THE OVERLAP BETWEEN DISSOCIATIVE AND OBSESSIVECOMPULSIVE DISORDERS: A THEORETICAL LINK

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ABSTRACT

The psychological literature reveals a comorbidity between dissociative and obsessive-compulsive disorders. The exact nature of this relationship, however, remains unknown (Steinberg, 1993). This paper offers one explanation by linking the manifestation of dissociative and obsessive-compulsive symptoms to rigidity in the spontaneous organization and integration of cognitive/perceptual experience. While the authors acknowledge there are most likely other factors contributing to this complex relationship, they believe that the dissociative and obsessive's inability to attend to new facts, respond to changes in the environment, and assimilate/accommodate peripheral information into pre-existing schemas about the self and the world may begin to explain some of their clinical overlap in perception, cognition, and behavior.

For over half a century, researchers and theorists have speculated about the relationship between dissociative and obsessive-compulsive disorders (Davison, 1964; Shorvon, 1946; Steinberg, 1993; Torch, 1978). However, despite a growing body of research linking the two (Bartlett & Drummond, 1990; Beere, 1996; Goff, Olin, Jenike, Baer, & Buttolph, 1992; Kluft, 1993; Ross & Anderson, 1988), little has been written to explain their clinical comorbidity. As a result, the following questions remain unanswered: Why do dissociative individuals tend to exhibit obsessive-compulsive symptoms? Why do some patients diagnosed with obsessive-compulsive dis-

order tend to display elevated levels of dissociativity? The following theoretical investigation of the psychological literature attempts to answer these complex and long-standing questions.

Although there are demonstrated biological aspects of OCD, initially hypothesized by Insel, Mueller, Alterman, Linnoila, & Murphy (1985), associated with the response of symptoms to serotonin reuptake inhibitors, biological considerations are not pertinent to the current discussion since dissociative psychopathology is non-biological, being strongly linked to an environmental history of trauma. Waller & Ross (1997), for example, using taxometric methods, demonstrated that pathological dissociativity is not genetic but environmental.

The thesis of this paper is that the comorbidity between dissociative and obsessive-compulsive disorders can be linked to rigidity in the organization and integration of cognitive/perceptual experience. A review of the psychological literature reveals that dissociative and obsessive-compulsive individuals have trouble attending to new facts, responding to changes in the environment, and assimilating/accommodating peripheral information into pre-existing schemas about the self and the world.

Relative to the available literature, the authors focus on a selected area of research, namely the cognitive and perceptual processing of dissociative and obsessive-compulsive individuals. This research, however, taps only one of a myriad of theoretical perspectives on dissociative and obsessivecompulsive disorders. The authors, therefore, acknowledge that their thesis may not fully explain the relationship between dissociative and obsessive-compulsive disorders and that there are most likely other factors contributing to this complex relationship. This, however, is not to diminish the importance of this thesis. In breaking new ground, this paper is the first to examine the "exact nature" (Steinberg, 1993) of the relationship between dissociative and obsessive-compulsive disorders. Despite some limitations, it raises several theoretical considerations and numerous directions for future research.

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The association between dissociative and obsessive-compulsive disorders can be traced to mid-20th Century research. Among the earliest investigations reported in the literature, Shorvon (1946) presented on a sample of patients diagnosed with depersonalization disorder 88% of whom exhibited obsessive personality traits. Reporting on the manifestation of depersonalization experiences among a group of seven obsessive-compulsive patients, Davison (1964) suggested that patients diagnosed with obsessional personalities seem prone to depersonalization in responses to psychosocial stressors. Torch (1978) suggested that "in nearly all cases of depersonalization, it is the obsessional nature of the syndrome which seems to provide the drive and the staying power to the syndrome" (p. 197). He argued for a variant diagnosis called "intellectual obsessive depersonalization syndrome." Found mostly among individuals who are highly intellectual and who have a tendency to ruminate on the intrinsic meaning of things, such as philosophers and mathematicians, this syndrome is "comprised of a complex and fascinating combination of alternating states of depersonalization and obsessional self-scrutiny" (p. 194).

