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Exploration of the Relationship between OCD and Parenting Style Subtypes

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Abstract

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by

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MA, Walden University, 2012

BS, University of Southern Maine, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Obsessive compulsive disorder (OCD) is an illness that significantly reduces the quality of life of those affected by the disorder. Current and past research has established a relationship between an authoritarian parenting style and the development of OCD. There is an absence of research regarding the influence of parenting styles on the development of different subtypes of OCD. This study examined the relationship of Baumrind's parenting styles (permissive, authoritarian, and restrictive) as gathered from participant answers on the Parenting Behavior Questionnaire and the OCD subtypes (contamination, harm, unwanted thoughts, and symmetry) as gathered from participant answers to the Dimensional Obsessive Compulsive Scale. Participants were 140 members of OCD Foundations within the United States, between the ages of 18 and 69, who self-selected to take the online survey that was linked to them by an e-mail from the foundations. A one-way between subjects ANOVA showed no significant difference between the 3 parenting styles and the 4 subtypes of OCD. Future studies should use a clinical sample that isolates participants for the specific diagnosed OCD subtypes. This isolation would eliminate the limitation of this study that had participants answering questions across all subtypes, regardless of their diagnosis. This study may impact social change by furthering the discussion of how parenting and OCD may be related, thus helping scholars, educators, and other professionals to be more proactive in guiding parents when raising their children.

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Dedication

I would like to dedicate this dissertation to Dr. John P. Broida; my former professor, mentor and friend who sadly passed away this past summer. Thank you for all your help, your dedication to my success and career. I will never forget you my dear friend. I miss you John!

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Chapter 1: Introduction to the Study

Introduction

Obsessive compulsive disorder (OCD) is a debilitating illness that affects the social, familial, and financial well-being of those afflicted, and significantly impacts quality of life (Carpenter & Chung, 2011). Research on this subject has increasingly been geared towards examining the relationships between parenting style and the development of obsessive compulsive tendencies in childhood in order to reduce the prevalence of lifelong OCD. With the onset of symptoms in childhood occurring at a rate of nearly 80% within the United States (Srivastava, 2008), the examination of parenting styles offers a different perspective into this phenomenon.

The vast majority of studies which examine parenting behaviors in connection to the onset of OCD focuses solely on authoritarian parenting behavior. The dearth of research conducted on other parenting behaviors necessitates projects that examine the connection between a variety of parenting styles and the onset of obsessive compulsive symptomology. Projects of this type could offer a more nuanced and comprehensive understanding of an illness which affects roughly 2.2 million American adults in any given year ("Obsessive Compulsive Disorder", 2015). While the present study will be among the first to conduct an examination of all parenting styles and the onset of OCD symptoms, recent research has indicated that the various, individually-specific manifestations of OCD subtypes may be related to and lessened by particular parenting styles.

The importance of this study stems from the potential it has to inform, expand, and refine our understanding of the predictors of OCD. Individuals who have this serious disability face significant financial, familial, social, and occupational challenges. As with many psychological afflictions, the effects of OCD extend far beyond the individual diagnosed with the disorder. Caretakers, friends, family, and co-workers with whom the person with OCD has relationships are also affected, making the issue one of social health in addition to individual health (Carpenter & Chung, 2011).

OCD has major health care implications in terms of direct costs to health care workers and professionals, and similarly contributes to potential labor-force productivity losses and early retirement. This affects the contributory revenue streams and loss of human capital of around $4 billion dollars annually (Egede et al., 2014). This study will examine all dimensions of OCD while simultaneously providing a comprehensive understanding of differing parenting types. The four primary OCD subtypes with which this project is concerned are: (a) concerns about germs and contamination; (b) concerns about being responsible for harm, injury, or bad luck; (c) unacceptable thoughts; and (d) concerns about symmetry, completeness, and the need for things to be “just right” (Abramowitz et al., 2010). The three key parental behaviors of focus are the permissive, authoritative, and authoritarian which were first theorized by Baumrind (1971). Though this project is an initial examination, this comprehensive overview has the ability to facilitate a more nuanced understanding of the predictors of OCD. The potential positive social impact that additional research on this topic could have includes: understanding the relationship between different parenting styles and the onset of OCD symptoms more

fully. This could influence the tailoring of services to effectively treat existing symptoms and expand to a more social awareness of the issue.

This section will include information on the gap this project aims to fill in the research literature. The research questions will then be discussed, followed by an explanation of the theories which serve as the foundation to this project. Methodology will briefly be discussed, and critical definitions used throughout this project will be explained. The next section will cover assumptions the researcher on this project has made, which were unavoidable and necessary, in addition to a discussion of mitigating efforts taken to remedy these assumptions. The scope, boundaries, and limitations of this project will be covered, followed by a discussion of the significance of this project in many different academic and social arenas.

Background

While recent research has begun to explore the relationship between parenting and OCD, only authoritarian parenting has been investigated to date; no other parenting styles or types have been assessed for their influence on the onset of OCD symptoms (Flessner et al., 2011; Timpano et al., 2010; Wissink et al., 2006). Literature regarding the correlation between an authoritarian parenting style and OCD has consistently found that this parenting style negatively impacts behavioral health in children (Timpano et al., 2010). Studies have shown that the development of anxiety disorders negatively impacts childhood and adolescent experiences in school, with parental overprotection being one predictor of anxiety-related disorders (Wood, McLeod, Signman, Hwang & Chu, 2003; Young, Wallace, Borgerding, Brown-Jacobsen, & Whiteside, 2013). It has been found

that students who experience elevated levels of anxiety when compared to other groups also were raised by authoritarian parents, while those students raised by caregivers who were more nurturing, permissive, and warm towards their children did not exhibit the same levels of anxiety (Bakhla et al., 2013; Chorpita & Barlow, 1998). Scholars assert that parental behavior, with its significant influence upon childhood development, also affects the development of healthy attachments between parents and children, which is in many ways foundational to a child's ability to function normally within society. The effects of difficult family dynamics and an upbringing characterized by a lack of warmth and emotional expression have been examined, with findings that suggest a relationship between attachment insecurity and the onset of obsessive compulsive symptoms (Rezvan et al., 2013; Smorti, 2012).

As a way to understand the importance of the parent-child connection and its influence upon the behavioral, emotional, and cognitive development of children, these findings provide a theoretical foundation for understanding the heterogeneous manifestation of OCD symptoms, while gesturing towards the importance of further research to address gaps in the research literature. Because OCD is a spectrum disorder that is experienced subjectively by those afflicted, it is important to recognize the wide array of emotional and psychological responses experienced by children during their early years as a result of various childhood experiences with differing parental behaviors (Yoshida, Taga, Matsumoto, & Fukui, 2005). Given the emerging scholarship on the relationship between parenting behavior and OCD, a study of all parenting styles or

dimensions is warranted to understand the relationship between parenting and OCD more fully.

This exploratory study examined if other parenting dimensions are also related to the development of OCD and whether there are specific OCD subtypes that are more strongly correlated with different parenting styles. Because OCD is a spectrum disorder, it has a wide variety of manifestations (Abramowitz et al., 2010; Abramowitz et al., 2011). An examination of the subtypes of the disorder, in addition to all of the parenting types, is needed to better understand the relationship between parenting and OCD. This initial exploratory investigation could provide valuable information for further studies that seek to understand the social mechanisms that may be contributing to the development of various subtypes of OCD, as well as aid in the planning and development of both corrective and preventative interventions tailored to specific manifestations of OCD.

Problem Statement

This exploratory study examined the relationship between OCD and permissive, authoritative, and restrictive parenting behaviors. "Permissive" parenting behavior is characterized by warmth and responsiveness toward the child (Wissink et al., 2006). “Authoritative control” refers to a parenting style that involves explaining the situation and granting autonomy to the children to make their own decisions (Huver et al., 2010; Timpano et al., 2010; Wissink et al., 2006). Lastly, “restrictive control” refers to a parenting style that involves high levels of strictness and discipline (Wissink et al., 2006).

By focusing on the specific OCD dimensions and their relationship to the different parenting styles, this study addressed a considerable gap in the current literature regarding parental behavior and OCD manifestations, which could inform the planning and development of both, corrective and preventive interventions, tailored to specific manifestations of OCD. This initial exploratory investigation could provide valuable information for further studies that seek to understand the social mechanisms that may be contributing to the development of various subtypes of OCD.

Purpose of the Study

This study explored the relationship between three key parental behaviors: permissive, authoritative control, and restrictive control, and the four primary OCD dimensions: concerns about germs and contamination, concerns about being responsible for harm, injury, or bad luck, unacceptable thoughts and concerns about symmetry, completeness, and the need for things to be "just right" (Abramowitz et al., 2010). With parental behaviors serving as the independent variable, the aim of this project was to determine the ways in which manifestations of OCD symptomologies are dependent upon exposure to differing parenting styles during childhood upbringing.

Research Questions and Hypotheses

In line with the problem and purpose of the study, the research questions to be addressed in this current study are the following:

RQ1. Is there a difference in concerns about germs and contamination between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o1: There is no significant mean difference regarding concerns about germs and contamination between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a1: There is a significant mean difference regarding concerns about germs and contamination between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ2. Is there a difference in concerns about being responsible for harm, injury, or bad luck between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o2: There is no significant mean difference in concerns about being responsible for harm, injury, or bad luck between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a2: There is a significant mean difference in concerns about being responsible for harm, injury, or bad luck between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ3. Is there a difference in unacceptable thoughts between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o3: There is no significant mean difference in unacceptable thoughts between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a3: There is a significant mean difference in unacceptable thoughts between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ4. Is there a difference in concerns about symmetry, completeness, and the need for things to be "just right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o4: There is no significant difference in concerns about symmetry, completeness, and the need for things to be "just right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a4: There is a significant difference in concerns about symmetry, completeness, and the need for things to be "just right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

The participants of this study were grouped based on parenting style and differences in the subcategories of OCD and were then compared. Because there were three separate groups of parenting type, a one-way between subjects ANOVA was used to analyze the data.

Theoretical/Conceptual Framework

The perceptions of children in regard to their own childhood experience was necessary for this study and served as the theoretical foundation of this project in accordance with Bowlby's (1969) theory of attachment. According to this model, an infant will seek proximity and closeness with an attachment figure. Based on the reaction that a child receives from a parent, who is the attachment figure, the child will develop

expectations from this relationship and will form a particular type of emotional and psychological relationship with the attachment figure that will influence their overall behavior throughout life (Bowlby, 1969). This theory highlights two things: (a) the child, especially in his/her younger years, usually look up to parents for comfort, care, and closeness, and (b) children's perception of parents' actions or behavior (parenting style) is important as it influences the children's emotional and psychological behavior.

According to this model of attachment, interactions with inconsistent, unreliable, or insensitive attachment figures (e.g. parents with restrictive of authoritarian parenting style) may (a) hinder the development of a secure, stable mental foundation of a person, (b) reduce resilience in a person's ability to cope with stressful life events, and (c) predispose a person to break down psychologically in times of crisis (Mikulincer & Shaver, 2012). As such, attachment insecurity can be seen to increase vulnerability to mental disorders, such as OCD (Mikulincer & Shaver, 2012; Thorberg et al., 2011). Applying the role of attachment to OCD in this current study, the relationship established based on the reaction or behavior of a parent toward a child is influential to the behavior and feelings about the child's self and toward others (Bowlby, 1969). A negatively perceived parental behavior toward a child is reflected as a reason for having poor self-worth; thus, the child develops maladaptive perfectionism, which might manifest itself as a need for perfect social performance to gain others' acceptance, thereby increasing the possibility of the development of psychological disorders such as OCD (Mikulincer & Shaver, 2012). In line with this study, the theory of attachment puts forward the

possibility that children's' behavior, especially those with OCD, is influenced by their perceptions of the opinions and behavior of their parents.

Asserting that an authoritarian parenting style is linked to OCD is too broad, and it remains to be further investigated whether specific parenting subtypes are linked to OCD subtypes.

Nature of the Study

The nature of this study was a quantitative approach within the OCD population of different OCD Foundations throughout the United States. Using a quantitative approach based the results on objectively verifiable evidence that made the interpretation of data more concrete (Fenech, Sweller, & Harrison, 2010). The independent variables in this study were the three parenting subtypes (permissive, authoritative, and restrictive) and the dependent variables were the OCD subtypes present (germ and contamination fears, feeling responsible to cause injury or harm to others, unacceptable thoughts, and worrying about completeness of tasks, symmetry or the need for things to be done just so).

This study was concerned with the ways in which the different parenting subtypes affect the onset and development of OCD amongst children. The most effective method of determining individual perceptions in studies such as this one was via survey, thus the present study conformed to this established convention, and additionally followed the dictates of a retrospective cohort study.

The participants in this study were individuals who belonged to or were associated with a variety of OCD Foundations throughout the United States. The

Foundations sent an e-mail with a survey link which included the Dimensional Obsessive-Compulsive Scale (DOCS) and the Parental Behavior Questionnaire (PBQ) to respondents, who anonymously completed the questionnaire.

Definition of Terms

Authoritarian parenting style: Is associated with parental behavior which "attempts to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard…" (1966).

A*uthoritative parenting style:* This style conversely "attempts to direct the child's activities in a rational, issue-oriented manner…Both autonomous self-will and disciplined conformity are valued by the authoritative parent" (1966).

Caretaker: Any adult primarily responsible for the well-being and safety of a child in lieu of a biological parent.

Obsessive compulsive disorder: A disease characterized by obsessions (intrusive/ anxiety provoking thoughts) which can only be stopped when a person with OCD acts upon compulsions (rituals) to lesson, or get rid of the anxiety that is currently felt.

OCD dimensions: Refers to the different subtypes of OCD which are, (a) Concerns about Germs and Contamination; (b) Concerns about being Responsible for Harm, Injury, or Bad Luck; (c) Unacceptable Thoughts; (d) Concerns about Symmetry, Completeness, and the Need for Things to be "Just Right" Abromowitz et al. (2009).

