Obsessive-Compulsive Disorder: An Overview for School Personnel

by

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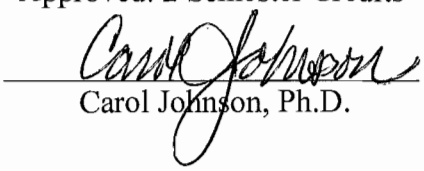

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ABSTRACT

Obsessive-compulsive disorder (OCD), defined as a set of recurrent obsessional ideas or compulsive actions, is a mental disorder that occurs in about 2-3% of the population. These compulsive ideas or actions generally consume more than an hour a day and may result in serious distress. Obsessions are recurrent and persistent thoughts, impulses, or images that are experienced as intrusive. The most common obsessions involve the cleanliness of dirt and germs. The client tries to ignore or suppress these obsessions. Compulsions are acts performed repeatedly to relieve obsessions, usually according to rigid rules. The cause of OCD is unknown, but there appears to be a genetic basis. The nature of the disorder is neurobiological. There is an abundance of treatments for patients with OCD; however, the efficacy of many of these treatments has not yet been established. OCD has many affects on students within the school setting that may

have a negative impact on academic performance and social relationships. School personnel need to be knowledgeable about OCD and the most common strategies that can be used. There are many accommodations and modifications available for use within the school setting that may prove helpful for those students struggling with OCD.

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Chapter I: Introduction

Obsessive-compulsive disorder (OCD) is a heterogeneous condition that involves unwanted distressing thoughts and compulsive rituals (Abramowitz et al., 2003). The American Psychiatric Association (cited in Obsessive-compulsive, 1995) explained the disorder as a set of obsessional ideas or compulsive actions that are recurrent and take up more than an hour a day. These ideas or actions can cause serious distress or impairments for those with OCD. Obsessions are described as repetitious thoughts, images, urges, fears, a need for order, aggressive and sexual impulses, and impulses that are experienced as intrusions that need to be neutralized and suppressed (Battling persistent, 2005).

The most common obsessions involve cleanliness of dirt and germs (Obsessive-compulsive disorder-part I, 1998). A main reason for the obsessions is the doubt that something has been done correctly (Battling persistent, 2005). People who suffer from obsessions usually fear that something awful is about to happen to them or someone close to them (Battling persistent, 2005). Individuals realize that the ideas and compulsions make no sense and do not need to be continued; however, they are unable to control and dismiss them (Spitzer & Heidelberg, 1997). Obsessions are usually relieved for a period of time by compulsive acts, also known as rituals. They have to be performed according to rigid rules (Battling persistent, 2005). Compulsions include actions such as washing, checking actions repetitiously, straightening, hoarding, and repetitious thoughts such as counting and prayer (Battling persistent, 2005).

OCD is a disorder that seems to be under-diagnosed and under-treated in all age groups (Heyman et al., 2003). The research suggests that OCD affects up to 2-3 % of the population (Gournay, 2006; Zepf, 2004). Research strongly supports this estimated

number of cases of OCD; however, it is important to note that prevalence studies vary in the percentages reported (Gournay, 2006). The median age of onset of OCD is about 19 years, although many cases have been found in children younger than the median age (Clinical Practice Guidelines, 2006).The ratio of males to females is two males afflicted for every one female (Purcell, 1999). Previously, OCD was thought to be very rare, but recent research has identified OCD in both children and adolescents as one of the most common of all psychiatric illnesses affecting youth (Stewart et al., 2004). Therefore, it is important to inform the general public, especially school professionals to raise awareness about this disorder in order to help children and adolescents succeed in their academic and personal lives.

The onset of OCD generally begins in adolescence and young adulthood. In the Diagnostic and Statistical Manual of Mental Disorders fourth edition (cited in Merlo & Storch, 2006), OCD has been classed as an anxiety disorder. The two symptom clusters of the disorder are obsessional thoughts and compulsive actions. Both adults and children share common symptoms. Common symptoms of compulsions may include checking locks, counting objects, and excess hand washing. Symptoms of obsessions include fear of contamination from germs, dying, and harming self or others (Merlo & Storch, 2006). These are just a few examples of the compulsions and obsessions that many OCD patients possess.

A major problem with understanding and treating this disorder is that the cause is not completely known. There have been studies that have indicated links to brain malfunction in patients with OCD (Obsessive-compulsive disorder- part II, 1998). There have also been cases that lead researchers to believe that heredity plays a role in the cause

of OCD (Giving Up the Secret, 1998). Although the specific causes of OCD have not yet been determined, research suggests the cause is neurobiological in nature and genetics and stress-related situations may also play a role in OCD symptoms (Adams, 2004).

The diagnosis of OCD must follow the criteria according to the DSM-IV. Criteria are met if obsessions or compulsions are present or if the symptoms have not been accounted for by a different psychiatric condition (Merlo & Storch, 2006). The person must also have symptoms that cause distress and consume a great deal of his/her time (Spitzer & Heidelberg, 1997).

The assessment for a person with OCD may involve multiple phases. These phases may include an interview that determines the description of the problem, the impact of the problem, and a definition of how the person wishes his/her life to be (Gournay, 2006). Also, clients need to provide background information which includes the onset, previous treatments, education, and family history. Two other important phases of the assessment process are rating scales and questionnaires such as the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) which is an instrument that has been used to evaluate the severity of symptoms in OCD (McKay et al., 2003). The guidelines for assessment and diagnosis of this disorder are quite strict; however, there is still a major concern with misdiagnosis because the disorder has been hard to separate from other disorders (Rasmussen & Eisen, 1992).

There are various forms of treatment available for obsessive-compulsive disorder and each treatment varies in their effectiveness. Some of the treatments are used only as a last resort. One of the problems with treating patients with OCD is the variety of symptoms that the patients display (Wilhelm et al., 2004). Another drawback is that about

25% of people refuse any form of treatment and about 20% drop out during the course of their treatment (O'Connor, 2005). These problems present many challenges for clinicians when trying to treat the disorder (Wilhelm et al., 2004). There are a vast number of treatments available for this disorder and efficacies of the various treatments are constantly increasing. Some treatment options include behavioral, exposure and response prevention, and cognitive-behavioral. Although there is an array of treatments for this disorder, there still needs to be continued research to develop even more effective treatments in the future.