More recently, Armstrong and Loewenstein (1990) found that the Rorschach responses of 14 dissociative-disordered patients displayed features consistent with an obsessional personality style. They compared this finding to the observations of Geleerd, Hacker, and Rapaport (1945), who reported that compulsive mechanisms "predominated in the psychological testing profiles of dissociating patients in their small sample" (Armstrong & Loewenstein, 1990, p. 453).

Summarizing the findings from several epidemiological investigations of dissociative identity disordered patients (DID), Kluft (1993) concluded that approximately a third of those sampled exhibited obsessive-compulsive symptoms. Ross and Anderson (1988) reported that of the three obsessive-compulsive disordered (OCD) patients comprising their inpatient sample, two exhibited alter personalities while under a sodium amytal interview. Explaining the comorbidity between dissociative and obsessive-compulsive symptoms. Ross (1989) suggested that "obsessions might arise out of dissociated aspects of the psyche" (p. 166).

In other research, Bartlett and Drummond (1990) reported on a patient with OCD who exhibited symptoms of derealization during exposure treatment. They proposed that dissociative experiences may have prevented desensitization in this individual. Examining the prevalence of dissociative symptoms in a sample of 100 OCD patients, Goff et al. (1992) found that twenty percent had elevated Dissociative Experience Scale (DES) (Bernstein & Putnam, 1986) scores. They concluded that "dissociative symptoms may commonly coexist with symptoms of OCD" (p. 335). Complicating matters, however, they noted OCD may mimic dissociation in

some patients, resulting in elevated dissociation scores, in other words, a false positive or misdiagnosis.

OVERVIEW

While the above-mentioned findings point to an association between dissociative and obsessive-compulsive disorders, the exact nature of the relationship remains unexplained and has not been the focus of much inquiry (Steinberg, 1993). This paper attempts to clarify the relationship between dissociative and obsessive-compulsive disorders by looking for a common etiological factor in the psychological literature. Using a perceptual-based theory of dissociation and a cognitive/information processing model of obsessive-compulsive symptomatology, the authors link the manifestation of dissociative and obsessive-compulsive symptoms to rigidity in the organization and integration of cognitive/perceptual experience.

The following discussion has been divided into three parts. Part one reviews the research linking perceptual rigidity and dissociative symptomatology. Part two reviews the research linking cognitive rigidity and obsessive-compulsive symptomatology. These include symptoms associated with OCD and obsessive-compulsive personality disorder (OCPD). Part three synthesizes these findings and the link becomes apparent.

Perceptual Rigidity and Dissociative Symptomatology

Recent research has found perceptual rigidity to play a significant role in the dissociative process (Beere, 1996; Beere & Pica, 1995; Beere & Pica, 1996; Beere, Pica, Maurer, & Fuller, 1996; Beere, Repasky, & Pica, 1997; Pica, Beere, & Repasky, 1996). Curious about the switching phenomena in DID, Beere (1996) collected and phenomenologically reduced descriptions by 16 DID patients of the experience of switching from one alter to another. Not only did his analyses reveal that switching required that "an alter currently in control had a rigid self-constitution" (defined by Beere as self-concept), but that "the more restricted the range of an alter's allowable experience, the greater the likelihood of switching to another alter" (p. 55). According to the descriptions, switching resulted when the activation of egodiscrepant thoughts and feelings became so intolerable for the alter in control that he/she lost control of the body to a newly energized (non-executive) alter. As well, Fine (1988) theorized about a cognitive perceptual substrate for dissociative disorders, positing a dystunctional rigidity to subtend the disorder. Assuming these findings are correct, one might conclude that the treatment of DID might be facilitated by working with the alters in ways that promote flexibility.

Moving from the investigation of dissociative pathology to the process of dissociation itself, there is further support for a dissociativity/perceptual rigidity connection. Testing

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a biological predisposition to dissociate consistent with Beere's (1995) perceptual theory, Beere and Pica (1995) administered the DES (Bernstein & Putnam, 1986) and two adult measures of temperament, the Dimensions of Temperament Survey (DOTS-R) (Windle, 1989) and the Structure of Temperament Questionnaire (STQ) (Rusalov, 1989) to 125 randomly selected undergraduate students. As expected and consistent with their notion that dissociativity derives from a general unresponsiveness to contextual cues, they found that high dissociators tended to perceive more rigidly and respond less readily to changes in the environment than low dissociators as measured by their responses on the DOTS-R rigidity subscale. Examples of the DOTS-R rigidity scale include the following: "It takes me a long time to adjust to new schedules" (DOTS-R item 13) and "When things are out of place, it takes me a long time to get used to it" (DOTS-R item 44). That these findings have been replicated with a second random sample adds further support for a dissociativity/perceptual rigidity connection (Beere et al., 1997).