Parental behavior: The wide variety of behaviors associated with child-rearing practices, administered by an adult responsible for the well-being of those in their charge.

Parenting dimensions and/or types/subtypes: Refers specifically to Baumrind's (1966) theoretical conceptions of the three primary parenting styles, "permissive", "authoritarian", and "authoritative".

Permissive parenting style: Is characterized by a "nonpunitive, acceptant, and affirmative manner towards the child's impulses, desires, and actions".

The two primary diagnostic tools used in this study are:

Dimensional Obsessive-Compulsive Scale (DOCS), and the *Parenting Behavior Questionnaire* (PBQ). The DOCS was created by Abromowitz et al. (2009) in response to the need for a more accurate and comprehensive diagnostic tool, and is widely regarded as being highly efficacious in the diagnosis of OCD. The DOCS measures four different subscales of OCD subtypes which are (a) germ and contamination fears, (b) feeling responsible to cause injury or harm to others, (c) unacceptable thoughts, and (d) worrying about completeness of tasks, symmetry or the need to get things done perfectly (Abramowitz et al., 2010). The test has a total of 20 questions and respondents answer these questions using a 4-point scale from 0 to 4, with a higher score having a positive correlation with symptomatic severity. Respondents receive a numerical score for each of the four subscales, which are then used to calculate the overall score and aid in assessment of the specific nature of the respondents' OCD symptoms.

Parental Behavior Questionnaire (PBQ) was developed by Haapasalo & Tremblay (1994). The PBQ was first developed to test for a relationship between the effects which parents and schools have on students' choosing future occupations (Noack et al., 2010). The PBQ was developed to be used by both, parents and (their) children,

though today this scale is mostly administered to adolescents to rate their perceptions of parent(s) or care takers behavior toward them as they grew up (Wissink, Deković & Meijer, 2006). The PBQ has 30 items, and further divides each of the three major parenting behaviors “permissive”, “restrictive control”, and “authoritative control” into subscales. The subscales “warmth” and “responsiveness” measure the “permissive” dimension, “strictness” and “discipline” are the subscales associated to the “restrictive control” dimension, and the subscales “explaining” and “autonomy” are representative of the parenting behavior of “authoritative control”. Participants choose their answers using a 5 point response scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often (Haapsalo & Tremblay, 1994).

Assumptions

One of the criteria for participation in this study was the primary diagnosis of OCD. It was assumed that participants would answer questions to determine their eligibility for participation in the study truthfully and to their best ability and knowledge. Similarly, it was assumed that respondents’ OCD had been diagnosed accurately, and that individuals’ OC-symptomology was not another psychological or anxiety disorder, or that OC-behavior was not cultivated, but rather out of the control of the person with OCD. Another assumption made by this study was that respondents would answer the administered questionnaire, the basis for data interpretation, truthfully and to the best of their abilities. This necessarily required the assumption that the respondent were self-administering the questionnaire, and that no outside influence was contributing to the nature of an individual’s responses.

Scope and Delimitations

The scope of this project was concerned with the unknown relationship between specific subtypes of parenting behavior (permissive, authoritative control, and restrictive control) and the different dimensions of OCD (concerns about germs and contamination; concerns about being responsible for harm, injury, or bad luck; unacceptable thoughts; and concerns about symmetry, completeness, and the need for things to be "just right"). Parenting style was based on the perception of children as to the level of permissive, authoritative control, and authoritarian (restrictive) control parenting styles they experienced while growing up. OCD was measured based on the four dimensions of OCD (concerns about germs and contamination; concerns about being responsible for harm, injury, or bad luck; unacceptable thoughts; and concerns about symmetry, completeness, and the need for things to be "just right"). Given that authoritarian or restrictive parenting was said to influence the development of OCD, it was hypothesized that parenting styles opposite to that of authoritarian parenting (e.g. permissive and authoritative parenting) may decrease the manifestation of OCD among children. Even though there are existing studies that have explored specific parenting styles and OCD (Flessner et al., 2011; Timpano et al., 2010), there has been no research that has focused on the different parenting behaviors and the four specific dimensions of OCD. Moreover, focusing on the child's perspective of this relationship was also necessary and more appropriate based on the subjectively-felt nature of OCD. Exploring and establishing the relationship between specific parenting styles and specific OCD dimensions deemed necessary. It was important because the established relationships can serve as the

empirical basis or guide for the development of strategies that may prevent or lessen OCD among children. Specifically focusing on the OCD dimensions that have a significant relationship with certain parenting styles.

Exploring the relationship of the parenting styles to the specific dimensions of OCD was needed in order to establish how different prominent parenting styles relate to the specific manifestations of OCD; hence the focus on specific dimensions. As stated above, OCD is a spectrum disorder with unique individual manifestations based on the different dimensions of OCD (Abramowitz et al., 2010; Abramowitz, McKay, & Taylor, 2013). By exploring the relationship of parenting styles to specific OCD dimensions, planning for interventions (corrective or preventive) would be more individualized and focused depending on the kind of manifestation or OCD dimension which a child may have exhibited.

Because this was an initial exploratory investigation of the effects of parenting behaviors upon the development of OCD, the population selected for participation in this study was chosen based on its generalizable nature. There are many different contributing factors in the development of OCD, and future studies should take action to ensure that the impacts of culture, ethnicity, religion, socioeconomic status, and education level are considered in the onset of this disease. However, as the present study was one of the first to examine the relationship between parenting subtypes and the manifestation of specific OCD dimensions, it would not be prudent to select participants based on demographic specificities. Another significant delimitation of the current study was the inclusion of participants who are associated with an OCD Foundation within the United States—this

necessarily suggests certain demographic realities, in that those with access to this type of treatment will most likely have resources unavailable to those who are not receiving treatment of any kind. However, it was likely that the precautions taken by the researcher in this study could result in the most generalizable interpretation of data possible.

Limitations

The pioneering nature of this project had certain drawbacks; there have been no established conventions related specifically to the research questions addressed by this study, and as such the researcher of this project developed the research design and incorporated methodological systems based upon theorizations. One inherent limitation to the present study was the aforementioned utilization of a volunteer population. However, due to ethical concerns and consideration for the sample population, this was the only acceptable population to utilize in a project such as this. Given the highly personal nature of a disorder such as OCD, a volunteer population was assured of complete anonymity of their responses in this study. However, volunteerism has associated personality characteristics which may somewhat limit overall generalizability of data to the larger OCD population, though not significantly.

In order to acquire the participation of a sample population that was representative of the larger population of people with OCD, the questionnaire utilized for interpretation of data was sent via the internet to respondents. There were major advantages to acquiring data in this manner. First respondents were presumably not be culturally homogenous, thus increasing the heterogeneity of the sample population. Second, the questionnaire had the ability to reach respondents who reside in disparate parts of the

country, which would otherwise have been costly and time-consuming to a researcher who attempted to administer the questionnaire in person. Third, anonymity was similarly guaranteed through the administration of a questionnaire over the internet, and with that participant reactivity was likely reduced. However, respondents were required to have internet access in order to participate in this study, which potentially affected the demographic nature of the participant group. This socioeconomic disadvantage could potentially be linked to respondents' ability to seek treatment at the OCD Foundations affiliated with this study, and as such suggests that participants may experience financially related advantages over other potential participants who do not have access to OCD Foundations and other resources. Despite these considerations, the internet survey method was determined as the most efficacious one in order to assure anonymity, which was a primary ethical concern to the researcher conducting the present study. Further, due to the ability of the internet survey method to reach the most disparate participants, it was expected that any socioeconomic biases would be offset by the inclusion of a culturally and ethically heterogeneous demographic, leading to high generalizability of results.

Significance

This study aimed to address a significant gap in the research literature concerning parental behaviors and the development of OCD and the manifestation of specific dimensions thereof. As has been established, there is a relatively large body of work dealing exclusively with the relationship of an authoritarian parenting style and the development of OCD, but no studies have attempted to examine the ways in which different parenting styles influence the development of specific OCD subtypes. This

study did so, and contributes to the understanding of the behavioral and social mechanisms which lead to the onset and development of OCD.

In expanding upon research findings in this area, the present study offers a more comprehensive understanding of not only OCD, but the impact and significance of parenting behaviors upon the cognitive development of children. This study has the potential to inform remedial services aimed at the treatment and prevention of OCD, and as such is of invaluable significance to both the field of psychology and medicine. Furthermore, because this study is concerned with a psychological issue theorized to be related to behavioral interactions, it is necessarily of importance to the larger national population of those without OCD.

The findings of this study have the potential to inform discussions about childrearing practices and to contribute to the body of knowledge and associated institutions concerned with identifying and implementing the most positive parenting practices. Many organizations offer parenting classes to new parents, and the present study and those to follow will likely aid in the development of materials that aim to inform and expand societal understanding of the importance of developing good parenting practices. The present study will increase the clinical understanding of OCD, which will further contribute to the treatment of the disease and the lessening of the severity of individuated symptoms. In seeking to provide a more nuanced understanding of the intricate relationship between parenting behaviors and OCD, this study is dedicated to the betterment of society and the contribution of research which will expand and refine clinical practices related to the disorder.

Summary

The purpose of this quantitative study was to explore the relationship between three key parental behaviors: permissive, authoritative control, and restrictive control, and the four primary OCD dimensions: concerns about germs and contamination, concerns about being responsible for harm, injury, or bad luck, unacceptable thoughts and concerns about symmetry, completeness, and the need for things to be "just right" (Abromowitz, et al., 2010). Building upon Bowlby's theory of attachment (1969), this study centralized the perceptions of OCD individuals as shaped by the subjectively-felt nature of OCD. This may help determine the extent to which parental behavior impacts specific manifestations of OCD symptomology and dimensions.

The present study aimed to direct future research towards a more comprehensive overview of the impact of all parenting subtypes upon individual manifestations of specific OCD dimensions. This study may affect positive social change in many different academic and clinical fields by offering a new perspective on the development of OCD and possible interventions.

Chapter 2: Literature Review

Introduction

This literature review focused on research regarding the relationship between specific subtypes of parenting behavior (permissive, authoritative control, and restrictive control) and the different dimensions of OCD (concerns about germs and contamination; concerns about being responsible for harm, injury, or bad luck; unacceptable thoughts; and concerns about symmetry, completeness, and the need for things to be "just right").

The purpose of this study was to examine whether specific parenting dimensions were related to the development of OCD, and if there were specific OCD subtypes that showed differences with different parenting styles. Because OCD is a spectrum disorder with a wide variety of manifestations (Abramowitz et al., 2010; Abramowitz et al., 2011), an examination of the subtypes of the disorder in addition to all of the parenting types was needed to understand the relationship between parenting and OCD more fully. This study examined the relationship between OCD and permissive, authoritative control, and restrictive control parenting behaviors.

Organization of the Chapter

The organization of the chapter will be as follows. The chapter begins with a brief overview of the literature search strategy and outlines the sources and databases utilized in the collection of material. Next, a discussion of the theoretical foundation of the present study will be included in an attempt to introduce readers to the established literature and theories that are pertinent to this study. A description of the authoritarian, authoritative, and permissive parenting styles on which the established literature focuses

will follow the discussion of the theoretical foundation. Following this, a brief word on the established connection between authoritarian parenting behaviors and anxiety disorders is necessary. The remainder of the chapter will be dedicated to the examination of the research that has been completed in this field, beginning with the literature on attachment insecurity and OCD. Next, an examination of the primary mode of assessing OCD will be included, followed by information on the relationship between the various types of parenting behaviors, attachment insecurity, and the development of OCD. An overview of the impact external criticism has on the onset of OCD, and a look at another important study will give more detail into this investigation. Finally, the research summary will reiterate the findings of the current body of work on this topic and make the case for the importance of further studies on the relationship between parenting behaviors and the development of OCD.

Literature Search Strategy

Literature collected for this study came from online databases, such as EBSCOhost, PsycARTICLES, PsycINFO, PsycTESTS, Thoreau: Search of Multiple Databases. Though most databases were specific to the field of psychology, other search engines such as Education Research Complete, ERIC, and SocINDEX (with Full Text) were also used to include other relevant search engines and information in this literature review. The majority of the research information was peer reviewed and published between 2009 and 2015. Key words used in the different databases were; *parenting, parenting style, authoritarian, authoritative, permissive, obsessive-compulsive disorder, anxiety.*

Theoretical Foundation

The theoretical foundation of this study was based on Barumrind's (1966) parenting styles. Parenting styles were a topic of research dating back to John Locke, Jean-Jacques Rousseau, Jean Piaget, Rudolf Dreikurs, and Erik Erikson (Spera, 2005). However, it was Baumrind (1975) who developed an interest in understanding the connection between parents' behavior and the development of what she called "instrumental competence," or the ability to manipulate an environment to ensure one's goals are being met (Baumrind, 1966).

Baumrind (1966) proposed that different parenting styles have varying repercussions for the development of children. The original three parenting behaviors theorized by Baumrind (1966) are: authoritarian, authoritative and a permissive parenting style. The authoritarian parenting style provides an environment that is not very loving or nurturing, shows low warmth, demands complete obedience from children, and places no value on a child's understanding of why discipline is necessary. An authoritative parenting style is in many respects the obverse of the authoritarian parenting style. Parents who subscribe to this parenting behavior tend to be very loving, nurturing, warm, and display positive interactions with their children. A permissive parenting style is a warm, nurturing environment in which parents allow their children maximum freedom with few disciplinary repercussions and little, if any, structure given to a child in regards to daily activities and behavior (Baumrind, 1966). Baumrind (1966) further suggested that parents should not be too strict, but also not be too permissive with their children. Instead parents should focus on giving children clear guidelines and rules, yet show them

affection and love. Baumrind's (1966) parenting styles focus on normal variations in parenting, rather than on parenting that is deviant or abusive. It should also be noted that these parenting styles are theoretical, and that although these parenting styles exist, parenting may deviate within these proposed parenting styles, meaning some styles will overlap or be a composite. Maccoby and Martin (1983) built upon Baumrind's (1966) theory by including an indulgent and neglectful parenting dimension to their study while retaining the authoritarian and authoritative styles. Maccoby and Martin's parenting behaviors further include the two dimensions of acceptance and responsiveness and demand and control.

