INTIMATE RELATIONSHIPS AND OBSESSIVE-COMPULSIVE DISORDER: INVESTIGATING THE APPLICATION OF AN INTEGRATIVE COUPLES THERAPY FOR OBSESSIVE-COMPULSIVE DISORDER.

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A DISSERTATION SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

GRADUATE PROGRAMME IN PSYCHOLOGY
YORK UNIVERSITY
TORONTO, ONTARIO

AUGUST, 2021

Abstract

The purpose of the present study was to examine the effectiveness of a couple-based intervention for Obsessive-Compulsive Disorder (OCD). The approach was integrative and utilized a previously established therapeutic protocol known as Systemic-Constructivist Couples Therapy (SCCT). In the present study, SCCT was modified to include elements of cognitive behavioural therapy and exposure and response prevention as is typically delivered for individuals who suffer from OCD. Twelve couples completed the study, and each received seven, 2-hour sessions of therapy. A number of different outcome measures were explored in the present study. We were interested in examining the impact of the intervention on OCD symptomatology as well as partner accommodation and relationship functioning. In addition, we were interested in looking at the intervention's impact on a construct known as We-ness, or the degree to which a partner has integrated their relationship into their personal identity. Multilevel modeling was conducted to examine change over time. The results indicated that OCD symptomatology decreased significantly over time. In addition, We-ness, or partner's identification with the relationship, increased significantly over time. However, the present study failed to show significant changes in relationship functioning overall. As well, there did not appear to be a significant reduction in accommodation behaviours by intimate partners. Taken together, the present study suggests that couple's-based interventions for the treatment of OCD are effective and feasible. While the findings of the present study were mixed, overall they point to the importance of continuing to examine couple dynamics in dyads where one partner has OCD.

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Chapter One: Introduction

Intimate Relationships and Obsessive-Compulsive Disorder: Investigating the Application of an Integrative Couples Therapy for Obsessive-Compulsive Disorder

To date the efficacy of couple's therapy has been well established (Gurman et al., 2015). The majority of couples who seek therapy experience positive effects, regardless of the approach employed (e.g., Gurman et al., 2015). In fact, randomized controlled trials show that 60 to 70% of couples who seek therapy experience as much as a 50% improvement in the relationship difficulties for which they sought professional help (Hewison et al 2016). The literature indicating the efficacy of couples therapy targeting relationship distress is expansive, however research investigating couples therapy whose aim is to target mental illness in one of the partners is scarce. More specifically, there are few studies whose primary aim is to examine the efficacy and impact of treating an individual's mental illness by incorporating the involvement of their intimate partner.

Studies investigating relationships and depression have found that relationship factors are correlated with the severity of depressive symptoms; with decreased relationship adjustment being associated with increased depressive symptoms (e.g., Davila et al 2003; Kouros et al., 2008; Whitton et al., 2008). In addition, there is evidence that relationship discord (i.e., dissatisfaction, conflict) can significantly impede the treatment of depression; with poorer marital adjustment predicting poorer treatment response and higher relapse rates (Whisman, 2001b). It is likely that the relationship discord observed in these studies is in part a bi-product of the affected partner's psychopathology. As such, one might expect that treatment of depression would necessarily result in decreased discord between partners. However, this expectation is not borne out in the findings of studies investigating individual treatments of depression.

Relationship discord has been shown to remain the same after individual treatments for depression and substance use (e.g. Beach et al., 2013; Jacobson et al, 1991). This lack of improvement in relationship dynamics following effective individual treatment suggests that once dysfunctional relationship patterns become entrenched, they may be independent of individual psychopathology symptoms, and as such are likely self-perpetuating (Epstein & Baucom, 2002). While psychopathology may maintain or exacerbate such problematic relational dynamics, the absence of individual psychopathological symptoms on its own does not resolve relational problems. Ignoring relationship difficulties may very well impede an individual's ability to respond positively to treatment, while including a partner may serve as a powerful agent of change.

This may especially be true for severe mental illnesses where family members are known to play a critical role in their course and treatment. Obsessive-Compulsive Disorder (OCD) is such a condition (Lebowitz et al., 2016; Lebowitz et al., 2012; Calvocoressi et al., 1999, Steketee et al, 2003). However, research investigating OCD and intimate relationships is scarce. Few studies have investigated OCD and relationship dynamics, and even fewer still have sought to investigate interventions that incorporate intimate partners. For example, current evidence-based treatments for OCD include exposure and response-prevention (EX/RP), yet problematic relationship dynamics may unwittingly undermine the intent of the treatment if the partner accommodates OCD symptoms by responding in ways that maintain or exacerbate the OCD (Cherian et al., 2015; Epstein & Baucom, 2002; Lebowitz et al, 2012). Therefore, a more comprehensive treatment of OCD might be to involve the intimate partner to ensure they understand the nature of OCD and its treatment to facilitate the application of evidence-based treatments (Stewart et al., 2020). Providing a therapy that engages both partners may engender an invested interest for each to minimize OCD symptoms.

Thus, the present study was born out of a gap in our knowledge of how to effectively treat OCD in the context of an intimate relationship. The present study was also motivated by the knowledge that accessing appropriate resources for individuals with OCD is challenging. This is often due to the lack of resources available, and the knowledge that even if one seeks appropriate treatment, the benefit could be limited both by relationship discord and by partner accommodation (Abramowitz et al., 2012; Boeding et al. 2013; Lebowitz et al., 2016; Richter & Ramos, 2018; Stewart et al., 2020). Hence, the objective of the present study was to examine the interpersonal and intrapersonal dynamics of couples where one partner suffers from OCD, while increasing relationship functioning and reducing OCD symptomatology. The examination of the couple's dynamics was done using a couple's treatment called Systemic-Constructivist Couple Therapy (SCCT; Reid & Ahmad, 2015). SCCT deliberately uses a Participant Action Research methodology where the partners study themselves, guided by the psychologists, to deepen their understanding of each other and effectively apply this understanding to improve their relationship.

The following sections will (a) characterize the nature and etiology of OCD (b) summarize the research that led to the development of the present study, (c) explain further the systemic-constructivist theoretical paradigm and its integration with exposure and response prevention in the current context and (d) outline the research objectives.

Obsessive-Compulsive Disorder: Nature and Etiology

Obsessive-Compulsive Disorder (OCD) is a severe mental illness with an estimated lifetime prevalence of 1%-3% in adults (Abramowitz et al., 2013; Richter & Ramos, 2018; Ruscio et al., 2010). Although once viewed as a rare condition, OCD occurs frequently within general psychiatric and therapeutic contexts and remains a condition that is both underrecognized

and undertreated. As such, it is highly likely that it occurs at higher rates than current prevalence estimates; likely due to the chronicity of the condition (Richter & Ramos, 2018). This may also be due in part to its complex etiology and the heterogeneity of the condition itself. It is thought that heredity plays a major role in OCD's etiology, with the prevalence of OCD in first-degree relatives elevated at 12% compared to 2% in relatives of normal controls (Pauls et al., 1999; Pauls et al., 1995). Family, twin and segregation analysis studies all point to the complex, but clear and significant influence of genetics in its etiology (Pauls et al., 1995). OCD also co-occurs at higher than expected rates with Tourette's syndrome, Body-Dysmorphic Disorder and grooming disorders, such a Trichotillomania and Excoriation (Skin-Picking) Disorder (Nicolini et al, 2009; Richter & Ramos, 2018). All of which speak to the genetic underpinnings of the disorder.

OCD's clinical presentation is best characterized by the presence of obsessions and compulsions which cause significant distress and impair an individual's ability to function normally (DSM-5, APA). Obsessions are repetitive unwanted, and intrusive thoughts, images or impulses experienced as anxiety provoking and at times disturbing. The content of obsessional thoughts is highly heterogeneous with multiple categories overlapping. These are typically classified into six categories as follows: Aggressive obsessions (i.e. thoughts about hurting the self or others), Contamination obsessions (i.e. concerns with germs or dirt), Sexual obsessions (i.e. forbidden images or thoughts), Hoarding/Saving obsessions, Religious obsessions (i.e. blasphemous thoughts) and obsessions to do with the need for symmetry or exactness. Each category is not mutually exclusive as individuals who suffer from OCD often experience obsessions from several of the above categories. For example, obsessions with a religious content such as marked concern about becoming possessed, may be experienced along with

intrusive thoughts regarding the symmetry of inanimate objects. Others with OCD may experience obsessions whose content is aggressive in nature; worrying about inadvertently harming others by unintentionally poisoning them while also experiencing counting obsessions (Abramowitz et al., 2013; Goodman et al., 1989; Starcevic et al. 2012). The overlap of symptom categories is the rule as opposed to the exception in OCD.

The obsessions experienced by individuals with OCD are often perceived as both distressing and at times intolerable. This intolerability can result in part, from obsessions being experienced by many individuals as ego-dystonic; separate from the self and incongruent with one's wants and needs (Abramowitz et al, 2001). In fact, obsessions are often experienced as particularly intrusive and distressing when individuals have insight and awareness of the illogical nature of their thoughts (Boeding et al., 2013; Starcevic et al., 2012). It is common for individuals with OCD to report that they know their "thoughts don't make sense" but regardless of their desire to exercise control over such thoughts they find themselves unable to do so. While some individuals experience obsessions as ego-dystonic, others experience obsessions as more ego-syntonic. In such cases individuals are less able to challenge intrusive thoughts as the bizarre or improbable nature of the obsessions is far less apparent to them. This inability to question the likelihood of obsessional fears being realistic often contributes to poorer outcomes when engaging in traditional cognitive behavioural therapy (Abramowitz et al., 2012).

Because obsessional thoughts are experienced as distressing and intrusive they often result in the elicitation of elaborate rituals aimed at attenuating anxiety. Like obsessions, these rituals or compulsive behaviours range widely in nature. Some individuals with OCD may engage in repeated hand washing, while others repeatedly check appliances to make sure they are turned off. Others may engage in excessive praying rituals, cleaning rituals, or mental rituals,

such as counting, which occupy multiple hours in their day. Compulsive behaviours have been shown to result in momentary fear reduction, which helps to negatively reinforce them, subsequently leading to their repetition (e.g Abramowitz et al. 2014, Rachman & Hodgson, 1980; Yorulmaz, 2008). As such, engaging in compulsive behaviours maintains the obsessional thoughts and has been shown to be associated with a decreased ability to question the likelihood of obsessional fears being realistic (Abramowitz et al, 2002). As they continue, the obsessions and compulsions become fused in a negative feedback loop, resulting in the maintenance of distress and OCD symptomatology.

Many individuals with OCD also engage in considerable behavioural avoidance techniques to prevent the elicitation of obsessive thoughts and associated behavioural rituals. Someone who experiences contamination obsessions may avoid using public transit, carry cleansing wipes with them and avoid shaking others' hands. Individuals who experience aggressive obsessions, such as a fear of harming someone, may never cook for another person due to fear of poisoning them. Affected individuals may avoid rooms or areas of their home, attempting to avoid spaces that they perceive to be 'contaminated'. Avoidance behaviours in combination with time consuming rituals often result in marked impairment in daily living and a decreased quality of life in those with OCD (e.g. Bobes et al., 2001). In fact, previous research has found that quality of life in OCD is comparable to (Bobes et al., 2001) or worse than what is seen in individuals with schizophrenia (Kugler et al., 2012; Stengler-Wenzke et al., 2007). Because of the time-consuming nature of the rituals involved in OCD, there is often a social withdrawal that takes place which significantly impacts an individual's ability to engage with their social world (Rosa et al, 2012; Kugler et al., 2012). Significant avoidance often results in contact with others which is limited, or of reduced quality.

Indeed, there is research to indicate that individuals with OCD show impairments in their ability to navigate their social environment. Greater symptomatology is associated with greater impairment, and even subclinical impairment has been found to be associated with difficulties with social functioning (Bysritsky et al., 2001; Grabe et al., 2001). Individuals with OCD often have low self-esteem and carry marked shame associated with their symptoms (Sorensen et al., 2004). As such, significant efforts are often made by those with OCD to conceal their illness. This often includes avoiding particular activities and can at times involve avoiding general contact with other people, all in an attempt to circumvent being rejected or feared by others due to the sometimes-bizarre nature of their rituals and content of their obsessions (Newth & Rachman, 2001). This often results in reduced social and relational intimacy, culminating in a social life and support system that is sub-optimal at best. This complex and idiosyncratic presentation of symptoms may in part account for noted delays in individuals with OCD receiving an appropriate diagnosis. It is estimated that it takes an average of 8-10 years for an individual with OCD to be diagnosed appropriately (Richter & Ramos, 2018). This delay in appropriate diagnosis and treatment often leads to greater overall suffering and greater symptom severity due to the chronicity of the illness. This is one of the many reasons why greater education and training regarding the nature and treatment of OCD is warranted.

Impact of Obsessive-Compulsive Disorder on Family Systems: Research to Date

While individuals with OCD experience significant impairment and a limited quality of life, it has also been found that their family members experience significant difficulties as a result of caring for them (Calvocoressi et al., 1999; Cherian et al., 2014; Strauss et al., 2015). In fact, family members of those with OCD are often intimately involved in the course of the disorder in ways not seen in other mental illnesses. There is a unique dynamic in OCD, in that family

members often significantly modify their routine in order to help loved ones with OCD avoid anxiety provoking stimuli and even engage in the completion of rituals with their family members (e.g. Lebowitz et al., 2016; Lebowitz et al., 2015; Calvocoressi et al., 1999). This is a process known as accommodation. Accommodation can take many forms, for example a spouse may agree to undress upon arriving home from work so as not to enter the home with 'contaminated' clothing on. They may also agree to wash surfaces or their hands excessively, or a family member may agree not to visit a particular place that is viewed as 'contaminated', such as a place of worship, at the request of their loved one. Family members may also avoid saying certain things or offer significant and repeated reassurance to their loved one in an attempt to attenuate OCD-related anxiety. Caregivers may also engage directly with the completion of rituals, as they may 'help' loved ones check appliances and locks, in an attempt to reduce the amount of time it takes to leave the family home (e.g. Lebowitz et al., 2016; Lebowitz et al., 2015; Calvocoressi et al., 1999).

It is estimated that anywhere from 62-100% of caregivers accommodate their loved ones (Kobori & Salkovskis, 2013; Strauss et al., 2015; Renshaw et al., 2005). Given the prevalence of this dynamic there is a growing body of literature that has sought to better understand the impact of family accommodation; both for the individual with OCD and the family member. There is mounting evidence to suggest that accommodation is associated with poorer treatment outcomes in those with OCD and poorer general functioning and harmony in families (Albert et al, 2010; Amir, 2000; Foa et al, 2006; Lebowitz et al., 2016; Lebowitz et al., 2015; Steketee & Van Noppen, 2003). A number of studies have found that there is a relationship between severity of OCD symptoms and the presence of accommodation; with greater OCD severity being associated with greater accommodation (Calvocoressi et al, 1999 ; Foa et al, 1995; Lebowitz et

al., 2016; Lebowitz et al., 2015; Strauss et al, 2015). Accommodation has also been found to be associated with increased rates of relapse after treatment (Abramowitz et al, 2013). Moreover, there is evidence to suggest a causal relationship between the two factors, with increased accommodation being followed by increased OCD symptomatology (Ramos-Cerqueira et al, 2008; Storch et al, 2009), while decreases in accommodation during treatment have been shown to predict better treatment outcomes (Merlo et al., 2008; Stekettee & Van Noppen, 2003). Accommodation is thought to be particularly problematic as it prevents new learning in affected individuals with OCD by preventing them from confronting anxiety provoking stimuli and habituating. As such, accommodation perpetuates the anxiety elicited by particular stimuli and inhibits the learning of more adaptive skills to manage OCD (Calvocoressi et al., 1999).

While accommodation has been shown to impact treatment course and outcome, it has also been found to contribute significantly to levels of distress and burden experienced by family members (Strauss et al, 2015). Family members often must assume many of the patient's responsibilities and activities in order to accommodate them (Colvocoressi et al., 1999; Stekettee & Van Noppen, 2003). There is also an increased burden experienced by family members and a long-term strain placed on family systems due to the severity and chronicity associated with OCD (Geffken, 2006, Strauss et al., 2015). Family members often take on the responsibilities of affected others at the detriment of their own health (Fadden et al., 1987).

The limited research that has investigated the impact of OCD on intimate relationships also points to significant increases in relationship discord and decreased relationship satisfaction in the presence of OCD (Abbey et al, 2007; Steketee & Van Noppen, 2003). Individuals with OCD are indeed less likely to be in intimate relationships as compared to the general population; likely due to the impact of the disorder on their lives. This often includes a decreased ability to connect

with others in an intimate way (Abbey et al., 2007). Overall, the presence of OCD poses a significant challenge for an individual and a partner to connect in a meaningful, sustainable way in the absence of effective treatment.

Given the prevalence and impact of accommodation on the course and treatment of OCD, and the increased stress experienced by family systems in this context, there have been calls to incorporate family members into its treatment with the intended benefit of decreasing incidence of accommodation and increasing coping strategies for both the individual with OCD and the family member. The following sections will review the literature examining the efficacy of interventions for OCD in general as well as interventions that incorporate an intimate partner.

Current Treatments for OCD

OCD was considered to be a treatment-resistant condition before the 1960's. Limited treatment options were available at the time, and the few existing treatments were minimally effective at best. This situation persisted until a psychologist attempted to implement a novel treatment in 1966 with two patients under his care at a psychiatric facility. Dr. Victor Meyer implemented an approach that involved prolonged exposure to aversive stimuli and situations, combined with the prevention of rituals; what we now refer to as exposure and response prevention (EX/RP) (Foa et al, 2012). During treatment individuals were challenged to un-fuse obsessional thoughts and compulsive behaviours. The patients learned that obsessional thoughts would diminish over time if they kept from engaging in compulsive rituals. The patients also began to gain important evidence that the feared consequence associated with the obsessional thought had not come to fruition, helping to decrease anxiety and distress associated with obsessional thoughts (e.g. Abramowitz et al., 2013). The first two patients Dr. Meyer treated reported significant and maintained improvement in OCD symptoms (Foa et al., 2012).

Given the success of their initial implementation, Meyer and colleagues continued to investigate the efficacy of the approach with an additional 15 patients. The treatment was found to be highly effective in 10 out of 15 patients treated, with partial effects reported by the remaining five individuals. The treatment effects were also found to be maintained over time; five years post-treatment patients reported sustained benefits (Meyer & Leveyk 1973; Meyer, Levy, & Schnurer, 1974). For the first time, a viable and effective psychological intervention offered hope for those who suffered profoundly from OCD.

Following this initial breakthrough in the treatment of OCD, several clinical trials were initiated to establish empirical support for the treatment model. These trials found that EX/RP was consistently effective, with benefits sustained at follow-up in each of the seminal studies conducted (Foa & Goldstein, 1978; Marks, Hodgson & Rachman, 1975). Several studies comparing the effect of exposure alone, response prevention alone and EX/RP in combination found treatments incorporating both exposure and response prevention to be significantly more effective than either on their own (Foa et al, 2012). Seminal studies also established the active ingredients that must be present for exposure to work optimally; exposure must be both sustained and prolonged (e.g. Foa & Goldstein, 1978). If an exposure is interrupted before anxiety levels decrease, the optimal effect is not achieved. In addition, various methods for conducting exposures in treatment have been examined, with no therapeutic benefit attributable to flooding. It is as effective to approach exposure in a step-wise and gradual fashion as it is to begin treatment by confronting the most distressing situations first (Foa et al., 2012; Hodgson et al. 1972; Rachman et al., 1971). In addition, patients have been found to prefer the step-wise method and it is far easier in practice to encourage a patient to begin with an exposure that is less anxiety provoking. Doing so helps them to feel safe and learn to trust the therapeutic process,

allowing for the maintenance of motivation and agreement on the tasks of therapy overtime. Thus, step-wise exposure is most often employed in practice (Foa et al, 2012).

Parallel to the development of EX/RP for OCD, significant advances were made in medications available for its treatment. Clomipramine was the first drug shown to effectively reduce OCD symptoms (e.g. Fernandez, Cordoba & Lopez Ibor Alino, 1967). A number of different drugs in the past few decades have also been shown to offer effective relief. These include the fluvoxamine (Luvox), fluoxetine (Prozac), sertraline (Zoloft), and paroxetine (Paxil). Overall, medications have been shown to benefit 60% of patients with OCD (Foa et al, 2012; Richter & Ramos, 2018). However, many, if not most, individuals taking medication treatments for OCD experience residual symptoms which are clinically significant (Greist, 1995; Richter et al., 2018). Moreover, most individuals experience significant relapse upon discontinuation of their medication (Dougherty, Rauch & Jenike, 2004; Richter et al., 2018). Thus, medication alone must be sustained to maintain gains.

OCD remains a challenging illness to treat due in part to the heterogeneity of its presentation and the chronic nature of its symptomatology. While there have been reports of spontaneous remission of symptoms, OCD is typically chronic in nature, with symptoms waxing and waning over the course of one's lifetime (Foa et al. 2008). Currently, Cognitive Behavioural Therapy (CBT) involving EX/RP is considered to be an effective first-line treatment (Abramowitz et al., 2013; Foa et al. 2008). CBT and EX/RP have been shown to significantly benefit approximately 60% of those who engage in it (e.g. Abramowitz et al, 2013; Richter & Ramos, 2018). While this treatment benefits most, many individuals are left with residual symptoms which are clinically significant, while others receive little benefit (e.g. Abramowitz et al., 2013; Abramowitz et al., 2012). Given this knowledge, there has been an increased interest in

better understanding the factors that contribute to a sub-optimal treatment response. Several of the factors thought to impact treatment response include the presence of accommodation and involvement or functioning of the family system (e.g. Boeding et al., 2013; Steketee &Van Noppen, 2003; Strauss et al., 2015). As such, there have been calls for interventions to incorporate family members directly into treatments. While much of the literature on accommodation and coping of family members recommends this, surprisingly few studies have investigated the efficacy of doing so. Even fewer studies have investigated the efficacy and impact of treatments involving an intimate partner. The following sections review this research to date.

Incorporating Intimate Partners Into the Treatment of OCD

Emmelkamp & colleagues (1983 & 1990) examined the efficacy of partner assisted exposure on two separate occasions. In the initial pilot study Emmelkamp & De Lange (1983) randomly assigned 12 couples to either a self-directed exposure protocol or a partner assisted exposure protocol. The partner assisted protocol resulted in greater reductions in OCD symptomatology and depression, and increased general life adjustment among participants compared to the self-directed condition. However, at a one-month follow-up these group differences were no longer present. Given the limited number of individuals in the above pilot study, Emmelkamp, de Haan & Hoogduin (1990) conducted a larger scale study with 50 couples. They found no significant advantage offered by the inclusion of the partner in treatment. In fact, it seemed that regardless of relationship distress levels individuals with OCD responded well to treatment. The above findings suggest that there may not be a clear advantage gained by including an intimate partner in treatment. However, there are several factors that impact our ability to draw strong conclusions from these earlier interventions. Firstly, it seems that in the

aforementioned studies intimate partners were not truly involved in the treatment in a meaningful way. Intimate partners were simply instructed to engage in exposure with their affected partner. This may have limited the impact of their involvement. Additionally, these studies measured whether there were any deleterious effects of including a partner as opposed to positive effects resulting from their inclusion. Thus, from a conceptual level this approach is somewhat problematic. It is hard to judge how the couples were impacted by the work they engaged in as meaningful change in the relationship was not adequately measured.

More recently, in response to the increased recognition of the impact and prevalence of intimate partner accommodation, Abramowitz et al. (2013) piloted a manualized 'couple-based CBT program' for patients with OCD and their partners. Sixteen couples completed the treatment protocol which included 16, 90 to 120 minute sessions. The protocol placed emphasis on partner assisted EX/RP, introduction of techniques aimed at reducing problematic couple dynamics, such as partner accommodation, and techniques aimed at targeting relationship difficulties related to OCD. Abramowitz et al. (2013) found positive effects of the treatment with substantial reductions in OCD symptomatology. They also found significant reductions in symptoms of depression, partner accommodation and improved relationship functioning. Perhaps more importantly, when comparing their findings to previous studies implementing treatments for OCD on an individual basis, Abramowitz et al. (2013) found evidence to suggest that their treatment was more efficacious. They found that their treatment resulted in a larger proportion of individuals experiencing clinically significant change in comparison with the studies focusing only on treating the individual with OCD. In sum, more recent preliminary evidence suggests that involving a partner in the treatment of OCD may in fact result in improved outcomes.

As a follow up to the above study, Belus et al. (2014) examined the effect of the treatment on the intimate partners in the same sample of sixteen couples. They examined intimate partners' assessments of relationship functioning over time. Marginal increases in relationship functioning after the completion of treatment were found. However, at the six-month follow up, most partners did not maintain these gains. This study suggests that there may be some important differences in how partners perceive both the treatment being delivered and their relationships; as there appeared to be a greater treatment effect on individuals with OCD compared to their intimate partners immediately following the completion of therapy. Individuals with OCD appeared to assess their relationship in a more positive light than did their partners.

While Abramowitz et al (2013) and Belus at al. (2014) reported positive findings, which show promise for future developments, it is important to note a significant limitation of their studies and indeed all the studies conducted in this area to this point. None of the studies to date have employed a true 'couples' intervention or methodology. Although Abramowitz et al. (2013) involved intimate partners in the intervention component of the study, they did not report on data from these partners. Instead, the data reported reflected only the affected partner's functioning and perceptions of the relationship pre and post therapy. While Belus et al. (2014) in a follow up did examine relationship functioning in intimate partners from this sample, they themselves noted that intimate partners were not the true targets of the intervention. It seems less than ideal to separately examine the effects of an intervention on members of a dyad in this way.

