

Clarifying the Temporal Relationship between Dependent Personality Disorder and Anxiety Disorders

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The relationship between dependent personality disorder (DPD) and several of the anxiety disorders is explored. Recent meta-analytic findings (this issue) suggest that DPD is comorbid with social phobia, obsessive-compulsive disorder, and panic disorder but not with the other anxiety disorders. Examination of comorbidity rates clarifies the relationship between DPD and specific anxiety disorders, but this method does not address many of the important questions concerning this relationship. It remains unclear whether DPD is associated with an increased risk for developing an anxiety disorder or whether anxiety disorders increase the risk of developing DPD. Additionally, if DPD does serve as a risk factor for the development of anxiety disorders, it is unclear whether this risk is clinically meaningful. Finally, causal mechanisms leading from DPD to anxiety disorder have not been examined and warrant future investigation. Examination of comorbidity rates between DPD and the anxiety disorders does not address many clinically relevant issues surrounding the DPD-anxiety relationship, but it does highlight important directions for future research.

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The *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994; *DSM-IV*) assertion that dependent personality disorder (DPD) serves as a risk factor for the development of anxiety disorders was examined in a meta-analysis conducted by Ng and Bornstein (this issue). This meta-analysis examined rates of comorbidity between DPD and

specific anxiety disorders. The results indicate that a reliable relationship exists between DPD and anxiety disorders but that this relationship is small in magnitude and only applies to some of the anxiety disorders. Specifically, DPD was found to have a moderate positive association with panic disorder, social phobia, and obsessive-compulsive disorder (OCD), a modest negative association with posttraumatic stress disorder (PTSD), and no relationship with generalized anxiety disorder (GAD), specific phobia, or agoraphobia. These findings indicate that the relationship between DPD and anxiety disorders may be more tenuous than the clinical literature on dependency has previously posited.

Although this meta-analysis resolves some of the uncertainty surrounding the relationship between DPD and anxiety, it generates far more questions than it answers. In particular, the *DSM-IV* states that DPD may be associated with an increased risk for anxiety disorders. This language conveys that the presence of dependency occurs prior to the onset of anxiety, and that DPD serves as a risk factor for anxiety disorders. The meta-analysis examined comorbidity of DPD and anxiety disorders, but did not address direction of causality. That DPD was present before an anxiety disorder emerged was not a necessary criterion for a study to be included in this meta-analysis. In fact, many of the studies included were cross-sectional in nature (e.g., Barzega, Maina, Venturello, & Bogetto, 2001; Chambless, Renneberg, Goldstein, & Gracely, 1992), rendering it impossible to determine whether the onset of DPD or the anxiety disorder occurred first. As such, examination of the assertion that DPD serves as a risk factor for anxiety pathology was not possible.

The designation of DPD as a risk factor for anxiety requires a more complex analysis of the temporal relationship between DPD and specific anxiety disorders and of the interplay of other potential risk factors for DPD and anxiety (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001); an examination of comorbidity rates does not provide evidence that DPD is a risk factor for the development of anxiety disorders. The observed association between DPD and several anxiety disorders may have resulted from the posited causal mechanism of dependency serving as a risk factor for anxiety, but also may have resulted from a host of other factors that were not examined in this meta-analysis. Finally, the

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mechanisms by which dependency may predispose an individual to experiencing anxiety states and increase the risk of anxiety disorder were not explored in the current meta-analysis. As such, there are three important issues that remain unresolved regarding the temporal relationship between DPD and anxiety disorders: (a) what is the direction of causality in the DPD-anxiety relationship, (b) is dependency really a risk factor for anxiety, and, if so, (c) what are the mechanisms that lead from DPD to anxiety disorders?

Elucidating the direction of causality in the association between DPD and anxiety is critical to understanding the nature of this relationship. The *DSM-IV* asserts that dependency may serve as a risk factor for the development of anxiety. Because personality disorders involve chronic disturbances of affect and interpersonal functioning that are present from adolescence or early adulthood (American Psychiatric Association, 1994), comorbidity between these conditions and an Axis-I disorder is often assumed to be a function of the personality disorder leading to the development of the Axis-I condition. This appears to be the case in the current conceptualization of DPD and anxiety in that the personality disorder is assumed to predate the development of anxiety. On the other hand, the presence of anxiety pathology may predispose an individual to developing dependency characteristics.

Anxiety disorders are common in children (e.g., Benjamin, Costello, & Warren, 1990; Breton et al., 1999) and could easily occur before the onset of DPD. In fact, the *DSM-IV* posits that separation anxiety disorder in childhood may be a precursor to the development of DPD (American Psychiatric Association, 1994). Past and current rates of separation anxiety disorder are elevated in individuals with DPD, even when compared to psychiatric controls (Loas et al., 2002). Additionally, it is plausible that anxiety conditions related to DPD in the current meta-analysis also could increase the risk of developing dependency characteristics.