Research has suggested that the environment in which an individual is raised has a large influence on their well-being, development, and behaviors later in life (Baumrind, 1966). Individuals who grow up in environments that are positive, loving, nurturing, and caring typically have a positive outcome in their development. Being raised in a negative environment that does not provide emotional and other support tends to adversely affect an individual's development. Other factors that may play a role in how an individual develops include: social economic status (SES), education of the parents, poverty, and the environmental exposure and stimulation that can be provided to a developing individual.

Authoritarian Parenting Style

Parents who have an authoritarian parenting style are perceived as being very strict, rigid, controlling, and expecting of complete obedience from their children (Kemme, Hanslmaier, & Pfeiffer 2014). Those who exhibit this parenting behavior tend to act as the higher authority and do not allow any deviation from any rules or guidelines

that they have set for their children. These parents do not allow children to argue with them or question requests made of them, nor do these parents tend to explain why a certain punishment has been applied (Baumrind, 1966). Children are kept in close range and parents feel it is necessary to restrict any kind of behavior that would allow any personal autonomy outside the purview of a parent-child relationship (Baumrind, 1966). Household chores are assigned as a means of discipline and to cultivate a respect for work, rather than as an activity embarked upon by family members working towards a common goal. Hibbard and Walton (2014) stated that putting such high demands on children may foster an environment in which parents expect complete obedience and perfection. Research has shown that individuals raised by with this parenting style may become socially withdrawn, feel pressure to conform, may not deal with anger very well, may grow to be resentful, and may have low self-esteem (Kemme et al., 2014).

Authoritative Parenting Style

The authoritative parenting style is in many ways the opposite of the authoritarian parenting style (Uji, Sakamoto, Adachi, & Kitamura, 2014). Parents who use this style are nurturing, warm, supporting, and connect well with their children. Although there are rules and guidelines children are expected to follow, parents with this style explain what a child has done wrong and why a certain punishment is applied. These parents foster autonomy and self-regulation in their children and encourage them to have their own views and perspectives. Children may choose the activities or sports they would like to be a part of and parents will support these endeavors if reasonable, and will provide unconditional encouragement (Uji et al., 2014). These parents believe in the importance

of working with each other as well as respecting one another. This parenting style is characterized by a desire to provide a safe, emotionally stable, and secure environment for children. Research has shown that individuals growing up with this parenting style are more social, more emotionally confident, perform well in school, and can more easily develop positive and fulfilling interpersonal relationships (Uji et al., 2014).

Permissive Parenting Style

The permissive parenting style is exemplified by parents who are warm, nurturing and affectionate toward their children, while being very loose and flexible in setting ground rules and guidelines for their children (Williams, Ciarrochi, & Heaven, 2012). Even when rules are established, parents may not apply punishment to a child when rules are broken. Parents who use this type of parenting style view their relationship with their children more as a friendship, rather than a traditional parent-child relationship. These parents place few demands on their children and will try to avoid arguments or conflict with their children if at all possible. Baumrind (1966) stated that this kind of parenting style is “too soft” and gives little direction or guidance for the children. Parents may use bribery to encourage the child to comply, and there are typically no consequences or punishment applied in cases of child non-compliance. Possible effects on children’s development with this parenting style include: aggressive reactions by individuals when not getting what they want; difficulty in cultivating good relationships with people of authority; self-centeredness; and not understanding the concept or merit of both externally applied discipline and self-discipline (Baumrind, 1966).

Authoritarian Parenting Style and Anxiety Disorders

Current and past literature has shown that there is evidence that an authoritarian parenting style can have negative outcomes for children, such as the development of anxiety disorders (Bakhla, et al., 2013). A study by Erozkan (2012) showed that there is a significant relationship between parenting styles and the development of anxiety. There was a strong positive relationship between the development of anxiety symptoms with an authoritarian parenting style and a negative correlation when compared to individuals raised with an authoritative parenting style.

A study by Wood, McLeod, Sigman, Hwang, and Chu (2003) also found that authoritarian parenting style was associated with anxiety disorders in childhood. This is further supported by Young et al. (2013), who correlated parental overprotection as a predictor of child anxiety. In another study, Bakhla et al. (2013) investigated how parenting and gender impacts students' anxiety in school. When looking at this correlation, researchers found that anxiety among students who experienced an authoritarian parenting style was significantly higher when compared to the other groups (Bakhla, et. al, 2013). Chorpita and Barlow (1998) based some of their research on Bowlby's attachment theory, and their study found that children who do not form healthy attachments, or whose parents will not bond or be emotionally involved, are also prone to having higher levels of anxiety when compared to children whose parents are more nurturing, warm, and supporting.

Attachment Insecurity and OCD

Data regarding the perceptions of children themselves was significant to this study because OCD is a disorder which is subjectively experienced by individuals. According to Bowlby's (1969) theory of attachment, infants desire emotional and physical closeness with an attachment figure. Based upon reactions a child receives from the attachment figure (in most cases a parent), the child will form a particular emotional and psychological relationship with the attachment figure that will influence their overall behavior (Bowlby, 1969). Bowlby's theory highlights two things: (a) the child, especially in his/her younger years, usually looks up to parents for comfort, care, and closeness, and (b) children's perception of parents' actions or behavior (parenting style) is important as it influences the children's emotional and psychological behavior.

According to this attachment theory, inconsistent, unpredictable, or emotionally volatile interactions with attachment figures may (a) hinder the development of a solid, healthy mental foundation of a person, (b) reduce resilience in a person's ability to cope with stressful life events, and (c) incline a person towards psychological breakdown in periods of great distress (Mikulincer & Shaver, 2012). As such, attachment insecurity has been seen to increase vulnerability to mental disorders, such as OCD (Mikulincer et al., 2012; Thorberg, Young, Sullivan, Lyvers, Connor, & Feeney, 2011).

Applying the role of attachment to OCD in this current study, the relationship established based on the reaction or behavior of a parent toward their child is influential to the behavior and feelings about the child's self and toward others (Bowlby, 1969). A perceived negative parental behavior toward a child is reflected as a reason for having

poor self-worth. As a result, the child may develop maladaptive perfectionism, which could manifest itself in the projection of a faultless social persona as a means to gaining others' acceptance, thereby increasing the possibility of the development of psychological disorders such as OCD (Mikulincer et al., 2012). In line with Mikulincer and Shaver's study, the theory of attachment puts forward the possibility that children's behavior, especially those with OCD, is influenced by their perceptions of the opinions and behavior of their parents, who are important people in their lives.

In his seminal study, John Bowlby defined attachment as a "lasting psychological connectedness between human beings" (1969, p.194). However, this connectedness does not have to be reciprocal, as it can be that a person may have an attachment with an individual while the other person may not experience the same intensity of emotional attachment. Bowlby found that specific behaviors in children, such as being close to a parent when they are threatened or upset, may be considered attachment. In order to cultivate a healthy parent-child relationship, adults need to respond sensitively and appropriately to their child's needs, which Bowlby defines as "attachment behaviors" in adults. These attachment behaviors are universal and span across cultures. Bowlby's (1958) attachment theory explains the interactions between parent and child and how this may influence a child's further development cognitively, socially or emotionally.

Bowlby (1952) observed that children who were separated from their mothers experienced heightened levels of emotional distress and anxiety. This anxiety did not diminish even when a different caregiver would care for them, and as such, this finding shaped Bowlby's belief that separation anxiety can influence the bond and adjustment a

child has with their mother, leading to an insecure attachment. Bowlby (1952) also contextualized his theory within the domain of evolutionary psychology, addressing the importance of parents or caregiver providing a safe and secure environment for a child. In this regard, Bowlby stated that attachment is adaptive and hence increases the chances for survival. Early interactions between caretaker and child, as well as a secure and safe environment, are extremely important for the development of healthy levels of attachment of infants and children and thus positive behavioral outcomes.

Current studies confirm the major tenets of both, Baumrind's (1966) and Bowlby's (1958) theories to be true. Carpenter and Chung (2011) support the notion that past negative experiences with parents or close caregivers impact an individual's emotional processing and can lead to the development of OCD. Similarly, Rezvan et al. (2012) found a high correlation between attachment insecurity and the development of OCD. The authors conducted their study to examine the impact of attachment insecurities and its various dimensions to investigate the development of obsessive compulsive symptoms in female children. The study's researchers administered the Birlson Depression Self-rating scale and the Children's Yale Brown Obsessive-Compulsive Scale, as well as the youth-appropriate version of the inventory of parent and peer attachment. These assessment tools were administered to a sample of 221 children (all female), between the ages of 10 to 12. Using hierarchical regression, the study found that attachment insecurities were strongly correlated with OCD in this sample population. Additionally, assessment of the subscales of attachment insecurity (communication, alienation and trust), revealed a high percentage of variance in children with obsessive

compulsive symptoms. It was further discovered that even though all attachment subscale scores were highly correlated with obsessive compulsive symptoms, the factor of unhealthy parent-child communication was found to be the strongest predictor of obsessive compulsive symptoms, followed by lack of trust and emotional alienation.

The effects of emotionally difficult dynamics within families were further examined by Smotri (2012). Smotri noted that the family factor of expressed emotion may be linked to OCD. Some characteristics which may be exhibited in a familial environment include parental over-involvement and critical or hostile behaviors toward the child. Smotri (2012) further noted that high levels of expressed emotion can even be influential on the severity of an individual's OCD symptoms. Parental behaviors and attitudes, such as excessive control, overprotectiveness, granting little to no independence to one's child, and showing little confidence in the abilities of a child are also associated with OCD. Smotri (2012) also recognized that low warmth or affection and lack of support (all characteristics of an authoritarian parenting style) from parents are associated with the development of OCD.

These behaviors and attitudes from parents may create a fearful environment in which children use excessive caution as to the kind of actions they take and thus may avoid certain situations out of fear. Lastly, the anxiety level of parents themselves, and their perceived lack of control of external events have also been suggested to be a factor in the development of OCD in children.

The research done in this area was essential to the current study. As a way in which to understand the importance of the parent-child connection and its influence upon

the behavioral, emotional, and cognitive development of children, the attachment literature provides a theoretical foundation for understanding the heterogeneous manifestation of OCD symptoms. As was aforementioned, because OCD is a spectrum disorder which is experienced subjectively by those afflicted, it is important to recognize the wide array of emotional and psychological responses experienced by children during their early years. Bowlby's (1960) seminal research and the existing studies afford scholars interested in the subject a nuanced understanding of the importance of the parent-child relationship and the significance of emotional attachment. This body of work is discursively related, thus, to the examination of the relationship between parenting behaviors, healthy parent-child relationships, and the development of OCD symptomology.

Assessment of Obsessive Compulsive Disorder

A brief overview of what is understood to be the nature of obsessions and compulsions is necessary. Obsessions are the intrusive and persistent thoughts that an OCD individual constantly battles with. It is impossible to ignore them or "stand up" to them to make them go away. Though individuals are aware that their thoughts (obsessions) are illogical, they do not have the will power or strength to make these thoughts go away. Common obsessions may be related to contamination (germs, dirt, and bacteria), concerns of acts of aggression (thought of hurting someone), unacceptable religious or sexual thoughts (raping someone) or concerns about safety (responsible for an accident). Perfectionism, a need for exactness and symmetry are also common types of obsessions (Starcevic et al., 2011).

Compulsions are the repetitive behaviors that are performed to release the anxiety that has been caused by the intrusive and persistent thoughts via the obsessions (Starcevic et al., 2011). In a case of an OCD individual that is concerned with contamination and wants to reduce the anxiety, it may be a ritual of excessive hand washing, showering many times a day, washing clothes over and over again or washing floors until the individual is satisfied that everything is clean and the anxiety is completely gone, if even only for the moment. Individuals that have intrusive thoughts about needing to check, order or rearrange things, may check whether they have turned the oven off before leaving the house, or check the door handle to make sure the door is really locked. These repetitive behaviors are usually performed a set number of times before the individual is satisfied. Often while doing so the fearful thoughts return that while "checking" the person may actually have unlocked a door again and hence goes back to check again. Hoarding is yet another compulsion that an individual can fall victim to collecting useless stuff out of anxiety that whatever is hoarded and kept may be able to be used later on at some point so it will not be thrown out. This specific compulsion may lead to houses that are full of hoarded materials (often just trash or junk) and leaves little space to live or move around (Starcevic et al., 2011).

While some of these compulsions (rituals) can be observed by others, such as excessive hand washing, counting numbers or words may not be as obvious. In many cases OCD individuals are able to keep their symptoms concealed and may appear to the outside world just as "normal" as everyone else does. However, depending on the specific individual manifestation of obsessive and compulsive tendencies and their

severity levels, the OCD individual may not be able to conceal their symptoms. The heterogeneity of this disorder thus makes it a difficult one to diagnose; a plethora of assessment tools have been created and discarded as ineffective diagnostic tools (Starcevic et al., 2011). However, the DOCS remains a reliable method of diagnosis and as such will be reviewed here for its importance to the current study.

Abramowitz, et al. (2010) sought to address limitations of existing OC symptom measures through the development of the DOCS, a self-reported measurement of an individual's OC symptoms. In doing so, these scholars drastically improved the reliability and validity of assessment tools used in the diagnosis of OCD. Abramowitz, et al. (2010) found a significant need for an assessment tool which did not "confound symptom severity with the range of symptoms present", as OCD has been found to be a spectrum disorder with a wide range of manifestations, the severity of which experienced entirely subjectively. The DOCS is a 20-item assessment tool which measures four different subscales of OCD subtypes: a. germ and contamination fears, b. feeling responsible to cause injury or harm to others, c. unacceptable thoughts, and d. worrying about completeness of tasks, symmetry or the need to get things done perfectly (Abramowitz et al., 2010). Respondents answer the 20 questions using a 4-point scale from 0 to 4, with a higher score having a positive correlation with symptomatic severity. Respondents then receive a numerical score for each of the four subscales, which are used to calculate the overall score and aid in the assessment of the specific nature of the respondents' OCD symptoms.