Therefore, the studies that have examined couple dynamics in the context of OCD are better termed 'partner-assisted' interventions. These interventions view the intimate partner as a coach, or an assistant who is expected to help the affected partner confront OCD. The affected individual's condition remains the sole focus of the treatment and any relationship patterns that

do not have to do with OCD receive minimal attention. It could be argued that this conceptualization is reductionistic in nature as it neglects the incredibly important emergent and dynamic qualities of the relationship that will need to be harnessed for the long-term effectiveness of the OCD treatment. Requiring the intimate partner to continue as a coach, for example, may prove to be too burdensome. It is this author's belief that couples therapy in this context must account for the complexity of relationships and as such must truly integrate the intimate partner's perspective, thoughts and feelings into case conceptualizations and planning. In order to create change that is elicited from within the couple system, an approach that is more comprehensive that targets couple dynamics *and* OCD symptomatology explicitly is necessary. Approaches which seek to simply add-on partners as coaches or cheerleaders do not address the underlying couple dynamics which maintain and could easily perpetuate OCD symptomatology.

Given the above, the purpose of the present study was to develop a therapeutic intervention for couples where one partner has a diagnosis of OCD. This intervention is designed to either stand on its own or act as an adjunctive OCD intervention that would effectively combine or incorporate conventional principles of CBT and EX/RP treatment for OCD with a well-developed scientifically based understanding of how to enhance intimate partners' ability to work together as a unit, where each partner benefits. The following paragraphs will outline the theoretical grounding for the intervention, including its development through a program of research conducted over the past 18 years.

Systemic-Constructivist Couples Theory: Research, Approach and Application to OCD

SCCT is an empirically supported couple's therapy with foundations in systems and social constructivist theories. It is a client centered approach and as such views each partner as an expert of themselves and their own relationship. SCCT was originally developed by engaging

a series of distressed couples, one couple at a time, in an approach similar to what is known as Participatory Action Research (Baum et al., 2006). This is a scientific method whereby the partners being studied also participate in studying themselves as a couple. This method was applied and refined along with developing a theoretical model (i.e. a methodology) that guided the application of the method to subsequent couples. Thus, SCCT is both a scientific methodology as well as a bonafide couple therapy. SCCT has developed into a flexible intervention that is capable of being modified to fit the issues and ways of thinking and behaving that are idiosyncratic to each couple. The protocol includes techniques developed, tested and refined on a series of couples and most of these are described in Reid et al. (2006), Reid et al. (2008) and Reid and Ahmad (2015).

SCCT is an intervention which emerged from rigorous research over 15 years into couples' dynamics. What was discovered to be a primary mechanism of change within SCCT is the enhancement of each partner's identification with their relationship, otherwise known as 'We-ness' (Reid et al., 2006). This identification with the relationship reflects how a partner's sense of who they are is informed by and intertwined with the relationship they are a part of. In essence, the relationship becomes a part of one's identity. This sense of We-ness reflects the degree to which each individual's understanding of her/his self is informed by their relationship. We-ness is distinct from 'same-ness' and enmeshment, as partners maintain their own self-system and sense of being unique individuals. Instead, the partners form a unique relationship that is a combination of each individual's identity, and thus emergent. Enhancing each partner's 'We-ness' enables them to have a shared context from which to cope together with relationship difficulties as well as assist each partner with individual difficulties. Partners who have a stronger sense of We-ness are able to approach difficulties from a less combative, more

collaborative perspective which considers both how they will each be impacted as individuals but also how their relationship, as its own entity, will be impacted by their subsequent decisions and actions. In this way, each partner becomes more explicitly aware of their knowledge of the other's wants and needs (more empathic) and is thus increasingly motivated by a desire to maintain and enhance the quality of their relationship that they behave accordingly. This type of change is more sustainable because it is self-perpetuating and intuitive to each partner.

Therefore, SCCT therapy was well suited to allow for modifications that would benefit those couples struggling with OCD. In the present study a number of modifications and additions were made to the original SCCT protocol in order to incorporate critical components of evidence-based CBT and EX/RP for OCD. These modifications and overall therapy protocol will be discussed at length in the following methods section.

Goals & Hypotheses

The goals of the present study were to gain a better understanding of relationship dynamics within OCD, while also improving relationship functioning by engaging couples in SCCT. As such couples received seven, two-hour therapy sessions, following a modified version of the previously established SCCT model. The SCCT approach was tailored to each couple, to address presenting issues and deal in particular with how the couples coped with and were affected by OCD.

The specific hypotheses tested in the present study were as follows:

1. Individuals with OCD will experience a significant decrease in OCD symptomatology after engaging in SCCT
2. Partners will demonstrate an increase in quality of their relationship after engaging in SCCT

3. Partners We-ness scores will increase significantly from session 1 to session seven of SCCT
4. The effect of SCCT on reported relationship quality will be mediated by We-ness.
5. The effect of SCCT on OCD symptomatology will be mediated by We-ness.
6. The effect of SCCT on OCD symptomatology will be mediated by partner accommodation.
7. Greater partner accommodation at the end of treatment will be associated with decreased relationship functioning in partners without OCD.

Chapter Two: Method

Participants

Participants were 12 couples, 24 individuals, aged 18 years and over who had been married or cohabiting for at least a year and in which one partner had a primary diagnosis of OCD. Other inclusion criteria were: a) Fluency in English in both partners and b) stability on a psychotropic medication regimen for the 6 weeks prior to treatment and maintenance during treatment. Exclusion criteria included a) an active co-morbid medical condition that would require urgent intervention during the treatment phase (such as severe depression or suicidality) and b) any concurrent symptoms or diagnosis that would interfere with the participant's ability to participate in treatment: such as psychosis, active bipolar disorder, cognitive impairment, substance dependency, and obsessive compulsive symptoms of organic origin or which occurred primarily in the context of another disorder.

Figure 1 depicts the flow of participants from the initial contact and screening to study completion. The dropout rate among the 13 couples who began treatment was 7.1%. All couples who completed treatment were heterosexual; eight were married, and four were not married but cohabitating for more than a year. The average length of marriage of the eight couples who were married was 9.4 years (SD = 10.1) and ranged from 4 months to 27 years. In seven of the 12 couples who participated the partner with OCD was male, with the remaining five being female. The mean age of the partners with OCD was 35.8 (SD = 8.5) years, while the mean age of the intimate partners was 35.2 (SD= 6.9) years. Two of the partners with OCD had previously completed a 12-week protocol of CBT and EX/RP, while the remaining 10 had not been exposed to CBT. Four participants were taking medication while participating in the present study. The sociodemographic characteristics of the participants are summarized in Table 1

Figure 1

Flow of Participants Through the Study

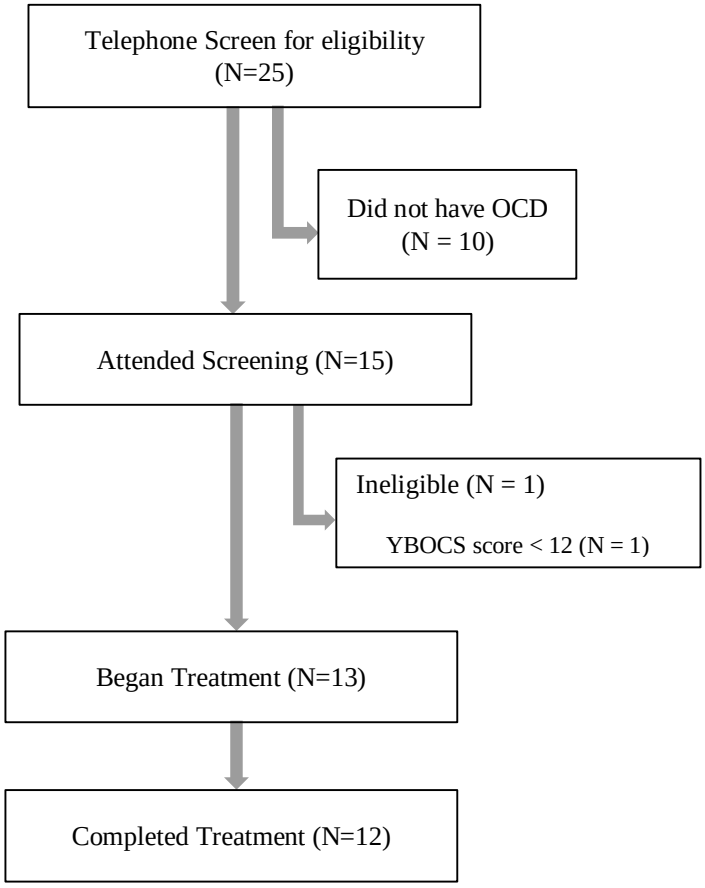


Table 1

Sociodemographic Characteristics of Participants (N=24)

Characteristic	Individual with OCD	Intimate Partner
Age (in years)	35.8 (Range 26 – 55)	35.17 (Range 25 - 46)
Education		
Professional Program	1	1
Graduate Education	2	3
Bachelor Degree	6	4
College	-	2
High School	3	2
Some Highschool	-	-
Employment Status		
Employed for wages	8	9
Self-employed	1	2
Out of work and looking	1	-
Unable to work	1	-
Other	1	1
Religion		
Jewish	1	1
Muslim	1	1
Christian	5	3
Sikh	1	1
Agnostic	4	6
Annual Household Income[a]		
> $100,000	3	4
$80,000- 100,000	1	1
$60,000 – 80,000	4	2
$40, 000-60,000	2	2
$20,000-40,000	2	1

Note: [a]There were discrepancies in reported annual household income between partners, therefore, the frequency of each household income category is reported separately for individuals with OCD and their intimate partners. Additionally, two intimate partners left household income blank.

Procedure

The study was approved by the York University Research Ethics Board as well as the Sunnybrook Health Sciences Centre Research Ethics Board. Diagnostic interviews, informed consent and all treatment took place at York University in Toronto, Canada. Participants were primarily recruited from the Frederick W. Thompson Anxiety Disorders Centre at Sunnybrook Health Sciences Centre in Toronto, Canada. Existing patients of the Sunnybrook clinic were approached by clinic staff (psychiatrists, social workers, research assistants) if they were in a committed relationship and were given information about the study. Participants were also recruited from the general population. A mail-out was sent to family physicians practicing in the Greater Toronto Area. In addition, local agencies such as the Canadian Mental Health Association and the International OCD Foundation posted information about the study on their websites. Study information was also posted to the Frederick W. Thompson Anxiety Disorders webpage. This enabled us to disseminate information about the study to those who were not registered patients at Sunnybrook, but who were on the waitlist for treatment and/or were interested in the programs offered. Participants initially completed a short telephone screen. If after the telephone screen participants met the initial eligibility criteria an in-person assessment was scheduled. During the in-person assessment each partner completed the MINI international Neuropsychiatric Interview (Sheehan et al., 1998) to confirm DSM-5 diagnosis of OCD in the affected partner, as well as confirm eligibility to participate by both partners (i.e. absence of psychosis, substance abuse etc. in either partner.) A discussion of study procedures was undertaken and formal consent obtained after the partners were deemed eligible for the study.

Treatment

Each couple who participated in the study received 7 weekly, 2-hour long therapy sessions. Therapy sessions took place at York University in an office intended to resemble that which would be found in a private practice setting. As was the case with previous studies utilizing the SCCT model, a co-therapist format was used (Reid et al., 2006; Reid et al., 2008). In this case the first author (Rachel Siegal), a senior doctoral student, was one of the therapists along with David Reid, C.Psych. Dr. Reid developed and evaluated previous trials using the SCCT protocol and is an expert marital therapist and researcher. All couples who agreed to participate in the present study received the treatment offered for free, there was no control group.

Unlike previous trials examining the efficacy of SCCT, the present study was the first to explore an integrative model combining SCCT and CBT with EX/RP for Obsessive Compulsive Disorder. SCCT lends itself well to being combined with CBT and EX/RP, as it falls within the larger framework of cognitive therapies. Given the established efficacy of CBT and EX/RP for OCD we felt that it was essential to maintain the core components of this evidence-based treatment in a couples' context. The following paragraphs will outline session by session the protocol that was followed for each of the 12 couples who took part in the study.

Session 1. During the first session couples were encouraged to discuss the presenting issue at length. Specifically, they were asked to explain how the OCD impacted each of them, the other partner, and the two of them as a couple. In so doing, we were priming the couples to begin to think beyond just 'you' and 'me', and consider the more emergent quality of their relationship. We made it very clear to each couple that although the focus of the study was on the treatment of OCD, this did not mean we would be focusing on how to 'fix' or change the

affected partner. Instead, we would be focusing on tools they could use individually *and* collectively as a couple to help decrease both the OCD symptoms and any problematic interactions between them. Towards the end of the first session couples were asked 3 pertinent questions intended to prime them further with respect to the content of the upcoming sessions. Couples were asked the following: 1. Do you want your relationship to change? 2. If you change will your relationship change? And 3. If your relationship changes, will you change?. In all 12 cases couples answered yes to each of the questions (as expected). After the partners responded we discussed the significance of these questions to reinforce the notion that change in a relationship is complex and requires both partner's investment.

A discussion of the etiology and treatment of OCD was weaved through the first session as well. This mutual understanding would be essential for the upcoming exposure work the couples would be doing together. Most intimate partners had a very cursory understanding of OCD in general and in some cases, depending on the severity of the OCD, were incredibly frustrated with its presence. Therefore, the introduction of additional information in combination with a thorough discussion of the OCD in the context of their relationship was thought to increase their respective understanding of the other's experience. This increased mutual understanding/empathy is thought to be a primary mechanism of change in SCCT (Reid et al., 2006; Reid et al., 2008). The idea of exposure and response prevention was explained to each couple in this first session. They were told that we would be working on challenging the OCD anxiety by approaching rather than avoiding triggers and by resisting or delaying engaging in compulsions. By doing so couples were told that we would be un-fusing the obsessions and compulsions. They were told that as we began to do this, the strength and intensity of the obsessions would decrease overtime and the subsequent impulse to engage in compulsive

behaviours would likewise decrease. Within this context, accommodation came up naturally and this was taken as an opportunity to introduce and label it as “accommodation”; a word they could continue to use as part of their mental model of how OCD challenges their quality of life as a couple. The mechanism through which accommodation contributes to maintaining OCD anxiety and symptoms was explained and we discussed how decreasing it would be an essential component of what we would be working on as a couple reducing OCD symptoms. The subject of accommodation was often one that was highly contentious. The affected partner often insisted it was necessary while the intimate partner expressed feelings of burden and frustration associated with their efforts to accommodate the other. Couples were told that throughout the treatment they would increasingly challenge the OCD anxiety together, and as a unit work to develop coping strategies, which would then allow them to work on decreasing the accommodation behaviour in a parallel fashion.

At the end of this initial session, couples were also given chapter 1 and parts of chapter 2 from “When a Family Member has OCD” (Hershfield, 2015). The first chapter of this book is titled: How OCD Works and Where it comes from. This chapter explains current theories regarding the etiology of OCD in very palatable terms and explains the nature of OCD, i.e. the presence of obsessions and compulsions. Chapter two is titled: Common Manifestations of OCD. The appropriate/applicable sections were provided to each couple. This chapter explains different types of obsessions and compulsions (i.e. contamination, checking) and gives the partner a sense of what they might notice their loved one doing if they indeed experience certain obsessions (e.g. checking locks on doors, washing their hands excessively). These chapters were given as an adjunctive to our sessions to help intimate partners better understand how OCD affects their loved one.

Session 2. Listening to Understand vs. Listening to Respond. The primary purpose of the second session was to have partners begin to learn how to communicate with one another in a novel way. Two modes of listening, listening to understand and listening to respond, were introduced to the partners. These modes of listening have been previously investigated in past SCCT trials (Doell, 1997; 2003; Reid & Ahmad; 2015). The basic tenant of this exercise is to have the partners begin to listen for the intended message their partner wishes to convey. We emphasize to partners that what they think they "hear" in a typical conversation with their partner is not necessarily what the partner said or meant. Instead, what the partner is listening to is the translation they have automatically made of the other's words, as informed often by past experience and possibly by emotional injury in the relationship. This form of listening is termed 'listening to respond'. We discussed listening to respond further, placing this form of listening within an important context. Listening to respond can be very efficient and possibly beneficial in everyday life, as one can converse with others in a rapid manner without having to pause and consider deeply the correct interpretation of the other's words. Inherent in this mode of listening however is a set of assumptions that in the context of a romantic relationship can become highly problematic. Thus, after explaining this to the partners, they were instructed to attempt to 'slow-down' and listen with the intention of hearing the intended message their partner wished to convey. An important point of emphasis was that partners did not need to agree with what the other was saying, instead they were instructed to place their reactions 'on the shelf' for the time being to allow the other a full expression of their thoughts. The job of the listener was to 'draw-out' the speaker and allow them to be truly heard.

Each partner then took a turn being the listener and the speaker. Therapists asked permission to interrupt or redirect the conversation if they felt it necessary. This was done to help

partners recognize when they were listening to respond instead of listening to understand. Couples were encouraged to talk about the OCD as an initial subject, and more specifically a part of their experience with the OCD that they felt they had not been able to fully express in past conversations.

After they each had at least one turn as both speaker and listener we asked partners to reflect together on what the exercise was like, and whether they noticed anything novel about the content and flow of their conversation. In each case partners acknowledged that: a. The exercise was challenging and would take practice and b. The conversation was remarkably distinct from 'typical' conversations. In addition, it was common for partners to indicate that engaging in listening to understand allowed the speaker to express themselves fully, allowing both of them to learn new things about one another. Each was learning to think out loud while the listening partner was supportive and encouraging by not interrupting. This of course is the intended purpose of the exercise, to allow each partner to feel truly heard, understood and validated, thereby increasing empathic understanding within the relationship (Reid et al., 2008).

After engaging in the listening to understand exercise the creation of a hierarchy of anxiety provoking OCD situations was discussed. The partners were provided with an example hierarchy to take away and begin working on and were asked to bring the hierarchy to the following session or email it to the first author in between sessions.

Session 3. Imaginal Exposure and Dual Processing. During Session three the first author engaged in a conversation with the affected partner about their OCD. The affected partner was asked to think of an anxiety provoking situation, when the OCD was at its worst, and describe the situation in detail. This included an in-depth exploration of what they encountered (detailed description of anxiety provoking stimuli), their physiological reactions and their

thoughts and feelings. While engaging in this task, the intimate partner was asked to listen carefully, with the intended 'point' of the exercise to reveal itself shortly. As the exercise continued the therapist leading the intervention was responsible for drawing out of the affected partner how they cope when their anxiety is bad. This was intended to 1. begin to regulate their anxiety in the situation by using cognitive strategies and 2. obtain information about the resources the affected partner may already have for dealing with the OCD. In so doing the therapist obtained examples in the client's own words for the introduction of a novel conceptualization of the OCD anxiety and one's coping. The therapist also obtained information regarding the client's own construction of their experience. At the conclusion of this discussion the therapist then drew a series of Venn diagrams and placed the title "dual processing" on the white board. Dual processing was then explained to the couple as two modes of thinking; rational vs. experiential. One mode, the experiential is automatic, fast, emotional, irrational and impulsive while the other, the rational mode is conscious, methodical and slow. A parallel was then drawn between these two modes of thinking and the OCD. It was explained that when the OCD is bad the experiential and automatic processes are predominant, but when the OCD is 'under-control' the rational mode predominates. We discussed in detail, using the client's own words, how this process occurs, facilitated by the use of the Venn diagrams. In each case this visual conceptualization of talking about one's OCD seemed to fit remarkably well with the affected partner's experience. It seemed to encapsulate their feeling of the OCD as something that at times was automatic and hard to control. The dialogue with the therapist also helped them to exercise a more rational process that gave a form by talking about what was going on for them. This exercise also allowed for the intimate partner to engage in 'mentalizing' (picture in his/her mind) their partner's experience. In some cases, this would be the first time the intimate

partner would be given an in depth view at what their loved one struggled with; the extent of it and the true anguish it caused at times.

After this exploration, the intimate partner was actively drawn into the conversation. The point was made that the intimate partner remains within the rational realm with respect to the OCD most times, as they do not struggle with it. Therefore, they could act as an important advocate for their partner in real time, patiently helping the affected partner to engage more control – by articulating a more rational reframing of situations and assisting them in challenging their anxiety in a supportive and sensitive way. The affected partner was encouraged to talk aloud about the OCD anxiety as they were experiencing it with their partner. This would help them to begin to further "objectify" the OCD as an entity separate from the self (objectifying a problem or topic is a classic Constructivist Therapy technique). In this way couples could become increasingly united against the OCD as a third entity rather than having the intimate partner be frustrated and angry with the other for being affected by it, as is often the case. Additionally, this would help the affected partner feel less alone in their attempt to combat the OCD.

As is customary with the original SCCT protocol in this integrated approach we encouraged couples to do this to the extent that they felt comfortable and in a way that made sense to, and was natural for them. We continued to work with couples from the frame of reference of them being the experts of their relationships. When the couples are able to integrate the relational work we do in session into their everyday life in a much more natural way, such changes become integrated and solidified as a new way of being and thus have a greater likelihood of remaining once the treatment has ended (Reid et al., 2008).

Finally, with the above in mind a planned exposure was discussed with the couple where they were to attempt to utilize the strategies and "experiment" with what we had discussed. They were to engage actively with the idea of dual processing noting what worked and what didn't while at home in between sessions.

Session 4. Objectifying the OCD and Recap. Session four was taken as an opportunity to 'check-in' with couples and solidify some of the concepts and work we had engaged in thus far. The sessions were quite dense and as such we find taking time to allow for the solidification and reification of concepts is helpful. This 4th session was also intended to be a session where therapists and couples alike could 'trouble shoot' and better tailor any techniques or strategies that had been suggested to the couple previously so as to make them more successful in their application. In addition, another planned exposure was assigned to the couple. Session 4 is an example of how the SSCT approach allows for calibrating the intervention to fit the dynamics of the partners and their relationship so that they are instrumental in teaching themselves how to minimize the OCD away from the therapy office.

Session 5. Ideal Relationship. In the fifth session couples were asked to independently come up with a list containing qualities they would want in an ideal relationship. This ideal relationship was described as one where OCD was still present, but more controlled and/or manageable. The couple was asked to carefully distinguish between the ideal relationship and the 'ideal partner'. They were not asked to list qualities they would want in an ideal partner but instead create a list that contained the core components that would comprise an ideal relationship (i.e. involving you and me- the us). They were asked to frame these in a positive manner, rather than talking about the absence of something in the relationship. For example, "no fighting", would be reframed in terms of what they would like to see in their relationship instead, perhaps

"open-communication". This technique has been used in previous SCCT trials (Ahmad & Reid, 2015; Reid, Dalton, Laderoute et al., 2006) to help draw out partners' constructions of their current relationship and explore the values each holds with respect to relationship quality. The purpose of this exercise is to shift the focus for each partner away from old patterns of complaining and/or blaming the other and construct a clear vision of what their ideal relationship would look like. It also requires each partner to take ownership for how they would like the relationship to be.

After each partner's list was written on a white board in separate columns, partners were asked to query the other regarding the meaning of the items on their respective list. Partners were encouraged, even if they felt they understood what the other partner 'meant' to verbalize that understanding and confirm that they in fact had 'gotten it'. This allowed for an open dialogue in which partners could revise the wording of their respective items to more closely indicate what they had intended to get across. This also allowed for each partner to discuss explicitly their relationship values and express in a non-confrontational way what they hoped for their own relationship. After any revisions and exploration of partners' respective lists, they were asked if it would be amenable to both to merge the lists into one that would simply be called "our ideal relationship". Partners were typically very agreeable to this as they felt they were co-constructing something meaningful together. At this point partners were asked to brainstorm and think of a behavioural change they (individually) could implement that would enable them as a relationship to get closer to this 'ideal' relationship. In addition, partners were asked how the other could assist them should they slip and fall back into old patterns. For example: in one case the husband expressed a desire to be more open about his OCD experiences, i.e. letting his partner know when he was experiencing anxiety and what that anxiety was like. However, he recognized that

this continued to be a challenge for him. The couple agreed together that his wife could assist him in being more open by asking him in a gentle way whether or not his OCD was affecting him in the moment. They agreed it would also be helpful for her to remind him that she would like to support him through his struggles. Going into such detail regarding the behavioural changes each partner would implement helped them to have a clear road map of what to do when they inevitably ran into challenges. The ideal relationship was framed as such, an ideal scenario, and as something the couple could always be working towards. This could stand as motivation for partners to work together towards a common goal.

During this session, there was also a check-in regarding how the last week's exposure went and a plan for a new one the following week. Partners were encouraged to continue to use each of the strategies we had been working on to facilitate in the implementation of cooperative and effective exposures.

Session 6. Internalized Partner. The internalized partner is a technique that has been used previously in each of the applications of the SCCT technique (Ahmad, Reid, 2016 Reid, Dalton, Laderoute, et al., 2006). It is a protocol that borrows from Karl Tomm's (1998) *interview of the internalized other* in family therapy. In our implementation of the protocol one of the therapists interviewed each of the partners 'being the other'. That is to say the partner's task was to answer the therapist's questions as if they were their partner. Before the technique began each partner was asked to what extent they viewed themselves as an imaginative person. They were then asked to imagine themselves in a place where they felt safe and calm. This was done to prime them for the upcoming task and assess their willingness to engage in such an activity. Partners were then asked to take turns 'being the other'. Each partner was interviewed in the presence of the other, who remained in the room but out of view. This process taps into each of

the partners' growing knowledge of the other's internal experience. It attempts to make transparent to both partners the respondent's (i.e. interviewee's) assumptive worldview of their partner, themselves and their relationship.

