Depersonalization and the correct identification of the symptoms of depersonalization remain a source of controversy in psychiatry. For this study, 2,2 university students (75 percent men) answered questions on the Differential Personality Inventory. Five types of depersonalization experiences, based on earlier scales, were then used to cluster subjects into six groups. Four relatively small groups, which experienced regular depersonalization experiences, included the Derealized, the Self-negating, the Body-detached, and the Profoundly Depersonalized. The fifth group, the Fleetingly Depersonalized, and the sixth group, the Non-depersonalized, constituted 25 percent and 50 percent of the population, respectively. Two discriminant functions, which were analyzed, helped predict group membership three times better than chance predictions. The first function differentiated the groups along a continuum of general pathological severity. The second function more specifically separated the groups based on disorganized thinking. The results support the validity of a multidimensional depersonalization construct. Furthermore, the results may aid clinicians' differentiation of their patients along a continuum of pathological severity based on patient reports of the type and frequency of depersonalization experiences. Four tables present statistical results. Contains 31 references. (RJM)
Depersonalization Types

Types of Depersonalization and their Relation to Severity of Psychopathology

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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 the Derealized, the Self-negating, the Body-detached, and the Profoundly Depersonalized. The fifth group, the Fleetingly Depersonalized, and the sixth group, the Non-depersonalized, constituted 25% and 50% of the population, respectively. Group membership was predicted three times better than chance based on two discriminant functions. The first function differentiated the groups along a continuum of general pathological severity. The second function more specifically separated the groups based on disorganized thinking. The results support the validity of a multidimensional depersonalization construct. Further, the results may facilitate clinician’s differentiation of their patients along a continuum of pathological severity based on the type and frequency of depersonalization experiences which they report.
Types of depersonalization and their relation to severity of psychopathology

The concept of depersonalization has been widely speculated upon by clinicians, but has remained under-researched despite the surge of attention to various forms of dissociation, such as multiple personality (Speigel, 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; Frischoltz, et al, 1990; 1991; Kirby, 1990; Sanders 1986; Steinberg, 1991) representing diverse forms of dissociation such as psychogenic fugue, amnesia, auditory hallucinations, and multiple personality disorder have been established. However, the failure to develop empirically sound instruments that measure different forms of depersonalization may account for the 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.
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.

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 form of depersonalization, **Derealization**, involves a loss of familiarity with friends or surroundings. A third, **Body Detachment**, involves perceptions of the body as distorted or detached. A fourth, **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. Individuals classified 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 also will be differentiated by levels of general psychopathology.

Derealization, the most frequently experienced form of depersonalization, 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). Thus, the present authors expect that derealization is experienced exclusively by one type of individual. The general differentiation of depersonalization and derealization has been supported in previous research (Fleiss, Gurland, & Goldberg, 1975). The literature (Jacobson, 1971; Mueller, 1982; Tucker et al, 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 Self-Objectification, 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 Nondepersonalized. Individuals who only fleetingly experience depersonalization have been frequently noted in the research literature (Eliot et al, 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 22.

Measures

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

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 six-cluster solution was chosen on an a priori basis. However, a post hoc examination of all solutions resulting in less than six clusters confirmed that the six cluster solution maximized qualitative differences in depersonalization between the clusters. 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 Self-negation and Derealization. The third group consisted of the Body-detached, who regularly experienced Body Detachment and Derealization, but only infrequently experienced 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 Inauthenticity, as well as Self Objectification, the most pathological form of depersonalization. The Fleetingly Depersonalized and Nondepersonalized groups emerged as predicted. These 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 stepwise discriminant analysis using the Mahalanobis method was used to classify the depersonalization groups based on the 10 DPI scales. The first discriminant function, Canonical $r = .67$, Chi Square (70) = 204, $p < .0001$, distinguished the six groups based on the severity of overall pathology, particularly Feelings of Unreality (See Table 2). The Profoundly Depersonalized scored highest on this function whereas the Nondepersonalized scored lowest (See Table 3). The Fleetingly Depersonalized and the De-realized scored relatively low whereas the Body-detached and Self-negating scored relatively high on the first function.
The second discriminant, Canonical $r = .42$, Chi Square (52) $= 82$, $p < .001$, differentiated the groups based on Thought Disorganization and Self-depreciation. The Profoundly Depersonalized group had relatively high scores on this Thought Disorganization/Self-Depreciation function compared to the other depersonalization groups. In contrast, the Self-negating, Derealized, and Fleetingly Depersonalized groups tended to have relatively well-organized thoughts and positive self-evaluations.