Clinicians and researchers are continually challenged with many aspects of OCD. There appear to be an astounding number of symptoms related to this disorder. Therefore, it is difficult to treat it when the cause is uncertain (Pinard, 2006). Treatments and therapies found have been shown to be effective, but at best, with less than optimal results (Pinard, 2006).

The effects of OCD on children and adolescents are considerable. They include agitation, poor attention span, lack of concentration, slow performance, and problems linked to poor academic functioning and difficulty maintaining relationships (Paige, 2007). If OCD is left untreated there may be many negative effects on a child's learning. The rituals OCD students engage in could cause attendance problems. They may avoid situations that increase their obsessive thoughts and, therefore, miss learning time. Many times the compulsive behaviors of the student with OCD result in bullying or victimization by other students (Paige, 2007). It is crucial for students with OCD that school personnel be aware of the symptoms and inform other staff members so the student receives the proper help. The most beneficial way for school personnel to help

students with OCD is with clear expectations, smooth transitions and a calm climate (Paige, 2007).

School personnel may need to provide classroom accommodations such as allowing extra time to take a test, having one staff member that the student with OCD can always turn to, and providing a safe haven for the student when he or she is having intense thoughts or feelings due to their OCD. Under Section 504 or Individuals with Disabilities Education Act (IDEA) students may qualify for special education services if the disorder impairs learning to a significant degree (Paige, 2007). School personnel should be aware of these special education services and above all else provide a safe and supportive environment (Paige, 2007).

Statement of the Problem

Educators have not always been very well-informed regarding obsessive-compulsive disorders and the potential impact on the learning environment. There has been very little research conducted on the impact of OCD in the classroom and the treatments and therapies available have been shown to be less than optimal. Students in the school setting have a difficult time fitting in with their peers and reaching their full potential academically due to their disorder. Therefore, the problem becomes how can educators learn more about ways to optimize learning environments for students with obsessive-compulsive tendencies?

Purpose of Study

The purpose of this study is to increase knowledge and awareness about school age students with obsessive-compulsive disorder and provide school personnel with ideas for modifications and accommodations to optimize the learning environment for all.

This review of literature will define obsessive-compulsive disorder and outline its symptoms, causes, diagnosis, and assessment as it impacts learning in a classroom setting. This study focuses mainly on the behavioral and cognitive treatments and the impact that OCD has on students within schools. Various modifications and accommodations will be provided for school personnel that may work with students with OCD during the school day.

Research Questions

1) What is obsessive-compulsive disorder and how may it impact student learning?
2) What behaviors occur due to obsessive-compulsive disorder within the school setting that may become obstacles to learning?
3) What accommodations and modifications are available for school personnel to use in the school system to help students living with obsessive-compulsive disorder?

Definitions of terms

For clarity and to ensure reader understanding the following terms have been defined.

Compulsions - "Acts performed repeatedly to relieve obsessions, usually according to rigid rules. In relation to their ostensible purpose of reducing discomfort and distress or preventing harm, these actions are unrealistic or excessive" (Battling persistent, 2005, p. 1).

Obsessions - "Recurrent and persistent thoughts, impulses, or images that are experienced as intrusive and inappropriate and cause serious discomfort, anxiety, or

distress. The patient recognizes that obsessions are products of his own mind and tries to ignore, suppress, or neutralize them" (Battling persistent, 2005, p. 1).

Assumptions of the Study

It is assumed that the research reviewed and used for this literature review is reliable, valid, and unbiased, and also that there is current and sufficient information on the topic of obsessive-compulsive disorder. The final assumption is that if a child has OCD it increases the likelihood of challenges during the school day.

Limitations of the Study

This review will be limited to information regarding the different scales and techniques used in assessing and diagnosing OCD as it pertains to use in an educational setting. It will also be limited to information associated with the differences in treatments for various school age groups and ideas for classroom accommodations. The information will primarily be focused on children ages 5-18; therefore, information will be limited to a smaller population. A final limitation is the amount of time and resources available to the writer during fall, 2009.

Chapter II: Literature Review

Introduction

Included in this chapter is a discussion of the symptoms and suspected causes of Obsessive-Compulsive Disorder (OCD), followed by a discussion of the assessment and diagnosis of OCD. In addition, the various options that have been found to help treat OCD and the efficacy and problems with each of those treatments are presented. The chapter concludes with problems students may face during the school day due to their disorder and recommendations for school personnel who work with students with OCD within the school system.

Indentifying Symptoms of OCD

OCD is a psychiatric disorder that has been characterized by persistent and distressing intrusions called obsessions. These obsessions usually trigger repetitive and ritualized motor or mental acts, such as washing or counting, often referred to as compulsions (Moritz, 2006). The onset of OCD generally starts in adolescences and young adulthood (Parkin, 1997). OCD has been classified as an anxiety disorder in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorder (Cited in Gournay, 2006).

The two symptom clusters of the disorder are obsessional thoughts and compulsive actions. These obsessions usually cause distress and anxiety for the individual (Gournay, 2006). The patient usually considers these thoughts to be irrational and they try to ignore or suppress these thoughts (Gournay, 2006). There are some symptoms that patients describe that involve washing after shaking hands or a

compulsion of having to check a partner's feces (Parkin, 1997). Adults and children usually share similar symptoms which include obsessions with contamination of dirt, germs, and bodily waste, harming self or others, forbidden sexual thoughts, luck/unlucky numbers, contracting an illness, dying, and the uncertainty of speaking properly.

Common symptoms of compulsions are seen as excess hand washing, checking of locks, alarms, homework, rewriting, rereading, counting objects, lining up objects in a certain way, storing items of no value, and excessive list-making (Merlo & Storch, 2006). They can also include touching or tapping routines to prevent bad things from happening (Summerfeldt, 2004). These compulsions and obsessions are just some of the examples of symptoms that OCD patients may show.

Some patients also frequently exhibit avoidance. There could be objects or situations that trigger certain thoughts or rituals which evoke anxiety. This leads the patient to avoid the stimulus. This is seen most commonly with fear of contamination where patients will avoid shaking another person's hand (Parkin, 1997).

In a study conducted by Abramowitz et al. (2003), it was found that OCD patients not only perform overt compulsions which include checking, washing, or hoarding, but they also perform covert mental rituals which include counting or repeating a phrase mentally. These rituals may involve conjuring up "safe" number or images, silently repeating prayers to reduce doubts of disastrous consequences, or mentally reviewing knowledge to alleviate doubts that one may forget information such as a spouse's name (Abramowitz et al., 2003).