This new tool was developed as a means to assessing the multidimensional nature of OCD, with particular attention paid to the heterogeneity of the disorder. As stated, the DOCS "aims to capture the links between obsessions, compulsions, and avoidance within each symptom dimension, and assess OC symptom severity independently of number and type of obsessions and compulsions present" (Abramowitz, et al., 2010). The authors' findings confirmed that the DOCS was indeed just as, if not more, efficacious in the assessment and diagnosis of OCD as the OCI-R, which remains the only other assessment tool which has been empirically demonstrated to be an accurate measure. The DOCS will be an essential component of the present examination of the relationship between parenting styles and the development of OCD, and will be used because of its high factorial validity and good reliability.

Relationship between Parenting Behaviors, Attachment Insecurity, and OCD

Building upon cognitive behavioral theories of OCD and the linkage to the development of OCD via the interactions between parents and children, Timpano et al. (2010) focused their study on how an authoritarian parenting style can influence the occurrence and/or development of OCD. The authors situated their study within Baumrind's (1966) model, which includes permissive, authoritative and authoritarian parenting styles, which as has been seen, vary greatly in regards to behavioral control and nurturing dimensions. The permissive parenting style is identified as a parenting behavior which enables children to do as they please and fails to include extensive measures of discipline, if any at all. The authoritarian parenting style includes parental behaviors that are very strict, rigid, low in warmth, and expectance of complete obedience of children.

The authoritative parenting, on the other hand, is a parenting style in which parents are nurturing and warm towards their children. It is defined as a democratic parenting style in which rules and discipline exist, but if a punishment is applied, parents will explain why the punishment has been enacted and a child may give his or her input as well.

Timpano et al. (2010) stated that as of today no research has been conducted that has looked closer at these parenting styles and their linkage to OCD. Using a nonclinical sample their study focused on the different parenting styles and the relationship between OC-related dysfunctional beliefs and obsessive-compulsive (OC) symptoms. The findings of the study indicated that greater OC symptoms were correlated to authoritarian parenting style. Further results indicated that the authoritative parenting style (almost opposite of the authoritative parenting style) showed no correlation with OC symptoms. However, further analysis showed that OC symptoms that were specifically linked to the authoritarian parenting style could only be identified when the other parenting styles were included. Moreover, based on the Obsessive-Compulsive Inventory–Revised (OCIR) it was found that only the subscale of obsessions was linked to an authoritarian parenting style.

After controlling for all the parenting prototypes, anxiety symptoms, and depression, the Obsessive Beliefs Questionnaire (OBQ) also showed an association to the authoritarian parenting style. The same accounted for the three different domains of the OBQ which were just as strong. The results of this study showed a correlation between an authoritarian parenting style and the development of OCD. However, further investigation into this phenomenon is needed as stated by the author to facilitate a better

understanding on how the various aspects of the different parenting styles can influence the development of OCD.

Aycicegi, Harris, and Dinn (2011) found similar results. In their study, it was found that a parenting style which is controlling (characteristic of an authoritarian parenting style) and psychologically manipulative is also associated with the development of OCD. Furthermore, when looking at different parenting dimensions, these scholars found that psychological control was the strongest factor associated with OC traits and symptoms. Additionally, as stated by Gecas and Seff (1990), it is essential to delineate the differences between authoritarian control and authoritative control as both styles have different developmental outcomes. An authoritarian parenting style that is demanding, controlling, harsh, strict and rigid, may have negative outcomes in a child's development when raised via such a parenting style. The authoritative parenting style that is warm, nurturing, loving and permissive may have positive outcomes in a child's development.

The aforementioned studies suggest that there are many psychological variables associated with the onset of OCD symptoms, necessitating an in-depth, comprehensive examination of the dynamic parent-child relationship in all of its potential manifestations. Further, as stated above, there is a considerable gap in the academic literature relating to the development of OCD in connection to parenting styles other than that of the authoritarian type. Because of this considerable lack in the established research, this study set forth to examine the remaining parenting behaviors and their influence upon OCD, which may provide valuable information for further studies that seek to understand

the social mechanisms that can contribute to the development of various subtypes of OCD. The following research begins this inquiry, but leaves much to be desired in the way of a comprehensive overview of the relationship between OCD and the other non-authoritarian parenting styles. Shaker and Homeyli (2011) provided a more nuanced understanding of the effects of attachment insecurity upon the development of various disorders. In this study, the authors investigated parental attachment and bonding in patients with OCD, depression and general anxiety. The sample size of a clinical nature used in this study consisted of 110 participants divided into three groups; 36 patients with OCD, 36 patients with depression and 38 patients with generalized anxiety disorder, which were all in the age range of 20-35. Patients were given different questionnaires which included the Parker, Tupling and Brown's (1979) parental bonding questionnaire, the Brennan, Clark and Shaver's (1998) attachment style questionnaire and Beck's anxiety questionnaire. Statistical measures in this study included the analysis of variance, as well as the Tukey post-hoc test, in an effort to analyze the specific data to compare parental bonding and attachment style within the three groups (patients with depression, OCD and generalized anxiety disorder).

Results showed that when looking at the frequencies of the patients in the different groups by attachment style (secure, avoidant, anxiety) and parental bonding (maternal control without affection, maternal neglectful, paternal control without affection, paternal neglectful), it was found that the depression group most consistently fell within the avoidance dimension with a 72.2% correlation rate; the obsessive compulsive group in the anxiety dimension at 77.9%, and the generalized anxiety group

also in the anxiety dimension with 79.1% for the attachment style. In regard to parental bonding the results yielded for maternal control without affection at 42.1% in the generalized anxiety group, 55.6% in the depression group for the frequency of controlling without affection, and 44.4% for maternal neglectful rearing in the obsessive compulsive group. This study showed that there were significant differences in regard to parental bonding and attachment style when patients in groups of generalized anxiety, OCD, and depression were compared. The significant difference lay at ($p<0.05$).

Another study by Ehiobuche (1988), found that when comparing Anglo-Australians, Greeks and Italian individuals with OCD to specific parenting characteristics, these individuals had parents that were overprotecting, rejecting and portraying low warmth toward their children—again, suggesting the detrimental impact of an authoritarian parenting type.

Turgeon, O'Connor, Marchand and Freeston's (2002) study similarly supports findings that childrearing practices can lead to the development of anxiety disorders including OCD. The study suggested that parental overprotection is a leading factor for the development of anxiety in children.

Rapee (1997) also supports the notion that parenting practices may have an influence on the development of anxiety and OCD. In particular, parents that are controlling and rejecting may be responsible for the development of OCD in their child.

In a study by Coccia, Darling, Rehm, Cui and Sathe (2012) it was found that parents who use an indulgent parenting style were described as being responsive to their children, and not putting demands on their children. Parents were viewed as being

typically lenient and non-directive, which behavior was understood as being conducive to creating a parent-child relationship in which parents have few behavioral expectations of their children. Although parents were involved in their children's activities, they did not put any demands or controls on their children. Parents were warm, nurturing, accepting and responsive to their children's needs, but there were few expectations in regard to their children's self-regulation or appropriate behaviors, which resulted in negative behavioral traits associated with self-control. A study by Ishak, Low and Lau (2012) suggested that although these children may have high self-esteem as well as good social skills, they often act out in social settings and do not well academically.

According to Watson et al., (2014), neglectful parents were not considered demanding, nor responsive to their children's needs. This kind of parenting is also called detached parenting, uninvolved parenting or hands-off parenting. These parents were not involved in their children's life and show low emotional warmth and control. They did not set any limits, were disengaged, rarely respond to their child's needs, and were considered to be undemanding. Although these parents provided basic needs to their child, they were usually not emotionally permissive and often dismissive of any worries their children may have had.

Children that grow up by such a parenting style may often think that their parent's needs are more important than their own (Floros, Siomos, Fisoun, & Geroukalis, 2013). These children fend for themselves and are often confused in regards to their own feelings of being independent and mature, or unsure of what to do in certain situations as they did not have someone role model for them. These children often become socially

withdrawn and have commitment/attachment issues later in their adult lives. They furthermore may have more absences from school or become involved in criminal activities (Taylor, Lopez, Budescu, & McGill, 2012).

Huver, Otten, de Vries, and Engels (2010) examined the ways in which the individual personalities of parents contribute to the manifestations of specific parenting style. In so doing, these scholars sought to determine the indirect affect that parents' personalities may have upon the development of their children, by way of parenting styles, behaviors, and techniques. This study is significant in that personality has often been studied in conjunction with friendships and other interpersonal relationships, but not much research has been dedicated to the examination of personality and the cultivation of parenting styles and outcomes.

In conducting their study, Huver et al. (2010) examined data gathered in the Study of Medical Information and Lifestyles in Eindhoven in which 688 residents of Eindhoven, a Dutch city, filled out self-administered questionnaires. The respondents were both male and female, married and single parents of children between the ages of 12 and 19. Education level was taken into consideration, as was income, with responses based on an 11-point scale with lower scores correlating to lower income. Religion was similarly included in the questionnaire. Using a Dutch assessment tool developed by Lamborn, Mounts, Steinberg, and Dornbusch (1991), two parenting style dimensions were considered: support and strict control. The personality portion of the questionnaire utilized a Dutch version of the "Quick Big Five" (Gerris et al., 1998), in which respondents rated the extent to which personality characteristics such as nervousness or

artistic inclinations were applicable. These questions were administered to assess a parent's self-perceived extraversion, conscientiousness, agreeableness, emotional stability, and openness (Huver, et al., 2010). A 7-point Likert scale was used in the personality portion of the questionnaire. Parenting styles were examined by a 5-point Likert scale in order to gauge whether statements such as "My child can count on me to help him/her out…" (Huver et al., 2010, p. 3) were applicable to respondents' experiences. Respondents were then classified as being "authoritative, authoritarian, indulgent, or uninvolved" (Huver et al., 2010, p. 3).

As the study found, "The more extraverted parents were, the less likely they were to be classified as authoritarian. More agreeable parents were less likely to be authoritarian and uninvolved. Furthermore, more emotionally stable individuals were more likely to be classified as indulgent and uninvolved parents" (Huver, et al., 2010, p. 5). Significantly, the study found that there was a correlation between emotionally unstable individuals and the manifestation of a more strict parenting style, while those respondents whose personalities were ranked as more emotionally stable tended to manifest "indulgent or uninvolved parenting" (Huver, et al., 2010, p. 6). In keeping with the scholars' hypothesis that "authoritative parents—parents that score high on support and strict control—would be more extraverted, agreeable, conscientious, and emotionally stable" (Huver, et al., 2010, p. 3) than respondents who engaged in other parenting behaviors, the outcome of the study confirmed that this was, indeed, the case. As such, the study confirms that the manifestation of a particular parenting style may in part be attributed to an individual's personality type.

Finally, Nedeljkovic et al. (2009) found that attachment insecurities in adults are correlated with OCD. In this study individuals with OCD were compared to a group with other anxiety disorders (AD) and a healthy control group. The measures used in this study focused on cognitions, adult attachment, OC symptoms and mood. The Anxiety Disorder Interview Schedule for DSM-IV was used to diagnose the OCD and AD group and the results were then used to show the relevance of the attachment insecurities when comparing the prevalence within the OCD sample. The sample was as follows: For OCD (N=30), for ADs (N=20) and for the control group (N=32). Results in this study posited that attachment insecurities or anxieties was linked with the diagnosis of OCD.

These findings illustrate the extensive research conducted on the relationship between an authoritarian parenting type and the development of OCD. However, it is evident that the literature leaves much to be desired in the way of findings on the relationship between the other parenting dimensions and the manifestation of OCD symptoms. As such, this study aimed to provide much-needed information on the parenting behaviors which have yet to be studied in any kind of depth. By filling the gap in existing literature, a more thorough and nuanced understanding of OCD may be reached, which will be invaluable to the assessment, diagnosis, and treatment of this serious disease.

External Criticism and the Development of OCD

Pace, Thwaites and Freeston (2011) explored the role of external criticism and its association with OCD. While various models of OCD have been explored in regard to the role of criticism, findings confirm that many of the ideas are still overlapping. Pace et al.

(2011) aimed to address a gap in the literature and identify exactly how or why criticism affects the development of OCD. The authors of this article attempted to map current and existing findings onto a cognitive map model of OCD to enhance a better understanding of the role that criticism plays in the occurrence and development of OCD. This investigation also posited that criticism could not only play a role in the occurrence of OCD, but could also potentially be a perpetuating factor in the longevity of the disorder.

Focusing on the cognitive model of OCD, the scholars showed that early childhood experience may predispose an individual to the development of OCD. Investigating this further, the study found that a critical and demanding parenting style (authoritarian) is also linked to the development of OCD. It is speculated that OCD connected behavior may develop in a child as a technique to please the parent(s) and avoid criticism. This finding is compatible with the literature's assertion that a child's social environment and external criticism plays a role in the development of anxiety in children and hence may adopt tactics to lessen this anxiety, which may or may not manifest as OCD behaviors. In order to reduce the anxiety-provoking thoughts that enter the mind, the OCD individual will engage in compulsions (rituals) to reduce the anxiety that is presently felt (Pace et al., 2011).

This study further asserted that criticism may impact the development of OCD in several ways. One consideration is the finding that criticism received early in life by a parent or caregiver is a high factor in the development of OCD. Furthermore, and as mentioned above, a child may develop obsessive beliefs in connection with parental criticism, which could potentially lead an individual to engage in compulsive behaviors

in order to mitigate feelings of anxiety and perhaps avoid parental criticism in the future (Pace et al., 2011).