Using Bayes Theorem, 56% of the subjects were correctly classified into the six depersonalization groups using the two discriminant functions; a rate which is three times better than the rate of classification by chance (17%). However, the Fleetingly Depersonalized and the Body-detached subjects could not be classified with as much accuracy as the other four groups, although the accuracy rate for these two groups was a bit over twice the chance rate (See Table 4).

Discussion

Five of the six groups matched the author's predictions
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, may be relatively low in dissociation, whereas the Body-detached and the Self-negating individuals report symptoms of depersonalization which reflect moderate levels of dissociation. The Profoundly Depersonalized are the most severely dissociated. They experience all forms of depersonalization, most notably Self Objectification which does not occur regularly in any of the other types.

The depersonalization groups are both qualitatively and quantitatively distinct in the experience of depersonalization.
Depersonalization Types

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 type 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 fourth group, the Profoundly Depersonalized, may be overwhelmed by their dissociative experiences and may have lost familiarity with their bodies, cognition, emotions and the external world.

The first discriminant function differentiated the depersonalization groups along a continuum of general psychopathology. The strongest discriminating variable loading on this function is Feelings of Unreality, which measures a range of dissociative states and implies that the depersonalized groups are more dissociated than the Nondepersonalized and Fleetingly Depersonalized groups. The strongest component of this function is Feelings of Unreality, which supports the concurrent validity of the five depersonalization scales used to cluster the subjects. Also, the lower but substantial loading of perceptual
Depersonalization Types

Distortion on the first function implies that the Profoundly Depersonalized report a tendency not only to become dissociated, but to report bizarre judgements about reality bordering on the psychotic. 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 et al, 1981, Munich, 1978).

Depression is the second strongest component of the first discriminant function and its considerable loading is congruent with a vast literature (Jacobson, 1964; Neuller, 1982; Tucker et al, 1973) arguing that depersonalized individuals manifest persistent depressive cognition and affect. The consistency with which the two phenomena 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 the world, the self, and the body as seeming strange and unfamiliar. The consistent presence of depersonalization is likely to make the individual more distressed and depressed.

The strong affective component of depersonalization is also evidenced in the substantial loading of mood fluctuation on the first discriminant function. The Profoundly Depersonalized perception and experience of reality may shift greatly as their mood vacillates between depression, agitation and stability.
When the level of affect usually associated with reality changes, perceptions and judgements of oneself, others, objects and situations may no longer seem familiar or reliable. Fluctuations in mood over long periods of time make it exceedingly difficult to have or maintain a stable frame of reference to perceive, process, and judge reality.

Broodiness was the third strongest component of the first discriminant function. 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 viewing 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.

The sixth strongest component of the first discriminant
function is neurotic disorganization which is a tendency to be inefficient and ineffective in the completion of routine tasks. The substantial loading of neurotic disorganization suggests that the depersonalization experiences of the Profoundly Depersonalized and Body-detached are severe enough to impair the ordinary functioning which most individuals take for granted. In the Profoundly Depersonalized and the Body-detached, social and occupational competence may be lowered.

The second discriminant function most strongly separated the Profoundly Depersonalized from the Self-negating, the Derealized, and the Fleetingly Depersonalized. The strongest loading was disorganization of thinking, implying that the Profoundly Depersonalized could be distinguished from the other three depersonalized types by the former group's breakdown in evidential reasoning. These individuals 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, defend against the aversive emotions associated with it (Munich, 1978; Noyes & Kletti, 1977).

In the groups displaying mild and moderate levels of depersonalization, intact intellectual perceptions may lack accompanying emotions. The Fleetingly Depersonalized, Derealized and Self-negating may be employing depersonalization to defend against relatively less threatening stimuli than the Profoundly Depersonalized. Eliot et al, (1984) notes that the fleetingly depersonalized were defending against violated self-expectations. Levy and Wachtel (1978) attributed their anxiety to role strain and Roberts (1960) and Torch (1978) to changes in familiar objects. These experiences, although they violate expectations and disappointments, are not severe enough to override intellectual functions and perceptions. Torch (1978) and Levy & 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).

Self-depreciation also discriminates between the Profoundly Depersonalized and the Fleetingly Depersonalized, Derealized and
Self-negating types. The Jackson and Messick (1972) scale for Self-depreciation consists of appraisals of the self as effacing, worthless, unlovable and deserving of rejection. The Profoundly Depersonalized individuals have effacing self-appraisals that add support to the inference that these individuals are defending 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 phenomenon associated with acute depersonalization, such as life threatening trauma and sexual abuse, obviously threaten self-concept and usually have negative effects on evaluations of self.