During the internalized partner interview process the co-therapist begins by asking each respondent more mundane questions, perhaps a description of their day so far for example. After the respondent becomes comfortable with the task the co-therapist begins to ask questions that are likely more challenging for the respondent to answer. These questions often deal with what they believe their partner needs or wants, and how they view a particular situation. Each of the questions is intended to tap into more affective, experiential processing rather than logical, rational processing. In the context of this study the respondents were each asked specific questions about their experience of OCD. This line of questioning would be expanded appropriately with each couple. This drew on each partner's developing knowledge of the other's internal experience with respect to a core issue and made it explicit. The co-therapist would also ask questions about the relationship in general, focusing on both issues which were contentious and those that were not. After each partner's turn being the respondent, the couple de-briefed and reflected upon what the experience was like and how close or far they were from an accurate description of the other's experiencing.

During this session, there was also a considerable amount of time spent (depending on the couple and their challenges or lack thereof) on discussing the exposure exercises they had done the previous week. Any issues were addressed and we planned additional exposure exercises for the coming week based on their hierarchy and what they had done previously.

Session 7. Recap and Dyadic Interaction Paradigm. During the final session, couples were asked to reflect on what they had learned and what they would be taking away from the

therapy. They were asked to reflect together on changes they had made as well as those changes they had yet to make. Often couples expressed anxiety about ending sessions, and we devoted some time to this. When this did come up a metaphor was often used to help the couples feel that they possessed the ability to continue to improve. For example, one of the co-therapists would talk about viewing the therapy as the thin edge of the wedge, or just the beginning of their journey. Relapse prevention in terms of the OCD was also discussed in this session with both partners.

Finally, the partners were told of the metaphor of riding a bike. That they may fall off the bike, so to speak, but each time they fall they are also getting better at getting back on the bike again and progressing. One partner helps the other so they can ride together. Soon they would automatically rebalance before falling and finally their sense of relational balance would be so good that it would be hard to fall off deliberately as their sense of themselves as a couple becomes so integrated into their mutual identities.

After this initial concluding meeting, we moved to a room adjacent to our therapy room where the dyadic interaction paradigm (explained below) was completed. Couples then came back to the therapy room and we debriefed and said our goodbyes at which point each couple was given a handout with a summary of what we had covered in each of the sessions for future reference.

Clinician Administered Interviews

The MINI International Neuropsychiatric Interview (Sheehan et al., 1998)

The MINI International Neuropsychiatric Interview (MINI 6.0) is a short, structured diagnostic interview for DSM-5 and ICD-10 diagnoses. In the present study the MINI was conducted by a graduate student highly trained in its administration. Subsequent inter-rater reliability was

obtained by having trained individuals listen to audio recorded segments of 20% of the interviews to confirm the diagnosis of OCD. Inter rater reliability using this method was found to be 100%.

The Yale Brown Obsessive Compulsive Scale- Revised (Y-BOCS, Goodman, 1989a, 1989b) The Y-BOCS is considered the gold standard measure for determining the nature and severity of OCD. It is a semi-structured interview which is administered by first going through a checklist of obsessions and compulsions with the respondent. This is followed by a 10-item severity scale which assesses the main obsessions (items 1-5) and the main compulsions (items 6-10) based on the following parameters: 1. Time occupied, 2. Interference, 3. Distress experienced, 4. Resistance and 5. Degree of control. The clinician rates each of these items on a scale of 0 (no symptoms) to 4 (extreme) based on the individuals' experience in the last week. An obsessions subscale (0 to 20) and a compulsions subscale (0 to 20) can be computed by summing item 1-5 and 6-10, respectively. A total severity score is derived from summing the subscales, with total scores ranging from 0 to 40. Higher scores indicate greater symptom severity. The Y-BOCS has been shown to have strong internal consistency for the Symptom Checklist with alpha = .91 (Kuder-Richardson) and severity scale with an alpha = .89. Test-retest and interrater reliabilities have been shown to be high with r =.85. Construct validity is supported by strong correlations with clinician-rated measures of OCD symptom severity and moderate correlations with measures of worry and depressive symptoms. In the present study the YBOCS was administered once before treatment began and again after treatment had ended. To confirm accuracy of the YBOCS scores, a second blind rater who was trained in the administration and rating of the YBOCS was given audiotapes of 20% of the interviews. The intraclass correlation coefficient between YBOCS scores overall was r = .95.

Self-Report Measures

The following measures were included in both the baseline and outcome questionnaire package:

Demographics. The personal demographic questionnaire was designed to obtain information about participants' age, sex, duration of relationship and/or marriage, number and age of children (if any), employment status, gross household income, ethnicity and religious beliefs. This questionnaire also asked participants to indicate if they were taking psychiatric medications and if so to specify which one(s) and dose(s). Finally, participants were asked to indicate whether they previously participated in psychotherapy and if so for how many sessions.

Obsessive Compulsive Inventory-Revised (OCI-R, Foa et al., 2002). The OCI-R is intended as a measure to determine severity/distress caused by OCD symptoms and is a shorter revised version of the original OCI (Foa et al., 1998). It consists of 18 statements related to common OCD experiences. Respondents are asked to indicate "How much that experience has distressed or bothered you in the past month", on a five-point likert scale, ranging from 0: not at all to 4: extremely. Sample items include: "I sometimes have to wash or clean myself simply because I feel contaminated" and "I frequently get nasty thoughts and have difficulty in getting rid of them". There are six subscales which include washing, checking, ordering, obsessing, hoarding and neutralizing. Both a Total Score as well as subscale scores can be computed. Total scores are generated by adding item scores, with total scores ranging from 0 to 72. Higher scores indicate greater distress/impairment associated with OCD symptoms. The mean score for a person with OCD is 28.0 (SD = 13.53). The recommended cut-off score is 21, with scores of 21 and above likely indicating the presence of OCD. It has been shown to have good internal consistency, convergent validity, and test–retest reliability in a mixed sample of patients with

OCD, other anxiety disorders, and non-anxious controls (Foa et al., 2002). In the current study, internal consistency coefficients for the total scale pre-therapy and post-therapy were $\alpha = 0.92$ and $\alpha = 0.93$.

Family Accommodation Scale Self-Rated (FAS-SR*,* Pinto, Van Noppen, Calvocoressi, 2013). FAS-SR is intended to assess for the presence and severity of family accommodation. It is a self-report version of the interviewer rated Family Accommodation Scale for OCD (FAS_IR) (Calvocoressi et al., 1999). The measure is administered to family members of individuals with OCD (in the case of the present study this was the intimate partner). The first section of the scale includes an OCD symptom checklist in which relatives are asked to identify the types of obsessions and compulsions experienced by their affected relative in the past week, of which they are aware. The respondent is then asked to indicate which accommodation behaviours they (the respondent) engaged in in the previous week. There are 19 items in this section of the scale, each rated in terms of frequency of the behaviour on a scale of 0: None/never to 3: Everyday. Total scores are computed by summing each of the 19 responses. Total scores range from 0 to 76, with higher scores indicating greater family accommodation. The FAS-SR demonstrated excellent internal consistency (Cronbach's alpha = .90) and the FAS-SR total score showed strong agreement with the FAS-IR total score ($ICC = .78$, $p < .01$) (Calvocoressi et al., 1999). With respect to convergent validity, greater family accommodation, and higher FAS-SR total scores, were correlated with more severe patient OCD as measured by the Yale Brown Obsessive-Compulsive Scale (YBOCS). In addition, higher FAS-SR total scores were associated with worse patient functioning on the Global Assessment of Functioning Scale (Calvocoressi et al., 1999). In the current study, internal consistency coefficients for the total scale pre-therapy and post-therapy were $\alpha = 0.94$ and $\alpha = 0.92$.

Beck Depression Inventory (BDI, Beck, Steer & Brown, 1996) The Beck Depression Inventory is a widely-used measure of self-reported depressive symptoms in adolescents and adults. There are 21 items that assess characteristic attitudes and symptoms of depression which are consistent with the DSM-IV (American Psychiatric Association, 1994) classification of major depressive disorder. Respondents indicate whether they experienced a symptom and if so how severe it was on a scale from zero to three. Sample items include the following: "Sadness: 0 I do not feel sad., 1 I feel sad much of the time., 2 I am sad all the time., 3 I am so sad or unhappy that I can't stand it". Total scores range from 0 to 63 with higher scores indicating more severe depressive symptoms. Typically, the following cut-offs are used to categorize the severity of symptoms: score of 0-9: minimal depression, 10-18: mild depression, 19-29: moderate depression and 30-63 indicates severe depression. Internal consistency for the BDI ranges from .73 to .92 with a mean of .86 (Beck, Steer, & Garbin, 1988). In the current study, internal consistency coefficients for the total scale pre-therapy and post-therapy were $\alpha = 0.91$ and $\alpha = 0.94$

Inclusion of Other in Self (IOSS, Aron et al, 1991) The Inclusion of Other in Self Scale is comprised of a single item intended to measure interpersonal closeness. This scale consists of a series of 7 increasingly overlapping Venn diagrams representing "self" and "other". Respondents are to circle the diagram that best represents the degree of interpersonal closeness they feel between themselves and their partner. Higher IOSS scores represent greater interpersonal closeness. In prior samples engaging in SCCT, significant increases in IOSS scores were demonstrated form first to final session. These increases were also correlated with We-ness scores and overall relationship functioning (Reid, Dalton, Laderoute, et al., 2006).

Dyadic Adjustment Scale (DAS, Spanier, 1976) The Dyadic Adjustment scale is a widely-used measure of relationship adjustment. The scale is designed to be applicable for couples who are married as well as those who are cohabiting. There are 32 items in total. Total scores range from 0 to 151, with lower scores indicating poorer relationship functioning. Raw scores equal to or above 100 indicate highly adjusted dyads. The scale has previously established criterion and construct validity (Spanier, 1976) and satisfactory internal consistency with Cronbach alpha =.95 for the entire 32-item measure. Subscale reliability ranges from .70 to .91, and test re-test reliability of r = .87 (Carey, Spector, Lantinga, & Krauss, 1993). In the current study, internal consistency coefficients for the total scale pre-therapy and post-therapy were α = 0.89 and α = 0.93 respectively.

Communication Patterns Questionnaire (CPQ, Christensen & Sullaway, 1984) The communication patterns questionnaire is intended to assess patterns of interaction between partners in a committed heterosexual relationship. The scale assesses communication during three phases of conflict: 1. “When some problem in the relationship arises”, 2. “during a discussion of a relationship problem”, and 3. “after a discussion of a relationship problem”. This questionnaire assesses five aspects of marital communication patterns: 1. Mutual constructive communication, 2. Mutual discussion avoidance, 3. Total demand/withdrawal, 4. Husband demand/wife withdrawal and 5. Wife withdrawal/husband demand. There are 35 items in total each rated on a 9-point scale from 1 = very unlikely to 9 = very likely. Previous research using the CPQ has demonstrated satisfactory reliability and validity of the subscales, with Cronbach’s alphas ranging from .50 to .87 (Christensen & Heavy, 1990; Heavy et al., 1993).

Couples Mutuality Questionnaire (CMQ, Reid, Dalton, Laderoute et al., 2006) This scale assesses respondents’ perception of their interaction patterns with their partner, namely the

degree of similarity or 'mutuality' within these interactions. The CMQ is comprised of 22 items on a likert scale ranging from 1: strongly disagree to 5: strongly agree. Higher scores on the scale indicate greater perceived mutuality. Each item on the scale is intended to assess a different type of partner interaction. For example, item seven states: "we are alike in demonstrating our affection for each other". This item assesses the concordance and mutuality between partners' ways of expressing affection towards the other. The CMQ has been found to have high reliability with a Cronbach's alpha of .81 for the first session and .90 for the last session as indicated in a previous study of SCCT (Reid, Dalton, Laderoute, et al., 2006). The CMQ has also been shown to correlate with We-ness, relationship satisfaction and the Inclusion of Other in Self Scale pointing to its strong convergent validity (Nguyen, 1999; Reid, Dalton, Laderoute, et al., 2006). In the present study, cronbach's alpha was 0.91 at pre-therapy and 0.92 post-therapy.

Relationship Assessment Scale (RAS, Appendix H) The Relationship Assessment Scale is a modified version of Fowers and Olson's (1993) ENRICH Marital Satisfaction (EMS) scale. The RAS includes 12 items which aim to assess marital satisfaction across a range of relationship domains. Items are answered on a five-point likert scale from 1= strongly disagree to 5 = strongly agree. The RAS has been found to be highly correlated with the Dyadic Adjustment Scale (Spanier, 1976): r = .75 (Nguyen, 1999), .85 and .78 (Dalton, 2007); with a test-retest reliability over four weeks of .86 (Nguyen, 1999). The RAS has also been found to be correlated with measures of couple mutuality, closeness and relationship identify ("We-ness") (Reid, Dalton, Laderoute, et al., 2006). In the present study, Cronbach's alpha was 0.74 pre-therapy and 0.84 post-therapy.

Observational Measures

We-ness Coding The We-ness coding scheme (Reid, Dalton, Laderoute et al., 2006) was developed to measure partners' degree of identification with their relationship. We-ness can be better understood as a form of 'self-construing' that results from partners' experiences of a mutual identity with an intimate other. Partners who experience high levels of We-ness have an identity which is informed by and a part of their 'couple identity'. The We-ness coding scale was modeled after Grenyer and Luborsky's (1996) Mastery scale. It consists of six hierarchical macro-levels of We-ness (labelled 1-6), with four additional subcategories embedded within each macro-level (i.e. a, b, c, etc.). Higher scores on the scale indicate greater levels of We-ness. Partners scores are computed separately, i.e. each partner has their own respective level of We-ness. Past studies using this coding scheme found that inter-rater reliability was good (mean r =.76) (Reid, Dalton, Laderoute, et al., 2006).

We-ness coding is derived from discourse between couples who are unaware that their discussion will be coded in this way. For the present study, the first and final therapy sessions were audio-recorded and subsequently transcribed by trained undergraduate research assistants. All transcription was done using Microsoft Word. Couple's identifying information was removed to maintain confidentiality.

After the sessions were transcribed discrete sections of discourse, known as 'Relationship Episodes' were identified. Relationship Episodes are identified as discourse in which a partner or partners are discussing their relationship. They can also include discourse in which one partner is talking about themselves in relation to the other. Ultimately, the subject of such segments must be a partner's implicit or explicit self-construal in relation to their partner. In identifying relationship episodes, it is often helpful to identify 'I' and 'me' statements as well as 'we' and

'us' statements. However, it is important that the segment not be coded for We-ness based solely on the frequency of such words as this is a reductionistic approach that does not truly reflect the identification of a sense of We-ness. Segments whose subject is clearly not the partner in relation to the other, or the relationship explicitly, are ruled out and not coded. This may include descriptions of family events, activities or personal comments about work or other activities etc.

Once relationship episodes were identified they were removed from the larger context of the session; maintaining enough of the context in which the comment occurred so as not to violate accessing the contextual information that affected the speaker's thoughts/intended meaning. These sections were then given to a trained rater who was blind to both the identity of the couple and whether the segment came from the first or final session. In total 583 Relationship Episodes were identified (386 in first session, 197 in final session). Of the total, 577 were coded (381 from first session, 196 from second session), the remaining segments were labeled as uncodeable segments due to the ambiguity of their We-ness code. There was an mean of 15.86 Relationship Episodes coded per partner for the first session and a mean of 8.52 Relationship Episodes coded in the final session.

Trained raters then coded each relationship episode for partner's respective We-ness scores. At times this meant that the segment was coded twice if it was a back-and-forth discussion between partners, with each partner receiving their own We-ness score. Each episode was coded by first anchoring a segment in one of the macro-levels (ie. 1-6) and then determining a subcategory score (a, b, c, d etc.). If it seemed like two scores were appropriate the higher-level score was decided on. The following are example segments from the present study intended to illustrate how We-ness was coded. The following was taken from an affected partner (husband) in the first session of therapy.

Do y- do you wanna go? Umm, I think that when we started dating, we were both in a more of a mutually beneficial kind of – the power dynamic was a little different, or I at least felt more – like I played more of a supportive role in like our relationship. Like I was a more of a support for you [emphasis] like I provided more support, and then as time went on and I guess my OCD symptoms became worse and stresses increased we, we moved in together and then uhh, looking for jobs and graduate school and more jobs and that kind of thing. Umm, and also then I – in my –in my uhh, therapy that I was having become more inconsistent. I found that as my symptoms grew worse, I was unable to provide as much support to her. For her own issues and the power dynamic kind of shifted – not so much that there's a power dynamic, but that I wasn't – you were able to provide me with support sometimes but I wasn't able to provide you with the same amount of support that you needed, which we kind of realized a few weeks ago.

Firstly, the relationship episode reflects an awareness on the husband's part of the impact his OCD symptoms (and he) may have had on a growing imbalance in the relationship. He reflects on this with a degree of awareness of how this is likely affecting his partner and the overall dynamics in their relationship. Therefore the segment was anchored in We-ness level 4. However, while he is aware, there is yet to be an expression of an effort to change such a dynamic. Therefore, the above segment was given the code of 4M.

The next chunk was taken from the seventh session of therapy and reflected the perspective of a wife whose husband had OCD.

That's it, yeah that's what it is, like you know I'm a little bit stronger and – and it's going back to you know all those talks that we've had here. It's like you know that I can go to him and like – I will say and I'll say, "well lets – lets us figure this out, you know". We have to put "we" into it, not "you" or "I" – we together have to – and we do talk and – and we're like "okay", so I think that's a comforting level as well that's like "okay I'm not alone it in, I can go, move with this together".

In this relationship episode the wife is reporting a shared experience of her relationship and is articulating out loud her conceptualization of it. More specifically, she views her marriage as a partnership and understands and appreciates the utility and purpose of working together. Therefore, this segment was anchored in level 5 of we-ness coding. Furthermore, she implies that they work together against outside challenges and thus this segment was coded 5T.

After all the segments from each of the sessions had been coded, a second blind rater coded 20% of the segments. The blind rater had been trained in We-ness coding alongside the first author and was familiar with the study protocol. The intraclass correlation coefficient was r = .92. In each case where there was disagreement on the appropriate code the raters discussed discrepancies and a final code was decided on. After all codes were assigned, a mean We-ness score was calculated for each of the partners for the first and final sessions. Mean scores were calculated by summing individuals' scores for each session and dividing by the total number of Relationship Episodes for that session. Mean We-ness scores can range from 1 to 24.

Dyadic Interaction Paradigm (DIP): Video-Recall Measure of Empathic Accuracy. The Dyadic Interaction Paradigm (DIP) is based on Icke's procedure (Ickes, 1997; 2001), a widely used and well validated observational measure where partners are asked to infer what the other is thinking. This procedure provides an accurate measure of empathic accuracy; the ability of a person to infer the thoughts and feelings of another (partner, friend, etc.) In previous trials of SCCT empathic accuracy was found to be correlated with We-ness and relationship satisfaction in the final session (Reid & Ahmad, 2015), therefore we wanted to attempt to replicate these findings. For the present study the DIP protocol was employed mid-way through the final session. The following DIP procedure was followed:

a) *Collection of videotape data*: During the final session couples were taken to a research room across the hall from the typical 'therapy room'. They were told that they would be videotaped having a discussion for 10 minutes. Couples were then asked to come up with a topic that currently caused conflict between them. After the couples decided what the topic would be the co-therapist began to videotape their conversation and left the room for 10 minutes. After

10 minutes the co-therapist returned and asked one of the partners to leave the room and complete the final questionnaire package while waiting.

b) *Collection of thought/feeling data:* The partner who remained with the co-therapist was given the following instructions:

> *You are going to watch the videotape just made of the interaction. You will be asked to record the thoughts and feelings you had during the interaction. Once the videotape begins, watch the tape carefully. When you recall having had a specific thought or feeling during the interaction, not now in response to watching it, tell me to pause the recording at that moment. It is important that you tell me to pause the tape at the exact moment that you remember having had the thought or feeling. If you find you passed the moment please let me know and I will rewind the tape to the point where you recalled having that thought. Record all thoughts or feelings on the form and rate whether it was a positive, neutral or negative thought/feeling.*

The partner was then shown the Self Thought/Feeling Coding Form (Appendix L) and instructions on how to use the form were provided. The partners were asked to indicate the time stamp of their thought/feeling in the first column, with emphasis placed on an accurate time stamp being provided to increase accuracy of the task. Participants were then instructed to complete the sentence stem: *I was thinking and/or feeling* in one or two sentences on the Self Thought/Feeling Coding form. They were told that it was acceptable to indicate the same thought or feeling if it recurred throughout the video. In the third column partners were asked to indicate the valence of their thought or feeling, circling (-) for negative, (+) for positive and (0) for neutral. Partners were encouraged to be as honest as possible and were assured that their partner would not see their responses. Each partner was encouraged to identify 10 moments where they

recalled thinking or feeling something in the context of the relationship. To ensure that each partner understood the instructions of the task they were asked to read out loud their initial thoughts/feelings. After the first partner had completed the initial protocol they returned to the therapy room and began completing the final questionnaire package while the other partner came to the research room and followed the same video-tape procedure.

c) Collection of empathic accuracy data: After both partners completed the initial videotape rating they returned to the research office to complete a second rating. During this second reading the partners were instructed to guess what their partner had been thinking/feeling when they stopped the video-tape and were instructed as follows:

> *Now I am going to play the session one more time. This time I will stop it at the times your partner recorded having had a thought or feeling. We are now interested in your guesses about what the other person was thinking or feeling during the interaction. Once the tape begins, watch it carefully, this time concentrating on the other person. This time you will not choose where to stop the tape. Instead I will stop the tape. Use the Partner Thought Feeling Rating Form to record your guess.*

The tape was then played and the co-therapist paused it at points previously selected. The partners were instructed to use the Partner Thought/Feeling coding form to indicate what they believed their partner was thinking and or feeling

Computation of empathic accuracy scores. Empathic accuracy scores were computed using a previously established protocol. Scores were determined by comparing each partner's inference with the corresponding thought/feeling entry from the target partner. Thought/feeling entries were de-identified so that raters would be blind to their identity. A three-point scale was used to rate the degree of similarity between the responses: 2 = essentially similar content

although words may differ, clear hit; 1= somewhat similar, but not the same content, 0= essentially different, clear miss. To obtain a score of 2 the following criteria needed to be met by both the actual and inferred thought/feeling: 1. Whether self, partner or both were being referred to 2. Same topic 3. Same evaluation/affective tone. In instances where the evaluation or affective tone was unclear the valence rating was used.

A composite empathic accuracy score was then calculated for each partner. The sum of all the scores out of 2 was computed for each partner. Then, a percent accuracy score was calculated by dividing the total score by the number of thought/feeling inferences x 2. This is because for each inference there is a possible 2 points that can be earned based on the accuracy of a response. For example, for a set of 7 thought/feeling inferences, if a partner scores 8 points total, this would then be divided by 14 (7 x 2), to derive a percent accuracy score. i.e. 8/14 x 100 = 57% accuracy. Previous studies that used SCCT as the primary intervention found high inter-rater reliability for empathic accuracy scores, Cronbach's α= .93, (Dalton, 2007). For the present study inter-rater reliability was good, Cronbach's α= .89.

Data Analysis Plan

The data collected had a hierarchical structure as repeated measures were nested within individuals and individuals were nested within dyads (see figure 2). As each individual exists within a dyad their responses are more likely to be correlated to one another; thus, violating the assumption of independent observations. Ordinary least squares regression (OLS regression) assumes independent observations (more specifically independence of residuals) and is unable to account for the non-independence of residuals as it ignores the hierarchical data structure (Atkins, 2005; Christ et al., 2017; Ledermann & Kenny, 2017). If used, this would likely lead to an increase in Type I error, where results are incorrectly interpreted as significant. In order to

appropriately account for the non-independence of residuals, multilevel modeling (MLM) was employed as the primary method of analysis. MLM is a method of analysis that was developed specifically for clustered data that violates the assumption of independence (Ledermann & Kenny, 2017). This method partitions error terms differently, and instead estimates variance at each level of the hierarchy. This results in error terms that are no longer correlated and can then be modelled as independently occurring observations. This ultimately results in more accurate predictions that are less susceptible to Type I error (Christ et al., 2017; Ledermann Kenny, 2017). For the above reasons, this method of analysis is widely used in couples research and more broadly within health and educational research where a hierarchical structure is very common, i.e. students nested within classes, classes nested within schools etc. (e.g. Christ et al., 2017; Goldstein, 1995; Ledermann Kenny, 2017).

Chapter Three: Results

Descriptive Statistics

All analysis was completed using SPSS version 27 and R studio version 1.4.1106. SPSS was used for preliminary analysis including examination of descriptive statistics, reliability, and examination of assumptions of normality and homogeneity of variance. The descriptive statistics for all variables pre and post therapy are displayed below in Table 2. The presence of outliers was examined using box and whisker plots and histograms. No significant outliers were detected using these methods; thus all of the data points were retained. Next, normality and homogeneity of variance were examined. Each of the outcome variables were reviewed visually using histograms and normal Q-Q plots. Normal Q-Q plots graph observed data points against a normal distribution. The distance between the normal distribution and observed data provides an estimation of the data's deviation from normality. The observed data points for each outcome variable in the present study were close to the line, indicating that they were normally distributed (see Appendix N).