Other

With parental support, environmental security, and personal safety being of utmost importance to a child's emotional development, the literature which addresses at-risk youths and the socially disadvantaged, in conjunction with parenting styles, was also of significance to the current study. In a dissertation by Pezzella 2010 entitled "Authoritarian Parenting: A Race Socialization Protective Factor that Deters African American Adolescents from Delinquency and Violence" (2010), an authoritarian parenting style was found to be significantly more efficacious in reducing delinquent behaviors amongst at-risk African American youths. The findings of this study, which examined data from 1000 youths and the prevalence of negative life events in conjunction with different parenting styles, affords scholars a cross-racial understanding of the effects of parenting styles upon adolescents. Significantly, Pezzella (2010) found that there was a "negative relationship between authoritative parenting and violence…exclusively in the African American sample", which suggests the importance of examining the ways in which cultural and ethnical backgrounds must be taken into consideration when examining the efficacy of childrearing practices. Further, because individuals who have OCD disproportionately experience negative life events when compared to the healthy non-OCD population, Pezzella's findings provide important racially-specific insight into the effects of different parenting styles, which is of central

concern to the study of the relationship between parenting styles and the development of OCD.

The Nature of OCD

As has been established, OCD is a complex disease, the specifics of which are subjectively felt and therefore heterogeneous and difficult to quantify. Because of this reality, many studies which aim to further understand OCD rely upon an examination of specific cognitive symptomologies, and both psychological and pharmacological treatment outcomes. Utilizing these measures enable researchers to quantify the effects of the disorder, and were relevant to the present study in their ability to concretely measure the effects of this disorder upon the human psyche in a manner which is empirically sound. The studies which relate to this area of inquiry will be discussed in the following section.

In what was the first comprehensive meta-analysis of the genetic associations of OCD, Taylor (2013) sought to expand and refine the understanding of the complex biological factors which may contribute to the onset of the disorder. After compiling a list of 179 existing genetic association studies**,** Taylor (2013) identified 113 which would be able to be utilized in conducting the meta-analysis that was lacking on this data. Despite the fact that four prior meta-analysis had been done, they were limited to single polymorphisms, and Taylor's (2013) study comprehensively addressed data regarding all existing polymorphisms which have been studied to date, which are more than 200 in number. The research returned results as follow:

Findings indicated that OCD is associated with multiple genes, which is consistent with twin studies showing that OCD is shaped by additive genetic factors; that is, by multiple genes that incrementally increase the odds of developing the disorder (Taylor, 2013).

Specifically, polymorphisms involved in "serotonin modulation" are associated with the onset of OCD, and for men specifically, any polymorphisms in catecholamine regulation are significant in the development of the disorder (Taylor, 2013). The data set utilized the age of sample subjects as a proxy for age of onset, with adolescent subjects representing early onset OCD and adult subjects representing late onset OCD. The chief limitation of that study was as a result of the existing data's inability to fully understand seemingly non-significant effects. Taylor (2013) suggests that this could be addressed in future studies which aim to further research in this area by "(a) sufficiently power[ing studies] to detect small effect sizes, (b) design[ing studies] to investigate potentially important moderator variables (for example, those defined by age of onset, comorbid tic or particular types of obsessive-compulsive symptoms), and (c) provid[ing] full information on non-significant results" (Taylor, 2013). These findings are important to the present study for their ability to expand upon what Taylor (2013) refers to as the "complex combination of biopsychosocial factors" which figure into the development and onset of OCD. As has been illustrated, there are over 100 studies which suggest a genetic association with the disorder, and this reality demands that the diagnosis and treatment of a particular individual's symptoms take the heterogeneous nature of the disease into account. These findings further suggest that parental behavior not only may

potentially impact the development of OCD amongst children, but that there may be a genetic basis for early-onset OCD as well as the behavior of the parents themselves. Based on these findings, treatment options must necessarily take into account the genetically-based component of the disorder and seek to address parental behavior in accordance with biological realities.

Storch et al. (2008), examined how cognitive behavioral therapy (CBT) could help in the treatment of the different subtypes of OCD (contamination and cleaning, symmetry and ordering or checking and hoarding), and found that CBT worked very efficaciously for all of the OCD subtypes, with a 76% treatment response rate exhibited by the study participants. The study included 92 children and adolescents that had OCD and an age range from 7 to 19 years old. 14 sessions of intense psychotherapy, “family based CBT” were administered in an effort to see how these intensive sessions could help in the treatment of the differing dimensions of OCD subtypes. The study’s findings, however, showed that CBT was slightly more effective when administered to patients who exhibited “checking rituals and harm obsessions”. The findings of this study suggest that CBT should be implemented as treatment, without hesitation, for all adolescents who present various OCD subtypes. Again, studies that address the cognitive component of OCD gesture towards the multidimensional nature of the disease. However, it is hopeful that studies such as Storch, et al. (2008) have found that therapies such as CBT are equally efficacious when administered to patients across OCD subtypes. This type of standardized treatment lessens some of the guess-work involved in the treatment of such

a heterogeneous disorder, allowing for a more tailored approach to the behavioral aspect of OCD.

In another study, Labad et al. (2008) engaged in a comparative analysis of the genders and various OCD subtypes. The authors used a multivariate analysis with specific attention to the age onset of OCD by which age was determined via a direct interview. The study included 186 outpatients diagnosed with OCD as determined by the DSM-IV who were administered the YBOC-S Symptom Checklist, Yale-Brown Obsessive–Compulsive Scale (YBOC-S), and the Hamilton Depression and Anxiety Scales. Using logistic regression analysis to determine the female: male "odds ratios" (OR) for the specific subtypes the authors found a correlation between the two genders based on the OCD subtype contamination and cleaning (which was higher in females) and the subtype of sexual/religious (which were lower in females). Specifically, the OR for the contamination/cleaning subtype lay at 5 2.02 and *p* 5 0.03 and for the sexual/religious subtype at 5 0.41 and *p* 5 0.03).

Surprisingly this study did not find a gender difference when looking at the OCD subtypes of symmetry/ordering and aggressive/checking. The age onset for the subtypes of sexual/religious and symmetry/ordering was considerably earlier with these two subtypes. The study posits that gender is an important factor in the role of OCD especially when it comes to the subtypes of sexual/religious and contamination/cleaning. The authors note that it is imperative to continue to investigate OCD dimensions with the focus on the onset and severity of OCD as well as gender and possible other characteristics in order to be able to more clearly identify the subtypes of OCD.

There seems to be consensus in past and current literature, that in order to better understand the nature of OCD and various OCD subtypes, more research needs to be undertaken. Furthermore, identifying and understanding the OCD subtypes more extensively will aid in the development of more adequate therapeutic techniques for individuals with OCD. These treatments may include psychological and pharmacological therapeutic approaches (Stein, 2007).

Sookman, Abramowitz, Calamari, Wilhelm and McKay (2005) researched the impact of CBT on the treatment of the different OCD subtypes. The authors further examined matching appropriate therapy techniques to specific OCD subtypes for a more focused approach to better help individuals with specific subtypes of OCD. Their research concluded that in the past, research and treatment has focused too narrowly on a conceptual approach in regard to OCD, at the expense of examining more specifically the various subtypes. It was concluded that future studies using CBT focus more on the subtypes of OCD and not just on "OCD" as a homogenous disease. CBT treatments as established at the time of this study may have had better results for subtypes comprised of cleaning or checking compulsions, but it was suggested that CBT was not as efficacious for subtypes which included an accounting dimension. One potential reason for this discrepancy in CBT efficacy is due to the tendency for these types of treatments to approach OCD as a homogenous disorder, as was aforementioned. The authors posit that specific treatment techniques need to be better aligned with the disparate, and specific OCD subtypes for better treatment outcomes for individuals with OCD.

Nedeljkovic et al. (2009) investigated neuropsychological performance by comparing the different subtypes of OCD. Using a sample of 59 OCD patients, the subtypes of washers, checkers, obsessionals and those with mixed symptoms were identified and compared to a 59 non-clinical sample group. Both groups were administered different tests from the Cambridge Neuropsychological Testing Automated Battery (CANTAB) computer-based assessment tool for cognitive functions (e.g. visual memory, executive function and attention). The Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV) and the Yale Brown Obsessive Compulsive Scale (YBOCS) were used to assess anxiety, depression and OCD symptoms. When the checkers, obsessionals, washers and the non-clinical sample were compared, only minor differences were found. However, checkers had lower performance on spatial working memory, while lower scores were seen in spatial recognition task with the obsessionals. Checkers and other subgroups showed slow performance on the Stockings of Cambridge planning task as well as lower scores in pattern recognition when compared to the non-clinical sample. Results of the overall study revealed that checkers had the greatest impairments on neuropsychological tasks when compared to the other subtypes. The study suggested that future research must focus upon and include neuropsychological components when investigating OCD subtypes.

Research Summary

The literature has illustrated that the environment in which a child grows up in can be very influential in regard to the development and/or manifestation of OCD. The focus lies specifically on the three most prominent parenting styles (authoritarian control,

authoritative control, and permissive), and how these can influence psychopathological development in children altogether. The focus of this study was specifically to investigate how the different parenting styles mentioned above can influence the occurrence of the onset and manifestation of OCD. Some of the literature has clearly linked an authoritarian parenting style to the occurrence and further development of OCD, but there is no investigation in regard to the other parenting styles and how they may be linked to the development and occurrence of OCD.

The parenting styles discussed in this study were based on Barumind's (1966) theory of parenting styles which include authoritarian, authoritative and permissive parenting styles. The authoritarian parenting style is a rigid, strict low warmth parenting style in which parents expect complete obedience from children and do not engage children in a discussion of punishment as to why it was applied (Baumrind, 1966). The authoritarian parenting style, on the other hand, is referred to as a "democratic" parenting style, and is characterized by a loving and nurturing parent-child relationship. These parents tend to display high levels of affection towards their children and strive to cultivate a disciplinary style which engages children in a conversation about why a particular punishment is necessitated. These parents set boundaries, but unlike those authoritarian parent-child relationships, children usually involved in their punishment in a way that affords children agency in and an understanding of discipline. The permissive parenting style includes parents that are nurturing and loving, but although they set rules and guidelines, they tend to be inconsistent in the application of any discipline Children raised within this parenting environment often fear no repercussions for poor behavior,

and parents set very few rules as a means to avoiding unpleasantness and conflict. Permissive parents appear to have a relationship which resembles more of a “friendship” with their children than a traditional parent-child relationship (Baumrind, 1966).

Although research findings indicate that there is a correlation between an authoritarian parenting style and the occurrence and development of OCD, other parenting styles need to be investigated in order to shed more light into this phenomenon (Timpano et al., 2010). Based on Bowlby’s (1969) attachment theory, it has been suggested that an inconsistent and emotionally volatile relationship with caregivers can lead to anxiety and may be a factor in the manifestation of OCD. Other factors such as cultural components in regard to attachment and anxiety also need to be investigated further to gain a better understanding on how these dynamics may also contribute to the development of OCD.

The gap in the literature that this study addressed was the unknown relationship between specific subtypes of parenting behavior (permissive, authoritative control, and restrictive control) and the various dimensions of OCD, which include contamination, physical injury, and symmetry concerns. Parenting style is defined as based on the perceptions of children as to the level of permission, authoritative control, and authoritarian (restrictive) control exhibited by their parents or caregivers while growing up. OCD is measured based on the four dimensions of OCD (concerns about germs and contamination; concerns about being responsible for harm, injury, or bad luck; unacceptable thoughts; and concerns about symmetry, completeness, and the need for things to be “just right” (Abramowitz et al., 2010)). Given that authoritarian or restrictive

parenting has been shown to influence the development of OCD, it was hypothesized that parenting styles which differ from that of authoritarian parenting (e.g. permissive and authoritative parenting) may decrease the manifestation of OCD among children.

This literature review has investigated the ways in which the specific subtypes of parenting behavior and the various dimensions of OCD can influence the occurrence and development of OCD. The next chapter will discuss the methodology that was used in this study, including samples size and target population, in addition to specific measures that were used, how data was collected and analyzed, and the possible ethical considerations that needed to be considered.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to determine if there was a relationship between parenting styles and OCD dimensions. While recent research has begun to explore the relationship between parenting and OCD, only authoritarian parenting has been investigated to date (Flessner et al., 2011; Timpano et al., 2010; Wissink et al., 2006).

By focusing on specific subtypes of OCD and different parenting styles, this study filled a gap in the current literature regarding parental behavior and OCD manifestations, which could inform the planning and development of both corrective and preventive interventions tailored to specific manifestations of OCD.

This initial exploratory investigation provided valuable information for researchers who seek to understand the social mechanisms that may be contributing to the development of various subtypes of OCD.

Research Design and Rationale

The nature of this study was a quantitative approach within a population of people with OCD from various OCD Foundations within the United States. Using a quantitative approach, the results were based on objectively verifiable evidence, which made the interpretation of the data more concrete (Fenech, Sweller, & Harrison, 2010). The independent variables in this study were the three parenting subtypes (permissive, authoritative, and restrictive) and the dependent variable was the OCD subtypes present (germ and contamination fears, feeling responsible to cause injury or harm to others,

unacceptable thoughts, and worrying about completeness of tasks, symmetry or the need for things to be done just so). Because the participants of this study were grouped based on parenting style, in order to examine the varying manifestations of OCD tendencies based on childhood experience, a one-way between subjects ANOVA was used to interpret data, followed by a post hoc test to determine specific intergroup variance between the different parenting styles.

Self-assessment questionnaires were the most efficacious way to group individual participants based on their childhood experiences, and so the design of this study was to utilize the survey method in addition to following the dictates of a retrospective cohort study. This maximized the accuracy of interpreted data as there were no considerable time constraints regarding the collection of information based on respondents' past childhood experiences.