There are differences between the symptoms of OCD in adults and children. Children are usually frightened by their obsessive thoughts and rituals, whereas adult's

involvement in rituals is most often elaborate. Children tend to hide their disorder, so that they do not appear different (Robinson, 1998).

Impact at home and school

The problems that patients have relating to their symptoms may not only affect the patient but also their family members (Stengler-Wenzke et al., 2004). Many patients are dependent on their family members for care. Family members are often involved in the patients' rituals. This can provoke intense disagreement among family members as to the most beneficial response to approaching the family member with OCD (Stengler-Wenzke et al., 2004). The symptoms of the disorder affect the interactions between patients and their relatives. It can cause emotional stress, disability, and burden in the family (Stengler-Wenzke et al., 2004). It may also lead to increased levels of parent-child conflict, and parental OCD (Piacentini & Langley, 2004).

Children afflicted with OCD may also experience difficulties when it comes to academics in a school setting. Many of their obsessions and compulsions tend to have a negative effect on their learning abilities. According to Shelton (2009) one boy with OCD recalled obsessively running his hands across his desk at school. He constantly transferred his pens and pencils in and out of his desk. He would also complete his school work and then erase it. This ritual continued for long periods of time. Many students with OCD repeatedly check to see their books are in their backpack. Some students even have an urge to return home to check something. They are continuously reading and rereading sentences, paragraphs, or pages in a book. Students with OCD also cross out and rewrite words and repeatedly sharpen their pencils (Adams, 2004). All of these rituals have an

impact on the students' academic success. There is little time for learning with so much time spent on rituals.

Suspected Causes

Until the last decade, experts believed that OCD in a child was caused by improper toilet training. Today scientists refute this belief. They do not believe that poor parenting plays any part in the disorder (Giving Up the Secret, 1998).

The causes of OCD are not completely understood. However, evidence suggests that dysfunction of corticostriatal circuits plays a central biological role in the disorder (Dougherty et al., 2004). Current studies have supplied an increasing amount of information about the underlying brain malfunction in OCD. The malfunction occurs in a circuit that connects the frontal lobes of the cerebral cortex with the basal ganglia. Injuries and diseases such as Huntington's disease that disrupt the functioning of the basal ganglia many times cause obsessive and compulsive symptoms (Obsessive-compulsive disorder- part II, 1998). Positron emission tomography scans (PET) provide direct evidence for the involvement of both the frontal cortex and basal ganglia in OCD (Obsessive-compulsive disorder- part II, 1998).

Early neurological literature indicates obsessions and compulsions were common in patients suffering with encephalitis lethargic, a sleeping sickness that attacks the brain, leaving patients speechless and motionless (Perminder & Gin, 2005). These were usually accompanied by anxiety and oculogyric crises which occur to a reaction to certain drugs or medical conditions. One of the responses of the crisis is the rotating of eye balls (Perminder & Gin, 2005). Evidence has also pointed to a complication of the transmission of serotonin, which is a major chemical found in the brain (Adams, 2004).

Researchers also believe that heredity plays a role in some cases of OCD, although specific genes have not been identified (Giving up the secret, 1998). The lifetime risk for relatives of people diagnosed with the disorder is 9%, compared with 2% in the general population. Studies comparing identical twins with fraternal twins have suggested heritability as high as 68% (Obsessions and compulsions in children, 2002).

Many experts suggest that there is a genetic link between OCD and Tourette's syndrome. According to the Harvard Health Letter (1998), 20% of people with OCD have tics, and approximately 50% of patients with Tourette's syndrome also have OCD. For a small percentage of children OCD symptoms may be linked to a strep infection (Adams, 2004).

Life events have also been linked to playing a role in OCD symptoms in vulnerable children (Adams, 2004). Examples of life events that may be linked to the onset of OCD are a specific and distressing event. This may include the loss of a pet, a divorce in the family, death of someone close, a change in schools, or unhappiness at school (Adams, 2004). Also concern over Traumatic Brain Injury at an early age has prompted some new student in later developmental OCD issues.

The determining causes of OCD have not yet been identified. However, it has been found that it is neurobiological in nature (Adams, 2004). Stress related to family conflicts can play a role in OCD symptoms, but parents' actions do not cause the disorder (Adams, 2004).

Diagnosis

The diagnostic criterion for OCD is similar for both adults and children. The characteristics of the disorder are also the same for adults and children (Robinson, 1998).

The Diagnostic and Statistical Manual of Mental Disorders (cited in Spitzer & Heidelberg, 1997) stated that for patients to be diagnosed he/she must recognize the unreasonability of the content of their obsessions and compulsions. The symptoms must cause distress and consume a great deal of the patient's time. The obsessions or compulsions cannot be due to substance abuse or other mental disorders (Clinical practice guidelines, 2006).

In order for the disorder to be diagnosed, it must follow the criteria according to the DSM-IV (cited in Merlo & Storch, 2006) which stated criteria are met if obsessions or compulsions are present which have been defined previously or if the symptoms are not accounted for by a different psychiatric condition such as an eating disorder or trichotillomania.

Assessment

The assessment of a person with OCD could involve many phases. The first interview determines the description and the impact of the problem. This would include not only the person being assessed, but others such as family members. Factors would be introduced which could make the problem better or worse. A discussion would include how the person wishes his/her life to be and how he/she wants it changed (Gournay, 2006).

After pinpointing the main features of the problem, it is important to be able to understand the context and background. This includes the onset, previous treatments, family history, childhood events, education, interests, and relationships. After the completion of an assessment, it is important to interview family members and ascertain

their careers. If OCD has been characterized by complex or ritualistic behaviors in the home, then a home visit may be necessary (Gournay, 2006).

There are two other important elements of assessment. These are the use of structured interviews, rating scales, questionnaires, and behavioural testing (Gournay, 2006). One of the most popular measures is the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS). This assessment instrument has been used for evaluating the severity of symptoms in OCD (McKay et al., 2003).

Although there have been strict guidelines in the assessment and diagnosis of this disorder, misdiagnosis is still a major concern. One of the main problems with misdiagnosis is that depression and other anxiety disorders may co-occur. This makes the disorder hard to separate from others possibly leading to a misdiagnosis (Rasmussen & Eisen, 1992).