Significant psychosocial and occupational impairment is common in individuals with panic disorder (Katon, Hollifield, Chapman, Mannuzza, Ballenger, & Fyer, 1995), social phobia (Magee, Eaton, Wittchen, McGonagle, & Kessler, 1996), and OCD (Koran, Thienemann, & Davenport, 1996). These impairments lead to reduced relationship quality and even an inability to complete activities of daily living for some individuals

(Calvoressi, Libman, Vegso, McDougale, & Price, 1998). Individuals with anxiety disorders also are likely to be financially dependent upon others (Markowitz, Weissman, Quелlette, Lish, & Klerman, 1989). Moreover, avoidance of social situations is common in panic disorder (e.g., Wittchen & Essau, 1991) and is a hallmark of social phobia. Social avoidance can lead to social isolation and a decline in the number and quality of interpersonal relationships. As such, individuals with panic disorder, social phobia, and OCD may become more financially and emotionally dependent upon partners, relatives, or other individuals with whom they have close relationships. Such dependency, resulting from severe anxiety symptomatology, may resemble or be mistaken for DPD in cross-sectional assessments. Financial and emotional dependence resulting from anxiety pathology also may lead to the development of dependency characteristics similar to those experienced by individuals with DPD.

The direction of causality in the DPD-anxiety relationship remains unclear. Assuming for the moment that DPD most commonly appears prior to the development of anxiety disorder, the issue still remains as to whether dependency is a causal risk factor for specific anxiety disorders. An observed statistical correlation between DPD and anxiety does not provide evidence that DPD is a causal risk factor for the development of an anxiety disorder (see Kraemer, Stice, et al., 2001). To determine whether DPD plays a causal role in the development of some anxiety disorders, prospective longitudinal investigations are necessary. Moreover, even if DPD is a causal risk factor for anxiety disorders, the question remains of whether it is a clinically important risk factor (see Kraemer, Kazdin, Offord, Kessler, Jensen, & Kupfer, 1999). Given the small magnitude of the association between DPD and the specific anxiety disorders, its clinical usefulness as a predictor of anxiety may be limited. On the other hand, comorbid cases (even if they are few in number) may involve substantial functional impairment and be more resistant to treatment. If that were the case, identification of individuals with DPD as targets of preventive interventions for anxiety may be worthwhile regardless of low prevalence. Whether DPD is a causal and clinically important risk factor for anxiety disorders remains to be examined empirically.

Perhaps the most important developmental question that remains unanswered following this meta-analysis concerns the mechanisms by which DPD may increase risk for anxiety disorders. Given that the results of the meta-analysis only support an association between DPD and panic disorder, social phobia, and OCD, potential mechanisms are most fruitfully examined in relation to these specific anxiety disorders. In what ways could the presence of dependency predispose an individual to developing these anxiety conditions? One feature of DPD that may serve as a predisposition for these anxiety disorders is the need for approval, and fear of disapproval, from others. This trait, similar to the construct of sociotropy (see Beck, 1983) is characteristic of dependency and has also been linked to the development of depression (see Nietzel & Harris, 1990 for a review) and anxiety (Alford & Gerrity, 2003). The link between sociotropy and social phobia is obvious, as the core pathology in social phobia involves excessive fear of disapproval or rejection from others (American Psychiatric Association, 1994). Moreover, individuals with this characteristic demonstrate deficits in social problem solving, such that they have a decreased belief in their ability to solve social problems effectively (Haaga, Fine, Roscow Terrill, Stewart, & Beck, 1995). This problem orientation may lead those individuals with a high need for social approval to feel anxious and uncomfortable in social situations, which may eventually contribute to the development of social phobia for some individuals.

Fear of disapproval also has been theorized to be involved in the underlying pathology of OCD (Guidano & Liotti, 1983; Salkovskis, 1985). For example, Salkovskis (1985) conceptualizes certain compulsions, such as excessive reassurance seeking and thought neutralization, as functioning to avoid disapproval and blame from others. Similarly, Guidano and Liotti (1983) view obsessions as perfectionistic attempts to gain approval. As such, need for approval and fear of disapproval from others may contribute to the development of compulsive behavior and even OCD. Finally, individuals with dependent characteristics experience extreme distress and sympathetic arousal following social rejection and interpersonal stressors (e.g., Allen, Horne, & Trinder, 1996; Lakey & Ross, 1994). Individuals who experience strong physiological reactions to interpersonal conflict, and who also experience other

risk factors such as high anxiety sensitivity (see Maller & Reiss, 1992; Weems, Haywood, Taylor, & Barr, 2002), may be predisposed to the development of panic disorder. These potential mechanisms are highly speculative and represent only a few possibilities of mechanisms that may lead from DPD to anxiety disorders. If DPD does play a causal role in the development of anxiety disorders, these mechanisms and potential others will need to be carefully examined in future research exploring the causal link between DPD and anxiety disorders.

Ng and Bornstein's (this issue) meta-analysis examining comorbidity of DPD and anxiety disorders represents an important step in conceptualizing the relationship between DPD and specific anxiety disorders in that it generates many questions for future research. The question of temporality remains unanswered: does DPD occur prior to the onset of anxiety, or does anxiety onset occur first? If DPD does predate anxiety onset, the question of whether DPD is a causal risk factor also is unanswered. Also, is this comorbidity clinically meaningful, regardless of comorbidity prevalence rates? Finally, the mechanisms by which DPD leads to the development of anxiety disorders have not been articulated or explored. From a clinical perspective, one reason to identify DPD as a risk factor for anxiety disorders is to intervene early in hopes of preventing the anxiety disorder from occurring. As such, understanding the causal mechanisms that may lead an individual to develop an anxiety disorder after the onset of DPD is critical.

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