Table 2

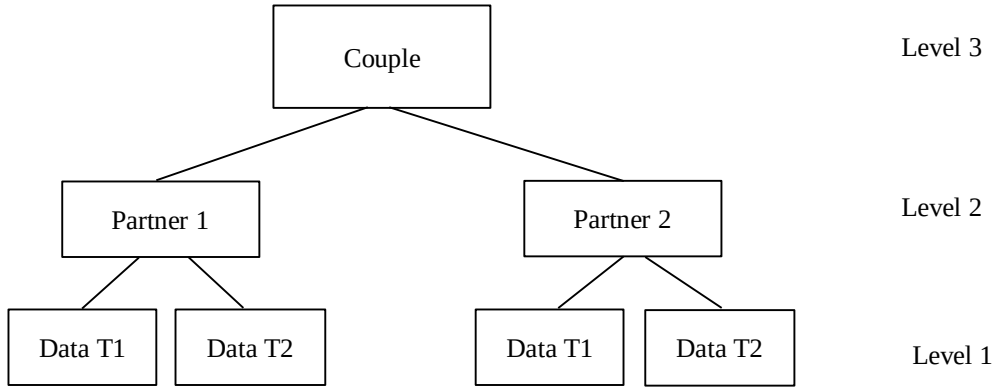
Means, Standard Deviations and Range of Scores Pre and Post Therapy

Measure	Pre-Therapy		Post- therapy	
	Mean (SD)	Range	Mean (SD)	Range
YBOCS	21.25* (4.83)	12-28	17.33* (5.77)	7-28
OCI-R	28.17 (11.58)	14-49	26.33 (13.93)	9-51
BDI	13.67 (9.86)	2- 29	12.67 (9.75)	2- 32
FAS-SR	21.75 (20.68)	0-61	24.58 (19.40)	1-63
DAS	102.50 (14.80)	77-133	106.25 (16.23)	76-134
RAS	38.39 (6.01)	28-54	38.21 (4.32)	30-46
IOSS	4.58 (1.38)	1-7	4.54 (1.35)	2-7
CMQ	103.61 (17.99)	59-133	107.75 (18)	77-138
CPQ-CC	4.67 (9.47)	-14-19	6.92 (10.72)	-14-20
CPQ-DW	28.46* (8.73)	7-42	24.58* (9.32)	8-42
CPQ-A/W	11.38 (4.95)	3-19	10.54 (4.93)	3-19
We-ness	8.71*(2.09)	4.12-13	13.57 *(4.07)	4.22-19.83
EA	-	-	61.17 (18.30)	17-90

Note. YBOCS = Yale-Brown Obsessive Compulsive Scale, OCI = Obsessive Compulsive Inventory-Revised, BDI = Beck Depression Inventory, FAS-SR = Family Accommodation Scale Self-Report, DAS = Dyadic Adjustment Survey, RAS = Relationship Assessment Scale, IOSS = Other in Self Scale, CMQ = Couple Mutuality Questionnaire, CPQ-CC = Communication Patterns Questionnaire-Constructive communication, CPQ-DW = Communication Patterns Questionnaire-Demand Withdraw, CPQ-A/W= Communication Patterns Questionnaire-Avoidance/Withholding, EA=Empathic Accuracy.

Figure 2

Hierarchical Data Structure



Mediation Models

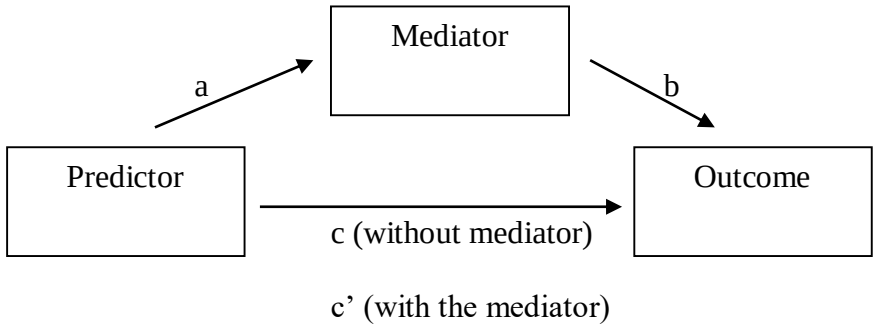
Several of the hypotheses in the present study involved mediation analysis. Mediation analysis allows us to examine how an independent variable (X) exerts its influence on an outcome variable (Y). It postulates that an intervening variable (M) is the mechanism through which the change occurs. In other words, the variation in X is thought to cause variation in M, which subsequently causes variation in Y. Mediation analysis allows us to look at both so called direct and indirect effects. Direct and indirect effects are represented visually in Figure 3 below, where c is the total effect of the predictor X on the outcome variable Y. The direct effect c' is the effect of the predictor variable (X) on the outcome variable (Y), once the effect of the mediator (M) is taken away. Finally, the indirect effect is equal to a*b and represents the effect of the predictor variable (Y) on the outcome variable (X) via the mediator (M) (Hayes, 2018).

Over the past decade the use of mediation analysis has expanded widely. This type of analysis was once considered highly complex but with advancements in both research and

statistical software it has become much more common place. Along with the increased use and application of mediation analysis has come revisions to its methodology. In the past, the causal steps approach proposed by Baron & Kenny (1986) in their seminal work was widely adopted. However, in recent years this approach has come under scrutiny and is no longer considered to be the best method for mediation analysis (Hayes, 2018; Montoya & Hayes, 2016; Mumtz et al, 2018). Thus, in the present study the methodology for mediation analysis as outlined by Hayes (2018) was utilized.

Figure 3

Simple Mediation Analysis



Independent Observations

The only exception to the hierarchical structure discussed above was for instances where data were collected for affected partners only *or* for their intimate partners *only*. For example, OCD symptomatology was measured only in those partners who suffered from OCD, and not in their intimate partners. Therefore, these scores lacked the hierarchical structure present for the rest of the data. Thus, when analyzing these variables, the use of statistical methods that assume independence of error terms was acceptable and undertaken.

Hypothesis Tests

H1: Individuals with OCD will experience a significant decrease in OCD symptomatology after engaging in SCCT. In order to test this hypothesis a paired samples t-test was used. Although each partner belonged to a dyad, as previously mentioned, only those partners with OCD contributed a score of OCD severity as measured by the YBOCS and OCI. A paired samples t-test was conducted to compare mean YBOCS scores pre therapy to those post therapy. There was a significant reduction in YBOCS scores from time 1 (M = 21.25, SD = 4.83) to time 2 (M = 17.3, SD = 5.77 , $t(11)$ = 4.524, p = 0.001). A paired samples t-test was conducted to examine pre-post differences in OCI scores. There was no significant reduction in OCI scores from time 1 (M = 28.17, SD = 11.6) to time 2 (M = 26.33 SD = 13.93), $t(11)$ = 1.37, p = 0.197. Thus, our hypothesis was partially confirmed as scores on the YBOCS decreased significantly pre to post treatment. However, no significant change in OCI scores was found. As a follow up analysis, we examined the correlation between OCI scores and YBOCS scores at time 1 and time 2 (Table 3). Results indicate strong correlations between OCI and YBOCS scores at all time points. Higher YBOCS scores strongly predicated higher OCI scores, both at the beginning of treatment and after the completion of treatment.

Table 3

Correlations Between YBOCS Scores and OCI Scores at Time One and Time Two

	1.	2.	3.	4.
1. YBOCS T1	-			
2. YBOCS T2	.855**	-		
3. OCI T1	.685*	.714**	-	
4. OCI T2	.688*	.717*	.968**	-

Note: YBOCS: Yale Brown Obsessive Compulsive Scale, OCI Obsessive Compulsive Inventory * $p < .05$, ** $p < 0.01$.

H2: It is hypothesized that partners will demonstrate an increase in quality of their relationship after engaging in SCCT. Multilevel modeling was used to examine the change over time in the following variables: DAS, RAS, IOSS, CMQ, CPQ-CC, CPQ-DW, CPQ-A/W. All analyses were completed in R studio version 1.4.1106. The first model examined was a fixed effects model with a random intercept. In each case the relationship variable was set to the outcome variable while time was the predictor variable. In this model each of the individuals are assumed to have the same rate of change over time as the slope is kept constant; however, the intercept, or starting point for each of the outcome variables, was allowed to vary. The findings are summarized in Table 4. As can been seen the effect of time on most relationship variables was non-significant. The one exception was for the CPQ-DW subscale, as this did change significantly over time. There was a significant reduction over time in demand withdraw communication characteristics in our sample. Overall however, we are not able to conclusively support our hypothesis that there would be significant improvement in relationship functioning, given the overwhelming majority of relationship variables did not change significantly over time.

Table 4

Multilevel Model: Changes in Relationship Functioning Over Time (N=24)

Outcome Measure	Estimate	SE	95% CI		*t* (df =45)	*p*
			LL	UL		
DAS	-2.04	2.06	-6.21	2.07	-0.99	0.32
RAS	-0.27	1.24	-2.74	2.23	-0.22	0.82
IOSS	-0.04	0.31	-0.65	0.56	-0.14	0.89
CMQ	3.79	2.37	-0.94	8.54	1.59	0.11
CPQ-CC	2.25	1.56	-0.87	5.37	1.44	0.15
CPQ-DW	-3.88	1.74	-7.34	-0.40	-2.23	0.03
CPQ-A/W	-0.83	0.74	-0.63	5.21	-1.12	0.26

Note: DAS = dyadic adjustment Scale, RAS = Relationship Assessment Scale, IOSS = Other in Self Scale, CMQ = Couple Mutuality Questionnaire, , CPQ-CC = Communication Patterns Questionnaire-Constructive communication, CPQ-DW = Communication Patterns Questionnaire-Demand Withdraw, CPQ-A/W= Communication Patterns Questionnaire- Avoidance/Withholding

H3: ***Partners We-ness scores will increase significantly from session 1 to session 7 of SCCT.***

In order to test whether We-ness increased significantly over the course of treatment, a MLM fixed effects model with random intercept was examined using R studio. We-ness was set as the outcome variable and time as the predictor variable. Time predicated a significant increase in We-ness scores as can be seen in Table 5. Therefore, the hypothesis that We-ness scores would increase significantly over time was supported.

Table 5

Multilevel Modelling: Examination of We-ness Over Time

Effect	Estimate	SE	95% CI		*t* (df =45)	*p*
			LL	UL		
Fixed effect						
Intercept	8.71	0.66	7.41	9.99	13.25	< 0.001
Time	4.82	0.72	3.39	6.25	6.73	< 0.001

H4: ***The effect of SCCT on reported relationship quality will be mediated by We-ness.*** In order to proceed with mediation analysis between relationship quality and We-ness scores, one would first have to satisfy the assumption that there is a significant main effect. That is to say that one would need to first establish that relationship variables change significantly over time. As noted above however, MLM analysis using a fixed effects model failed to establish that there was significant change over time. Therefore, mediation analysis was not undertaken.

H5: ***The effect of SCCT on OCD symptomatology will be mediated by We-ness.***

In order to examine the above hypothesis two separate mediation models were examined. The first model examined We-ness scores at time 1 while the second examined We-ness scores at time 2 (See Figure 4). In each of the models there were two mediators. For the first model, the mediators were We-ness at Time 1 for affected individuals and We-ness at Time 1 for intimate partners. For the second model, the mediators were We-ness at Time 2 for affected individuals and We-ness at Time 2 for intimate partners. For each model the independent variable was YBOCS scores at time 1 and the outcome variable was YBOCS scores at Time 2. The mediation analysis was set up in this way for a number of reasons. Firstly, the hierarchical structure of the

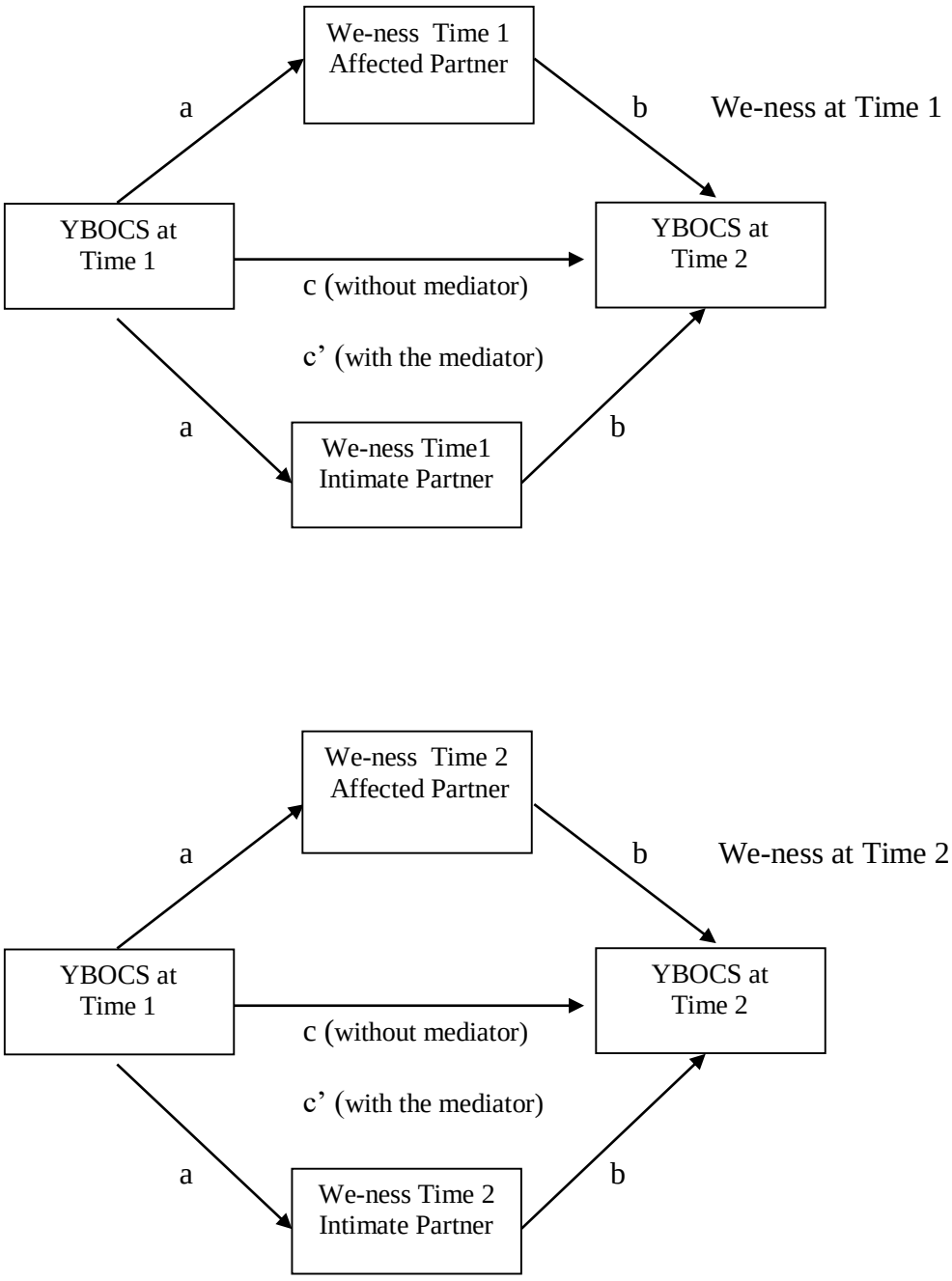
data necessitates that we structure the model in such a way to account for the fact that partners are nested within dyads. If we were to simply combine all of the scores into a We-ness mediator this would ignore the hierarchical structure and likely contribute to Type 1 error, as the error terms are not independent. Therefore, the model was set up in such a way to explicitly account for the non-independence of partners' scores by separating them into meaningful categories. This is also theoretically coherent as there is reason to believe that individuals with OCD and their intimate partners may assess the quality and function of their relationship differently (Belus et al., 2014; Boeding, 2013) and therefore may differentially impact their own We-ness scores.

The indirect effect of We-ness scores for intimate partners at Time 1 was non-significant, B = -0.105, SE = 0.107, p = 0.327, CI [-0.315, 0.105]. Thus, intimate partners' We-ness scores at the beginning of therapy did not mediate the relationship between YBOCS scores over time. Similarly, the indirect effect of We-ness scores for affected partners at Time 1 was non-significant, , B = -0.018, SE = 0.119, p = 0.882, CI [-0.250, 0.215]. Affected partners' We-ness scores at time 1 did not mediate the relationship between YBOCS scores over time.

Similar results were found for the second mediation analysis. The indirect effect of We-ness scores for intimate partners at Time 2 was non-significant, B = -0.003, SE = 0.109, p = 0.978, CI [-0.217,0.211]. Thus, intimate partners' We-ness scores did not mediate the relationship between YBOCS at Time 1 and Time 2. Finally, the indirect effect of We-ness scores for affected partners at Time 2 was also non-significant, B = -0.212, SE = 0.264, p = 0.423, CI [-0.730, 0.307]. Affected partners' We-ness scores did not mediate the relationship between YBOCS scores over time.

Figure 4

Mediation Models Examining Relationship Between YBOCS Scores and We-ness Scores



H6: ***The effect of SCCT on OCD symptomatology will be mediated by partner accommodation.*** Next, we were interested in exploring whether or not partner accommodation accounted for the variability in YBOCS scores over time. A mediation analysis examining the indirect effect of partner accommodation at time 1 on YBOCS scores over time, as well as a mediation analysis examining the indirect effect of partner accommodation at time 2 on YBOCS scores was examined. Results indicated that the indirect effect of partner accommodation at time 1 was non-significant, $B = 0.034$, SE = 0.068, $p = 0.61$, CI [-0.099, 0.168]. Similarly, we found that the indirect effect of partner accommodation at time 2 was non-significant, $B = 0.053$, SE = 0.096, $p = 0.578$, CI [-0.134, 0.240]. Thus, partner accommodation did not mediate the relationship between YBOCS at time 1 and YBOCS at time 2.

H7: ***Greater partner accommodation at the end of treatment will be associated with decreased relationship satisfaction in partners without OCD.*** *The* above hypothesis was examined using a bivariate Pearson correlations to determine if greater rates of partner accommodation at the end of treatment predicted lower relationship functioning in intimate partners. The findings are presented in Table 6. As can be seen from the results, the relationship between partner accommodation and the CPQ- Demand/Withdrawal subscale was significant. Greater partner accommodation predicated greater demand and withdrawal characteristics in relationships, as rated by intimate partners. No additional significant correlations between relationship satisfaction/functioning and partner accommodation at time 2 were found.

Table 6

Correlations for Relationship Variables and Partner Accommodation in Intimate Partners at Time Two

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. FAS-SR	-								
2. CMQ	-.199	-							
3. CPQ-CC	-.114	.858**	-						
4. CPQ-DW	.627*	-.636*	-.625*	-					
5. CPQ-A/W	.491	-.749**	-.753**	.853*	-				
6. DAS	-.299	.898**	.799**	-.720**	-.884**	-			
7. RAS	-.368	.798**	.546	-.594*	-.706*	.814**	-		
8. IOSS	.560	-.525	.179	-.571	-.507	.557	.787**	-	
9. We-ness	.523	-.154	.025	.524	.399	-.296	-.508	-.811**	-

Note: DAS = Dyadic Adjustment Survey, RAS = Relationship Assessment Scale, IOSS = Other in Self Scale, CMQ = Couple Mutuality Questionnaire, , CPQ-CC = Communication Patterns Questionnaire-Constructive communication, CPQ-DW = Communication Patterns Questionnaire-Demand Withdraw, CPQ-A/W= Communication Patterns Questionnaire- Avoidance/Withholding, FAS-SR = Family Accommodation Scale- Self Report. * $p < .05$, ** $p < 0.01$.

Additional Analysis

While not part of our main hypotheses for the present study, we were interested in whether empathic accuracy scores were positively related to We-ness scores at time 2. Therefore, a Pearson correlation was conducted to examine the relationship between these two variables. There was no significant relationship between empathic accuracy scores and We-ness scores at the end of treatment, r (23) = -0.142, p = 0.530. In other words, an individual's level of We-ness at the end of treatment did not predict their level of empathic accuracy at the end of treatment.

We were also interested in determining if there were any significant changes in symptoms of depression among affected individuals, as measured by the BDI. A paired samples

t-test was conducted and found that there was no significant difference between depressive symptoms at time 1 (M = 13.67, SD = 9.85) and depressive symptoms at time 2 (M = 12.67, SD = 9.75), $t(11)$= 0.609, p = 0.55. Thus, symptoms of depression among those individuals with OCD did not differ significantly over the course of our intervention.

Chapter Four: Discussion

The purpose of the present study was to investigate the efficacy of an integrative couples treatment for dyads where one partner suffers from OCD. We were interested in examining the impact of this treatment on relationship functioning, partner accommodation and OCD symptomatology. To our knowledge, this is the first study to implement a true 'couples therapy' for OCD, where the intervention is designed to benefit both the individuals with OCD and their intimate partners equally. In addition, as an integrative treatment, it was focused on both reducing OCD symptoms *and* on improving relationship functioning as a primary aim. This approach contrasts with past studies which have focused almost exclusively on the reduction in OCD symptoms, with a secondary focus on relationship factors thought to be directly related to OCD symptomatology. The present study is also the first to measure relationship functioning and OCD symptomatology at the couple level, as all previously published studies in this area have looked at affected partners and intimate partners independent of one another (Abramowitz et al., 2013; Abramowitz et al., 2012; Belus et al., 2014; Emmelkamp et al., 1990; Van Noppen et al., 2003)

OCD Symptomatology

One of the primary aims of the present study was to determine whether or not the integrative treatment offered was effective in reducing OCD symptomatology. To date, most studies examining treatments for OCD utilize CBT and EX/RP, as it is considered a first-line treatment (e.g. Abramowitz et al 2012; Abramowitz et al., 2013). Thus, limited studies have investigated the effectiveness of utilizing an integrative therapeutic approach; particularly one that integrates an intimate partner. Therefore, it was hypothesized that the integrative therapy offered in the present study would be effective in reducing OCD symptomatology. This hypothesis was

partially supported. There was a significant reduction in OCD symptoms over time as measured by the YBOCS. However, while there was a decrease in OCD symptoms as measured by the OCI, this decrease was not statistically significant. This was a somewhat surprising finding, as one would expect this improvement to be apparent on both of our measures of OCD symptomatology. However, the nature of the measures used might in part explain this finding. The YBOCS is the current gold standard measure of OCD symptomatology and is widely used in both research and practice (Abramowitz et al, 2013; Richter et al, 2018). The YBOCS involves an interview with a trained rater who is able to both explain and explore responses from the affected individual. In doing so, it is not uncommon to ask additional probing questions to clarify a participant's response. Because of this, it is possible that results obtained from the administration of the YBOCS may in fact be more accurate and reliable than those obtained via a self-report measure, such as the OCI. In other words, the YBOCS has greater content validity. Consistent with this supposition is the clinical observation in the present study that overall, the reported change in OCD symptoms appeared to be substantial. The primary therapists in the study noted, with few exceptions, that most participants experienced a change in OCD symptoms that was meaningful.

Further support for this theorizing can be found when looking at past research comparing the OCI and the YBOCS. Past research has found weak to moderate correlations between the OCI and YBOCS scores (Abramowitz & Deacon, 2006) among individuals with OCD. Abramowitz and Deacon (2006) suggest that the OCI may be a better indicator of the variety of symptoms one suffers from, rather than an accurate indicator of symptom severity per se. The OCI asks questions about distress associated with specific subtypes of symptoms, whereas the YBOCS is a measure of global severity. Additionally, when administering the YBOCS, an individual is first

asked to focus on the symptoms which are most problematic or distressing for them; known as target symptoms. Target symptoms for each individual are first established by going through an extensive list of symptoms and asking participants to endorse those that apply to them. Once target symptoms are established, ratings measuring time occupied, level of interference, level of distress, resistance against and degree of control over these target symptoms are established. Ratings are obtained separately for obsessions and compulsions associated with the target symptoms and then summed to determine a final score. Therefore, the YBOCs may be more sensitive to changes that occur over time, particularly in target symptoms. Conversely, the OCI may not be as sensitive to changes over time in target symptoms given the greater heterogeneity of the measure. Taken together, it appears that the YBOCS provides a more accurate and sensitive measure of symptomatology. Thus, it seems appropriate to tentatively conclude, based on the current findings, that the integrative treatment offered was effective in significantly reducing OCD symptoms.

Relationship Functioning

Previous trials of SCCT have found that the intervention results in significant improvements in relationship functioning (Ahmad & Reid, 2016; Reid et al 2006, Reid et al., 2008; Reid et al, 2015). SCCT has been shown to result in significant improvements in dyadic adjustment, namely communication styles, overall distress experienced and relationship satisfaction. It has also been found to improve partner's perceptions of how well their counterpart is listening to what they have to say (Reid et al, 2015). Furthermore, Reid & Ahmad (2015) found that these improvements were sustained over time, as the significant gains in the couples' relationship satisfaction remained when assessed at a two-year follow-up. All of the couples in previous SCCT trials presented as seeking therapy for significant relationship

difficulties. However, in the present study, we found that partner's assessments of their relationship, both in terms of level of satisfaction, communication patterns (with one exception), level of closeness and overall relationship distress, either remained unchanged or did not improve in a substantive way over the course of treatment. This result was somewhat unexpected given the changes seen in previous SCCT trials and couple's interventions more broadly (e.g. Hewison et al., 2016; Reid et al., 2015). Several important differences between the present study and past trials may help to explain these findings. In past SCCT trials, the level of relationship discord reported by couples far exceeded that reported in our study. For example, partners in the present study began treatment with dyadic adjustment scores in the same range as those scores obtained at the end of treatment for couples in past SCCT trials (Reid et al., 2006; Reid et al., 2008). Additionally, these scores were consistent with levels reported by couples who are 'well-adjusted dyads' (Spanier, 1976), whereas previous studies examining the impact of SCCT involved couples who were considered 'highly distressed' (Spanier, 1976). Similar results were found for other relationship measures. For example, in this study the partners' assessments of relationship satisfaction at the beginning of treatment were similar to post-intervention levels found in previous SCCT studies. As well, partners' assessments of the mutuality, or similarity within their interactions at baseline, were at a level seen for post-intervention scores of partners in past studies. It is therefore possible, given that the partners were assessing their relationship as one that was well adjusted from the start, that there was an attenuation effect, specifically a ceiling effect. Thus, at this level of functioning, the intervention may have had limited effect on the target symptoms.