Treatments

Literature indicates there are many different forms of treatment for obsessive-compulsive disorder. Although there is a vast array of treatments available, some treatments are more effective than others. Some treatments are used only as a last resort. The main problem in treating patients is the variety of symptoms and the comorbid conditions that patients have. This poses many challenges for clinicians in trying to treat the disorder (Wilhelm et al., 2004). Another issue with treating OCD is that despite all the recent advances in treatment, about 25% of people refuse treatment and about 20% drop out in the course of their treatment. It is also believed that a large number of people do not even seek treatment (O'Connor, 2005). However, even with the difficulties

presented to clinicians in treating OCD, the number of treatments and efficacy of these treatments are constantly increasing.

Behavioral treatment

Behavior therapy is one of the most effective methods for treating OCD (Hill & Beamish, 2007). Behavioral approaches to help treat OCD rely on the assumption that compulsions are perpetuated through negative reinforcement (Hill & Beamish, 2007). One goal of behavior therapies is to attempt to interrupt the association between the obsession and the subsequent anxiety. Another goal is to eliminate the connection between completing the compulsion that the patient has and the reduction of anxiety (Hill & Beamish, 2007).

The main behavioral interventions include systematic desensitization, modeling, muscle relaxation, exposure, and response prevention (Hill & Beamish, 2007). The exposure component of behavioral treatment makes clients confront themselves with the action or thought that has been contributing to their anxiety (Hill & Beamish, 2007). The other part of the behavioral component is the response prevention. Response prevention involves delaying the compulsion that is associated with the encountered event, or thought (Hill & Beamish, 2007). The success rates of behavioral treatment is anywhere from 70-92% effective (Hill & Beamish, 2007).

Exposure and response prevention

Research has suggested that either by itself or as a combination with pharmacotherapy or cognitive-behavioral therapy, the use of exposure and response prevention (ERP) would be an effective treatment for OCD (Bram & Bjorgvinsson, 2004). According to Bram and Bjorgvinsson (2004), the efficacy of ERP has been clearly

established. ERP is performed by first setting up a fear hierarchy of situations that will trigger anxiety. The patient moves up a fear hierarchy by exposing him/herself to more and more challenging anxiety-provoking situations.

An example includes touching something that is perceived to be contaminated and then not washing hands to reduce anxiety (Bram & Bjorgvinsson, 2004). Every exposure is then followed by response prevention where the patient does not complete the compulsive act (Bram & Bjorgvinsson, 2004). The point of this process is that the anxiety will gradually decrease by itself without having to perform compulsion or avoidance behavior. This process is called habituation. When it occurs, the OCD-related situations trigger less anxiety and also decrease the urge to ritualize (Bram & Bjorgvinsson, 2004). According to Bram and Bjorgvinsson (2004), ERP has reported success rates of 70% or higher.

There are a few problems with this type of treatment, however. One problem is that there is a shortage of clinicians trained in this form of therapy (Bram & Bjorgvinsson, 2004). Another, more serious problem is that patients have a hard time tolerating the high level of anxiety that is necessary for compliance with exposure (O'Connor, 2005).

Cognitive treatment

Cognitive treatment (CT) is based on the assumption that compulsions are a product of a persistent thought pattern of putting either themselves or others at risk by a certain action or a failure of a certain act (Hill & Beamish, 2007). The thought patterns of students with OCD usually include an irrational sense of personal responsibility and an irrational perception of threat (Hill & Beamish, 2007). Therefore, the point of cognitive

treatment is to challenge the excessive responsibility and perfectionist tendencies that patients with OCD have (Hill & Beamish, 2007).

Thought-stopping is also used in cognitive treatment. With thought-stopping counselors yell "stop" when the intrusive obsession surfaces in the students thinking (Hill & Beamish, 2007). It has been found that cognitive therapy approaches are as effective as ERP (Wilhelm et al., 2005). Van Oppen et al. (cited in Wilhelm et al., 2005) conducted a study with a large sample and found that CT and ERP produced similar benefits. In their study, it was found that 57% of patients with CT were rated "recovered" and 75% were "reliably changed" (cited in Wilhelm et al., 2005, p. 174). In another study done by Cottraux et al. (cited in Wilhelm et al., 2005), it was reported that 74% of patients with CT responded to treatment. They also found that CT was more effective than ERP in reducing depression. In a study conducted by Abramowitz et al. (2005,) it was determined that CT produced a modest improvement in OCD symptoms. The studies available have shown that CT is no more effective than ERP. However, the data suggests that CT may reduce treatment dropout. This is a major concern with many of the treatment types for OCD (Abramowitz et al., 2005). Although CT has been shown to be effective for some patients, the research does not indicate that it is necessarily an effective treatment compared to other treatments such as ERP. The sizes for many of the studies are too small to definitively reflect its effectiveness (Abramowitz et al., 2005).

Cognitive-behavioral treatment

Cognitive-behavioral treatment (CBT) is the combination of the exposure and response prevention components of behavioral approaches combined with the cognitive restructuring components of cognitive therapy (Hill & Beamish, 2007). The efficacy of

CBT has been established (Franklin & Abramowitz, 2000) and it is the most cost-effective treatment available (Storch & Merlo, 2006). Cognitive-behavioral treatment involves three steps which include information gathering, counselor-guided exposure and response prevention, and homework assignments (Hill & Beamish, 2007). The interventions usually begin with exposure and response prevention. It continues with the challenging of irrational thinking patterns (Hill & Beamish, 2007). The research in this area is limited by small sample sizes, the lack of control groups, and statistical comparisons of improvement in self-monitored behavior (Hill & Beamish, 2007).

OCD is a disorder that is chronic and unremitting if left untreated. Symptoms usually fluctuate over time because of the stress-induced aggravations of the symptoms (Storch & Merlo, 2006). Children who have this disorder have a higher risk for other psychiatric problems once they reach adulthood. Therefore, finding an effective treatment for this disorder is very important.

Recommendations for individuals who work with OCD patients in the school setting

It is of the utmost importance that school personnel come to the realization that there is a high prevalence of OCD in children. This disorder can ultimately lead to many behavioral and academic problems in school. It's essential that school personnel who work with children be informed of methods available that may help these students succeed. It is also important to understand the laws in place which can help students with OCD in the schools.

Problems Children with OCD face in schools

Children with OCD may experience problems on a daily basis and may result in major effects on their performance academically. It also may impact their social

relationships. OCD may manifest itself during school in many ways. Students may have trouble arriving to school on time due to the countless rituals they are obsessed with performing. These may include cleaning and getting ready in the morning. Students may not be able to finish their work or may get behind in their work because they constantly erasing and redoing work. Students may have anxiety attacks while taking tests. They may become depressed leading to a school phobia which prohibits them from attending school (Purcell, 1999). Students may become mentally and physically exhausted from ritualizing affecting their ability to concentrate (Woolcock & Campbell, 2005).

