A PROFILE ANALYSIS OF PSYCHOPATHOLOGY IN CLUSTERS OF DEPERSONALIZATION TYPES

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ABSTRACT

Five types of depersonalization experiences based on scales developed by Jacobs and Bovasso (1992) were used to cluster subjects into six groups. Four relatively small groups which had regular depersonalization experiences were identified: the Derealized, the Self-negating, the Body-detached, and the Profoundly Depersonalized. The fifth group, the Fleetingly Depersonalized, and the sixth group, the Nondepersonalized, constituted 25% and 50% of the population, respectively. A profile analysis indicated qualitative differences between the six groups in their pathological traits, which fell along a continuum of pathological severity. The results support the validity of a multidimensional depersonalization construct which may clarify some of the contradictions and inconsistencies in the literature on depersonalization. Further, the results may facilitate clinicians' differentiation of their patients along a continuum of pathological severity based on the type and frequency of depersonalization experiences which they report.

The concept of depersonalization has been widely speculated upon by clinicians, but has remained underresearched despite the surge of attention to various forms of dissociation, such as multiple personality disorder (Spiegel, 1993; Singer & Sincoff, 1990). The definition of the construct of depersonalization and the correct identification of the symptoms of depersonalization have been a source of controversy in psychiatry (Levy & Wachtel, 1978; Mellor, 1988). In the last decade a number of measures (Bernstein & Putnam, 1986; Frischholz, et al. 1990; Frischholz, Braun, & Sahes, 1991; Kirby, 1990; Sanders, 1986; Steinberg, 1991) studying diverse forms of dissociation such as psychogenic fugue, amnesia, auditory hallucinations, and multiple per-

sonality disorder have been established. The absence of empirically sound instruments that measure different forms of depersonalization may account for inconsistent findings regarding its symptoms, incidence and prevalence, and its association with other forms of psychopathology.

Jacobs and Bovasso (1992) found empirical evidence to support a multidimensional construct of depersonalization differentiated by mild self-observation on one end of the continuum and psychotic states on the other. Their findings suggest that an array of symptoms has been attributed to depersonalization because the construct is multidimensional (Mellor, 1988). These depersonalization symptoms have been attributed to disorders such as depression (Tucker, Harrow, & Quinlan, 1973) and anxiety (Oberdorf, 1950), as well as to non-pathological phenomena, such as therapeutic change (Kelly, 1955), and adjustment to new social roles (Levy & Wachtel, 1976). The empirical development of a multidimensional construct may resolve the ambiguity surrounding the construct of depersonalization and its confusion with other constructs. This multidimensional construct involves an expansion of the standard psychiatric concept of depersonalization.

In the multidimensional model, the principal form of depersonalization, *Inauthenticity*, involves a loss of a sense of genuineness about one's behavior reflected in the need to continuously remind oneself of one's actions. A second set of symptoms which had been long regarded as a form of depersonalization, *Derealization*, involves a loss of familiarity with friends or surroundings. A third type of depersonalization, *Body detachment*, involves perceptions of the body as distorted or detached, and is commonly reported in psychiatric populations. A fourth type, *Self-negation* involves the reluctance to acknowledge that oneself is involved in or experiencing a particular situation, emotion or cognition. The fifth, *Self-objectification*, involves a gross disorientation in the external world and the experience of the self as numb, dead or inanimate.

The measurement of these five depersonalization dimensions facilitates the development of a typology of depersonalization experiences which may be used to classify individual cases. Certain individuals may experience one or more forms of depersonalization while they do not, or less frequently experience other forms. Further, individuals classi-

TABLE 1
Depersonalization Groups Resulting from Cluster Analysis

Cluster	Mean Depersonalization Scale Score*					
	1	2	3	4	5	%
Non-depersonalized	.19	.59	.15	.29	.27	50
Fleetingly Depersonalization	.88	1.08	.54	.88	.90	25
Derealized	.47	2.16	.42	.87	.69	9
Self-negating	1.56	2.04	.59	2.04	1.29	9
Body Detachment	2.50	2.04	1.22	.98	1.30	5
Profoundly Depersonalized	2.47	2.50	2.20	2.70	2.30	4
All Subjects	.70	1.10	.44	.75	.67	100*

^{* 1)} Body Detachment; 2) Derealization; 3) Self-objectification;

fied with different types of depersonalization may differ in the severity of more general pathological traits. The authors hypothesize that six depersonalization groups will best describe the population sampled. These groups will experience qualitatively different depersonalization experiences which will be also differentiated by levels of general psychopathology.