The level of functioning seen at baseline for couples was also surprising given what previous research has found regarding the deleterious impact of OCD on care-givers' functioning

(e.g. Abbey et al, 2007; Albert, 2010, Bystritsky et al., 2001; Strauss et al, 2015). Many studies have found that the presence of OCD in family systems is correlated with decreased overall functioning and quality of life in caregivers (e.g. Strauss et al., 2015). Given these findings, one would naturally assume that the presence of OCD in a romantic relationship would significantly impact any assessment of relationship functioning. However, this may not be the case. Most of the research on accommodation and family system functioning has been conducted on family systems, usually parent-child relationships, rather than couples exclusively. Thus, for many of these studies, parent-child dyads comprise the majority of the participant pool. There may be something distinct about a parent-child dyad vs. a romantic dyad. Perhaps a parent is more willing to accommodate their child and therefore is more highly impacted by their OCD symptoms, whereas a spouse may be less likely to accommodate to the same extent.

In addition to the above consideration, it is also possible that the individuals who took part in the present study may have been self-selecting. As noted above, couples who took part were in relationships that they assessed as well functioning over-all. We know more typically that with increased severity of OCD symptoms, individuals are less likely to end up in a romantic relationship (Abbey et al, 2007). Thus, it may have been the case that the participants who took part in the present study were the ones who were high functioning enough to do so from the start.

The lack of significant change over time in relationship functioning may also be the product of a notable difference between the presenting concerns of participants in the present study vs. past studies using SCCT. In past trials, couples who entered were markedly distressed, and improving their relationship functioning was the primary therapy goal (Reid et al., 2006; Reid et al., 2008). In the present study however, intimate partners entered treatment often out of a motivation to assist their partner with OCD. They frequently reported a desire to see

improvement in the symptoms of OCD their partner struggled with, hoping that this would in turn lead to a more functional relationship. While affected individuals entered treatment seeking assistance in managing their OCD symptoms, as well as wanting to ameliorate the burden they felt was on their partner due to their OCD symptoms. These differences may account for the higher functioning seen overall in our sample, and therefore the lack of improvement on most of our measures of relationship functioning. Further support for this supposition is provided by the knowledge that Abramowitz et al (2013) found similar relationship functioning levels at baseline to those found in the present study. Such findings, provide additional evidence for the theory that individuals engaged in a romantic relationship where OCD is present may be functioning at a higher level than expected.

Finally, it is possible that participants in the present study answered the questionnaires in a way that reflected their feelings about the OCD, rather than a true assessment of relationship functioning. Partners often expressed unrealistic expectations of how much symptoms might change or decrease over time. This was clinically more noticeable in intimate partners, as they would often express frustration at the pace with which their affected partner made progress. This may have been reflected in the findings, as partners may have expected that after the completion of treatment, OCD symptoms would have decreased more substantially. If this was their expectation, they may have evaluated the relationship based on this one factor, rather than other changes or improvements that may have occurred over the course of therapy.

The only exception to the above null findings in the present study was a significant improvement over time in a single type of communication pattern. Partners reported a decreased tendency to engage in demand-withdraw characteristics, a communication pattern that is known to be associated with poorer relationship functioning overall (Christensen et al., 1990; Hewison

et al, 2016). In addition, we found that at the end of treatment greater partner accommodation was associated with greater demand withdraw characteristics, as assessed by intimate partners. Thus, the more accommodation behaviours a partner tended to engage in, the greater likelihood it was for them to also report more of these types of negative interactions. The intervention used more specifically targeted demand-withdraw characteristics as it directly focused on increasing openness between partners and directly suggested alternative ways to manage conflict that arose in the context of both accommodation, and when the affected partner was struggling with OCD symptoms. We actively encouraged partners to openly express their feelings, particularly during moments of conflict. In the context of OCD, this meant encouraging affected partners to indicate when and how they were struggling with OCD. We found clinically that it was common for partners with OCD to hesitate in sharing the specifics of their symptoms with partners. They often feared that they would not be understood and/or that they would be judged due to the sometimes bizarre nature of their beliefs. It was in fact surprising at times how little intimate partners knew about the OCD that was impacting the other. We observed that this hesitancy to disclose often led to conflict, as intimate partners did not understand what was motivating problematic or time-consuming behaviour in the other (ritualizing before leaving the home, repeating certain phrases etc.). Intimate partners were thus more likely to interpret the behaviours as malicious or insensitive in nature, creating more conflict. We observed that when partners engaged in more direct and open communication about OCD symptoms this helped both partners to better navigate challenging situations. When intimate partners better understood why their affected partner engaged in certain behaviours, as well as how distressed they were, affected partners were observed to experience increased empathy and could more readily support the other. This increased empathy and greater understanding regarding the other partner's

perspective is a direct target of SCCT. There was a strong emphasis placed on having partners be increasingly aware of their shared relational context; thereby helping them to approach difficulties as a unit. In summary, the findings from the present study indicate that the intervention was effective in decreasing demand-withdraw communication between partners and that overall couples were functioning at a higher level than was expected.

Couple Identity: We-ness

One of the main mechanisms of change in SCCT, according to past research, has been found to be We-ness (e.g. Reid et al, 2015). As a reminder, We-ness refers to the level of identification each partner has with their relationship; how their belonging to a significant relationship informs their own personal identity. Increased levels of We-ness in a relationship allow partners to approach conflict with a more enhanced sense of their belonging to that relationship. In so doing, partners are naturally oriented towards navigating conflict with empathy, as they act in accordance with what would be beneficial for the relationship, rather than being motivated by their individual needs exclusively. In the present study, we hypothesized that levels of We-ness would increase significantly overtime. We found strong support for this hypothesis as partners levels of We-ness increased significantly from pre to post therapy. This finding provides further support for SCCT's ability to impact the degree to which individuals integrate couple-hood into their own identity. This finding is consistent with past research that has found substantial improvements in levels of We-ness over the course of SCCT (Reid et al., 2006; Reid et al, 2008). It is particularly noteworthy as our intervention, as discussed above, was not found to result in a significant improvement in relationship functioning. These findings may reflect the uniqueness of the population being studied. As noted earlier, there were substantial

differences between participants in the present study and those in past trials of SCCT. These factors may contribute to the pattern of results that was observed.

One additional consideration that may in part explain our findings, is the nature of the We-ness measure itself. More specifically, this is a measure that lacks face validity (i.e. the respondent does not know what is being measured). Because We-ness is derived from transcripts of therapy sessions, participants did not have a good understanding of what was being measured. They understood and consented to having sessions recorded, and were aware that we would be looking at their discourse, but did not have knowledge of the specific target of these recordings. Thus, We-ness could not be influenced by face-validity in the way the self-report measures might have been. It is therefore possible that significant shifts took place in We-ness that were independent of reported changes in relationship functioning overall. In fact, this appears to be the case as levels of We-ness did not predict relationship functioning in the present study.

Couple Identity, Relationship Functioning and OCD Symptomatology

Several mediation analyses were examined in the present study. First, we were interested in examining if We-ness mediated the relationship between baseline and post intervention relationship functioning. However, as noted above, we did not find there to be a significant improvement in relationship functioning. Therefore, we did not undertake this analysis as there was insufficient evidence to support it. Thus, we were unable to support the hypothesis that the effect of our intervention on relationship functioning was mediated by We-ness.

In addition to exploring the impact of our intervention on OCD symptomatology and We-ness separately, we were interested in the relationship *between* We-ness and OCD symptomatology. As such, we examined mediation models where We-ness (pre and post) was hypothesized to mediate the relationship between OCD symptoms at the beginning of therapy

and OCD symptoms at the end of therapy. Ultimately, We-ness was not found to mediate the relationship between OCD symptomatology at the beginning and end of treatment. We also examined the correlation between these variables of interest and found that they were not significantly related. In other words, both levels of analysis seem to point to two variables that are independent of one another. This suggests that We-ness is not a mechanism of change for OCD symptoms. Although theoretically driven, based on what we do know thus far about relationship functioning in the context of OCD, our theory was not borne out. It is important to note that although we did not find support for our hypothesis, the present study was the first to examine the relationship between such variables. It was also the first to do so using a sample that was derived from both individuals with OCD and their intimate partners.

Partner Accommodation, OCD Symptomatology and Relationship Functioning

The final mediation analysis that was examined looked at the relationship between partner accommodation and OCD symptomatology. Past research indicates that greater accommodation is related to increased symptoms of OCD (Boeding et al, 2013; Strauss et al, 2015). There is also evidence that increased accommodation behaviour may precede increased symptoms of OCD in affected individuals (Lebowitz 2016; Strauss et al., 2015). In the present study we posited that partner accommodation would mediate the relationship between OCD symptoms at baseline and post-intervention. While we did see a significant decrease in OCD symptoms over time, as measured by the YBOCS, partner accommodation was not found to mediate this relationship. In fact, we did not find a relationship between these two variables. Surprisingly, partner accommodation was not found to predict OCD symptom severity. Part of what may account for this finding is the measure itself used to assess levels of partner accommodation. In the present study we utilized a self-report version of the Family

Accommodation Scale. While this is a scale that has been validated (Pinto et al., 2013), it is not one that is widely used in the literature. It is plausible that this self-report version is simply not as accurate as the original interview version in obtaining levels of accommodation. Clinical observations support this theorizing as levels of accommodation reported by partners in the study were frequently found to contradict what was reported in session. It was often the observation that levels of accommodation were far higher than what was reflected on the scale. It may be that partners were so used to accommodating the other that their ability to decipher between what was and was not accommodation may have been compromised.

Finally, we were interested in assessing whether greater partner accommodation would predict decreased relationship satisfaction among *intimate partners* at the end of treatment. Belus et al. (2014) found that increased partner accommodation was related to decreased relationship satisfaction among intimate partners who took part in couple-based OCD therapy. We wished to determine if we could replicate this finding and further explore the potential for partner accommodation to impact additional measures of relationship functioning. Upon examination, we found only one relationship variable that was significantly related to partner accommodation at the end of treatment. As previously mentioned, greater partner accommodation at the end of treatment was significantly correlated with demand-withdraw characteristics in relationships as assessed by intimate partners. In other words, the more accommodation behaviours intimate partners engaged in at the end of therapy, the more they felt their relationships were characterized by communication patterns that involve one partner demanding or blaming, while the other avoids or withdraws from the interaction. This result is consistent with our clinical observations, as partners who engaged in greater accommodation were observed to be more desperate for the other to change. These were often the partners who would in fact engage in

more confrontational behaviour, as they would often object or not go along willingly, with the requests being made by their partner. In these instances, intimate partners were quite vocal about their desire for their affected partner to better manage their OCD symptoms.

It was surprising that we did not find support for the relationship between partner accommodation and relationship functioning more broadly, as past studies have consistently pointed to the negative impact of greater partner accommodation; both for the affected individual and for the partner engaging in the accommodation (e.g. Boeding et al, 2013; Cherian et al, 2014; Strauss et al., 2015). However, as previously noted, most of the accommodation literature focuses on family systems that are not comprised of intimate relationships. Therefore, there may be something distinct about intimate relationships that accounts in part for the findings in the present study. Given the scant research in this area, it certainly warrants further investigation as this potential difference may have clinical implications.

Additional Analyses

While not part of our primary hypotheses we wished to examine several additional constructs as an adjunctive to the analysis undertaken. Past SCCT trials have examined a construct known as empathic accuracy, the degree to which partners are able to infer what the other is thinking and feeling (refer to methods section above). Past studies have found that this is related to both relationship satisfaction and We-ness at the end of treatment (Reid et al., 2006; Reid et al., 2008). The present study measured empathic accuracy at the end of treatment and examined its relationship to post-treatment levels of We-ness. We were not able to replicate previous findings, as we found that empathic accuracy did not predict levels of We-ness. In other words, greater levels of empathic accuracy did not predict greater levels of We-ness. However, we did find that empathic accuracy was higher overall in the present study than in previous

studies. This is likely due to the increased functioning of couples that participated in the study. As noted earlier, couples were substantially less distressed as compared to previous trial of SCCT. Therefore, it would stand to reason that empathic accuracy levels would be higher at the end of treatment as well.

Finally, we measured symptoms of depression in affected partners to determine whether the intervention might have an impact on these symptoms. Overall, affected partners reported minimal to moderate symptoms of depression. We found that symptoms of depression did not ameliorate over time and remained relatively constant. These findings are in contrast to those obtained by Abramowitz et al (2013), who found significant reductions in symptoms of depression among affected individuals in their couples intervention. Symptoms of depression were not the primary focus of our intervention, so this finding is not entirely contrary to what we were expecting. It would however be helpful to better understand what active ingredients in an intervention help lead to reductions in symptoms of depression. Depression is often comorbid with OCD (Richter et al., 2018), therefore if we could design an intervention that effectively targeted both OCD symptoms and symptoms of depression this would be ideal.

Strengths and Limitations

The present study was designed to address a gap in our knowledge about the efficacy of couples interventions for the treatment of OCD and relationship distress. Thus, one of its primary strengths was the novelty of both the intervention used, and the methodological design. To our knowledge, this is the first study to examine the impact of an integrative couples therapy on OCD symptoms and relationship functioning. It was also the first study to examine the impact of a couples intervention at the couple level; including both individuals with OCD and their intimate partners simultaneously. While the findings were not entirely consistent with what we

were expecting, the present study provides a foundation from which we can build in order to increase the efficacy of future treatments.

Of course, when interpreting the results of the present study it is important to consider some of the study limitations. Firstly, the small sample size was one of the most significant limitations. Given that only 12 couples completed the study, there are natural limitations on how representative our sample was of couples managing OCD in the context of their relationship more generally. It is therefore possible, that the characteristics of our sample were skewed in some ways, possibly towards higher functioning couples as previously noted. In addition, a small sample size posed challenges in terms of statistical power. It is possible that we might have been able to detect additional effects with a larger sample. A total of 24 individuals is a small sample from which to derive generalizable results and therefore the results of the present study should be interpreted with this limitation in mind.

There were also some methodological limitations that are important to consider. The present study lacked a control group and therefore the differences observed overtime in We-ness scores and YBOCS scores could be the result of regression to the mean, or spontaneous recovery. In addition, while we did make an effort to include components of CBT and EX/RP in the treatment, they may not have been extensive enough. The treatment is relatively brief, lasting just seven sessions, and although each session is two hours, this does not leave enough time for therapist-assisted exposures. There is evidence that therapist-assisted exposures have a greater impact than do self-directed exposures (Abramowitz et al., 2001; Abramowitz et al., 2002; Foa et al., 2012). This is in part because the therapist is able to guide the client through each of the steps and ensure that the exposure is being conducted correctly for maximal effect. Thus, it is possible that because we did not utilize therapist assisted exposure the impact of our intervention may

have been limited in some ways (Abramowitz et al, 2012). Therapist assisted exposures may have led to even greater improvement among affected partners.

Lastly, the sample of couples who took part in the study were all in heterosexual relationships. Therefore, we cannot be certain that our findings would apply to homosexual couples. In future, it would be important to actively recruit homosexual couples to take part in a study of this kind. This would allow us to better understand couple dynamics in general and address some of the inherent bias in couples research that, like the present study, has focused almost exclusively on the study of heterosexual relationships.

Implications and Future Directions

While research on OCD is expansive, our understanding of couples dynamics in the context of OCD is still in its infancy. The present study adds support to the conclusion that couples therapy is effective in the treatment of OCD. However, what was less clear in the present study, was the impact such an intervention can have on relationship functioning. Our intervention did not result in improved relationship functioning overall. While this may be a function of the population under investigation, it speaks to the necessity to continue to investigate the nature of intimate partner relationships in the context of OCD. We did find that our integrative intervention significantly increased levels of We-ness; how closely partners identified with their relationship. Past research found this construct to be closely related to improvements in relationship functioning, a finding that was not replicated in the current study. Future research should seek to further examine this relationship, in order to better determine if this is a finding that is born out of the nature of the population being studies or some other important factors.

A number of additional research questions also arise from the findings of the present study. Among them is determining if there are in fact substantial differences between types of relationships, for example: parent-child vs. intimate partner relationships. It would be helpful to conduct a study that directly examined the differences between these relationships, rather than treating these relationships as if they were qualitatively equivalent. If for example, parent-child relationships are associated with greater accommodation and lower overall functioning, this would warrant additional attention and the potential for a specific parent-child intervention, like that seen in pediatric populations. Better understanding the differences in relationships would enable us to offer treatments that are more targeted towards the unique challenges that arise from differing relationship dynamics.

Future studies should also systematically examine differences between couples vs. individual therapy for OCD, potentially in the form of a randomized controlled trial. This would enable us to directly compare potential benefits of including intimate partners against the current first line treatment. This would allow us to draw stronger, more broad based conclusions about both the nature of intimate relationships with OCD present, as well as the potential added efficacy of including an intimate partner in treatment. Given the overall response rate individuals experience after engaging in current first line treatments for OCD, examining ways that we may be able to increase the benefit derived from the interventions we offer is desperately needed. Individuals who suffer from OCD suffer profoundly, often for many years. It is incumbent upon us to do what we can to improve the circumstances of those living with OCD as well as those who love them and care for them.

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Appendices

APPENDIX A

INFORMED CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Full Study Title: Systemic Constructivist Couples Therapy and Obsessive Compulsive Disorder

Principal Investigator:
Rachel Siegal and Dr. David Reid, Department of Health, York University
Dr. Peggy Richter, Department of Psychiatry, Sunnybrook Health Sciences Centre;

INFORMED CONSENT

You are being asked to consider participating in a research study. A research study is a way of gathering information on a treatment, procedure or medical device or to answer a question about something that is not well understood.

This form explains the purpose of this research study, provides information about the study procedures, possible risks and benefits, and the rights of participants.

Please read this form carefully and ask any questions you may have. You may have this form and all information concerning the study explained to you. If you wish, someone may be available to verbally translate this form into your preferred language. You may take as much time as you wish to decide whether or not to participate. Please ask the study staff or one of the investigator(s) to clarify anything you do not understand or would like to know more about. Make sure all your questions are answered to your satisfaction before deciding whether to participate in this research study.

Participating in this study is your choice (voluntary). You have the right to choose not to participate, or to stop participating in this study at any time.

INTRODUCTION

You are being asked to consider participating in this study because you OR your partner have a diagnosis of Obsessive-Compulsive Disorder (OCD).. We have come to understand that effectiveness of treatment may be enhanced by including ones partner in a couple's approach, as both partners, regardless of who may struggle with mental illness, are often significantly impacted by the symptoms of the illness. Therefore, this study's primary aim is to explore the effectiveness of a couples' treatment for OCD. The results of this study could help to enhance treatments offered to those struggling with OCD and their partners.

WHY IS THIS STUDY BEING DONE?

As suggested above, this study is being done in order to enhance our ability to provide more effective treatments for OCD. We expect that those participating in this study will experience greater relationship functioning over the course of treatment, while also being more able to cope with OCD as a couple and as individuals. Partners are expected to learn how to cope with how their partner's OCD impacts their life, and will come to decrease the behaviour they may have been engaging in that unknowingly perpetuates their partner's OCD. As well, those partners who have a diagnosis of OCD are expected to be better able to cope with their symptoms and/or experience a decrease in their symptoms.

WHAT WILL HAPPEN DURING THIS STUDY?

During the study you and your partner will participate in approximately 7 sessions of Systemic-Constructivist Couples Therapy. Each session will be approximately 2 hours and will take place once each week. Sessions will take place in the Behavioural Sciences Building at York University and will be run by a registered Clinical Psychologist, Dr. David Reid and a Clinical Psychology Doctoral Student, Rachel Siegal. The therapy will focus on enhancing your relationship functioning while also helping both you and your partner cope with OCD. You will be given specific tools to enhance your communication, and come to learn how your relationship functioning may directly effect the severity of OCD symptoms, as well as how the OCD may be effecting your relationship.

As part of this study you will also be asked to complete a number of questionnaire packages. The first questionnaire package will be completed before the study begins, and then another package will be completed once the study has ended. You will also be given a short questionnaire prior to each therapy session. In addition, therapy sessions

will be videotaped (in cases where you are comfortable) in an effort to allow us to review sessions and better understand the therapeutic process.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

It is anticipated that about 28 people (14 couples) will participate in this study at York University. The length of this study for participants is 7 weeks. The entire study is expected to take about 18 months to complete and the results should be known in 2 years.

WHAT ARE THE RESPONSIBILITIES OF STUDY PARTICIPANTS?

If you decide to participate in this study you will be asked to first undergo a short interview to determine if you and your partner are eligible to participate. This interview will take approximately 1.5 hours. During this time you and your partner will be asked questions about your mental health. (Each partner will be interviewed individually). If after this short screening interview it is decided that you are eligible to participate you will then be invited to take part in approximately 7 sessions of couple's therapy in the Behavioural Sciences Building, York University. Each therapy session will be approximately 2 hours in length. Prior to beginning the first therapy session and once therapy has been completed you will be asked to complete a short questionnaire package that will take approximately 40 minutes. The questionnaire will include questions about your mood, anxiety levels, and relationship functioning. You may also be asked to complete a short questionnaire prior to each therapy session which should only take 5 minutes to complete.

In addition, the study will involve videotaping of some therapy sessions. You will be given the option to indicate whether this is something that you are comfortable with or not. All video recordings will be transferred to CD and kept in a locked filing cabinet along with your study data. Session video tapes will be viewed exclusively by the study therapists.

WHAT ARE THE RISKS OR HARMS OF PARTICIPATING IN THIS STUDY?

As this study involves a psychological intervention there may be times when what is discussed in session may cause anxiety, feelings of sadness or distress. You are encouraged to express such feelings throughout therapy and feel free to indicate to the therapist if you are uncomfortable discussing a particular issue or feel uncomfortable or distressed in any way. Study therapists will do their best to minimize these occurrences and will be present to answer any questions or address any concerns you may have throughout the study.

There are no medical risks to you from participating in this study. You may refuse to answer questions or discontinue treatment at any time if you are not comfortable with

continuing. This will in no way effect any care you receive from Sunnybrook Health Sciences Centre, or psychological treatment you may seek at York University in the future.

You will be told about any new information that might reasonably affect your willingness to continue to participate in this study as soon as the information becomes available to the study staff.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THIS STUDY?

You may or may not benefit directly from participating in this study. However, possible benefits include increased relationship functioning, and decreased symptoms of OCD in yourself or your partner. Your participation may or may not help other people with OCD in the future.

CAN PARTICIPATION IN THIS STUDY END EARLY?

The investigator(s) may decide to remove you from this study without your consent for any of the following reasons:

- If you disclose that you are seriously considering harming yourself or someone else

If you are removed from this study, the investigator(s) will discuss the reasons with you and plans will be made for your continued care outside of the study.

You can also choose to end your participation at any time without having to provide a reason. If you choose to withdraw, your choice will not have any effect on future treatment received at either York University or Sunnybrook Health Sciences Centre. If you withdraw voluntarily from the study, you are encouraged to contact Rachel Siegal, 647-504-6957. You may be asked questions about your experience with the study.

WHAT ARE THE COSTS OF PARTICIPATING IN THIS STUDY?

Participating in this study may result in added costs to you for travel to and from York University, or if you will be driving to York, for parking at the University.

By signing this consent form, you do not give up any of your legal rights.

ARE STUDY PARTICIPANTS PAID TO PARTICIPATE IN THIS STUDY?

You will not be paid to participate in this study.

HOW WILL MY INFORMATION BE KEPT CONFIDENTIAL?

You have the right to have any information about you that is collected, used or disclosed for this study to be handled in a confidential manner.

If you decide to participate in this stormation and collect only the information they need for this study. “Personal health information” is health information about you that could identify you because it includes information such as your;

- name,
- address,
- telephone number,
- date of birth,
- new and existing medical records

You have the right to access, review and request changes to your personal health information.

Access to your personal information will take place under the supervision of the Principal Investigator.

“Study data" is information about you that is collected for the study, but that does not directly identify you.

No study data about you will be sent outside of Sunnybrook Health Sciences Centre. Likewise, none of your personal health information will be transferred outside of Sunnybrook Health Sciences Centre.

The investigator(s), study staff and the other people listed above will keep the information they see or receive about you confidential, to the extent permitted by applicable laws. Even though the risk of identifying you from the study data is very small, it can never be completely eliminated.

The Principal Investigators will keep any personal information about you in a secure and confidential location for 10 years and then destroy it according to Sunnybrook Health Sciences Centre policy.

When the results of this study are published, your identity will not be disclosed.

You have the right to be informed of the results of this study once the entire study is complete. If you would like to be informed of the results of this study, please provide your name, address and telephone number to Rachel Siegal, York University, Department of Psychology, Behavioural Sciences Building Room 310.

DO THE INVESTIGATOR(S) HAVE ANY CONFLICTS OF INTEREST?