Many students get stuck on a thought which may cause an inability to complete certain tasks. This slowness can lead to decreased work production, poor grades, and changes in academic performance overall (Woolcock & Campbell, 2005). Students that have compulsions repetitiously cross out, rewrite letters, and recheck answers (Woolcock & Campbell, 2005). There are many negative effects on children with OCD that can dramatically impact them. Students may develop depression, agitation, poor attention and concentration, feelings of shame, and slow performance (Paige, 2007).

There are many other OCD behaviors that can be observed within the school setting. Some of these behaviors include; being late for class when changing rooms, rearranging desktop items, getting up and down from their chair, repeatedly asking to go to the bathroom, lack of concentration or focus on what is being said, inability to focus or fears of contamination due to classmates sharing objects, and perfectionistic tendencies which cause extreme fatigue because the student had to stay up late to reread or rewrite assignments (Social Development, 2008). These are only some of the difficulties that students with OCD face on a daily basis at school.

Students not only have problems with their school work but they also have difficulty in establishing and maintaining peer relationships. Students with OCD can be an easy target for bullies. Some ways that other children bully children with OCD is by name calling, teasing, taunting, and shunning. This may result in their feeling even more uncomfortable than they already are. The hurtful behavior could possibly increase stress which, in turn, could trigger more OCD symptoms (Social Development, 2008). This vicious cycle can drive these students into depression which makes treatment for OCD even more difficult (Social Development, 2008).

According to Storch et al. (2006) children with OCD were less well-liked by peers compared to children that had no clinical issues. Also, those with OCD reported having low levels of social acceptance, self-esteem, and frequent negative peer interactions (Storch et al., 2006). Students with more severe OCD symptoms may be even more victimized or disliked by their peers, thus creating further increase in symptoms of depression and loneliness (Storch et al., 2006). The social problems that students with OCD have are quite significant.

A study conducted found that most children with OCD sought help from school staff. School personnel need awareness of the signs and symptoms of OCD because of the significant amount of time that they spend with students. Unfortunately, according to the reearch, it has been found that many school personnel ignore students' problems as they don't feel they have the right skills to make a referral (Woolcock & Campbell, 2005). Many times the belligerent behaviors that students with OCD display are mistaken for other disorders such as ADD.

One relatively easy way school personnel can help students is by making modifications to the classroom. Many children with OCD have issues with claustrophobia. Therefore, they need to be placed in larger classrooms. For those students who find it difficult to take notes because of their rituals, school personnel could provide students with notes or audiotapes. It is very important to create a flexible working environment for students in order to reduce their level of anxiety (Woolcock & Campbell, 2005).

Research promotes the use of in-service training to provide information to educators relating to OCD. There are many symptoms that educators could observe such as; many erasures, constantly falling behind in work, difficulty in taking notes, lack of friends, and perfectionist tendencies (Purcell, 1999). Educators need to work around the students' rituals and come up with alternatives. Educators may also offer testing accommodations for these students (Purcell, 1999).

Another example of when school staff could support students is in cases where the children have a difficult time making friends. Teachers could facilitate interaction between the student and peers by initiating group projects. These projects would allow students to achieve goals cooperatively. They would not only allow the student to work with others, but also the interaction with other students may help keep those with OCD on task. Students can help keep the student with OCD from getting bogged down by rituals and constant revisions (Purcell, 1999). The teacher or school counselor in charge of a student with OCD can also help create ties between groups of children by forming a small lunch group. When students have a shared experience many times they draw on that experience later (Sample Accommodations, 2009). Another way school counselors

can help students with OCD build relationships is by teaching lessons on tolerance, empathy, and respect. When students have an understanding of these key themes, it can limit situations that are damaging to their self-esteem (Social Development, 2008).

There are several ways educators can help students that are struggling with OCD. It is important to keep stress levels as low as possible. Students with OCD should not be threatened or severely punished for being tardy or missing a homework assignment because this could cause the student to have a full-blown OCD attack (Black, 1999). Students with OCD need to be reminded of their strengths. Teachers can do this by recognizing students for particular talents. This recognition can improve students' self-esteem. It not only shows the student that he or she has "good" behaviors along with the OCD behaviors, but it also points out to other students that the student with OCD is worthy of praise (Social Development, 2008). Having a few "safe friends" for students with OCD during classroom activities can be a huge help (Black, 1999).

504 and IEP

Although there are recommendations that school personnel could offer for students who experience OCD, there are also legal guidelines. School personnel should be knowledgeable about both Section 504 and the Individuals with Disabilities Education Act (IDEA) which is a civil rights law which provides that "no qualified individual with a disability in the United States shall be excluded from, denied the benefits of or be subjected to discrimination under" programs that receive federal funding (Understanding the Law, 2008, p. 2). This section ensures that accommodations are provided so that a student with a disability has access to education and can learn in a similar way to his or her peers (Understanding the Law, 2008).

OCD qualifies as a disability under this law. In order for a student to be served under Section 504 they must have a disability that limits a major life activity. Learning is considered to be a major life activity. The child is evaluated and the information found must come from a variety of sources. If a student is eligible, a Section 504 plan is written. This plan is customized specifically for a child with the disability. It allows school personnel to put in place procedures to manage learning and social or behavioral problems that may occur for a student with OCD. The 504 plan may have a specific outline that facilitates managing certain situations at school if a student has an OCD-related behavioral outburst (Understanding the Law, 2008). This may include isolating a student so they do not hurt him or herself (Understanding the Law, 2008).

Another federal law that was put in place that protects students with OCD is the Individuals with Disabilities Education Improvement Act (IDEA). This act is especially beneficial for those with severe cases of OCD. In order to receive services under IDEA a formal assessment of the student must be obtained. The assessment must determine that the disability has an adverse effect on the student's educational performance. There are 13 disability categories under IDEA. Students with OCD have previously been identified under the category of "Emotional Disturbance" (Understanding the Law, 2008).

Recently students are classified under the "Other Health Impaired" (OHI). The reasoning is that OCD is neurobiological in nature rather than emotional. Once a student with OCD is eligible for special education and related services, an individualized education program (IEP) is developed for the student. The IEP includes several components and provides steps on how a student should be educated. Under IDEA children must be educated in the "least restrictive environment" (Understanding the Law,

2008). Research has shown that the large majority of students diagnosed with OCD that are served under IDEA were included in regular classrooms (Understanding the Law, 2008). Although some students may not be eligible for IDEA they may still be eligible for Section 504. It is the responsibility of school personnel to be knowledgeable regarding both of these laws and provide these services for students with OCD as needed.