Derealization is commonly found in mildly and severely dissociated individuals in both clinical and non-clinical populations (Eliot, Rosenberg, & Wagner 1984; Ross, Joshi, & Currie, 1990; Sanders, McRoberts, & Tollefson, 1989; Trueman, 1984). Although derealization and depersonalization are currently regarded as independent, derealization experiences are frequently presented by individuals suffering depersonalization disorder. Nonetheless, the independence of the depersonalization and derealization constructs has been supported in previous research (Fleiss, Gurland, & Goldberg, 1975). Thus, the authors expect to find a cluster of individuals who experience derealization exclusively, as well as clusters that experience both derealization and depersonalization. The literature (Jacobson, 1971; Nueller, 1982; Tucker, Harrow, & Quinlan, 1973) also suggests another distinct type of depersonalization experience involving Body-detachment. This type of individual frequently experiences estrangement from the body, as well as general derealization.

A third type of depersonalized individual is depicted in

the literature as combining a loss of authenticity and self-negation (Myers & Grant, 1972; Torch, 1978). These individuals have difficulties in acknowledging and experiencing emotions and cognition which violate their self-expectations. A fourth type of depersonalized individual is severely dissociated, and therefore reports high levels of several dimensions of depersonalization, particularly Selfobjectification, which is the most pathological depersonalization experience. Self-objectification is experienced in only a small proportion of the population and is associated with severe personality disorders (Munich, 1978). The authors also expect two additional types of depersonalization: the Fleetingly Depersonalized and the Non-depersonalized. Individuals who only fleetingly experience depersonalization have been frequently noted in the research literature (Eliot, Rosenberg, & Wagner, 1984), and a substantial body of the general population reports no experiences of

depersonalization (Nemiah, 1976).

METHOD

Subjects

The subjects were 232 students from a large northeastern university. They were approximately 75% women, with a median age of twenty-two.

Measures

The five depersonalization scales (Jacobs & Bovasso, 1992) each consisted of five items. Subjects rated the frequency of the occurrence of the experience expressed in each item, as follows: 0) never, 1) yearly, at least once a year, 2) monthly, at least once a month, 3) weekly, at least once a week, or 4) daily, at least once a day. Data from 11 of the 232 subjects who responded to a Depersonalization item that measured careless or random responses were not used in the analysis. The Depersonalization scale was group-administered; the researcher read instructions to the subjects and remained in the room to answer any questions about the form.

Ten scales from the Differential Personality Inventory, or DPI (Jackson & Messick, 1973) were used to assess pathological traits associated with depersonalization. The DPI has internal consistency and convergent and discriminant validity (Jackson & Carlson, 1973), and has also been validated against the Brief Psychiatric Rating Scale (Auld & Noel, 1984).

⁴⁾ Self-negation; 5) Inauthenticity.

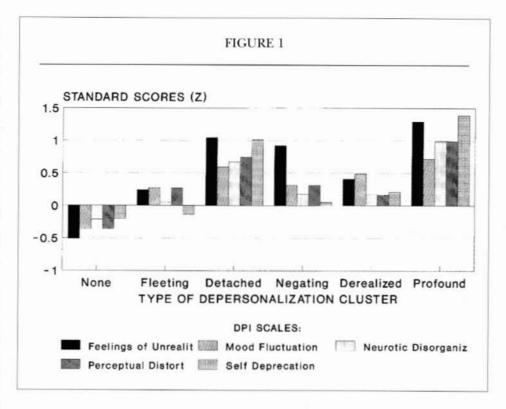
^{**} Percentages do not sum to 100 due to rounding.