There are no conflicts of interest to declare related to this study.

WHAT ARE THE RIGHTS OF PARTICIPANTS IN A RESEARCH STUDY?

You have the right to receive all information that could help you make a decision about participating in this study. You also have the right to ask questions about this study and your rights as a research participant, and to have them answered to your satisfaction, before you make any decision. You also have the right to ask questions and to receive answers throughout this study.

If you have questions about the research in general or about your role in the study, please feel free to contact the faculty supervisor of this research, Dr. David Reid either by telephone (416-736-2100 ext. 66265) or by e-mail (dried@yorku.ca). You may also contact Dr. Peggy Richter by telephone (416-480-6832).

The Sunnybrook Research Ethics Board as well as the York University Research Ethics board have reviewed this study. If you have questions about your rights as a research participant or any ethical issues related to this study that you wish to discuss with someone not directly involved with the study, you may call **the Chair of the Sunnybrook Research Ethics Board at (416) 480-4276 or** you can contact York University's Research Ethics senior manager and policy advisor of the university Human Participants Review committee, **Ms. Alison Collins-Mrakas at (416)-736-5914**.

DOCUMENTATION OF INFORMED CONSENT

You will be given a copy of this informed consent form after it has been signed and dated by you and the study staff.

Full Study Title: Systemic Constructivist Couples Therapy and Obsessive Compulsive Disorder

Name of Participant: _____

Participant

By signing this form, I confirm that:

- This research study has been fully explained to me and all of my questions answered to my satisfaction
- I understand the requirements of participating in this research study
- I have been informed of the risks and benefits, if any, of participating in this research study
- I have been informed of any alternatives to participating in this research study
- I have been informed of the rights of research participants

- I have read each page of this form
- I authorize access to my personal health information, and research study data as explained in this form
- I have agreed, or agree to allow the person I am responsible for, to participate in this research study

_____ _____ _____

Name of participant (print) Signature Date

I agree to allow therapy sessions to be videotaped ☐

I do **NOT** agree to allow therapy sessions to be videotaped ☐

ASSISTANCE DECLARATION

Was the participant assisted during the consent process? ☐ Yes ☐ No

☐ The consent form was read to the participant/substitute decision-maker, and the person signing below attests that the study was accurately explained to, and apparently understood by, the participant/substitute decision-maker.

☐ The person signing below acted as a translator for the participant/substitute decision-maker during the consent process. He/she attests that they have accurately translated the information for the participant/substitute decision-maker, and believe that that participant/substitute decision-maker has understood the information translated.

_____ _____ _____

Name of Person Assisting (Print) Signature Date

<u>Person obtaining consent</u>

By signing this form, I confirm that:

- This study and its purpose has been explained to the participant named above
- All questions asked by the participant have been answered
- I will give a copy of this signed and dated document to the participant

_____ _____ _____

Name of Person obtaining consent (print) Signature Date

APPENDIX B

Demographic Information

Age: ____

Marital Status
What is your current marital status? For each please indicate for how long

___Married

___Separated

___Common Law

If Married:

Years married: _____

Length of relationship before marriage (say 0 if you did not date before marriage): _____

Years co-habiting (living together) (say 0 if you did not co-habit): _____

Children

Do you have any children? If so how Many? (please indicate below)

1. Age: _____ , Gender: _____
2. Age: _____ , Gender: _____
3. Age: _____ , Gender: _____
4. Age: _____ , Gender: _____

Education
What is the highest degree or level of school you have completed? If currently enrolled, mark the previous grade or highest degree received.

___ Some High School
___ High School
___ College
___ Bachelor Degree
___ Graduate Education

___ Professional Program (e.g. MBA)
___ Other (specify): _____

Employment Status
Are you currently...?

___Employed for wages

___Self-employed

___Out of work and looking for work

___Out of work but not currently looking for work

___A homemaker

___A student

___Retired

___Unable to work

Annual Gross Household Income
What is your total household income? (i.e. combined income of you and your partner):

___ Less than $20,000
___ $20,000 to $40,000
___ $40,000 to $60,000
___ $60,000 to $80,000
___ $80,000 to $100,000
___ Over $100,000

Ethnicity
Please specify the ethnicity you identify with below:

Religion
Please specify your religious background below:

Are you currently taking any psychiatric medication? If so, please list the medication below:

Have you had psychotherapy in the past? *Yes___ No____*

If so, what was the therapy concerning? How many sessions did you attend

APPENDIX C

OCI-R

The following statements refer to experiences that many people have in their everyday lives. Circle the number that best describes **HOW MUCH** that experience has **DISTRESSED or BOTHERED youduring the PAST MONTH.** The numbers refer to the following verbal labels:

0 Not at all	1 A little	2 Moderately	3 A lot	4 Extremely

1.	I have saved up so many things that they get in the way.	0 1 2 3 4
2.	I check things more often than necessary.	0 1 2 3 4
3.	I get upset if objects are not arranged properly.	0 1 2 3 4
4.	I feel compelled to count while I am doing things.	0 1 2 3 4
5.	I find it difficult to touch an object when I know it has been touched bystrangers or certain people.	0 1 2 3 4
6.	I find it difficult to control my own thoughts.	0 1 2 3 4
7.	I collect things I don't need.	0 1 2 3 4
8.	I repeatedly check doors, windows, drawers, etc.	0 1 2 3 4
9.	I get upset if others change the way I have arranged things.	0 1 2 3 4
10.	I feel I have to repeat certain numbers.	0 1 2 3 4
11.	I sometimes have to wash or clean myself simply because I feel contaminated.	0 1 2 3 4
12.	I am upset by unpleasant thoughts that come into my mind against my will.	0 1 2 3 4
13.	I avoid throwing things away because I am afraid I might need them later.	0 1 2 3 4
14.	I repeatedly check gas and water taps and light switches after turning themoff.	0 1 2 3 4

15. I need things to be arranged in a particular way.	0	1	2	3	4
16. I feel that there are good and bad numbers.	0	1	2	3	4
17. I wash my hands more often and longer than necessary.	0	1	2	3	4
18. I frequently get nasty thoughts and have difficulty in getting rid of them.	0	1	2	3	4

APPENDIX D

BDI-II (1 of 2)

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past week, including today.** Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3. I am so sad or unhappy that I can't stand it.

2. Pessimism
- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse

3. Past Failure
- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure
- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time

6. Punishment Feelings
- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike
- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

8. Self-Criticalness
- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10. Crying
- 0 I don't cry anymore than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

11. Agitation
0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest
0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness
0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness
0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy
0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern
0 I have not experienced any change in my sleeping pattern.
1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.
2a I sleep a lot more than usual.
2b I sleep a lot less then usual
3a I sleep most of the day.
3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability
0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite
0 I have not experienced an change in my appetite.
1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.
2a My appetite is much less than before.
2b My appetite is much greater than usual.
3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty
0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

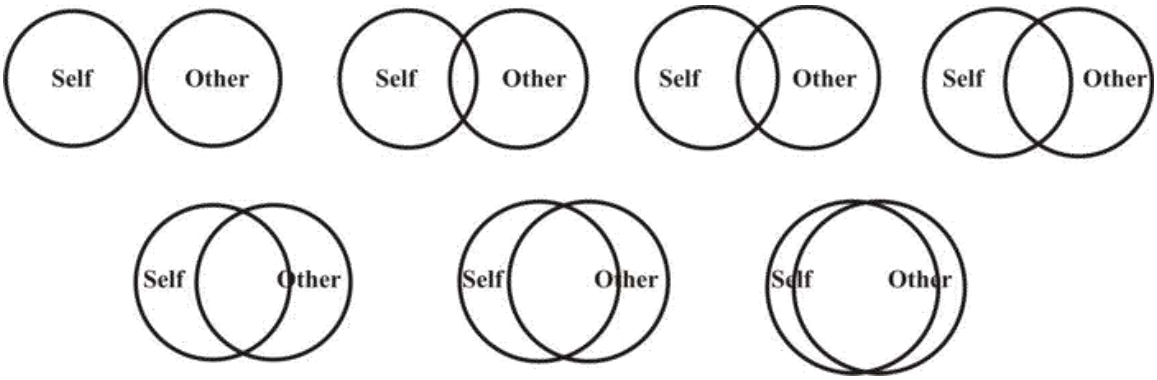
20. Tiredness or Fatigue
0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex
0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

APPENDIX E

Inclusion of Other in the Self Scale (IOSS)

Please circle the picture below which best describes your relationship.



APPENDIX F

Dyadic Adjustment Scale

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	**Almost Agree**	**Always**	**Occasionally Disagree**	**Fre-quently Disagree**	**Almost Always Disagree**	**Always Disagree**
Handling family finances	O		O	O	O	O	O
Matters of recreation	O		O	O	O	O	O
Religious matters	O		O	O	O	O	O
Demonstrations of affection	O		O	O	O	O	O
Friends	O		O	O	O	O	O
Sex relations	O		O	O	O	O	O
Conventionality (correct or proper behavior)	O		O	O	O	O	O
Philosophy of life	O		O	O	O	O	O
Ways of dealing with parents or in-laws	O		O	O	O	O	O
10. Aims, goals, and things believed important	O		O	O	O	O	O
11. Amount of time spent together	O		O	O	O	O	O
12. Making major decisions	O		O	O	O	O	O
13. Household tasks	O		O	O	O	O	O
14. Leisure time interests and activities	O		O	O	O	O	O
15. Career decisions	O		O	O	O	O	O

	All the time	**Most of the time**	**More often than not**	**Occa-sionally**	**Rarely**	**Never**
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	O	O	O	O	O	O
17. How often do you or your mate leave the house after a fight?	O	O	O	O	O	O
18. In general, how often do you think that things between you and your partner are going well?	O	O	O	O	O	O
19. Do you confide in your mate?	O	O	O	O	O	O
20. Do you ever regret that you married? (*or lived together*)	O	O	O	O	O	O

21. How often do you and your partner quarrel?	O	O		O	O	O	O
22. How often do you and your mate "get on each other's nerves?"	O		O		O	O	O	O

23. Do you kiss your mate?		O	O	O	O	O

	All of them	**Most of them**	**Some of them**	**Very few of them**	**None of them**
24. Do you and your mate engage in outside interests together?	O	O	O	O	O

	Every Day	**Almost Every Day**	**Occasionally**	**Rarely**	**Never**

How often would you say the following events occur between you and your mate?

	Never	**Less than once a month**	**Once or twice a month**	**Once or twice a week**	**Once a day**	**More often**
25. Have a stimulating exchange of ideas	O	O	O	O	O	O
26. Laugh together	O	O	O	O	O	O
27. Calmly discuss something	O	O	O	O	O	O
28. Work together on a project	O	O	O	O	O	O

These are some things about which couples sometimes agree and sometime disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (Check yes or no)

	Yes	No	
29.	O	O	Being too tired for sex.
30.	O	O	Not showing love.

31. The circles on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please fill in the circle which best describes the degree of happiness, all things considered, of your relationship.

O	**O**	**O**	**O**	**O**	**O**	**O**
Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect

32. Which of the following statements best describes how you feel about the future of your relationship?

O I want desperately for my relationship to succeed, and *would go to almost any length* to see that it does.
O I want very much for my relationship to succeed, and *will do all I can* to see that it does.
O I want very much for my relationship to succeed, and *will do my fair share* to see that it does.
O It would be nice if my relationship succeeded, but *I can't do much more than I am doing now* to help it succeed.
O It would be nice if it succeeded, but I *refuse to do any more than I am doing now* to keep the relationship going.

- My relationship can never succeed, and *there is no more that I can do* to keep the relationship going

APPENDIX G

COMMUNICATION PATTERNS QUESTIONNAIRE

Andrew Christensen & Megan Sullaway

Directions: We are interested in how you and your partner typically deal with problems in your relationship. Please rate each item on a scale of 1 (= very unlikely) to 9 (= very likely).

A. WHEN SOME PROBLEM IN THE RELATIONSHIP ARISES,

	Very Unlikely								Very Likely
1. Mutual Avoidance. Both members avoid discussing the problem.	1	2	3	4	5	6	7	8	9
2. Mutual Discussion. Both members try to discuss the problem.	1	2	3	4	5	6	7	8	9
3. Discussion/Avoidance.									
I try to start a discussion while My partner tries to avoid a discussion.	1	2	3	4	5	6	7	8	9
My partner tries to start a discussion while I try to avoid a discussion.	1	2	3	4	5	6	7	8	9

B. DURING A DISCUSSION OF A RELATIONSHIP PROBLEM,

1. Mutual Blame. Both members blame, accuse, and criticize each other.	1	2	3	4	5	6	7	8	9
2. Mutual Expression. Both members express their feelings to each other.	1	2	3	4	5	6	7	8	9
3. Mutual Threat. Both members threaten each other with negative consequences.	1	2	3	4	5	6	7	8	9
4. Mutual Negotiation. Both members suggest possible solutions and compromises.	1	2	3	4	5	6	7	8	9
5. Demand/Withdraw.									
I nag and demand while my partner withdraws, becomes silent, or refuses to discuss the matter further.	1	2	3	4	5	6	7	8	9

My partner nags and demands while I withdraw, become silent, or refuse to discuss the matter further. 1 2 3 4 5 6 7 8 9

	Very Unlikely							Very Likely
6. Criticize/Defend.								
I criticize while my partner defends her/himself.	1	2	3	4	5	6	7	8 9
My partner criticizes while I defend myself.	1	2	3	4	5	6	7	8 9
7. Pressure/Resist.								
I pressure my partner to take some action or stop some action, while my partner resists.	1	2	3	4	5	6	7	8 9
My partner pressures me to take some action or stop some action, while I resists.	1	2	3	4	5	6	7	8 9
8. Emotional/Logical.								
I express feelings while my partner offers reasons and solutions.	1	2	3	4	5	6	7	8 9
My partner expresses feelings while I offers reasons and solutions.	1	2	3	4	5	6	7	8 9
9. Threat/Back down.								
I threaten negative consequences and my partner gives in or backs down.	1	2	3	4	5	6	7	8 9
My partner threatens negative consequences and I give in or back down.	1	2	3	4	5	6	7	8 9
10. Verbal Aggression.								
I call my partner names, swear at Him/her, or attack their character.	1	2	3	4	5	6	7	8 9
My partner calls me names, swears at me, or attacks my character.	1	2	3	4	5	6	7	8 9
11. Physical Aggression.								
I push, shove, slap, hit, or kick my partner.	1	2	3	4	5	6	7	8 9

My partner pushes, shoves, slaps, hits, or kicks me. 1 2 3 4 5 6 7 8 9

C. AFTER A DISCUSSION OF A RELATIONSHIP PROBLEM,

1. Mutual Understanding. Both feel each other has understood his/her position. 1 2 3 4 5 6 7 8 9

	Very Unlikely							Very Likely
2. Mutual Withdrawal. Both withdraw from each other after the discussion.	1 2 3 4 5 6 7 8 9							
3. Mutual Resolution. Both feel that the problem has been solved.	1 2 3 4 5 6 7 8 9							
4. Mutual Withholding. Neither partner is giving to the other after the discussion.	1 2 3 4 5 6 7 8 9							
5. Mutual Reconciliation. After the discussion, both try to be especially nice to each other.	1 2 3 4 5 6 7 8 9							
6. Guilt/Hurt. I feel guilty for what I said or did while my partner feels hurt.	1 2 3 4 5 6 7 8 9							
My partner feels guilty for what they said or did while I feel hurt.	1 2 3 4 5 6 7 8 9							
7. Reconcile/Withdraw. I try to be especially nice, act as if things are back to normal, while my partner acts distant.	1 2 3 4 5 6 7 8 9							
My partner tries to be especially nice, acts as if things are back to normal, while I act distant.	1 2 3 4 5 6 7 8 9							
8. Pressure/Resist. I pressure my partner to apologize or promise to do better, while my partner resists.	1 2 3 4 5 6 7 8 9							
My partner pressures me to apologize or								

promise to do better, while I resist 1 2 3 4 5 6 7 8 9

9. Support Seeking.

I seek support from others (parent, friend, children) 1 2 3 4 5 6 7 8 9

My partner seeks support from others (parent, friend, children) 1 2 3 4 5 6 7 8 9

Are you currently involved in an intimate relationship? Yes___ No____

If you answered **Yes** please complete the questionnaire below. If you answered **No** you have completed this questionnaire.

APPENDIX H

Couples Mutuality Questionnaire

Couples vary in the degree to which they see themselves as similar in their ways of interacting with each other. You are asked to rate on each of the following items how similar you and your partner are. Each item is about a different type of interaction. Please circle the number which best represents your degree of mutuality.
Please note: 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
	1	2	3	4	5
1. When feeling angry with the other person we are both equally likely to say so.	1	2	3	4	5
2. We are both equally likely to express our feelings about the relationship.	1	2	3	4	5
3. We experience the same willingness to discuss our relationship.	1	2	3	4	5
4. We are equally likely to suggest constructive alternatives to our partner for behaviours which bother us.	1	2	3	4	5
5. Although we may do so differently we are emotionally supportive of each other.	1	2	3	4	5
6. We are mutually supportive of each other's activities.	1	2	3	4	5
7. We are alike in demonstrating our affection for each other.	1	2	3	4	5
8. Expressing our affection comes easily to us.	1	2	3	4	5
9. We are both equally likely to do favors for the other.	1	2	3	4	5
10. We are both appreciative of the other's help even when it is unsuccessful.	1	2	3	4	5

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
	1	2	3	4	5
11. When one has not understood what the other has said, we are both equally likely to ask for elaboration.	1	2	3	4	5
12. We are both equally likely to think that we understand the other person's intentions.	1	2	3	4	5
13. We are both equally likely to be aware that an argument is getting out of hand.	1	2	3	4	5
14. When we are involved in a conflict we are both equally likely to contain our reactions.	1	2	3	4	5
15. When we are discussing a problem there is a "give and take" between us.	1	2	3	4	5
16. We are compatible in the way we deal with emotional issues.	1	2	3	4	5
17. In general, when it comes to making decisions our decision is mutual.	1	2	3	4	5
18. We are both equally likely to tolerate each other's gripes.	1	2	3	4	5
19. When the other voices a complaint we are both equally likely to complain in return.	1	2	3	4	5
20. When it comes to disputes or "fighting" we are equally likely to argue "fairly" with the other.	1	2	3	4	5
21. We are both equally likely to make demands of the other when under pressure.	1	2	3	4	5
22. We are compatible in how we discuss issues.	1	2	3	4	5

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
	1	2	3	4	5
23. When problems arise we can have a constructive interchange even if we do not fully agree.	1	2	3	4	5
24. When it comes to assisting each other in having a good time my partner and I can be equally encouraging.	1	2	3	4	5
25. We are equally likely to think that we understand the other person.	1	2	3	4	5
26. My partner and I have complementary senses of humor (we enjoy each other's humor).	1	2	3	4	5
27. We are similar in the way we can "push each other's buttons".	1	2	3	4	5
28. When one of us gets upset the other is equally likely to also feel upset or concerned.	1	2	3	4	5
29. When we are actively involved in a conversation we are equally likely to interrupt each other.	1	2	3	4	5
30. We are quite similar in the ways we can tease the other about his/her abilities.	1	2	3	4	5

APPENDIX I

Relationship Assessment Scale

Please circle the number which best represents your agreement with each statement **during the last two weeks**.

SD = strongly disagree
MD = moderately disagree
N = neither agree nor disagree
MA = moderately agree
SA = strongly agree

	SD	MD	N	MA	SA
1. My partner and I understand each other perfectly.	1	2	3	4	5
2. I am very happy with how we handle role responsibilities in our relationship.	1	2	3	4	5
3. My partner understands and sympathizes with me.	1	2	3	4	5
4. I am not happy about our communication and feel that my partner does not understand me.	1	2	3	4	5
5. Our relationship is a success.	1	2	3	4	5
6. I am very happy about the way we make decisions and resolve conflicts.	1	2	3	4	5
7. I am unhappy about the way we make financial decisions.	1	2	3	4	5
8. I have some needs that are not being met by our relationship.	1	2	3	4	5
9. I am very happy with how we manage our leisure activities and the time we spend together.	1	2	3	4	5
10. I am pleased about how we express affection and relate sexually.	1	2	3	4	5
11. I don't regret my relationship with my partner.	1	2	3	4	5
12. I am dissatisfied about our relationship with my parents, in-laws, and/or friends.	1	2	3	4	5

APPENDIX J

We-ness Coding Scale Version 4[1]

A. These codings are applied to "Relationship Episodes" identified from transcripts of couple's conversations.
B. Each coding is focused on interpretation of the Language used by either or both partners.
C. Each "episode" is to be coded by first anchoring the episode within a level, and then proceeding to discriminate between the sub-categories within a level.
D. If two or more levels are clearly evident within a given episode, code at the highest level.
E. If a given "episode" either cannot be understood, or does not seem to fit well into any level, then identify as "uncodeable" (UC).
F. Identify segments that are one partner complementing the other (POS).

Level 1: Domination of "I" versus "thou" over any reference to "We" or "Us". The "thou" can be the other's name treated as a contrasting/oppositional/or antagonistic force. The couple's psychological construction of the "WE or US or OUR" is dismissive and submerged in a sea of antagonism/discord or possibly indifference between the partners, or is not expressed at all. Within either the active *in vivo* interchange by the partners or else narrative reference by either to the couples' relationship there is expression of:

1A Indifference ("don't care"), "You do your thing; I'll do mine" - non-caring attitude.

1B Oppositional/put-downs/complaints/blaming/accusations/
Focus is on "changing the other" without reciprocal changing of the self. Alternatively, points to differences that are implicitly/explicitly either antagonistic or typical of why the relationship is not working. (Again, the "we" if present, is dismissive or antagonistic.

1C Personal frustrations with the relationship. Possibly laments about being stuck in the relationship. Bitterness/possible Desperation. In some cases either fear of or expressed potential for divorce/estrangement.

1D Disappointment with relationship. Fundamental discouragement and doubt may be expressed.

Level 2: Competitive, disharmony, asynchrony

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[1]This coding scale copies the format of the Grenyer and Luborsky (1996) Mastery Scale. In addition, some of the wording for the coding categories - particularly the levels 5 and 6 - are verbatim from the Mastery Scale. However, this version is substantially different in-so-far are as it includes findings from our exploratory examination of couples therapy audio-tapes and focuses on the couples' reflexive comprehension and experience of their relationship.

2E Either partner does not feel "validated", valued as part of a partnership.

2F Direct or implied that: One of the partners says or feels that she is treated by the other partner "as if" the other partner was either ignoring what she had said or else it is "as if" he had not heard what his partner had said.

2G One (or both partners) persists in presenting one's own views of the relationship issue(s) as being the more viable or valid view or either partner perceives the other as doing so. (e.g., Either one side dominates or else they both promote their views in ways that are either insensitive or defensive toward acknowledging the worth of the other's views[2]).

2H The one partner (or both) refuses to reply or cooperate or be congenial. (e.g., Stonewalling). Lack of "good will".

Level 3: Relationship ambivalence, but tacit recognition

The central theme at this level is that of experienced and/or perceived difficulties in: (1) "understanding/construing completely" the existence of a jointly supported, reflexive entity called a relationship (2) difficulties coordinating/maintaining the essence of 'couplehood', but these difficulties are accompanied by hints of there being a "We", (3) ambivalence about fully committing (or outrightly acknowledging) to there being a relationship, but suggesting a guarded anticipation/possibility. (4) Evidence for the co-constructing (and co-experiencing) of a "We" that is not yet solidified as an "objectified" entity. The ambivalence will be a juxt-a-position of positive mental models of their relationship with either their anxieties, their confusion, their defensiveness stemming from past mistrusts, and their need for more evidence of the viability of their relationship.

3I Momentarily speaks about a positive relationship as existing or desirable, but somewhat conflicted, unsure and/or sceptical. Perhaps expressed as confusion as to what either partner wants/expects from the relationship.

3J hints (e.g., fleeting experiences or fantasies) of there being a relationship that either one or both appears to <u>want</u> to create, find, or discover. Evidence of attempts made by either partner to try to please the other. Can contain self criticism of ways one could have behaved differently so as to result in a more viable relationship.

[2]This category is particularly culture sensitive. That is, for some people a so-called antagonistic or competitive exchange of views can be experienced as a respectful or loving diatribe that both desire as part of their relationship. Thus the quality of the evidence needs to be scrutinized contextually.

3K a struggle or attempt(s) to reify (or speak as if there is) a relationship. Provides examples of cooperation/collaboration that could be used as evidence of a relationship being possible.

3L Makes statements about the promise of the relationship, yet asks questions of whether such a relationship is reasonable or possible (e.g. asks the other as to whether s/he agrees or else treats the current 'good will' between the partners as naive or at risk of destruction by other forces). May describe "you and I" as having different views/values/experiences. These differences, presented in a somewhat ambivalent yet searching way and are seen as an obstacle to overcome.

Level 4: Interpersonal Awareness, yet distinctions and distances, and lack of immersions into a more unitized relationship. (Although awareness is present, there is a lack of a more integrated sense of the relationship.)

4M Awareness of the impact each has on the other. This can include experience of tension between them. Awareness of the impact of certain similarities or differences "as if" "you are more like this and I am more like that".

4N References to considering yet not integrating the others point of view.

4O References to awareness of positive or negative reactions of self to the relationship or to the other as a partner in "our" relationship. (e.g. “When you do this, I....”)

4P References to inter-personal responsiveness serving to support or promote the relationship. Can include realizations of how one can change one's own behaviours or responses so as to advance the relationship. (Awareness vs. using the awareness.)