Accommodations and Recommendations for School Personnel

School personnel are usually the individuals who recognize difficulties in students. Educators are very familiar with the behavior of other children that are in the same age group and educational background as a student with OCD. This indicates that educators may be the first to become aware of students with the disorder and thus may play a key role in the assessment of and accommodations for students with OCD (Adams, 2004).

There are specific accommodations and modifications that can be implemented based on student needs. If a student is chronically late for school resulting from a lack of sleep after a long night of revising homework or engaging in morning rituals school personnel should refrain from penalizing the student. The student's teacher could also give shorter homework assignments. If a student repeatedly asks to go to the bathroom, school personnel could set up a pre-arranged signal that the student can use when they need to leave the room. Limits should be set on the number of times a student can leave the room per day (Social Development, 2008).

If the student is not able to focus or has fears of contamination due to normal classroom activities such as sharing objects or items being passed from students the student should be allowed to be the first to get any handouts or provide a separate set of

classroom materials for the student (Academic Support, 2008). School personnel should provide students with OCD with notes or an outline of the class if the student has a persistent lack of concentration (Academic Support, 2008). Often students have multiple perfectionistic tendencies and this can cause extreme fatigue and lead to difficulties completing assignments. In order to help these students reduce the amount of homework given, allow them to use a computer to write assignments, and let the student take a test orally (Academic Support, 2008).

The classroom environment needs to be calm, supportive and organized for anxious students such as those with OCD. There are many fears that surface for students within the classroom that school personnel can help to avoid. Students fear they will get in trouble for sitting by unruly classmates. Therefore they should be seated away from those students (Sample Accommodations, 2009)

Strategies School Counselors can use to provide support to students with OCD

School counselors can be very helpful when it comes to assisting students that suffer from OCD. Many students fear unstructured times during the school day such as lunch and recess. Students fear rejection in the cafeteria or on the playground. Counselors can help these students by creating lunch groups in the school counselor's office. This creates ties between students. Also, it is important to provide students with a trusted person who understands the student's worries. School counselors can be that safe person for a student. Students can check in with them during the school day to help them dispel their worries and help them with relaxation strategies and provide them with a safe environment (Sample Accommodations, 2009).

Another way school counselors can help students with OCD is by bringing awareness of the disorder to all students. Awareness can build understanding and tolerance. School counselors can also provide lessons regarding self-esteem issues. This will not only be a positive learning experience for all students but especially for students with OCD. Students with OCD tend to need extra help realizing that they have value and talents (Healthful Support, 2008). School Counselors can also provide whole-class interventions by incorporating emotional awareness into the classroom. This type of learning enviornment encourages students to express their emotions positively and also to ask for help when needed (Woolcock & Campbell, 2005). Identifying and naming fearful emotions may help both the students with OCD and other students in the classroom but it can also help school personnel strengthen classroom management (Woolcock & Campbell, 2005).

Whole-class interventions also raise the level of awareness about anxiety and help all students develop effective coping skills (Woolcock & Campbell, 2005). Relaxation techniques can be provided by the school counselor with the entire class or individually with the student with OCD in their office (Purcell, 1999). Students with OCD often have difficulty with basic social skills. Therefore, school counselors need to take the time to provide social skills training to students with OCD. Students need to not only be taught basic social skills but they also need to know how to use social skills in many different social interactions. Students with OCD should understand how to engage in verbal exchanges, social expression, and also be able to develop strategies for handling negative social interactions (Social Development, 2008). School counselors can provide these skills and strategies for students, and can also bring in other students that may not have

OCD but also need social skill training to role play with the students with OCD. The most important role a school counselor can have in helping a student with OCD is by being the person that provides support and understanding to the parents and family members of the student. The school counselor should keep communication open and discuss progress with families as frequently as possible (Adams, 2004).

If school personnel are aware of the symptoms of OCD they will be able to help identify it in their classroom. When school personnel partner together with parents and students with OCD and provide beneficial classroom strategies, schools can provide a safe environment where academic achievement, social interactions, and treatment of OCD can be all be obtained for the betterment of all involved (Purcell, 1999).

Chapter III: Summary, Discussion, and Recommendations

This chapter summarizes the review of literature from the previous chapter. It also provides a discussion of information on obsessive-compulsive disorder and it concludes with recommendations for future research.

Summary

It is documented that Obsessive-Compulsive Disorder can impair an individual's ability to function normally. The symptoms patients' exhibit can lead to great distress, avoidance of situations, and unpleasant emotions (Wilhelm, Tolin, & Steketee, 2004). Studies have shown that the cause of OCD is not yet known; however, there is evidence that suggests it is due to neurobiological reasons (Adams, 2004). The diagnosis and assessment of OCD is a time-consuming and costly process. It has the potential for misdiagnosis due to others disorders that are similar in nature to OCD (Merlo & Storch, 2006). There are many treatment options available to patients; however, these treatments are still less than optimal (Pinard, 2006). There is a definite need for more research to assess the efficacy of the treatment options available. The ramifications of OCD can be enormous for students with OCD in school. Student's obsessions can be intrusive and may interfere with normal thinking (Adams, 2004).

The attention students spend on academic tasks can be debilitating. Many times students have a difficult time completing academic tasks and it can lead to decreased work production and poor grades (Adams, 2004). OCD can also affect a student's social competence (Adams, 2004). There are several ways that educators can provide help and support to student with OCD. School personnel can provide accommodations to their classroom such as rearranging the seating order, allowing the student to have a safe spot

in the room to go to when they need to get away from their rituals, and giving them less homework and special testing accommodations.

School counselors can specifically provide support by providing students with OCD relaxation techniques, social skills training, and informing school personnel with a general understanding of the disorder. This may create awareness and tolerance of OCD within the school. OCD is a disorder that may negatively impact students within the school; however, these students can be helped when school personnel are informed with accurate knowledge about modifications and accommodations than can be used within the school setting.