To this end, the presented survey utilized the DOCS, and the PBQ. The DOCS (Abramowitz et al., 2010) has been used in past research (Williams, Pajak, O'Moore, Andrews & Grisham, 2014) and it has been found that this test shows factorial validity, as well as good reliability. The PBQ was developed by Haapasalo & Tremblay (1994) and has also been used in prior research studies (Stright, & Yeo, 2014).

Methodology

Population

The participants in this study were individuals who belong to or are associated with a variety of OCD Foundations throughout the United States. The Foundations who agreed to administer the questionnaires to their members on behalf of this project were:

The International OCD Foundation located in Boston, Massachusetts; The OCD Foundation of Michigan; The OCD Foundation of Jacksonville; The OCD Foundation of Wisconsin; The OCD Foundation of Virginia; The OCD Foundation of Kansas; and The OCD Foundation of Texas as well as two OCD related Facebook pages. These are all highly respected OCD organizations that administer state-of-the-art care, support, and treatment for persons with OCD and as such were invaluable in obtaining the information/data that was required by this project. Further, the population of participants was chosen for the high probability that the respondents had been diagnosed with OCD. Additionally, these individuals fit the criteria of this study and had differing experiences with parental behaviors during childhood, and similarly different manifestations and severity levels of OCD, making for a robust data set which was representative of the diversity and heterogeneity of people with OCD.

Sampling Procedures

An initial e-mail including the name, purpose, possible benefits, eligibility criteria, and the contact information of the researcher and the link to the actual survey was sent out to the different OCD Foundations throughout the United States. The link to the survey that included the DOCS and PBQ was made available via esurveycreater; a program to collect data online listing the consent form as the very first page in the survey. Participants were asked to take part in a study regarding parenting behaviors and OCD. Anonymity was assured as all responses were collected via the esurveycreator program, which is unable to track responses back to specific participants. It was determined that the survey method was most efficacious in capturing and understanding the nuances in

individual cases of OCD, and as such, communication via email was the fastest and most efficient way to collect data on the subject.

The criteria for participant inclusion in the present study were formulated as a result of careful consideration as to how best to meet the aims of this project. Participant inclusion was limited to those individuals who had been diagnosed with OCD and who had been raised by a consistent primary caretaker. In order to isolate the relationship between OCD and parental behaviors, individuals with other psychological disorders were not considered for inclusion in this study.

Individuals who had been through foster care were not considered as respondents, as this system frequently rehomes children many times throughout adolescence, thereby preventing the development of consistent interpersonal relationships between children and their foster caregivers. Further, because this study was interested in the relationship between a child's perceived relationship with a consistent, exclusive parent or caregiver and the development of OCD, those who had been through foster care and on average had presumably not experienced a long-term, consistent relationship with a parent or caregiver were excluded from participation in order to best meet the goals of this study.

Individuals who had more than one subtype of OCD were also not considered for participation in this project. Because the goal of this study was to examine as clearly as possible the direct differences between parental behavior and the development of OCD symptomology, it was most beneficial to the project to have a concrete understanding of the specific OCD subtypes which the respondents experienced most pervasively. Should an individual present with multiple OCD subtypes, it would be unduly difficult to

understand the relationship between a specific set of OCD symptoms and parental behavior. Further, the presence of multiple OCD subtypes in an individual would confound any efforts to understand which subtype was most dominantly experienced, whether parental behavior contributed to the development of all subtypes equally, or whether one subtype created more distress than another in a respondent's life.

Individuals who experienced aural, oral, or ocular disabilities were unable to participate in this study due to the complex nature of the effects these disabilities had on their life experiences Finally, individuals who have been raised by numerous caretakers, such as grandparents, aunts, uncles, or other extended family members, were not able to participate in this project. The current study sought the clearest data possible in order to most accurately understand the already extremely complex nature of parental behavior and the onset of OCD, and individuals who have been raised by numerous caretakers would complicate the clear understanding sought by this project.

To determine the appropriate sample size for this study a G-Power test was conducted. Using a statistical test of ANOVA (Fixed effects, special, main effects and interactions) and the power analysis of priori with the effect size of .8, err prob of 0.05 a total sample size of 47 was needed to be able to see a significant difference in this study.

Instruments

The DOCS, and the PBQ were the primary surveys used in this project. The DOCS has been widely used in past research and has been shown to be a reliable diagnostic tool with high factorial validity. The PBQ has similarly been used widely in prior research, and while it was initially developed in order to gauge the impact of

parenting and education upon a student's future occupation, today it is used primarily as a self-assessment method for determining respondents' perceptions of parental and caretaker behaviors during childhood (Wissink, Dekovic & Meijer, 2006).

The PBQ has 30 items, and further divides each of the three major parenting behaviors "permissive", "restrictive control", and "authoritative control" into subscales. The subscales "warmth" and "responsiveness" measure the "permissive" dimension, "strictness" and "discipline" are the subscales associated to the "restrictive control" dimension, and the subscales "explaining" and "autonomy" are representative of the parenting behavior of "authoritative control". Participants choose their answers using a 5 point response scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often. This questionnaire was answered by persons with OCD as he or she reflected on the behavior of the parent (or caretaker) who was perceived to have had the most impact on their childhood experience while growing up. The decision to rate one parent or caretaker versus another was left up to the discretion of the respondent.

The DOCS measures four different subscales of OCD subtypes which are: (a) germ and contamination fears; (b) feeling responsible to cause injury or harm to others; (c) unacceptable thoughts; and (d) worrying about completeness of tasks, symmetry or the need to get things done perfectly (Abramowitz et al., 2010). The test has a total of 20 questions and respondents answer these questions using a 4-point scale from 0 to 4, with a higher score having a positive correlation with symptomatic severity. Respondents received a numerical score for each of the four subscales, which were then used to

calculate the overall score and aid in assessment of the specific nature of the respondents' OCD symptoms.

Permission to use both, the DOCS and PBQ, is stated explicitly as follows:

"Test content may be reproduced and used for non-commercial research and educational purposes without seeking written permission. Distribution must be controlled, meaning only to participants engaged in the research or enrolled in the educational activity. Any other type of reproduction or distribution of test content is not authorized without written permission from the author and publisher" (Abramowitz, et. al, 2010), (Wissink, Dekovic, & Meijer, 2001).

These tools were utilized in the present study in a non-commercial capacity, for research purposes, and as such did not require written consent from the creators of these materials.

There are but a few recent studies which have utilized the DOCS and PBQ assessment tools in the evaluation of various OCD dimensions and symptomology, but they nonetheless illustrate the efficacy and reliability of these questionnaires. Similarly, the relatively few published studies which have used the DOCS and the PBQ instruments suggests the urgent need of studies such as the present one in order to expand the field as well as the clinical understanding of the effects of parental behavior upon the development of OCD.

Published Reliability Values

There are three primary studies which have utilized the DOCS assessment tool in conducting research related to parenting behaviors and the development of OCD, and

they will be discussed in this next section. As was aforementioned, although the number of current studies that utilize the DOCS is relatively small, the published research suggests both, the efficacy of the tool and the importance of research which furthers this line of inquiry.

The most recently published study which utilizes the DOCS is “Just to be Certain: Confirming the Factor Structure of the Intolerance of Uncertainty Scale in Patients with Obsessive-Compulsive Disorder” (Jacoby, Fabricant, Leonard, Riemann, & Abramowitz, 2013).

In this study, Jacoby, et al., (2013) sought to assess the validity and reliability of the Intolerance of Uncertainty 12-item Scale (IUS-12) in patients with OCD. While the two-factor, 12-item measure has been studied previously, prior sample groups were predominantly young and female, and thus not necessarily representative of the general OCD population. Jacoby, et al. (2013) further limited their investigation of the efficacy of the IUS-12 to a sample population which had been diagnosed with OCD due to evidence that there is a significant relationship between the cognitive dysfunction that is Intolerance of Uncertainty and OCD, and also because there has not been a study to date which examined this relationship exclusively. Participants in this study included 96 men and 108 women who had received a diagnosis of OCD and were seeking treatment from the Obsessive-Compulsive Disorders Center at Rogers Memorial Hospital in Wisconsin (Jacoby et al., 2013). The average age of the participants was 29.9 years, and the ethnic makeup of the study was primarily Caucasian at 91%, followed by a 3.4% inclusion of Latino/Hispanic participants, 2.5% Asian participants, 2% African American participants,

and 1% Native American. The study included information on participants' education levels, reported as an average duration of time spent in formal schooling at 14.87 years. Significantly, 80% of participants in this study had multiple diagnoses, the most prevalent being unipolar depression at 37%, followed by other anxiety disorders at 19%. The researchers found that the IUS-12 was a highly efficient tool in the assessment of IU symptoms in those also diagnosed with OCD, and, perhaps more importantly to the present study, that the administration of the IUS-12 to OCD persons may aid in the treatment and management of this OCD dimension. While the primary aim of this study was to examine the efficacy of the IUS-12 and its relationship to OCD, the DOCS was used as a reliable measure and for its ability to be highly correlative in a study which examines multiple subscales.

In 2012, the DOCS was again used in "Internet Administration of the Dimensional Obsessive-Compulsive Scale: A Psychometric Evaluation (Enander, et al., 2012). The aim of this study was to determine whether or not the DOCS could be administered via the internet and still maintains efficacy. The researchers ultimately found that it was possible to administer their Swedish version of the DOCS via the internet and retain internal consistency. The participants in this study were 101 individuals who had been diagnosed with OCD, and the results illustrated a high level of internal consistency. Alongside this evaluation, the researchers also sought to examine convergent and discriminant validity in the administration of the DOCS via the internet. To this end, 48 individuals who had received cognitive behavioral therapy via the internet were administered the DOCS, which they also received via the internet. The results of

this study are promising for other researchers who attempt to undertake similar variations in the administration of diagnostic tools, and these findings also suggest the efficacy of the DOCS for usage in multiple capacities.

Finally, and as was aforementioned, the DOCS was created in order to address limitations to the existing OCD-symptom diagnostic tools and to improve the efficacy and reliability of such measures (Abramowitz, et al., 2010). These authors developed the DOCS with particular focus on the heterogeneity of the disorder, and as a result created a tool that could evaluate the total severity of an individual's OCD symptoms, while incorporating an "avoidance" dimension into the 20-item questionnaire. It was found that the DOCS was just as efficacious as the other most widely used OCD-symptom measure, the OCI-R, in accurately diagnosing patients with OCD. The DOCS reportedly was found to have high factorial validity and internal consistency, in addition to displaying a high level of accuracy with, and sensitivity to, both treatment and diagnoses of patients with OCD. This makes this tool highly efficacious in clinical administration and research purposes. Participants in this study were 315 adults who had a primary diagnosis of OCD, as well as 198 adults with Other Anxiety Disorders. Additionally, 1,044 undergraduate students were recruited from Vanderbilt University in Tennessee, Florida State University, and the University of Arkansas, and received academic credit for their participation.

The PBQ has been cited in three published articles as well. Most recently, McWayne, Owsianik, Green, and Fantuzzo (2008) utilized the Parenting Behavior Questionnaire-Head Start, which is a modification of the original PBQ designated

specifically for use with urban populations. The PBQ-HS is a 40-item questionnaire used to assess parenting behaviors, consistent with the original PBQ developed for the same measure. The sample population of study 1 consisted of 1,184 urban African-American children and their families, while in the second study the sample size was more conservative at 210 urban African-American families with children.

It was found that the PBQ-HS was a reliable measurement for the study population, though the outcomes of this study diverged slightly from the scholars' initial hypotheses. Significantly, it was discovered that there was not a significant relationship between parenting constructs and the development of emotional, social, and behavioral skill-sets amongst the target population. The scholars assert that these findings are in keeping with other studies which question the efficacy of measures such as the PBQ when administered to populations that face significant socioeconomic disadvantages and which do not closely resemble the primarily white, middle-class sample population from which it was initially created for the original PBQ. Despite the null findings of the authors' study, the general usefulness of the PBQ remains undisputed. Rather, these findings indicate the critical need for measures which take into consideration the diverse cultural, socioeconomic, and geographical realities of parents and their resultant parenting styles (McWayne et al., 2008).

A second study indicated good results, and the authors were pleased with the reliability and internal consistency of both the PBQ and the PBFQ for test re-test validity (Sanders, 2005). Further, results indicated that there was a strong correlation between the two assessment tools, suggesting that both were adequately suited to this study and

appropriate tools to utilize in the examination of the relationship between an individual's perception of parenting behaviors and the frequency with which those behaviors were perceived to have occurred. The sample size for this project was conservative—82 graduate students from a University on the East coast were respondents.

The authors of the final study aimed to examine the validity of Baumrind's (1966) original conception of parenting dimensions for use with low-income, urban-residing, African American populations (Coolahan, McWayne, Fantuzzo, & Grim, 2002). As such, the researchers hypothesized that Baumrind's (1966) parenting behaviors would not be universally applicable when measuring the parenting behaviors of this sample population. However, the findings indicated that there was a significant correlation and overlap between the three most salient parenting dimensions identified by the PBQ-HS, "Active-Responsive, Active-Restrictive, and Passive-Permissive", and those of Baumrind's (1966) parenting styles. This suggests that there is cross-cultural relevancy and validity to the application of Baumrind's (1966) parenting constructs, though the scholars of this study assert that while Baumrind's (1966) parenting behaviors may be applicable to an urban, low-income African American community, further research is needed to determine applicability to other minority groups. Respondents were limited to the primary caregivers of children associated with the Head Start program, and included 465 urban participants.

Given the nature of the studies discussed above, their objectives, and their findings, both the DOCS and the PBQ, were appropriate measures to utilize in the present study. Because the research questions were addressed by the questionnaire administered

to this study, participants were derived directly from the combined measurements of the DOCS and PBQ. These tools were the only measures which adequately addressed the aims of this project.