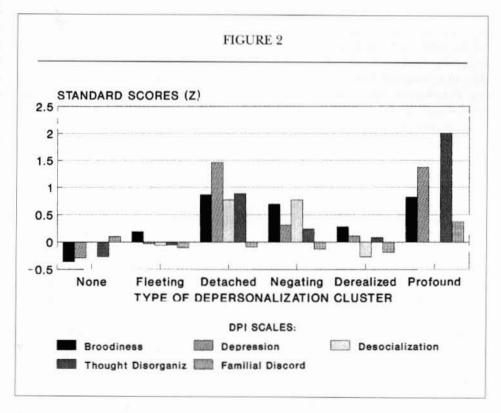
The DPI measures the same general domain of psychopathology as the Minneapolis Multiphasic Personality Inventory, or MMPI (Jackson & Hoffman, 1987). The DPI was selected for the present study because its scales specifically measure phenomena most commonly reported to be associated with depersonalization, particularly general feelings of unreality.

The ten DPI scales selected for the study measured Broodiness, Depression, Desocialization, Feelings of Unreality, Mood Fluctuation, Neurotic Disorganization, Thought Disorganization, Perceptual Distortion, Self Depreciation, and Shallowness of Affect. For each subject, a total score on each DPI scale was calculated based on true/false responses to each item. In addition, the DPI Infrequency and Defensiveness scales were used to check the validity of the responses. Defensiveness measures the tendency not to endorse items that are low in social desirability. Infrequency measures random or careless responding. Only 15 subjects endorsed one of the five DPI Infrequency scale items, which was common in 50% or fewer of the subjects in the DPI's normative sample. None of the subjects here endorsed more than one of the Infrequency items. Thus, the DPI responses were valid, and no subjects were eliminated from the analysis.

RESULTS

Using Ward's method of hierarchical cluster analysis, subjects were categorized into six groups based on their responses to the five depersonalization scales (See Table 1). The sixcluster solution was chosen on an a priori basis. A post-hoc examination of all solutions resulting in fewer than six clusters confirmed that the six cluster solution maximized qualitative differences in depersonalization among the clusters.





DEPERSONALIZATION TYPES

The first depersonalization group contained the Derealized, who experienced Derealization on a monthly basis, but no other form of depersonalization. The second group consisted of the Self-negating, who regularly experience both Self-negation and Derealization, and to a lesser extent Body-detachment. The third group consisted of the Body-detached, who regularly experienced Body Detachment and Derealization, but only infrequently experienced the other types of depersonalization. The fourth group consisted of the Profoundly Depersonalized, who regularly experienced all forms of depersonalization. They were the only group to experience regular Inauthenticity and Self-objectification, the latter of which is the most pathological form of depersonalization. The Fleetingly Depersonalized and Non-depersonalized groups also emerged as predicted. These latter two groups consisted of 25% and 50% of the sample, respectively. The existence and prevalence of the Fleetingly Depersonalized and a Nondepersonalized group was expected in a non-clinical population and is consistent with the literature (Nemiah, 1976).

A profile analysis was conducted to test whether the clusters differed in their profiles on more general traits associated with pathology, as measured by the DPI scales. To test this hypothesis, a multivariate analysis of variance (MANO-VA) was performed using the DPI scales as repeated measures of the within-subjects factor, general pathology, and the depersonalization clusters as levels of the between-subjects factor, depersonalization. As expected a significant multivariate interaction was found between depersonalization and general pathology, $\underline{F}(45, 1182) = 3.1$, $\underline{p} < .0001$. All univariate tests of interaction effects were also significant, except for two. The depersonalization clusters failed to significantly differ in the degree to which their members reported a) unequal levels of Neurotic Disorganization and Perceptual Distortion and b) unequal levels of Depression and Desocialization.

Overall, the subjects in the depersonalization clusters had significantly different profiles on the DPI scales (See Figures 1 and 2). The Non-depersonalized subjects had DPI scores below average on all DPI scales, except for Familial Discord, which was average. The Fleetingly Depersonalized had DPI scores which were in the average range, except for Feelings of Unreality, Mood Fluctuation, and Perceptual Distortion, which were slightly above average. The Derealized had slight elevations on the DPI scales, except for Desocialization and Familial Discord, which were slightly below average, and Feelings of Unreality and Mood Fluctuation scales which were somewhat above average. The Self-negating scored above average on the Feelings of Unreality scale, and to a lesser extent scored above average on the Broodiness and Desocialization scales. Otherwise, the Self-negating had DPI scores which were only somewhat above average, and in a range similar to the scores by the Derealized and Fleetingly Depersonalized. In contrast, the Profoundly Depersonalized had exceptionally high elevations on nearly all the DPI scales, except Desocialization and Familial Discord. Similarly, the

Body-detached had substantial elevations on most of the DPI scales, including Desocialization, but not Familial Discord.