Discussion

The prevalence of people diagnosed with OCD is increasing. It is important to help these individuals by providing them with effective treatments and helping them overcome the barriers that they face in their everyday life. The literature indicates that behavioral treatment is one of the top choices of treatment for patients with OCD. This treatment has been tested more than most other treatments and has a high rate of efficacy at 70-92% effective (Hill & Beamish, 2007). The research points out, however, that most of the treatments have not had adequate testing. Therefore, in order to find an effective treatment that will work for most individuals suffering from this disorder, it is necessary for more studies to be conducted. This would ensure the efficacy of each treatment and comparison of treatments to determine which is most effective for the population at large (Pinard, 2006).

School counselors and other school personnel manage behavior problems in a school setting on a daily basis. They not only deal with behavioral problems in general,

but they also encounter children having academic difficulty or behavior problems in the classroom due to disorders. Therefore, it is significant that school counselors and other school personnel be aware of OCD so they will also be able to help accommodate these children. Playing a role in assisting children with OCD would not only be a great benefit for the child but also the teachers, students, and family of the child as well. If these children do not receive support the disorder may lead to suicide, failed grades, loneliness, depression, and difficulties in finding jobs. If school counselors are able to identify, assess, and help even one child a year who shows the signs of OCD, the knowledge gained would be well worth the effort taken to make people aware of this often overlooked disorder. Knowledge of any disorder or disease that affects children is extremely valuable as it enables professionals to help children succeed in school, in the work force and in all aspects of life.

Recommendations for further research

Further studies are needed in the treatment of OCD (Abramowitz, 2006). According to Abramowitz (2006), there is a need for a treatment program that includes the training of family members, the facilitating of treatments, and the assisting of teaching those who can be of help in a loved one's therapy. This information can be very important, given the high prevalence of relational problems in families with OCD patients (Abramowitz, 2006) and the negative effect of childhood OCD on the family (Piacentini & Langley, 2004). Also, readiness programs need to be implemented. This would allow patients to read case histories or discuss treatment with former patients. This may decrease the refusal rates and increase treatment compliance (Abramowitz, 2006).

Although there are many treatment options available, and the number of studies testing these therapies is increasing, the outcomes are still at best less than optimal (Pinard, 2006). There are few patients who attain full remission. The therapeutic strategies for OCD for the moment are very challenging, multi-focused, and less than satisfactory (Pinard, 2006).

The prevalence of OCD is constantly increasing. The number of patients with this disorder is believed to be higher than expected (Brynska & Wolanczyk, 2005). More studies are necessary to assess the type of treatment that best suits each individual patient. More clinicians need to be trained in ERP, as this could be an effective treatment option. The sample sizes used need to increase drastically. Most studies involve very small sample sizes. This makes it challenging to generalize across the population. Determining the number of sessions each patient needs may result in a more positive outcome.

It is important to ascertain what treatments are most effective and how the treatments differ when working with patients from diverse backgrounds. Studies should focus on specific treatments for various age groups. There is a serious need for long-term follow-up studies on patients involved in treatment to determine if these patients are benefiting from the treatment being implemented. These studies may allow insight into the treatments that are most effective for different age groups and backgrounds.

There is also a need in research regarding differences in cultures with students with OCD. The information is very limited regarding this topic, and it could be very beneficial information for school personnel in helping students of different cultural backgrounds.

Ongoing studies and research will hopefully result in a cure for this disorder. This may enable people afflicted with the disorder to live a life free of constant distress and anxiety. There should be materials readily available to school personnel which will help students afflicted with OCD. Lesson plans and information need to be provided to school personnel in order to facilitate identifying, assessing, and treating students with OCD. In summary, schools have a lot of issues, limited budgets and will need to prioritize where training and funding will go. It is hoped that this area would be given a top priority to remove barriers to learning for children diagnosed with OCD.

References

(1995). Obsessive-compulsive disorder-part I. *Harvard Mental Health Letter, 12*, 1-3.

(1998). Giving up the secret. *Harvard Health Letter, 23*, 1-4.

(1998). Obsessive-compulsive disorder-part I. *Harvard Mental Health Letter, 16*, 1-4.

(1998). Obsessive-compulsive disorder-part II. *Harvard Mental Health Letter, 15*, 1-4.

(2002). Obsessions and compulsions in children. *Harvard Health Letter, 19*, 1-4.

(2005). Battling persistent unwanted thoughts and senselessly repeated actions. *Harvard Mental Health Letter, 22*, 1-4.

(2005). Treating the symptoms and studying the brain. *Harvard Mental Health Letter, 22*, 1-4.

(2006). Clinical practice guidelines: Management of anxiety disorders. *Canadian Journal of Psychiatry, 51*, 43-49.

(2008). *The role of school personnel: Academic support strategies*. Retrieved June 28, 2009, from: OCD Education Station: OCD Chicago Web Site: www.ocdeducationstation.org/role-of-school-personnel/academic-support-strategies/

(2008). *The role of school personnel: Healthful support strategies*. Retrieved June 28, 2009, from: www.ocdeducationstation.org/role-of-school-personnel/healthful-support-stragegies/

The role of school personnel: Social development support strategies. Retrieved June 28, 2009, from: www.ocdeducationstation.org/role-of-school-personnel/social-development-support-strategies/

(2008). *The role of school personnel: Understanding the law*. Retrieved June 28, 2009, from:www.ocdeducationstation.org/role-of-school-personnel/understanding-the-law-as-it-relates-to-students-with-ocd/

(2009). *Sample accommodations for anxious kids*. Retrieved June 28, 2009, from: www.worrywisekids.org/schools/sample_accomodations.html

Abramowitz, J. S. (2006). The psychological treatment of obsessive-compulsive disorder. *Canadian Journal of Psychiatry, 51*(7), 407-416.

Abramowitz, J. S., Franklin, M. E., Schwartz, S. A., & Furr, J. M. (2003). Symptom presentation and outcome of cognitive-behavioral therapy for obsessive compulsive disorder. *Journal of Consulting & Clinical Psychology, 71*, 1049-1057.

Abramowitz, J. S., Taylor, S., & McKay, D. (2005). Potentials and limitations of cognitive treatments for obsessive-compulsive disorder. *Cognitive Behaviour Therapy, 34*(3), 140-147.

Adams, G. B. (2004). Identifying, assessing, and treating obsessive-compulsive disorder in school-aged children: The role of school personnel. *Teaching Exceptional Children, 37*(2), 46-53.

Black, S. (1999). Obsessive-compulsive disorder: How to help kids with OCD. *American School Board Journal, 65*(2), 66-71.