Data Analysis

Baseline characteristics, such as age and sex were analyzed descriptively. Mean and Standards Deviations were included to get an understanding of the characteristics of the population that composed the study sample. Once the results of the PBQ and DOCS were scored, they were entered into SPSS.

The PBQ parenting style was coded for each participant as follows; 1 = permissive, 2 = authoritative control, 3 = restrictive control. For the DOCS questionnaire, each participant received a score for four different OCD subtypes based on subscale scores (a) Concerns about Germs and Contamination, (b) Concerns about being Responsible for Harm, Injury, or Bad Luck, (c) Unacceptable Thoughts, (d) Concerns about Symmetry, Completeness, and the Need for Things to be “Just Right”. Using the above mentioned measures told exactly which parenting style the participant was raised with and scores for each subtype of OCD. Each research question was investigated using a one-way between subjects ANOVA in SPSS to determine mean differences in the four OCD subtype scores by parenting style.

The following statistical analysis was used for the research questions in this study.

RQ1. Is there a difference in concerns about germs and contamination between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o1: There is no significant mean difference regarding concerns about germs and contamination between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a1: There is a significant mean difference regarding concerns about germs and contamination between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ1 will be answered with the use of a one-way between subjects ANOVA in SPSS to investigate difference in mean score on concerns about germs and contamination by parenting subtypes group.

RQ2. Is there a difference in concerns about being responsible for harm, injury, or bad luck between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o2: There is no significant mean difference in concerns about being responsible for harm, injury, or bad luck between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a2: There is a significant mean difference in concerns about being responsible for harm, injury, or bad luck between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ2 will be answered with the use of a one-way between subjects ANOVA in SPSS to investigate differences in mean score on concerns about being responsible for harm, injury, or bad luck by parenting subtypes group.

RQ3. Is there a difference in unacceptable thoughts between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o3: There is no significant mean difference in unacceptable thoughts between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a3: There is a significant mean difference in unacceptable thoughts between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ3 will be answered with the use of a one-way between subjects ANOVA in SPSS to investigate differences in mean score on unacceptable thoughts by parenting subtypes group.

RQ4. Is there a difference in concerns about symmetry, completeness, and the need for things to be "just right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control)?

H_o4: There is no significant difference in concerns about symmetry, completeness, and the need for things to be "just right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

H_a4: There is a significant difference in concerns about symmetry, completeness, and the need for things to be "just right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

RQ4 will be answered with the use of a one-way between subjects ANOVA in SPSS to investigate differences in concerns about symmetry, completeness, and the need for things to be "just right" by parenting subtypes group.

Threats to Validity

While the present study has taken care to ensure that the random sample population reflects the heterogeneity of the overall OCD population, there nonetheless remain some issues which will be taken into consideration in the following section. Additionally, the present study took the necessary steps to mitigate any threats to validity, as will be discussed further. First and foremost, because this sample relied upon participants' voluntary responses, there were some inherent and well-documented threats to validity in utilizing a sample of this type. Ethically speaking, voluntary respondents were necessary to descriptive studies, and as such are recognized as being the most frequently utilized type of population. However, some studies have shown that volunteer populations tend to differ to some extent from the general population. Because the aims of this project was to provide descriptive analyses of parental behaviors and their relationship to the development of OCD, which is a psychological affliction, voluntary respondents to the questionnaire utilized in this study was likely to have different behavioral, emotional, and psychological characteristics than that of the general OCD population. Volunteerism requires a certain level of interpersonal interaction, making

those who agreed to participate in this study potentially more sociable and confident than other OCD individuals who would perhaps score higher on an anxiety dimension of OCD assessments (Pine, Guyer, Goldwin, Towbin, & Leibenluft, 2008). While this study utilized an internet-based questionnaire, thereby limiting face-to-face interaction, studies such as this one require a certain willingness and trust on the behalf of the respondent population. However, these differences were not so great that a volunteer population had significantly affected the efficacy of this study or its generalizability to the larger OCD population. While the internal validity of the present study was expected to be high, the utilization of a volunteer population who was complete self-administered questionnaires perhaps modified the nature of participant' reactivity. Again, due to ethical considerations, a voluntary population was the only acceptable one, and as such was utilized in this study.

Ethical Procedures

The following agreements were issued from the various OCD organizations granting access to participant data and communications. No ethnical concerns were identified in this study, as this was a survey-based project with anonymity of central importance and concern. Data was collected and stored with utmost care taken to ensure that responses remain strictly confidential, with no access granted to third parties. Transmission of data were directly from the respondents through the esurveycreator program, and only the researcher affiliated with this study received the completed questionnaires which will be promptly discarded after the project is completed. All responses were collected on a voluntary basis, ensuring that no coercion or quid-pro-quo

arrangements compromised the integrity of participants, researchers, or the OCD Foundations. Further, because respondents completed self-assessments, there was virtually no possibility of conflicts of interest or power differentials arising throughout the duration of this study.

Summary

This project aimed to establish the differences between permissive, authoritative control, and restrictive control parenting behaviors and manifestations of differing dimensions of OCD. This study was quantitative in nature, to ensure data was able to be easily interpreted and based on concrete, standardized measurements. The independent variables were the three primary parenting styles of interest, permissive, authoritative control, and restrictive control, while the dependent variable was the presence and manifestation of OCD subtypes. The tools utilized in this study were the Dimensional Obsessive-Compulsive Scale (DOCS), and the Parenting Behavior Questionnaire (PBQ), chosen for their efficacy, validity, and appropriateness to this study.

Respondents were self-selected volunteers who were signed up for list-serves through the various OCD Foundations throughout the United States where they received treatment. Inclusion in the project was limited to those respondents who had been raised by a primary caregiver, and who had a singular diagnosis of OCD that was officially diagnosed by health care providers such as a psychiatrist, physician, or clinical/and or counseling psychologist. Participants in the study answered a survey sent via email to the participating OCD Foundations throughout the United States, including information about the purpose of the study, possible benefits, contact information of the researcher

and the actual link to the survey, and which were transmitted via esurveycreator to ensure anonymity and confidentiality. No third party access was granted, and data was promptly discarded after the completion of this study.

Chapter 4: Results

Introduction

This study explored the differences between three key parental behaviors: (permissive, authoritative control, and restrictive control) and the different dimensions of OCD (concerns about germs and contamination; concerns about being responsible for harm, injury, or bad luck; unacceptable thoughts; and concerns about symmetry, completeness, and the need for things to be "just right" (Abramowitz et al., 2010). With parental behaviors serving as the independent variable, the aim of this project was to determine the ways in which manifestations of OCD symptomologies were dependent upon exposure to differing parenting styles during childhood.

Four research questions were developed to guide this research. To answer each research question, a one-way between subjects ANOVA was performed in SPSS to determine mean differences in the four OCD subtype scores by parenting style. This chapter includes the demographics of the participants, information about data collection, the statistical tools used, and the results of this study.

Demographics

Participants

Participants in this study were asked to take the DOCS and PQB combined questionnaire online via esurveycreator. To participate in this study participants were asked to verify that they had an official diagnosis of OCD given by a health care provider such as psychiatrist, psychologist, or any other licensed mental health worker.

Participants were asked if they had a single diagnosis of one of the four OCD subtypes and were excluded if they indicated they were diagnosed with more than one. Additionally, they were asked if they had been diagnosed with any other mental disorder and were excluded if they had more than a single OCD diagnosis. The final eligibility question asked participants if they had been in foster care and they were excluded from this research if they answered yes. All exclusion criteria were previously explained in Chapter 3 and approved by the Walden IRB. (Walden University's approval number for this study is 08-31-15-0124519).

An e-mail containing information about this study was sent to different OCD Foundations throughout the United States. These included the International Obsessive Compulsive Disorder Foundation (IOCDF) of Boston, Massachusetts, OCD Foundation of Jacksonville, Florida, the OCD Foundation of Houston, Texas, OCD Foundation of Livonia, Michigan, OCD Foundation of Oconomowoc, Wisconsin and two specific OCD Foundations that have a presence on Facebook. The web link to the survey was active for a little longer than two months to recruit enough participants for this study. The consent form was the very first page of the questionnaire and contained information about the nature of the study, the requirements needed to determine participation, the time needed to take the survey, and the possible risks or discomforts for taking the survey. The researcher's contact information was provided in case participant's had questions or concerns. Participants were informed of their right to stop participation at any point in time if they chose to. There was no compensation for participating.

The first six questions provided the participant demographics and eligibility criteria for this study. There were a total of 140 eligible participants who completed the DOCS and PBQ. The participants ranged in age from 18 to 69 years old, (M=38.99, SD=13.23). The sample in this study consisted of 97 females and 43 males.

Results from the parenting style questionnaire indicated that 41 participants reported having been raised by a parent with permissive parenting style (29.3%). Results from the parenting style questionnaire indicated that 36 participants reported having been raised by an authoritative parenting style (25.7%). Results from the parenting style questionnaire indicated that 63 participants having been raised by restrictive parenting style (45.0%).

Information pertaining to description of the participants and the grouping of parenting styles for each is included in Table 1.

Table 1

Descriptive Statistics of Participants

	Variable	Frequency	Percentage
Gender	Male	43	30.7%
	Female	97	69.3%
Parent Style	Permissive	41	29.3%
	Authoritative	36	25.7%
	Restrictive	63	45.0%

The analysis of parenting style within each of the gender groups was analyzed with a chi-square test. The results indicated no significant difference between the frequency of parenting style occurrence within each of the two gender groups: $\chi 2$ (2, N = 140) = 0.38, p = .83 Table 2 presents the means and standard deviations of the subtypes scores of OCD obtained from the DOCS.

Table 2

Group Means and Standard Deviations

DOCS	(M)	SD
Contamination	2.26	1.23
Harm	1.95	1.08
Unpleasant Thoughts	1.81	0.96
Symmetry	1.88	0.90

Research Questions Analysis

Research Question 1

The first research question examined whether there was a difference in concerns about germs and contamination among individuals raised under different parenting subtypes. This question was addressed with a one-way ANOVA. An ANOVA was conducted to assess the mean differences of each parenting style group the participants experienced in childhood in comparison to their current scores of intensity for fear of germs and contamination on the DOCS. The ANOVA used cumulative DOCS germs and

contamination scores as a dependent variable and Parenting Style as a factor. Results were not significant for Contamination F (2,137) = 0.23, p =.79, η^2= .003. There was no significant difference found between the three parenting styles and levels of concerns about germs and contamination by participants. However, with a small eta squared value of – 0.3%, the size of the sample could have affected a lack of statistically significant results. Only 0.3% of variability was due to the independent variable in this set of analysis.

Table 3 presents the means for the three different parenting style groups and their standard deviations as compared to DOCS germs and contamination values.

Table 3

Group Means and Standard Deviations

PBQ	Contamination (M)	SD
Permissive	2.29	1.29
Authoritative	2.36	1.22
Restrictive	2.19	1.21

Research Question 2

The second research question examined whether there was a difference in concerns about being responsible for harm, injury, or bad luck among individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control). An ANOVA was conducted to assess the mean differences of each parenting

style group the participants experienced in childhood in comparison to their current scores of concerns for harm, injury, or bad luck on the DOCS. The ANOVA used cumulative DOCS harm, injury, or bad luck scores as a dependent variable and Parenting Style as a factor. There was no significant difference found between the three parenting styles and levels of concerns about harm, injury, or bad luck by participants, $F(2,137)=.75$, $p = .48$, $\eta^2= .011$. Again, only 1.1% of variability between the groups was due to independent variable. Although there was no evidence suggesting that differences between groups were significant, sample size might have affected those results.

Table 4 presents the means for the three different parenting style groups and their standard deviations as compared to DOCS harm, injury, or bad luck values.

Table 4

Group Means and Standard Deviations

PBQ	Harm, injury, or bad luck (M)	SD
Permissive	1.78	1.11
Authoritative	2.06	1.12
Restrictive	2.00	1.03

Research Question 3

The third research question investigated whether there was a difference in concerns about unacceptable thoughts among individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control). An ANOVA was

conducted to assess the mean differences of each parenting style group the participants experienced in childhood in comparison to their current scores of concerns for unacceptable thoughts on the DOCS. The ANOVA used cumulative DOCS unacceptable thoughts scores as a dependent variable and parenting style as a factor and was not significant for unacceptable thoughts $F(2,137)=2.39$, $p = .10$, $\eta^2 = .034$. The effect of the sample size could have also played a role here. Only 3.4% of the sample variability was due to the independent variable. There was no significant difference found among the three parenting styles and levels of concerns about unacceptable thoughts by participants.

Table 5 presents the means for the three different parenting style groups and their standard deviations as compared to DOCS unacceptable thoughts values.

Table 5

Group Means and Standard Deviations

PBQ	Unacceptable thoughts (M)	SD
Permissive	1.56	0.90
Authoritative	2.03	1.06
Restrictive	1.84	0.92

Research Question 4

The final research question examined whether there was a difference in concerns about symmetry, completeness, and the need for things to be “just right” among individuals raised under different parenting subtypes (permissive, authoritative control,

and restrictive control). An ANOVA was conducted to assess the mean differences of each parenting style group the participants experienced in childhood in comparison to their current scores of concerns for symmetry, completeness, and the need for things to be "just right" on the DOCS. The ANOVA used cumulative DOCS symmetry, completeness, and the need for things to be "just right" scores as a dependent variable and parenting style as a factor and was not significant for symmetry, completeness, and the need for things to be "just right" $F(2,137)= 2.80$, $p = .06$, $\eta^2= .039$. There was no significant difference found among the three parenting styles and levels of concerns about symmetry, completeness, and the need for things to be "just right" by participants. Although there was no evidence suggesting that differences between groups were significant, the effect size expressed as eta squared was very small. It was estimated that only 3.9% of the variability was due to the independent variable. The small study sample might have influenced the lack of results of statistical significance.

Table 6 presents the means for the three different parenting style groups and their standard deviations as compared to DOCS symmetry, completeness, and the need for things to be "just right" values.