In other research, Beere and Pica (1996) found that high dissociators tended to rate themselves as significantly more rigid in their thinking than low dissociators (p < .05). Likewise, Pica, Beere, and Repasky (1996) found that, compared to the TAT stories of low dissociators, the stories of high dissociators were more concrete and more likely to center on a common theme across cards ($\underline{p} < .05$). They were also written from a perspective in which the writer did not seem to take into consideration why the characters thought, felt, or acted the way they did. Providing further support for a dissociativity/perceptual rigidity link, Beere, Pica, Maurer, and Fuller (1996) found that reversal rates of the Necker cube were significantly lower (p < .05) for high than low dissociators. Furthermore, changes in peripheral stimuli (background) did not increase the rate of reversal for the high dissociators but did increase it significantly for the low dissociators (p < .05). These results are consistent with the prior results on temperament. In other words, individuals who dissociate tend to perceive rigidly (alter their perception less readily) and are less influenced by the context (peripheral stimuli or background).

COGNITIVE RIGIDITY AND OBSESSIVE-COMPULSIVE SYMPTOMATOLOGY

Like dissociative individuals, obsessive-compulsives have trouble attending to new facts, responding to changes in their environment, and assimilating/accommodating peripheral information into pre-existing schemas about the self and the world. Early support for this notion can be traced to the writings of Janet (1903) and Shapiro (1965), each of whom associated obsessive-compulsive symptoms to an inability to attend to peripheral information. Janet (1903) described it as an inability to integrate reality (see Reed, 1985), while Shapiro (1965) described it as an "inability to attend to new

facts or different points of view" (p. 25).

Over the last decade, Reed (1985, 1991) has written most extensively on the cognitive processing of obsessive-compulsives. His two books outline a cognitive-deficit model of OCD which the current authors extend to the cognitive experience of OCPD as well. A problem with the literature in general, as well as the paper presented here, has been the blending of OCD and OCPD into a single group and overlooking their differentiation. While the authors acknowledge the distinction between these disorders, they take the position that the two may be associated with a similar style of perceptual processing.

Reed (1985) proposes that to compensate for an impairment in the spontaneous organization and integration of peripheral information, the obsessive overstructures and imposes rigidly defined limits and time markers. Spanning four decades of research, he refers to a series of laboratory studies which support his basic hypothesis. What follows is a brief review of this research.

The first study that Reed cites is Hamilton (1957), who administered a series of cognitive flexibility tasks to a group of obsessive-compulsives, a group of hysterics, a group of anxiety patients, and a group of normal controls. The tasks included the Rubin figure and the Necker cube, three series of ambiguous drawings, three tests of discrimination, and a block sorting task in which subjects were instructed to divide different blocks into categories based on features possessed in common. As predicted, he found the obsessive-compulsive group performed more rigidly than the normal controls on each of the measures (p < .01). They also performed more rigidly than the hysterics on the block-sorting task, dividing the blocks into a larger number of small categories (p < .05). Of interest to note is that, like high dissociators (Beere et al., 1996), the obsessives reported fewer reversals on the Necker cube.

Citing his own research, Reed (1969a) administered a cognitive flexibility task to a group of 25 OCD patients, 25 matched psychiatric controls, and 25 matched normals. In this study, subjects received a list of target nouns followed by a group of five associated words and the word "none." They were faced with the task of underlining those words that were essential to the target noun, or the word "none," if none of the words were essential. Assuming that the obsessive-compulsive group should be more rigid in their thinking, it was hypothesized that they should have more difficulty generating alternatives to the target noun. As predicted, the OCD group accepted fewer alternatives as essential to the target noun than the matched controls (p < .001).