Bram, A., & Bjorgvinsson, T. (2004). A psychodynamic clinician's foray into cognitive-behavioral therapy utilizing exposure-response prevention for obsessive-compulsive disorder. *American Journal of Psychotherapy, 58*(3), 304-320.

Brynska, A., & Wolanczyk, T. (2005). Epidemiology and phenomenology of obsessive-compulsive disorder in non-referred young adolescents. *European Child Adolescent Psychiatry, 14*, 319-327.

Dougherty, D. D., Rauch, S. L., & Jenike, M. A. (2004). Pharmacotherapy for obsessive compulsive disorder. *Journal of Clinical Psychology, 60*(11), 1195-1202.

Franklin, M. E., & Abramowitz, J. S. (2000). Effectiveness of exposure and ritual prevention for obsessive-compulsive disorder: Randomized compared with nonrandomized samples. *Journal of Consulting & Clinical Psychology, 68*(4), 594-611.

Gournay, K. (2006). Assessment and management of obsessive compulsive disorder. *Nursing Standard, 20*(33), 59-65.

Heyman, I., Fombonne, E., Simmons, H., Ford, T., Meltzer, H., & Goodman, R. (2003). Prevalence of obsessive-compulsive disorder in the British nationwide survey of child mental health. *The British Journal of Psychiatry, 179*, 324-329.

Hill, N. R., & Beamish, P. M. (2007). Treatment outcomes for obsessive-compulsive disorder: A critical review. *Journal of Counseling & Development, 85*, 504-510.

McKay, D., Greisberg, S., Placentini, J., Graae, F., Jaffer, M., Miller, J., Neziroglu, F., & Yaryura-Tobias, J. A. (2003). The children's Yale-Brown obsessive-compulsive scale: Item structure in an outpatient setting. *Psychological Assessment, 15*(4), 578-581.

Merlo, L. J., & Storch, E. A. (2006). Obsessive-compulsive disorder: Tools for recognizing its many expressions. *Journal of Family Practice, 55*(3), 217-222.

Moritz, S. (2006). False beliefs maintenance for fear-related information in obsessive compulsive disorder: An investigation with the hindsight paradigm. *Neuropsychology, 20*(6), 737-742.

O'Connor, K. (2005). Overcoming treatment resistance in obsessive-compulsive disorder. *Acta Psychiatrica Scandinavica, 111*, 257-260.

O'Connor, K. P., Aardema, F., Robillard, S., Buay, S., Pelissier, M. C., Todorov, C., Borgeat, F., Leblanc, V., Grenier, S., & Doucet, P. (2006). Cognitive behaviour therapy and medication in the treatment of obsessive-compulsive disorder. *Acta Psychiatrica Scandinavica, 113*, 408-419.

Paige, L. Z. (2007). *Obsessive-compulsive disorder*. Retrieved June 28, 2009, from: www.naspweb.org/resources/principals/nassp_obsessive.pdf

Parkin, R. (1997). Obsessive-compulsive disorder in adults. *International Review of psychiatry, 9*(1), 73-82.

Perminder, S. S., & Gin, M. S. (2005). Obsessive-compulsive behavior: A disorder of decision-making. *Australian and New Zealand Journal of Psychiatry, 39*, 757-763.

Piacentini, J., & Langley, A. K. (2004). Cognitive-behavioral therapy for children who have obsessive-compulsive disorder. *Journal of Clinical Psychology, 60*(11), 1181-1194.

Pinard, G. (2006). The pharmacologic and psychological treatment of obsessive compulsive disorder. *The Canadian Journal of Psychiatry, 51*(7), 405- 406.

Purcell, J. (1999). *Children, adolescents, and obsessive-compulsive disorder in the classroom*. Retrieved February 28, 2008, from: ERIC database.

Rasmussen, S. A., & Eisen, J. L. (1992). The epidemiology and differential diagnosis of obsessive compulsive disorder. *Journal of Clinical Psychiatry, 53*, 4-10.

Robinson, R. (1998). Obsessive-compulsive disorder in children and adolescents. *Bulletin of the Menninger Clinic, 62*(4), 49-64.

Shelton, D. L. (2009, August 12). Delayed diagnosis: After decades of living with obsessive-compulsive disorder, a man gets help. *Leader-Telegram*, p. C1.

Spitzer, M., & Heidelberg, U. (1997). The phenomenology of obsessive-compulsive disorder. *International Review of Psychiatry, 9*(1), 7-14.

Stengler-Wenzke, K., Trosbach, J., Dietrich, S., & Angermeyer, M. C. (2004). Coping strategies used by the relatives of people with obsessive-compulsive disorder. *Journal of Advanced Nursing, 48*(1), 35-42.

Stewart, S. E., Gellar, D. A., Jenike, M., Pauls, D., Shaw, D., Mullin, B., & Faraone, S. V. (2004). Long-term outcome of pediatric obsessive-compulsive disorder: A meta-analysis and qualitative review of the literature. *Acta Psychiatrica Scandinavica, 110*, 4-13.

Storch, E. A., Ledley, D. R., Lewin, A. B., Murphy, T. K., Johns, N. B., Goodman, W. K., & Geffken, G. R. (2006). Peer Victimization in children with obsessive-compulsive disorder: Relations with symptoms of psychopathology. *Journal of Clinical Child and Adolescent Psychology, 35*(3), 446-455.

Storch, E. A., & Merlo, L. J. (2006). Obsessive-compulsive disorder: Strategies for using CBT and pharmacotherapy. *Journal of Family Practice, 55*, 329-333.

Summerfeldt, L. J. (2004). Understanding and treating incompleteness in obsessive compulsive disorder. *Journal of Clinical Psychology, 60*(11), 1155-1168.

Wilhelm, S., Steketee, G., Reilly-Harrington, N. A., Deckersbach, T., Buhlmann, U., & Baer, L. (2005). Effectiveness of cognitive therapy for obsessive-compulsive disorder: An open trial. *Journal of Cognitive Psychotherapy: An International Quarterly, 19*(2), 173-179.

Wilhelm, S., Tolin, D. F., & Steketee, G. (2004). Challenges in treating obsessive compulsive disorder: Introduction. *Journal of Clinical Psychology, 60*(11), 1127-1132.

Woolcock, E., & Campbell, M.A. (2005). The role of teachers in the support of students with obsessive-compulsive disorder. *The Australian Educational and Developmental Psychologist, 22*, 54-64.

Zepf, B. (2004). Management strategies for obsessive-compulsive disorder. *American Family Physician, 70*(7), 1379-1380.