DISCUSSION

Five of the six groups matched the authors' predictions regarding the clustering of depersonalization symptoms, whereas expectations for the Self-negating group were only partially confirmed. The Self-negating group was expected to report regular experiences of Inauthenticity, which was not the case. Inauthenticity experiences were not regularly experienced by any depersonalization group, except the Profoundly Depersonalized. Inauthenticity, which pertains to experiences of the self as not genuine, may be associated with pathological experiences, but only in a small portion of the population. Although occasional loss of genuineness may be common, persistent experiences of this type appear to be associated with relatively severe character pathologies.

Derealization is common to several groups regularly experiencing various forms of depersonalization, and is the most commonly experienced form of depersonalization, and possibly an early symptom of the dissociation process. Individuals in the Derealized group, who only experience Derealization, experience low levels of dissociation, as measured by the DPI Feelings of Unreality scale, whereas the Bodydetached and the Self-negating report symptoms of depersonalization which reflect moderate levels of dissociation. The Derealized do not regularly experience symptoms associated with the moderately dissociated groups, the Self-negating and the Body-detached. These two moderately dissociated groups have qualitatively distinct depersonalization experiences from each other. The Body-detached experience their physique as unfamiliar, detached or not belonging to them. The Self-negating experience alienation from emotions, thoughts or situations which they recognize but try not to acknowledge because they are ego-dystonic. Thus, the Body-detached group's distress is caused by a diminished or lost relation to their body, whereas the Self-negating group's distress is caused by a lost recognition of certain experiences.

The more general traits of the Body-detached and Self-negating clusters also differ. Although similar in their broodiness, desocialization and sense of unreality, the Body-detached tend to be more depressed, more disorganized in their thoughts and feelings, and more given to perceptual distortions and self-deprecation than the Self-negating. Although the self-negated are moderately disturbed, their dissociation stems largely from not wanting to acknowledge ego-dystonic events in the external world. The body detached's depersonalization is internalized wherein fundamental aspects of themselves (i.e., their body) are experienced as unreal. Body-detached experiences have long been associated with strong mood disorders, particularly depressive disorders (Jacobson, 1959) whereas Self-negating experiences are associated with youthful expectations of the world

which have gone unfilled (Wagner & Trueman, 1984). The Body-detached's depression might account for their elevated scores on self-depreciation and thought disorganization. Depression has long been associated with negative and pathological self-images as well as difficulty in organizing thinking and acting effectively.

The Profoundly Depersonalized have the highest levels of dissociation, and experience all forms of depersonalization, most notably Self-objectification which does not occur regularly in any of the other types. These individuals may be overwhelmed by their dissociative experiences and may have lost familiarity with their bodies, cognition, emotions and the external world. This impairment of reality testing is a fundamental feature of Borderline Personality Disorder, and the symptoms associated with Profound Depersonalization have been related to Borderline Personality Disorder (Chopra & Beatson, 1986; Gunderson, Kolb, & Austin, 1981, Munich, 1978). The Profoundly Depersonalized are relatively high in thought disorganization, as well as neurotic disorganization, the tendency to be inefficient and ineffective in the completion of routine tasks. These traits, which are characteristics of the Profoundly Depersonalized, and to a lesser extent the Body-detached, may be severe enough to impair the ordinary functioning which most individuals take for granted. In the Profoundly Depersonalized and the Bodydetached, social and occupational competence may be lowered. These individuals may have difficulty attending to relevant details, and their emotions often overpower their ability to think and act effectively. Tucker et al. (1973) noted that severe depersonalization was associated with high levels of disorganized thinking, but that moderate and mild depersonalization was not necessarily associated with disorganized thinking. Thus, the perceptions of the Profoundly Depersonalized individual may not be reliable and he or she may be grossly disoriented in the external world. The breakdown of attention and reasoning capacities has been associated with an implosion of aversive emotions. This gross disorientation allows the individual to doubt the disturbing reality and in turn, to defend against the aversive emotions associated with it (Munich, 1978; Noyes & Kletti, 1977).

