour? Precaution systems and action parsing in developmental, pathological and cultural rituals. *Behavioural and Brain Sciences, 29*, 595-650. doi:

- 10.1017/S0140525X06009332 Davis, C., & Kaptein, S. (2006). Anorexia nervosa with excessive exercise: A phenotype with close links to obsessive compulsive disorder. *Psychiatry Research*, 142, 209-217. Retrieved from www.sciencedirect.com
- Davis, D. M., Steevar, A.M., Terwilliger, J.M., & Williams, M.T. (2012). The relationship between the culturebound syndrome koro and obsessive-compulsive disorder. *Psychology of Culture*, 13, 214-219.
- Jiang, C., et al. (2018). Association between TNF-a-238G/A gene polymorphism and OCD. Retrieved from https://www-ncbi-nlm-nih gov.cyber.usask.ca/pmc/articles/PMC5805438/
- Kleinman, A. (1987). Anthropology and psychiatry: The role of culture in cross-cultural research on illness. *British Journal of Psychiatry*, 151, 447-454. Retrieved from <u>https://www.cambridge.org/core/services/aop-</u> Cambridge-

core/content/view/FA498634713CA6565FB27988B4A5 D9E8/S0007125000217340a.pdf/anthropology_and_ps ychiatry.pdf

- Laidlaw, J., & Whitehouse, H. (2007). Religion, anthropology and cognitive science. Durham, North Carolina: Carolina Academic Press
- Lochner, C. et al. (2004). Gender in obsessive-compulsive disorder: Clinical and genetic findings. European *Neuropsychopharmacology*, 14(2). Abstract retrieved From

http://www.europeanneuropsychopharmacology.com

- Moldavsky, D. (2004). Transcultural psychiatry for clinical practice. *Psychiatric Times*, 21(7). Retrieved from http://www.psychiatrictimes.com/schizophrenia/trans cultural-psychiatry-clinical-practice
- Yorulmaz, O., Genco, T., & Woody, S. (2010). Vulnerability factors in OCD symptoms: Cross cultural comparisons between Turkish and Canadian samples. *Clinical psychology and Psychotherapy*, 17, 110-12. doi: 10.1002/cpp.642
- Zohar, J., Sasson, Y., Cohen, R., & Kindler, S. (1996). S-29-3new insights to the serotonin hypothesis of OCD. *European Neuropsychopharmacology*, 6(3), 91. doi:10.1016/0924-977X(96)87720-0