Expanding on the work of Hamilton, Reed (1969b) administered a series of block-sorting tasks to a group of obsessive-compulsive patients, a group of non-obsessional psychiatric controls, and a group of normal matched controls. Subjects were instructed to sort the blocks into families according to features possessed in common. Consistent with

Hamilton's (1957) findings, the obsessive-compulsive group performed more rigidly, allocating fewer members to each family and requiring more families (p < .0002).

More recently, Turner, Newman, and Foa (1983) found that obsessive-compulsive patients were more likely than normal controls to focus on a single dimension when asked to rate the similarity of a set of paired emotional adjectives. In contrast, normal controls were significantly more likely to rate on two or more dimensions. Persons and Foa (1984) had a group of obsessional and non-obsessional patients complete a series of card-sorting tasks. On each card was an object or brief description. Subjects were instructed to sort the cards into different categories based on the object or brief description. Assuming the obsessionals should perceive more rigidly than the non-obsessional controls, the authors hypothesized they should fit fewer items per category and take a significantly longer time to complete the task. Both hypotheses received significant support.

Despite these findings, Reed's cognitive model of OCD is not without its critics. Jakes (1996), for example, suggests that it fails to explain the motivation behind obsessive-compulsive behavior and misrepresents the role of anxiety in obsessive-compulsive symptomatology. He goes on to argue that the research presented by Reed is "at best controversial" (p. 134) and hints at problems with the diagnosis of the experimental and control groups. Ultimately, he concludes that Reed's theory of OCD

appears to be most plausible when regarded as partial explanation of some obsessional difficulties in particular those where one observes the patient's having problems structuring some task and tending to perform it in an overstructured manner...the best examples...appear to be...instances involving contamination fears and cleaning behavior (p. 135).

Linking Dissociative and Obsessive-Compulsive Disorders

Apparent from the preceding review is that the cognitive processes hypothesized as underlying obsessions and compulsions (i.e., an inability to attend to new facts, respond to changes in the environment, and assimilate/accommodate peripheral information into pre-existing schemas about the self and the world) is similar to the perceptual processes underlying dissociation.

It is possible the difference among dissociative and obsessive-compulsive symptomatology may relate to focused attention versus perception of peripheral stimuli. Relevant to obsessive-compulsive disorders, the literature presented here addresses the rigid conceptual and perceptual focusing on particular figures. By contrast, the perceptual theory and research by Beere and Pica (1995) emphasizes a distinction between focused attention and peripheral

perception. They correlated the latter with dissociativity. In this way, even though the dissociative and obsessive-compulsive person appear rigid, the source of the rigidity might derive from two different ways of organizing perceptual experience. Following this logic, some variance between the two disorders would be shared, but not completely.

Despite the apparent overlap, the authors believe the relationship among trauma, dissociation, obsessions, and compulsions can be readily distinguished. For the most part, dissociation occurs as a defensive reaction to a traumatic event in the lived-world. Obsessions and compulsions, on the other hand, occur as a way to keep anxiety provoking feelings from entering conscious awareness. In this way, dissociation might be construed as representing a response against something external, while obsessions and compulsions represent a response to something internal most notably a thought or bodily feeling.

Another interesting link comes from Beere's (1996) research on switching. Based on his analysis of the written descriptions and his clinical experience, Beere (1996) has noticed that host personalities will experience obsessions when alters insert their thoughts, impulses, emotions, or memories into consciousness. Inevitably, the obsessions are distressing. More to the point, they are inconsistent with the self-constitution of the host. The host's inability to own (accept, tolerate) the experience as "mine" leads to the distress, the active attempt to stop the experience, and the effort to avoid it. The critical underlying feature of the self-constitution is its rigidity or inability to flexibly incorporate new or different experience. It would seem reasonable to hypothesize that a perceptually rigid way of organizing experience probably underlies the rigid self-constitution. Critical to note is that the process just described is almost identical to Reed's, assimilating/accommodating peripheral information into pre-existing schemas about the self.

An interesting question pertains to the origin of the rigidity. The authors have so far considered the rigid perceptual style to be biological, or temperamental. Might there be other origins for this rigidity? Might, for example, a child learn via modeling? Or might the experience of trauma "teach" a rigid perceptual style?