Table 6

Group Means and Standard Deviations

PBQ	symmetry, completeness (M)	SD
Permissive	1.61	0.77
Authoritative	2.06	1.07
Restrictive	1.95	0.85

Summary

ANOVA analyses indicated that there were no significant difference found among the three parenting styles and levels of concerns about germs and contamination, concerns about harm, concerns about unacceptable thoughts, nor concerns about symmetry, completeness, and the need for things to be “just right”. However, it was noticed that in each case effect size was very small (it ranged from 0.03% to 3.9%), resulting in variability being due to interactions and error. This study’s findings, conclusions, and recommendations for further research will be discussed in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Based on Baumrind's (1966) parenting style theory, different parenting styles manifest different interactions between parents and their children and these interactions may impact the development of behaviors in the children they are raising. Parents who use an authoritarian parenting style may portray very strict, rigid, and controlling behaviors as well as expect complete obedience from their children (Kemme, Hanslmaier, & Pfeiffer, 2014). These parents act as the higher authority toward their children and do not allow any deviation from rules or guidelines that they have set forth for their offspring. This parenting style does not allow children to argue or question their parents or any requests that are made of them. These parents also do not explain why a certain punishment has been applied. These parents feel that it is necessary to restrict any kind of behavior that would allow their children any kind of autonomy outside the realm of the parent-child relationship. House work may be assigned and used to discipline as well as to cultivate respect for work, and not so much as a means of family members working towards a common goal. As stated by Hibbard and Walton (2014) putting such high demands on their offspring may portray an environment that expects not only complete obedience, but also aims for perfectionism. As indicated by Kemme et al. (2014) children that are raised by this parenting style portray social awkwardness, feel under constant pressure to perform well and also may portray anger issues. Furthermore, children raised by this parenting style resemble a very low self-esteem and may grow up with resentful feelings toward their parents.

When comparing the authoritative parenting style to the authoritarian parenting style, it is in many ways the complete opposite of the authoritarian parenting style (Uji, Sakamoto, Adachi, & Kitamura, 2014). Parents using this style are usually very nurturing, warm, supporting and have an overall good relationship with their children. Unlike authoritarian parents that do not explain why a certain punishment is applied authoritative parents who still set forth rules and guidelines for their children and who are expected to be followed, authoritative parents will explain what a child has done wrong and why a certain punishment is given. The authoritative parents foster autonomy and self-regulation in their offspring and encourage them to have their own perspectives and views. Authoritative parents may allow their children to choose activities or sports of their liking and these parents will support these activities if reasonable, and provide support and encouragement to help their offspring to excel and succeed at these activities (Uji et al., 2014). Authoritative parents have a desire to provide a safe, emotionally stable, and secure environment for their offspring. Children raised by this parenting style seem to be more socially involved, do well in their academic pursuits, are emotionally confident and have more positive relationships with others (Uji et al., 2014).

When comparing the authoritative parenting style and permissive parenting style, the permissive parenting style includes parents who are warm, nurturing and affectionate toward their offspring, but are also very easy going and flexible when setting ground rules and guidelines for their children (Williams, Ciarrochi, & Heaven, 2012). Even though rules are given by these parents there are often no consequences that will follow if these rules are not respected, followed or even broken. This parenting style portrays more

like a “friendship” relationship, rather than a parent to child relationship. Permissive parents place few demands on their children and will try at any cost to avoid any confrontations, arguments or conflicts with their children. Baumrind (1966) asserted that this parenting style is “too soft” and provides little (if at all) direction, structure, or guidance to their children. In addition, these parents may use bribery to try to make the child comply with rules and guidelines, yet when this approach does not work or the child does not do what the parents have asked of them, there are usually no consequences or punishments that are applied. Children raised by this kind of parenting style are often aggressive when they do not get what they want, have difficulties in forming good and positive relationships with people of authority, portray self-centeredness and have little to no understanding of the concept or merit of both, externally applied discipline and/or self-discipline (Baumrind, 1966). In the realm of this study, the focus was on parental “permissive, authoritative control, and restrictive control”.

Obsessive compulsive disorder manifests itself via four different types. These types are: (a) Concerns about Germs and Contamination; (b) Concerns about being Responsible for Harm, Injury, or Bad Luck; (c) Unacceptable Thoughts; (d) Concerns about Symmetry, Completeness, and the Need for Things to be “Just Right”. These individuals experience obsessions (intrusive, illogical thoughts) that pushes them into performing rigid routines (obsessions) in an effort to rid themselves of the anxiety they are currently experiencing. For individuals concerned with germs and contamination that may mean that they spend hours washing their hands and that often up to 100 times per day in very extreme cases (Starcevic et al., 2011). It may also mean that these individuals

may take showers several times a day or restrict themselves to their “clean” space in an effort to avoid “contamination” or “germs” altogether. Individuals with concerns about being responsible for harm, injury, or bad luck may worry that because of things they do that others may get harmed. It may mean that when such an individual puts broken glass into a trash bin they may constantly worry that because of their actions someone else could get hurt, such as the person that picks up the trash. In an effort to reduce their anxiety, they may drive home from work, take the broken class out of the trash bin and bring it to a trash facility themselves, just to ensure no one gets hurt (Abramowitz, Deacon, Olatunji, Wheaton, Berman, Losardo, & Hale, 2010). Individuals with the OCD type of unacceptable thoughts may think about violent behaviors, or sexual related thoughts that are inappropriate and go against society’s norms. Such an individual may have unacceptable thoughts of wanting to harm someone or think of sexual acts that again are not acceptable by the standards of society (Abramowitz, Deacon, Olatunji, Wheaton, Berman, Losardo, & Hale, 2010). Individuals with the OCD type of concerns about symmetry, completeness, and the need for things to be just right may obsess about having everything in perfect order, they may not be able to stand when a chair is not in an exact spot or if someone moves their pen just slightly on the opposite side of the desk they may be working on. The individuals keep everything in meticulous order and when this order is interrupted they engage almost immediately in measures to correct the “unorderly” surroundings they find themselves in (Abramowitz, Deacon, Olatunji, Wheaton, Berman, Losardo, & Hale, 2010). All these individuals experiencing obsessions that leads them to act upon their compulsions to release their anxiety if only just for a short time.

Research by Abramowitz et al. (2010) showed that there is a link between an authoritarian parenting style and the development of OCD. It was however only established that authoritarian parenting style was linked to the disorder, but that there was no research being conducted on the different parenting styles and their possible influence on OCD. The purpose of this study was to investigate if there was a difference in the different OCD types (a) Concerns about Germs and Contamination, (b) Concerns about being Responsible for Harm, Injury, or Bad Luck, (c) Unacceptable Thoughts, (d) Concerns about Symmetry, Completeness, and the Need for Things to be "Just Right" between individuals raised under different parenting subtypes (permissive, authoritative control, and restrictive control).

Participants from different OCD Foundations throughout the United States were asked to complete an online survey that consisted of the DOCS and PBQ. In an attempt to control this study, participants were asked if they had an official diagnosis of OCD given by health care providers such as a psychiatrist, psychologist, or any other licensed mental health worker. If they stated that they did not, they were excluded from the study. Participants were asked if they had a single diagnosis of one of the four OCD subtypes and were excluded if they indicated they were diagnosed with more than one. Additionally, participants were asked if they had been diagnosed with any other mental disorder, and were excluded if they had more than a single OCD diagnosis. The final eligibility question asked participants if they had been in foster care and they were excluded from this research if they answered yes.

To determine the appropriate sample size for this study a G-Power test was conducted. Using a statistical test of ANOVA (Fixed effects, special, main effects and interactions) and the power analysis of priori with the effect size of .8, err prob of 0.05 a total sample size of 47 was needed to be able to see a significant difference in this study. The sample size was more than necessary thereby increasing the chances for notable differences. The non-clinical data sample consisted of 97 females and 43 males between the ages 18 and 69 obtained over a two month period. A one way ANOVA analysis was performed to establish the mean differences between participants in the three different parenting groups of "permissive, authoritative control, and restrictive control".

Interpretation of Findings

This research showed no significant difference among the three parenting styles and levels of concern in the four OCD characteristics. A test of Homogeneity of Variances was used to assess the equality of variances for the groups and to assess the H_0 assumption that variances of the populations from which different samples are drawn are equal. No significance was shown for Contamination p=.54, for Harm p=.38, for Unpleasant Thoughts p=.59, or for Symmetry p=.17. This means that we fail to reject H_0, which increases the probability of the between groups variances being equal, and the homogeneity of variance assumption being met. Because the p value is greater than the α level, we fail to reject H_0 implying that there is little evidence that the variances are not equal and the homogeneity of variance assumption may be reasonably satisfied. The one way ANOVA's were then run for each of the OCD subgroups, Contamination $F(2,137)=.23$, p=.79, Harm $F(2,137)=.75$, p=.48, Unpleasant Thoughts $F(2,137)=2.39$,

p=.10, and Symmetry $F(2,137)=2.80$, p=.06; all came up with insignificant results with p>.05. Post hoc testing was not warranted with the results that were obtained in each ANOVA and doing so would only increase the chance of error of results. Overall, there was no statistical evidence suggesting that OCD subgroups were associated with various parenting styles. However, a one-way ANOVA yielded p-value of 0.06 for the symmetry OCD subgroup, indicating marginal evidence for some association between parenting style and that OCD subtype. Such a value on the margin of significance would call for further investigation of the matter. The OCD subgroup of Symmetry was insignificant at p>.05 but showed some marginal significance at p=.06 between groups of parenting styles and may warrant further investigation given the following limitations of this study. It is also worth noting that in each case effect size was extremely small (varied between 0.3% up to 3.9%), which could mean that the sample size was so small that differences between groups could not be detected.

Limitations of the Study

One of the main limitations of this study was the fact that the sample was not balanced. There were twice as many female respondents (97) in comparison to male study participants (43). Such an imbalance between the groups can skew the results and might have diminished the actual differences between OCD subtypes and parenting styles in the context of gender. Furthermore, the sample size could have been too small to show the actual differences between the studied groups.

Other limitations of this study might be that the sample population demographics was not of a clinical nature, and therefore subjects, although indicated that they had been

only diagnosed with one subtype, often responded throughout all of the four subtypes. It may have been more appropriate to have respondents indicate the subtype they were diagnosed with or to fill out the survey for only the subtype they were professionally diagnosed with. The inability of excluding individuals with more than one form of OCD, even though they stated they only had one diagnosis, made the data convoluted or less defining to particular subtypes. Additionally, there was no control for individuals in an active care plan and because DOCS measures level of perceived distress, this may have had a positive influence on participant responses on the DOCS. The overall perception of the individuals in this study about their health and wellness as a whole may have impacted their level of distress with their disorder. Finally, without a clinical sample there is a risk that individuals might decide to take the survey while not having an OCD diagnosis at all.

There is always a small risk that individuals are untruthful about the answers they gave as they were taking the survey and although the survey was locked to limit one survey per computer IP address, it is possible that an individual could have taken multiple surveys on different devices.

Definition or understanding of parental styles may be socially determined and a changing entity that may evolve over time within society. As participants age there are studies (Flessner et al., 2011; Timpano et al., 2010; Wissink et al., 2006) that show that memories of one's youth fade to either good or bad feelings and are less pinpointed as the parenting style survey requires. The ability of the parenting survey, PBQ, to determine clearly defining lines for parenting style also appeared limited within the memories of

participants. Surveys about perceived parenting style do not appear to have a defining line that fits parents specifically into one parenting style. Many participants had conflicting views of their parents parenting style as it was determined by the PBQ and answered multiple traits across the different styles making assignment to an individual group sometimes a close determination but not necessarily clearly defining. Perhaps looking at a cohort of individuals within a similar age group may show more consistency in rating of parent style memory. A cohort that is closer to release from parenting may have a closer relationship to memory of parenting style, or it may prove more effective to have parents of adolescent individuals with OCD rate their own parenting style – while the adolescents rate their own OCD.

Recommendations

There has been very little research that looked at the links between parenting styles and the subtypes of OCD, hence it may be suggested that future research should be directed in this area to eliminate some of the limitations listed in this study. The use of a clinical sample with a deciding factor of OCD subtypes would be recommended. It may be that OCD is only linked to parenting style in a more general sense as this study implies, or it may be suggested that researchers should look for different tools, such as different questionnaires, that can enhance the reliability of other studies going forward in this direction. Furthermore, although it may be a very time consuming quest, the benefits of a longitudinal study that follows persons with OCD over a period of time through childhood with the parents as self-reporters may prove beneficial. Finally, statistical

analysis performed in this dissertation would imply that a larger sample size is advised in order to detect true differences.

Implications for Social Change

This study added a new dimension to the field of how parenting styles may impact the development of subgroups of OCD. While authoritarian parenting style had already been shown to impact the development of OCD, this study stretched to consider the level of concern participants experienced within subgroups of OCD and if they are impacted by parenting styles. This study's insignificant results has brought more awareness to the field of study that concentrates on parenting style and its possible impact on subtypes of OCD.

It cannot be ruled out that a specific parenting style might possibly decrease the level of concern that someone with OCD experiences, and could also be very helpful for clinicians, psychiatrists, psychologists and educators. The results of this study may be used as a framework for future studies that can focus on different components, add more power to their study, use a clinical sample, and add a healthy control group. All scientific investigations (with significant results or not) have a contribution to healthcare and social change, researchers need to know what is not as well as what is. Specifically, the field of psychology and mental health research in this area should continue in the effort to help prevent or slow OCD development. Parents might be able to take a more defining role in this area of their child's development.

Conclusion

This study did not yield any significant differences for the research questions that were addressed but may constitute a start in examining the influences of parenting style on OCD. The p=.06 with the symmetry group showed a marginal significant difference that might be worth addressing in a more direct way or with more cohesive participants or even different measurement instruments as indicated in the limitations to this study.

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