Depression, which has been consistently associated with depersonalization (Jacobson, 1964; Neuller, 1982; Tucker et al., 1973) characterizes only the Profoundly Depersonalized and the Body-detached, arguing that only severely depersonalized individuals manifest persistent depressive cognition and affect. The consistency with which depression and dissociation are associated in the literature raises the possibility that their presence is interactive; one may intensify the other. The distorted cognition and feelings which are characteristic of depression may result in perceptions of the world, the self, and the body as strange and unfamiliar. In turn, the consistent presence of depersonalization is likely to make the individual more distressed and depressed.

Similarly, self-depreciation also distinguishes the

Profoundly Depersonalized and the Body-detached from the Fleetingly Depersonalized, Derealized and Self-negating types. The Jackson and Messick (1972) scale for Self-depreciation consists of appraisals of the self as worthless, unlovable, and deserving of rejection. This self-effacement by the Profoundly Depersonalized individuals adds support to the inference that these individuals are defending themselves against more intense threats to identity than the other depersonalized types. Severe depersonalization has been associated with the developmental impairment of identity and gross identity diffusion characteristic of Borderline Personality Disorder. Other phenomena associated with acute depersonalization, such as life threatening trauma and sexual abuse, obviously threaten self-concept and usually have negative affects on self-evaluations.

The factor which most distinguishes the Body-detached from the Profoundly Depersonalized is Desocialization, probably due to the profoundly depersonalized being so cognitively disorganized that their social competence is negatively affected. They probably lack both confidence and cognitive skills to perform well in social situations. This group is clearly the most pathological of the depersonalized types. The high scores of the Profoundly Depersonalized on thought disorganization suggest that this group has the greatest difficulty with organizing and acting upon information. This is reflected in profound states of depersonalization where they blur such fundamental perceptions of self as being alive or distinguishing the self from the external world.

Broodiness generally distinguishes the three most depersonalized clusters from the three least depersonalized clusters. Jackson and Messick (1972) define their Broodiness scale as measuring an intense suspicion of others' motivations, caution about making personal disclosure and a tendency toward paranoid ideation. These individuals search reality for information to justify their persecutory ideation, although they probably have only vague ideas of others' motivations. Secondly, their constant and intense examination of the motives of others might make it more difficult to experience others as genuine or situations as relatively straightforward and not deceptive. For the broody individual, depersonalization may be facilitated by selectively perceiving information which does not confirm their vague suspicions as unreal. Other information supporting their view of the world as hostile and persecutory is probably so aversive that it is experienced as unreal. These individuals are in a double-bind; non-threatening perceptions violate their suspicions and seem unreal while threats to self and identity become unreal because they are frightening.

In the groups displaying mild and moderate levels of depersonalization, intact intellectual perceptions may lack accompanying emotions. These three groups, the Fleetingly Depersonalized, Derealized and Self-negating may be employing depersonalization to defend against relatively less threatening stimuli than individuals classified in the more

DEPERSONALIZATION TYPES

severely depersonalized clusters. Eliot et al. (1984) note that the Fleetingly Depersonalized were defending against violated self-expectations. Levy and Wachtel (1978) attributed the anxiety of these individuals to role strain and Roberts (1960) and Torch (1978) attributed it to changes in familiar objects. These experiences violate expectations, but are not severe enough to override intellectual functions and perceptions. Torch (1978) and Levy and Wachtel (1976) note that certain derealized subjects may over-intellectualize and be hypervigilant toward reality, becoming emotionally detached from jarring events. In contrast, the reactions of Profoundly Depersonalized individuals have been associated with life-threatening trauma (Kletti, 1976), sexual abuse (Steinberg, 1991), suicidal impulses (Munich, 1978), and in a diffusion or loss of fundamental aspects of identity (Chopra & Beatson, 1986; Gunderson et al., 1981).

Although these results should be approached with caution, a vivid pattern emerges which suggests that depersonalization may be indicative of overall level of psychopathology. Individuals who report certain types of depersonalization have higher levels of pathology than individuals who report other types of depersonalization. The failure to differentiate these distinct types of depersonalization may result in the misclassification of individuals with varying levels of overall psychopathology. In assessing individuals for psychopathology, consideration of the distinct types of depersonalization reported by an individual may provide an expedient index of their overall level of pathology.

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