Level 5: Couple Understanding and Couples' Selfhood (the “Us”). At this level there is evidence of the functioning of the couple's self interpretation. An example is evidence of a "couple's stories", with the partners reporting shared experiences and explaining these as a shared, couple's phenomena. In idealistic academic terms, it is as if the couple realizes that their relationship is more than the mere "sum of the parts"; more than just co-habitating.

5Q Impressions of having 'insight' into their patterns and ways of relating 'that work for or characterize them' as a couple. An understanding of how they work as a couple.

5R Making links between past ways of relating and the present. A sense of change, evolution, possibly also anticipating further growth.

5S References to an interpersonal union. Unit effectiveness, negotiation competence, compromise, mutual support, common-ground (within the relationship)

NOTE: the comments should indicate that this is established. If the comments only indicate a dream or wish fulfilling statement or a possibility, then go to either level 3 or 4.

5T Comparisons of the partners as in dialectical/dynamic contrasts that indicates how they are different and yet similar. Interdependence and the gain of each from the other which entails drawing on each others strengths, and the ways in which they complement one another. (E.g. Implies a "team", working together against outside challenges.)

Level 6: Couple experiences a deep understanding of themselves as a Couple. Couple has a reflexive comprehension of their relationship. These are mutual experiences, combined with a growing conceptual awareness that leaves each partner with an intuitive or unstated (i.e., implicit and difficult to put into words) sense of themselves as a couple.

6U The development of tolerance and acceptance of each other. Despite so-called 'personality' differences such as differences in preferences, attitudes, and ways of coping, the couple supports if not celebrates/defends these differences. It is as if they see this process of supporting these differences as being integral to who they are as a couple. (e.g. Wife says: "He is different - at times frustratingly so - and I wouldn't want it any other way").

6V [i]Couple reports (or their interactions imply) that when interacting (or when they are recalling an interaction with each other) they have an active "here and now" consciousness of their relationship. There is a more automatic (intrinsic) interest and responsivity to the other's point of views, feelings and positions (the quality of this is one of internal motivation, rather than of obligation).

6W Expressions of an emotional responding to each other (and/or expressions of empathic accuracy). Also included here are aspects of a discovered personal identity with the relationship such that the relationship is an integral part of each partner's self-concept. "If we are OK; then I am OK"; If we are not OK; then I am not OK". (An internalization of the relationship).

6X Expressions of emotional self-control over their conflicts, differences. Examples may include the realization that the differences are less threatening because the relationship is more intact and more solidified. There is faith and confidence in the integrity of the relationship. Thus the couple will report disagreements and even forms of fighting, but the partners do not see these as destructive, rather such squabbles are seen as acceptable ways of relating. Included here are examples of where one partner "lets an issue go", or doesn't "jump to conclusions" when triggered by the other partner and instead responds in ways to bolster the relationship.

APPENDIX K

Chunking Criteria for Relationship Episodes

Note: The following is an amalgam of Chunking criteria previously used for the original "We-Ness" studies. "We-Ness" is a special case of Self-Construing that occurs as a result of finding various degrees of mutual identity with an intimate other. The co-occurring "Self-Construing" (co-occurring as a result of or contextualized within the respondent's relationship with another person) is a relational cognitive schematic structure from which the "We-Ness" may be formed. The person doing the "chunking' must focus on reliably designating the "relationship episodes" as defined below, not implicitly coding for 'we-ness' as the latter is distinctly a later step, done after the 'chunks' have been identified.

Chunking Guidelines/Criteria

1. "Relationship Episodes" are identified from transcripts of the couple's discourse. Relationship Episodes are narration's/narratives or comments about each other or the relationship as a unit. These "Relationship Episodes" can be descriptions of past interpersonal events (eg. What you said to me last weekend) or else *in vivo* (here and now) recorded transactions of the person with the partner. Overall, the subject of the segment should be the person's implicit/explicit self-construal in relation to their partner, that is, how the person construes her/himself or is construing him/herself in the relationship.[3]
2. It is helpful to initially identify (by circling) the "I" and "me" statements as well as the "We", "Us", "Our" words. In addition the words "you", "other", "he" or "she" and such references to the partner should be underlined. These demarcations bring attention to their use within the speaker's statements.
3. Pay attention to the implicit "voice" of the speaker to determine whether the speaker is clearly implying a sense of self vis-à-vis the relationship or the other partner. Where this is apparent, underscore. It is this portion that will be coded.

5 Chunking can include segments where there is a dialogue characterised by a "tête-à-tête" (private conversation between two people), or a repartee (conversation full of quick replies, banter), or rapport (harmonious or sympathetic relation or conversation). In these cases, it may be useful to code each speaker respectively from the same "chunk".

6 **Rule out segments that are clearly unrelated to the interpersonal characteristics (i.e., not clearly the speaker in relation to the partner), or the relationship. (eg. Where there are descriptions of family events, activities the person was involved in, personal comments about work or other people, etc.)**

[3] Persons undertaking both the Chunking of the Relationship Episodes and/or the subsequent coding must understand the theoretical distinction implied by the following algorithm. "Self-Construal = content and process". For example, the Self-Construal can be the person's sense of "Me" which is the 'content' where the Self-Construal requires an 'I' that is making the Construal of 'me'. The 'I' is the process. The "self-construing" is inferred from the speaker's statements.

7 Mark the entire paragraph so as to keep the meaning context', but indicate the segment that is to be coded. Include with the segment the preceding statement(s) if the partner is responding to a particular statement made by the preceding speaker.
8 End the segment when either the topic changes or another person begins speaking.
9 Don't select a single sentence by one speaker as this violates accessing the contextual parameters affecting the speaker's immediate thought/meaning.
10 If there are multiple speakers in segment, then indicate who should be coded.

APPENDIX L

Self Thought/Feeling Rating Form

Name:
Date:
Session Number:

TIME	**THOUGHT OR FEELING**	**+, 0, - (Valence)**
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -
	I was thinking and/or feeling:	+ o -

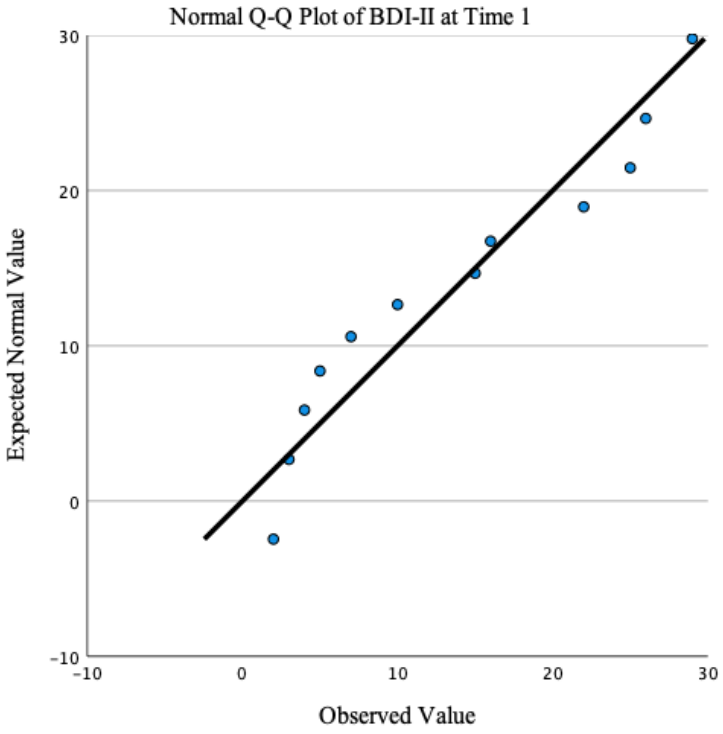
APPENDIX M

Partner Thought/Feeling Rating Form

Name:
Date:
Session Number:

TIME	**THOUGHT OR FEELING**	**+, 0, - (Valence)**
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -
	My partner was thinking and/or feeling:	+ o -