Although the results should be approached with caution, a vivid pattern emerges suggesting depersonalization types may be indicative of overall level of psychopathology. In terms of overall cognitive and affective pathology, the Profoundly Depersonalized and the Body-detached represent the most clearly pathological types of depersonalization. The Self-negating are relatively pathological, but have less cognitive disorganization and more positive self evaluations. Thus, the authors propose that depersonalization is associated with the severity of mood and character disorder. The more severe the type of depersonalization, the more severe the psychopathology associated with it.
References


Jackson, D.N. and Carlson, (1973). Convergent and discriminant
validation of the Differential Personality Inventory.


### Table 1

**Depersonalization Groups Resulting from Cluster Analysis**

<table>
<thead>
<tr>
<th>Cluster</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-depersonalized</td>
<td>.19</td>
<td>.59</td>
<td>.15</td>
<td>.29</td>
<td>.27</td>
<td>50</td>
</tr>
<tr>
<td>Fleetingly Depersonalized</td>
<td>.88</td>
<td>1.08</td>
<td>.54</td>
<td>.88</td>
<td>.90</td>
<td>25</td>
</tr>
<tr>
<td>Derealized</td>
<td>.47</td>
<td>2.16</td>
<td>.42</td>
<td>.87</td>
<td>.69</td>
<td>9</td>
</tr>
<tr>
<td>Self-negating</td>
<td>1.56</td>
<td>2.04</td>
<td>.59</td>
<td>2.04</td>
<td>1.29</td>
<td>9</td>
</tr>
<tr>
<td>Body Detachment</td>
<td>2.50</td>
<td>2.04</td>
<td>1.22</td>
<td>.98</td>
<td>1.30</td>
<td>5</td>
</tr>
<tr>
<td>Profoundly Depersonalized</td>
<td>2.47</td>
<td>2.50</td>
<td>2.20</td>
<td>2.70</td>
<td>2.30</td>
<td>4</td>
</tr>
<tr>
<td>All Subjects</td>
<td>.70</td>
<td>1.10</td>
<td>.44</td>
<td>.75</td>
<td>.67</td>
<td>**</td>
</tr>
</tbody>
</table>


** percentages do not sum to 100 due to rounding
Table 2

**Significant correlations between discriminating DPI traits and the canonical discriminant functions.**

<table>
<thead>
<tr>
<th>DPI Traits</th>
<th>Function 1</th>
<th>Function 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings of Unreality</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Broodiness</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>Perceptual Distortion</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>Mood Fluctuation</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Neurotic Disorganization</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Disorganization of Thinking</td>
<td>.55</td>
<td>.60</td>
</tr>
<tr>
<td>Self-depreciation</td>
<td></td>
<td>.50</td>
</tr>
</tbody>
</table>
Table 3

**Depersonalization Group Means for the Canonical Discriminant Function Scores**

<table>
<thead>
<tr>
<th>Depersonalization Group</th>
<th>Function 1</th>
<th>Function 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nondepersonalized</td>
<td>-.76</td>
<td>.19</td>
</tr>
<tr>
<td>Fleetingly Depersonalization</td>
<td>.34</td>
<td>-.41</td>
</tr>
<tr>
<td>Derealization</td>
<td>.45</td>
<td>-.41</td>
</tr>
<tr>
<td>Self-negating</td>
<td>1.04</td>
<td>-.59</td>
</tr>
<tr>
<td>Body Detachment</td>
<td>1.90</td>
<td>.38</td>
</tr>
<tr>
<td>Profound Depersonalization</td>
<td>2.09</td>
<td>1.57</td>
</tr>
</tbody>
</table>
Table 4

Rates of Correct Classification of Subjects into Depersonalization Groups Using the Discriminant Functions

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>Cases</th>
<th>Rate of Correct Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nondepersonalized</td>
<td>111</td>
<td>78 (70.3%)</td>
</tr>
<tr>
<td>Fleetingly Depersonalization</td>
<td>56</td>
<td>20 (35.7%)</td>
</tr>
<tr>
<td>Derealization</td>
<td>17</td>
<td>5 (29.4%)</td>
</tr>
<tr>
<td>Self-negating</td>
<td>17</td>
<td>7 (41.1%)</td>
</tr>
<tr>
<td>Body-detached</td>
<td>11</td>
<td>7 (63.6%)</td>
</tr>
<tr>
<td>Profound Depersonalization</td>
<td>9</td>
<td>7 (77.8%)</td>
</tr>
</tbody>
</table>