A final association between dissociative and obsessivecompulsive disorders might be derived by comparing the defenses used by obsessive-compulsives and the defensive function of dissociation. Three psychological defenses have been associated with obsessive-compulsive symptomatology: isolation, undoing, and reaction formation (Yaryura-Tobias & Neziroglu, 1983). From an analytical perspective, the obsessive uses isolation to separate and repress anxiety-provoking feelings (most often, feelings of anger and resentment toward a significant other) from entering conscious awareness. For the compulsive, the defense of undoing prevents acting on id-related impulses (most often, feelings of anger and resentment toward a significant other). Reaction for-

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mation, which works by engaging in patterns of behavior which are exactly the opposite of the underlying impulses, has been hypothesized to explain the obsessive's often superficially cooperative nature. This masks underlying feelings of anger, guilt, and self-degradation.

Of the three proposed defenses, only isolation has received empirical support (Rubino, Sonnino, & Tonini, 1992). Critical to note is the similarity between the function that isolation serves for the obsessive-compulsive and the defensive function of dissociation. Both arise out of a need to prevent anxiety-provoking emotions from entering conscious awareness. Goff et al. (1992) suggested that OCD might mimic dissociation in some cases resulting in false diagnoses. In some cases, might the obsessive's attempt to repress anxiety-provoking feelings from conscious awareness mimic dissociation? While this might be the case for obsessives who endorse dissociative symptoms during obsessions or compulsions and not at any other time, the authors suggest that it fails to explain the obsessive who dissociates independent of the obsession or compulsion. Another interesting question pertains to the relationship between dissociation and repression. Is the obsessive's attempt to repress anxiety-provoking affect a special form of dissociation? Though beyond the scope of this paper, this question raises various theoretical implications about the relationship between dissociation and repression. For a comprehensive review of this research see Singer (1990).

SUMMARY AND CONCLUSION

The purpose of this paper was to clarify the relationship between dissociative and obsessive-compulsive disorders by identifying a common etiological factor in the psychological literature. Drawing on a perceptual model of dissociation and a cognitive model of obsessive-compulsive symptomatology, the authors linked the comorbidity between dissociative and obsessive-compulsive disorders to a rigidity in the organization and integration of cognitive/perceptual experience. Both dissociative and obsessive-compulsive individuals have trouble attending to new facts, responding to changes in the environment, and assimilating/accommodating peripheral information into pre-existing schemas about the self and the world. Directions for future research might focus on the questions raised throughout the body of this paper. It might also prove a useful clinical study to focus on obsessions and compulsions in DID, OCD, and obsessivecompulsive personality disorder in order to clarify their similarity, difference, and theoretical relationship.

Critical to note is that this theoretical link is not without its limitations. For example, given this common hypothesized-predisposition, the theory cannot explain why some patients become dissociative and others become obsessive or compulsive. This question might be addressed in future research. In addition, the theory does not explain why some obsessive-compulsive patients do not exhibit dissociative symptoms or why dissociative patients do not always experience obsessions or compulsions. This implies that there are additional factors leading to dissociative and obsessive-compulsive symptoms. Attempts to clarify these additional factors might clarify the "motivation" behind the rigidity, a conceptual omission for which Jakes (1996) criticizes Reed (1985, 1991).

While the theory presented here begins to explain some of the association between dissociative and obsessive-compulsive disorders, it is important to make the following caveats. First, the authors do not believe that an inability to attend to new facts, respond to changes in the environment, and incorporate peripheral information into pre-existing schemas about the self and the world fully explains the association between dissociative and obsessive-compulsive disorders. There may indeed be other factors contributing to this complex relationship. Second, that one perceives rigidly, does not mean he/she will dissociate, obsess, or act compulsively. There is most likely an environmental contribution, such as trauma in the case of dissociation or a restrictive, demanding, and highly moralistic parental style in the case of obsessions and compulsions; although trauma has also been associated with obsessive-compulsive disorders (Rachman & Hodgson, 1980). Third, although we have emphasized a common perceptual/cognitive style, are there differences in that style unique to the functioning of dissociative and obsessive-compulsive individuals?

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