APPENDIX N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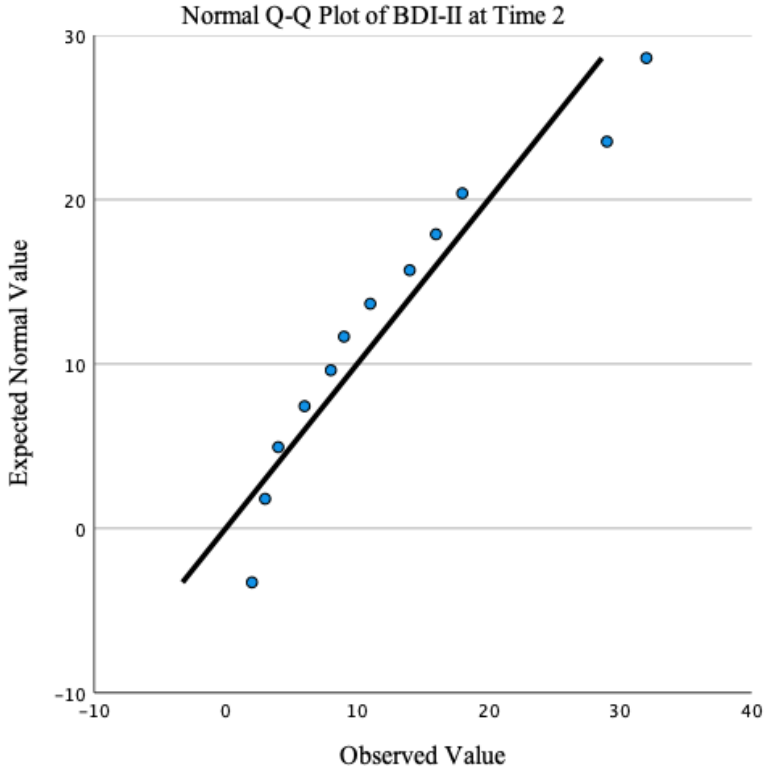
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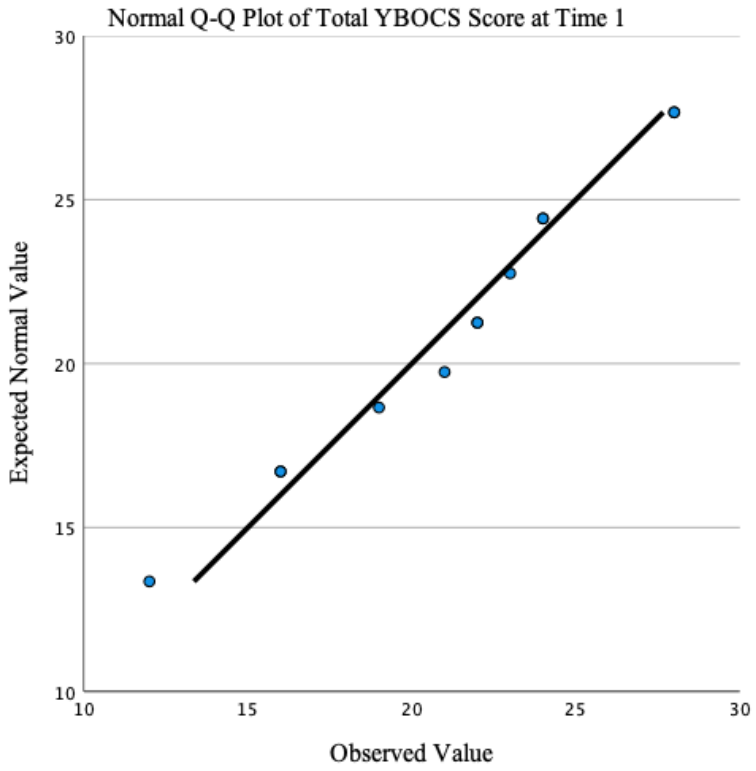
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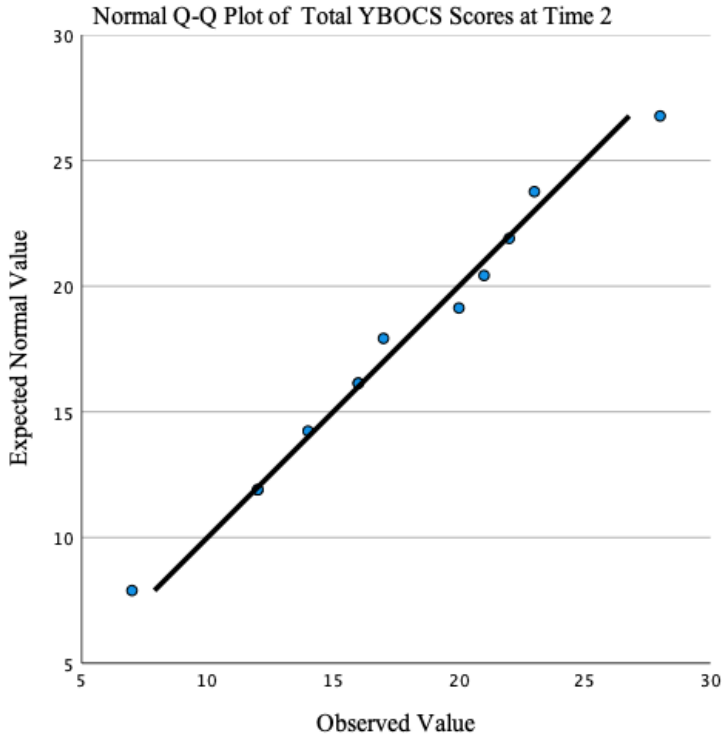
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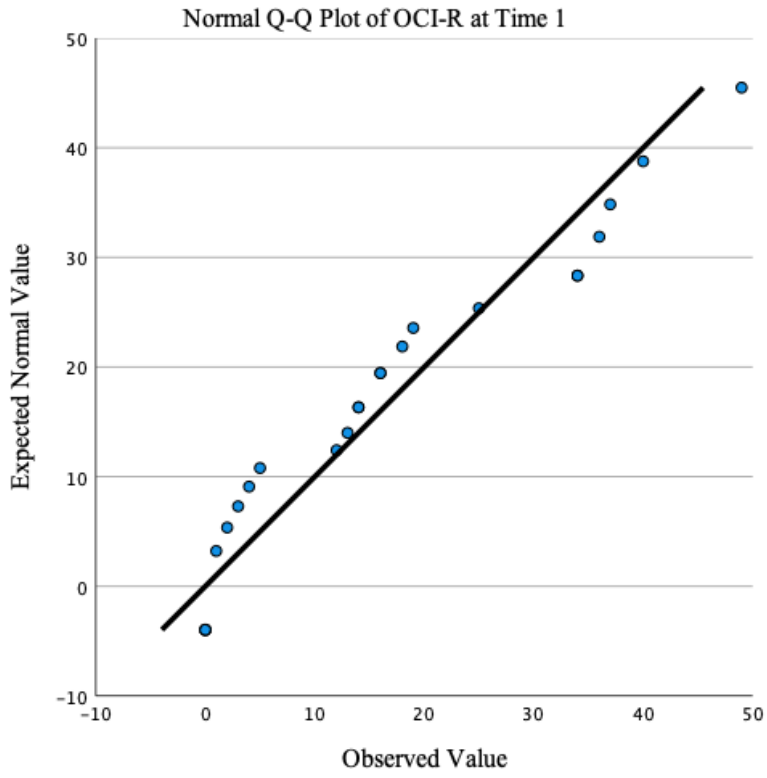
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-10
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10
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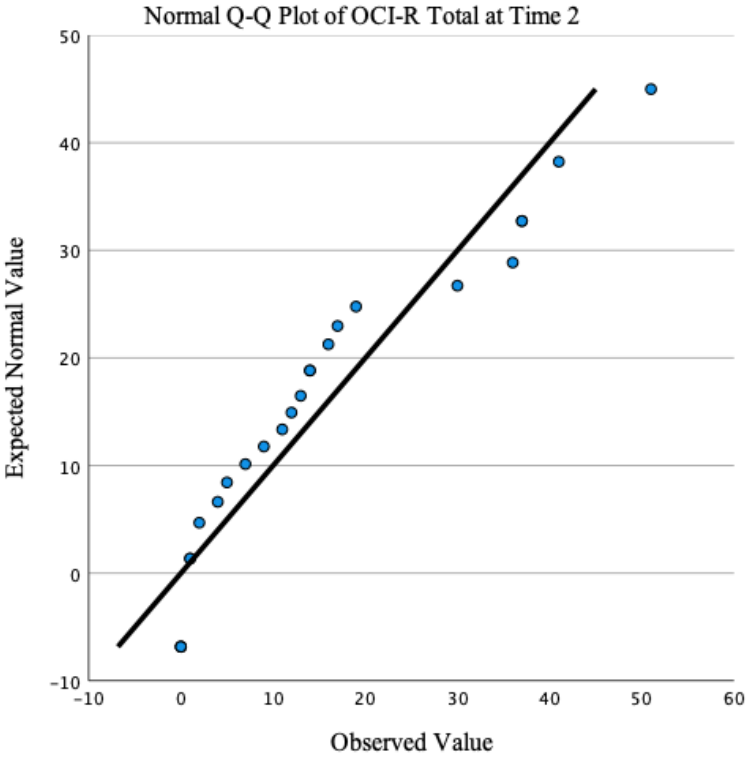
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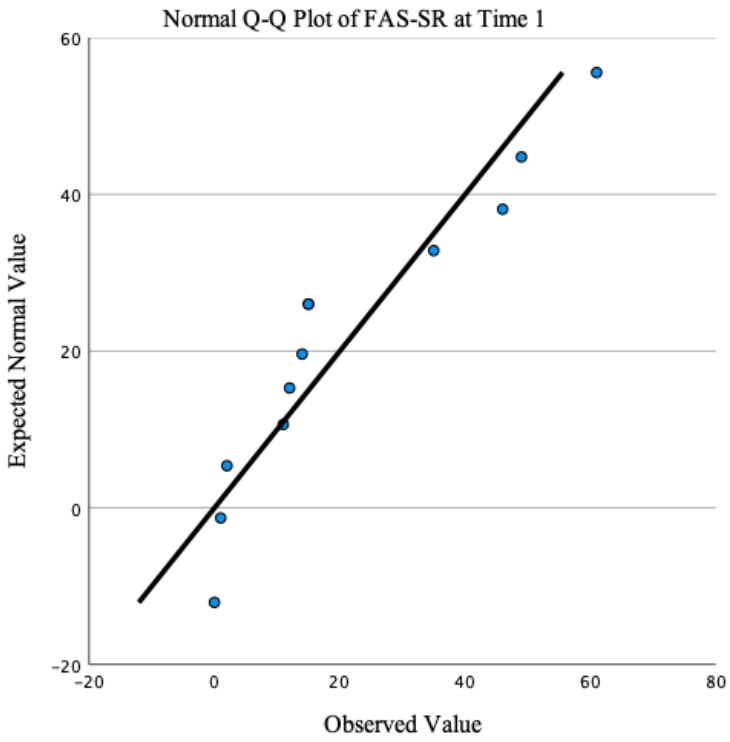
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40
60
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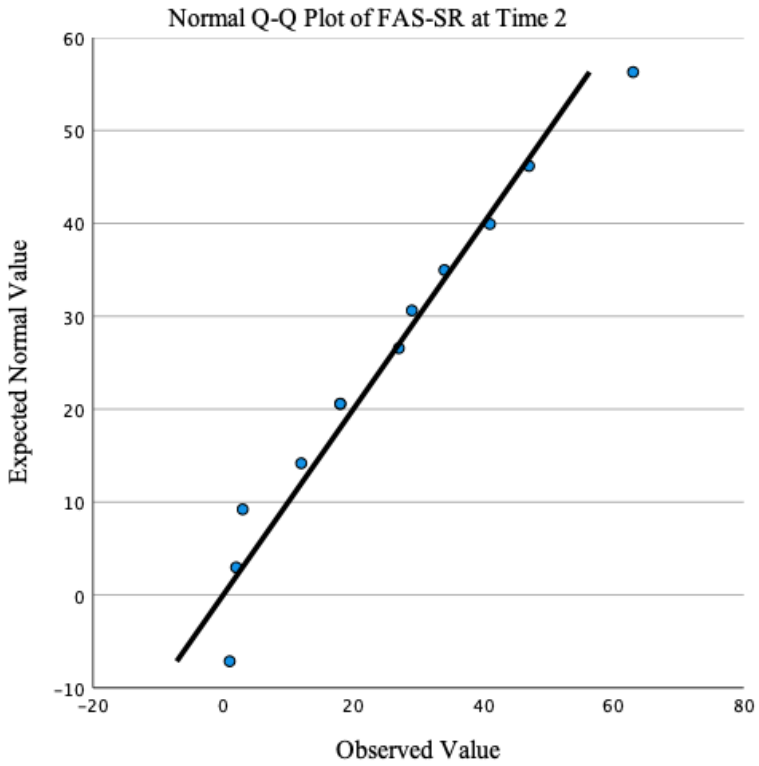
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20
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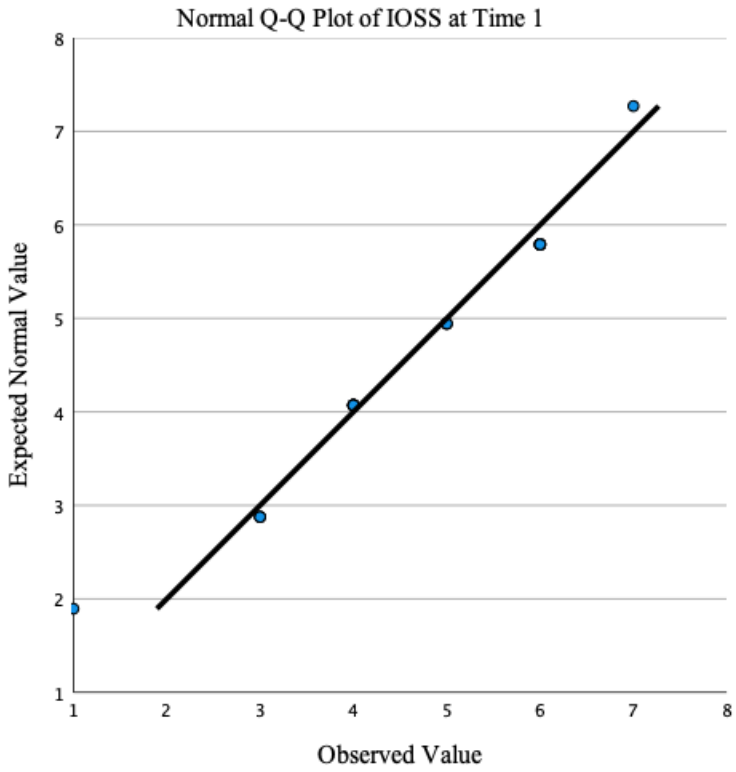
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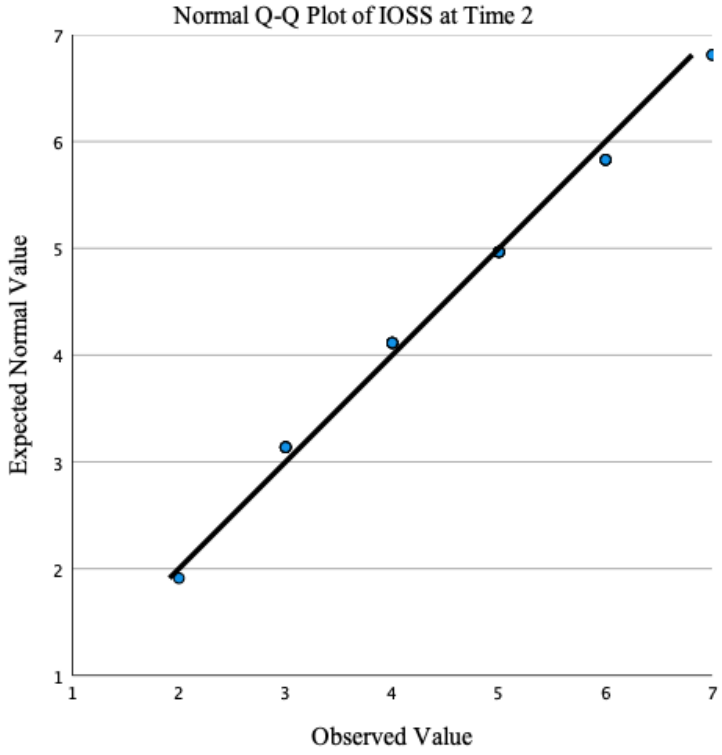
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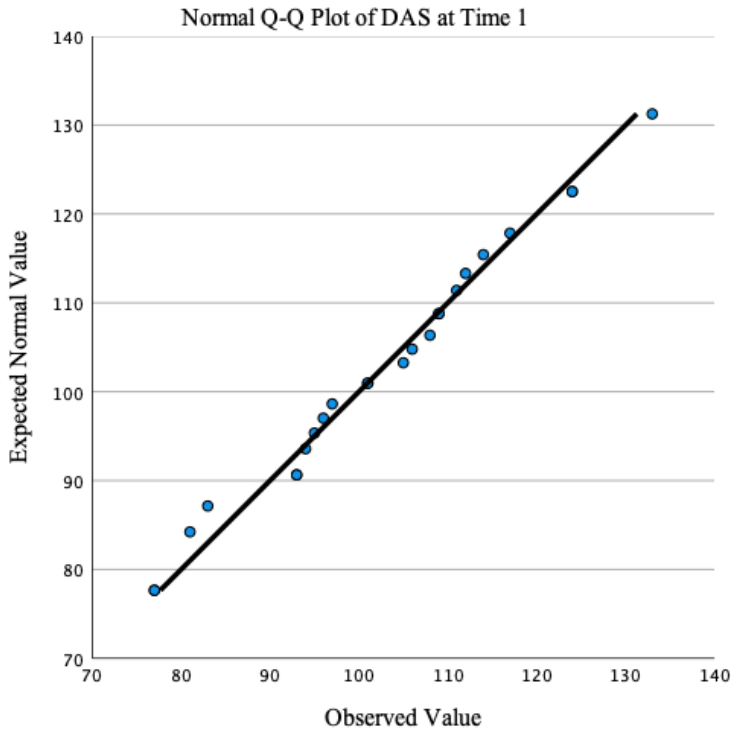
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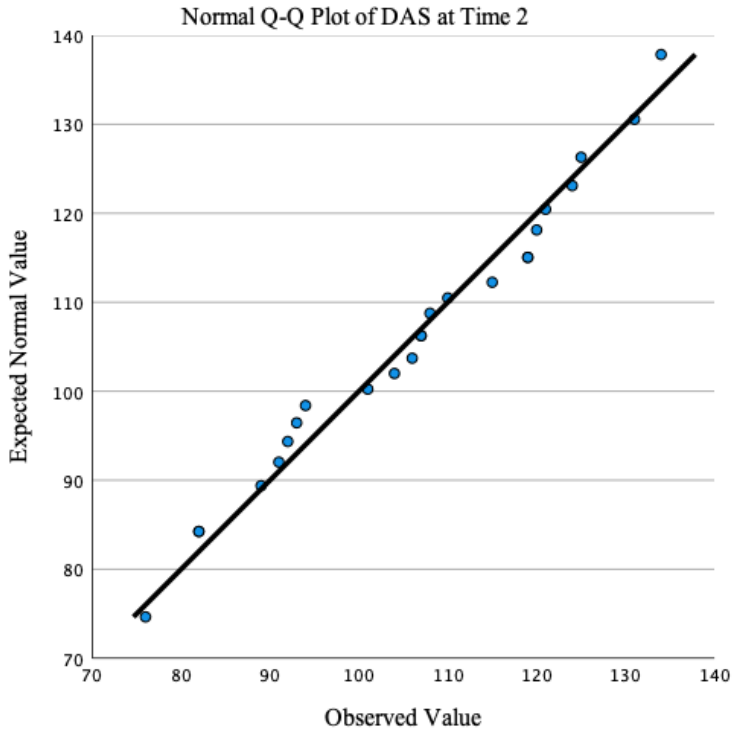
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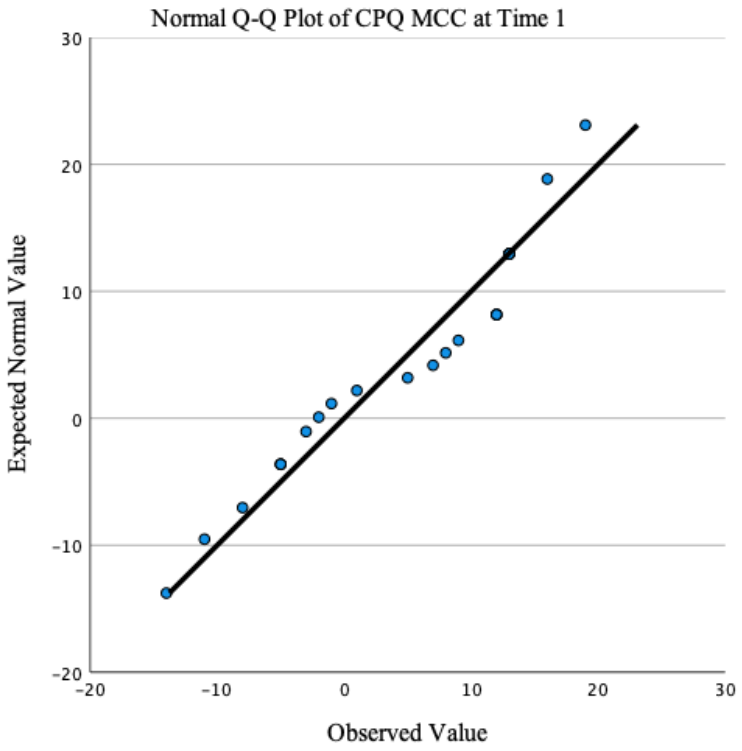
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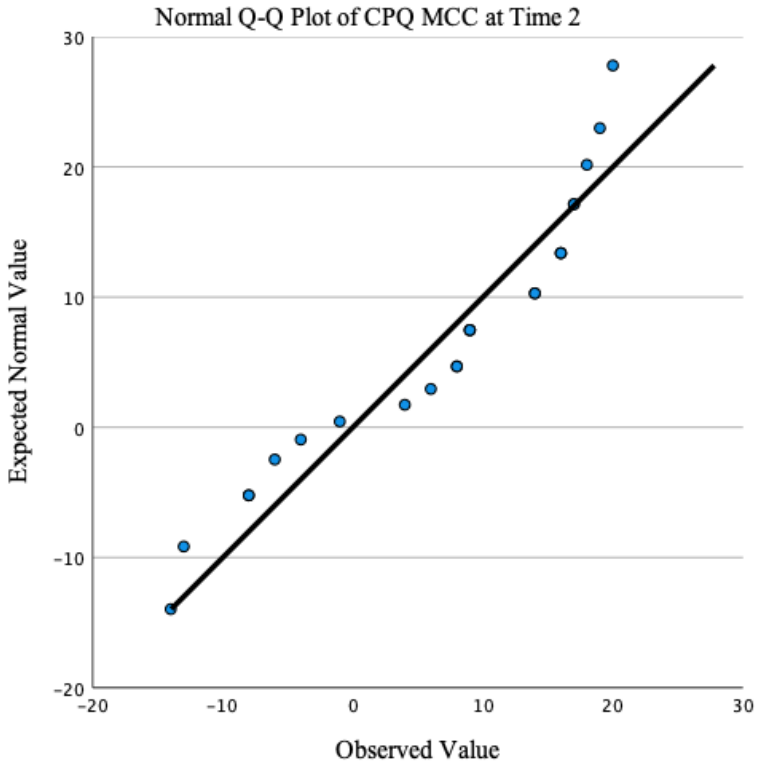
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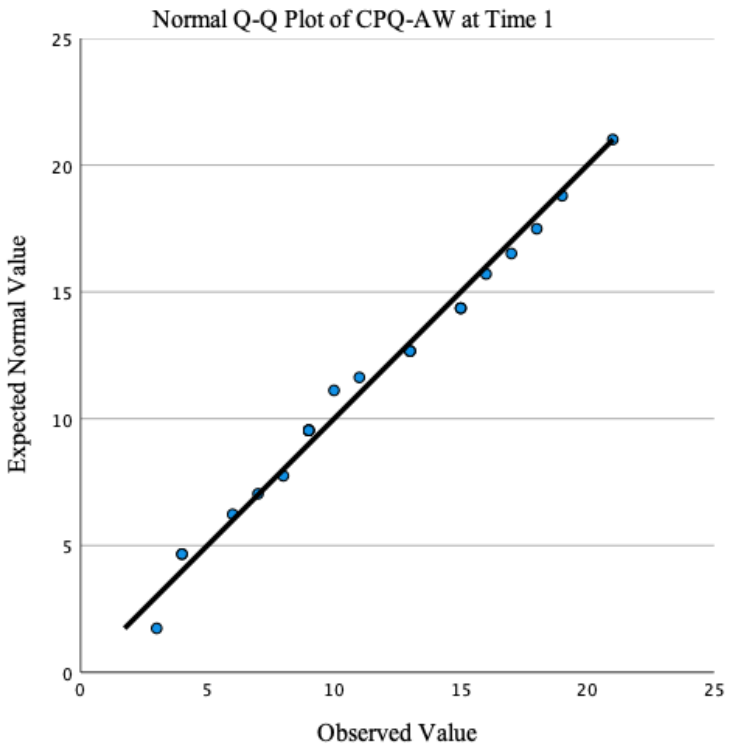
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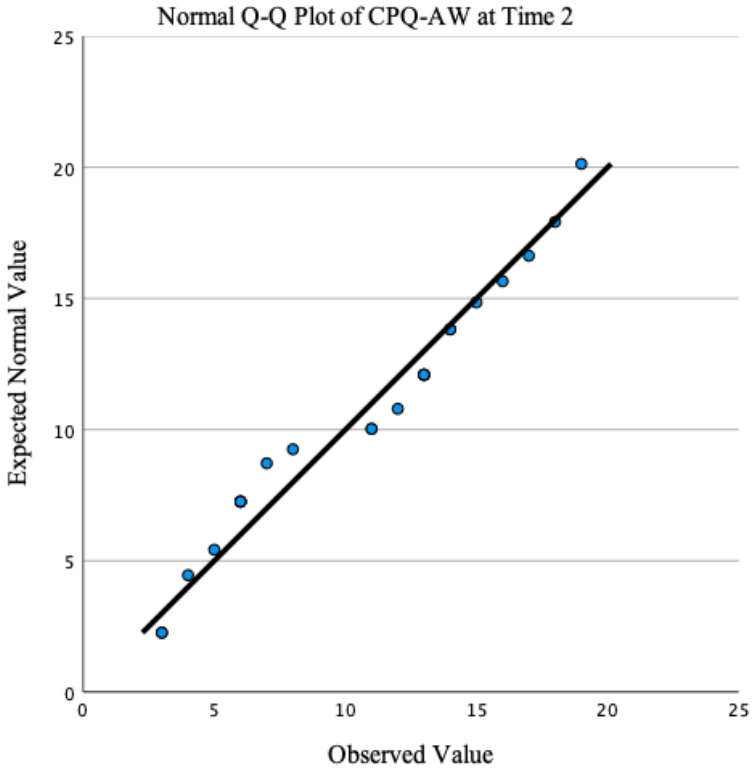
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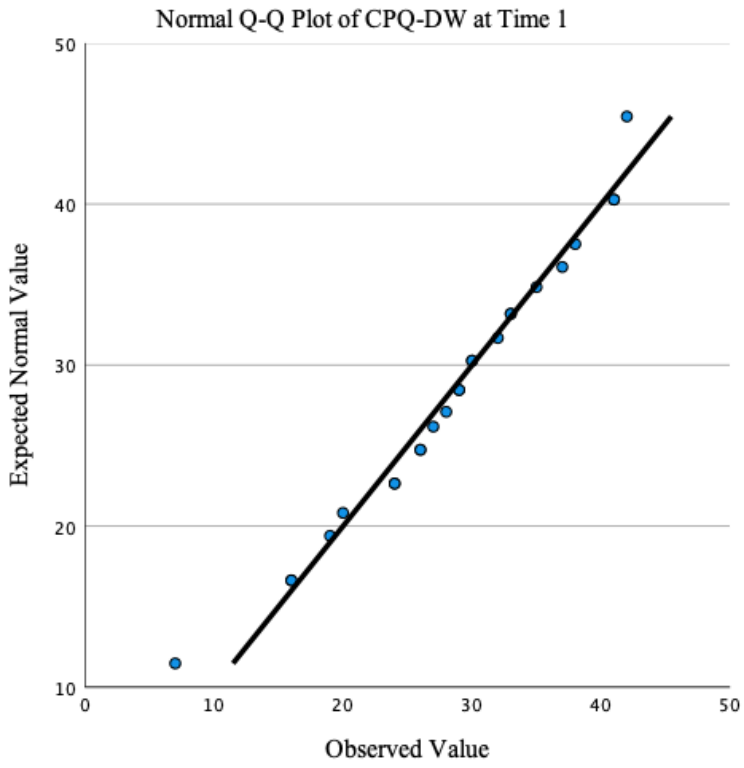
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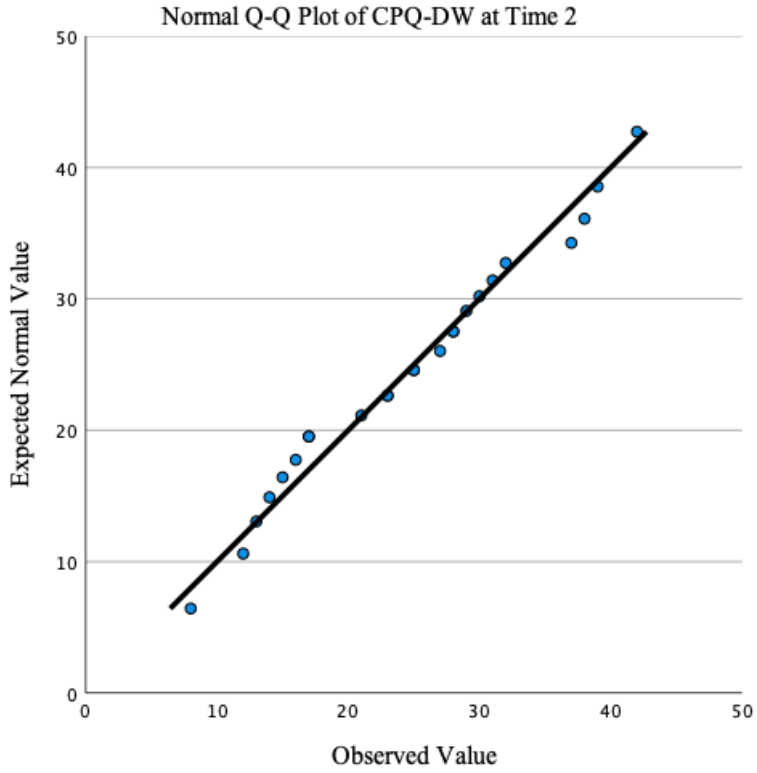
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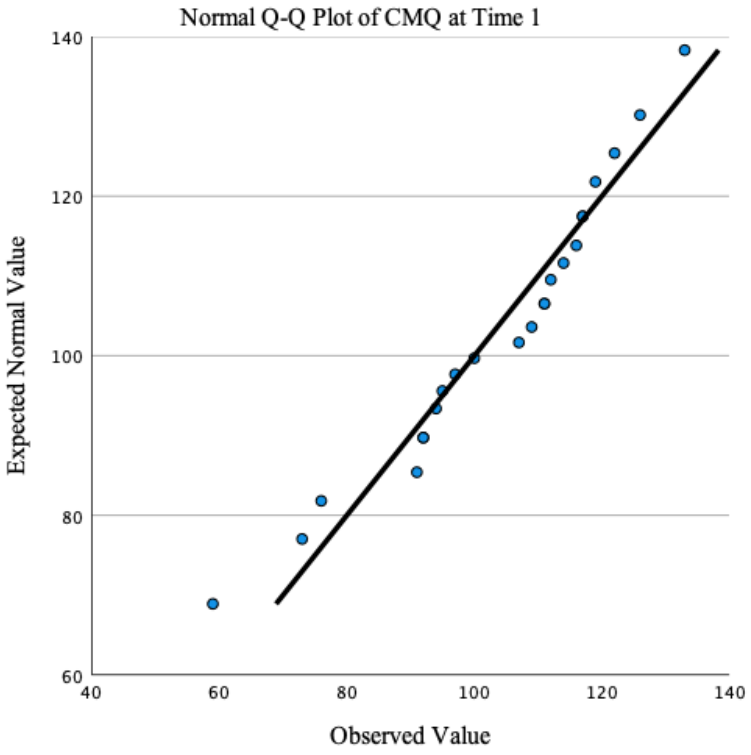
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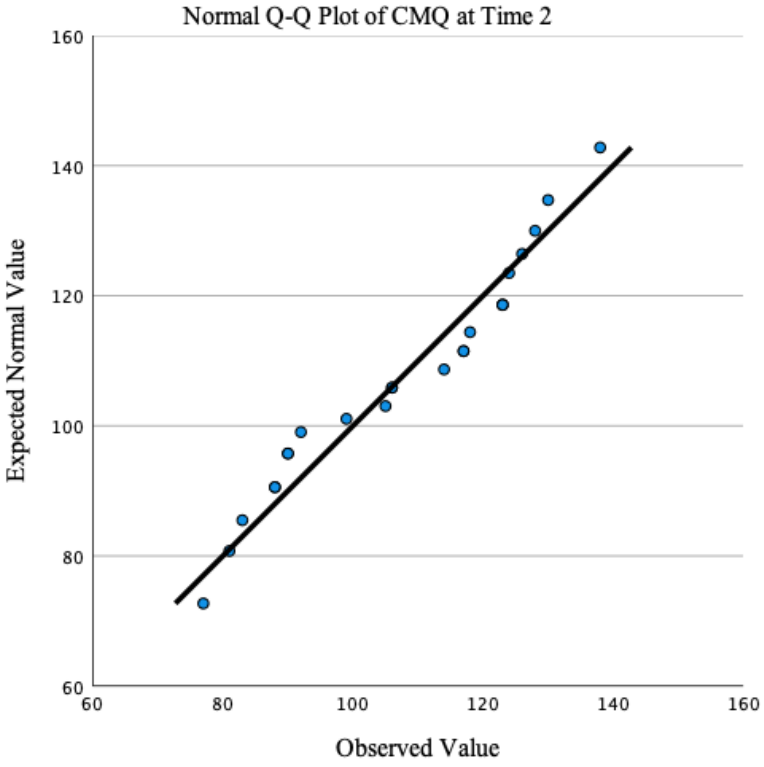
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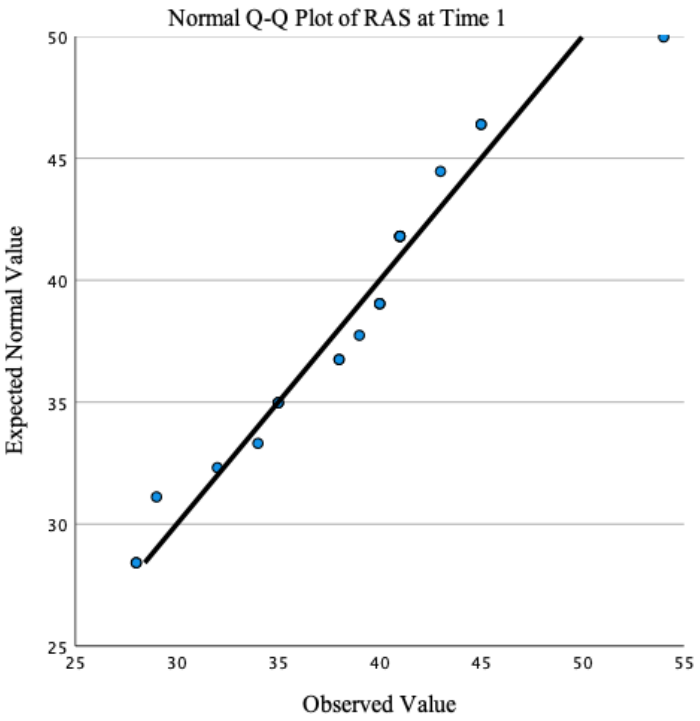
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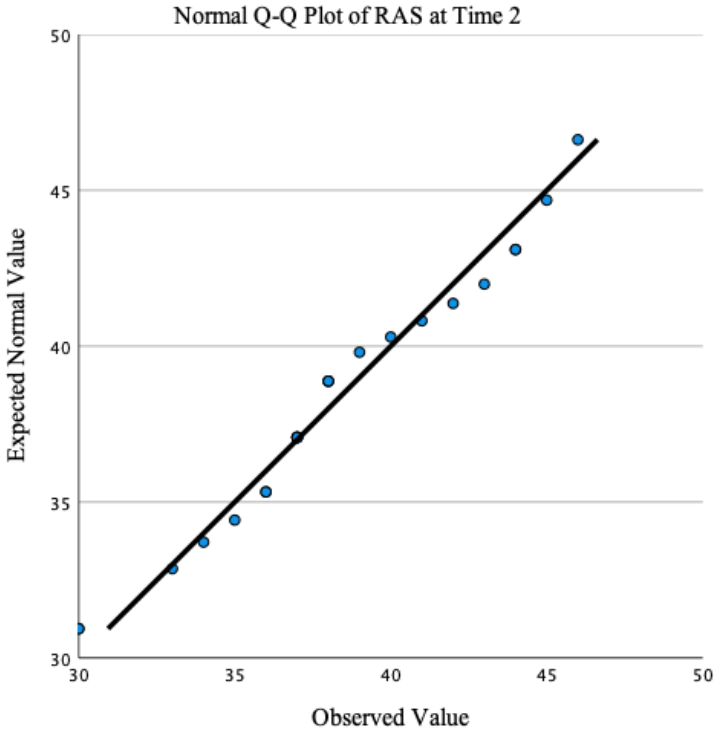
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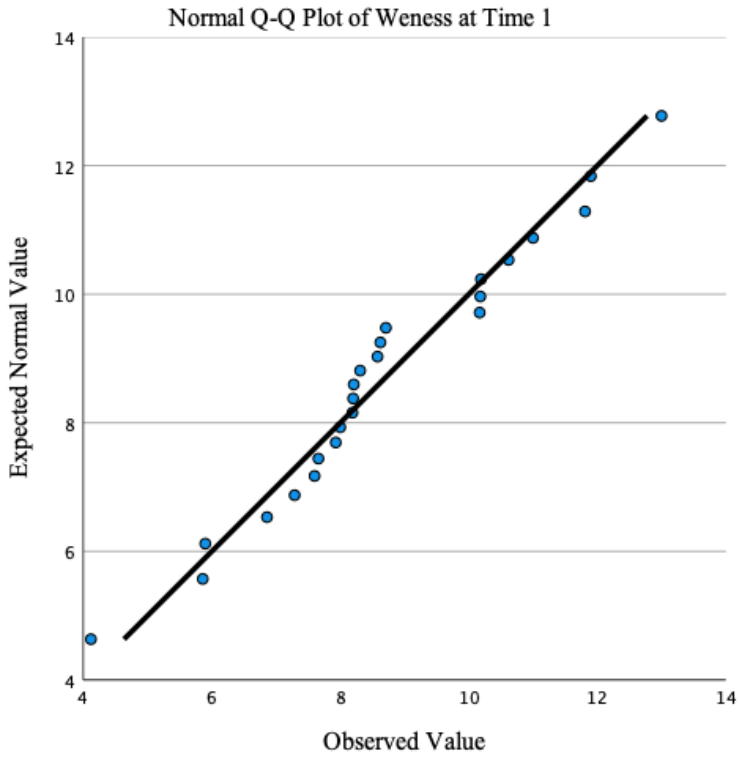
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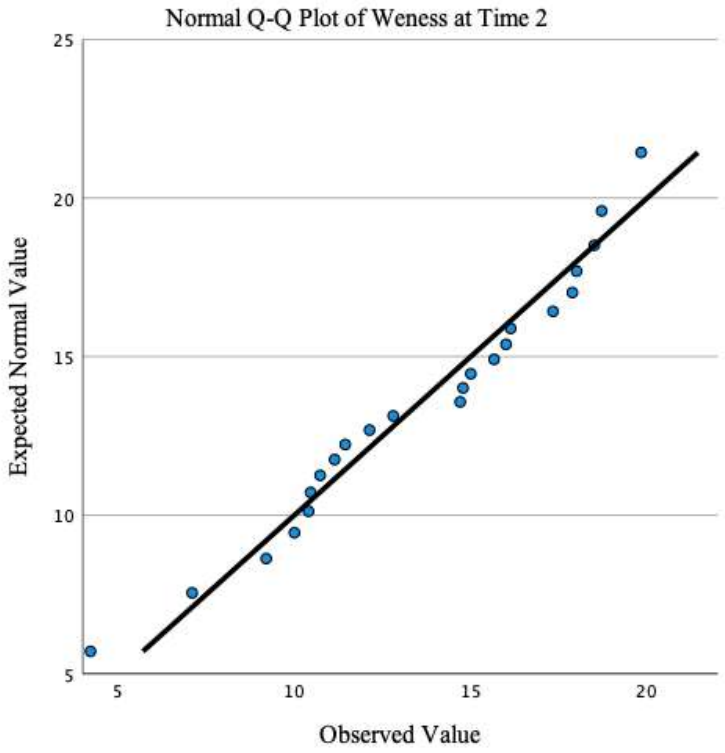
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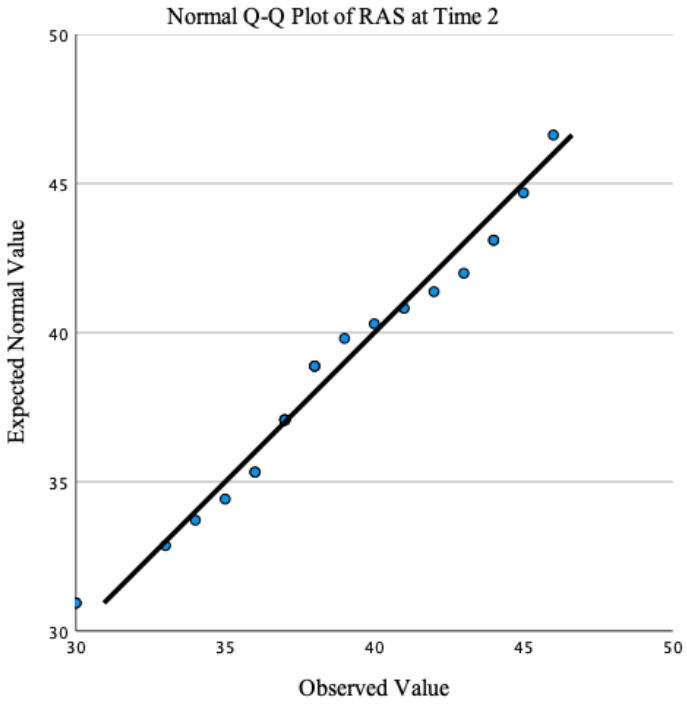
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