This study was conducted to assess the effects of incest using the Minnesota Multiphasic Personality Inventory (MMPI). Women (N=81) seeking counseling for issues related to an incestuous childhood and nonsexually abused adult female counseling clients (N=90) completed the MMPI and a background information questionnaire. The groups were compared by completing cluster analyses on each group's profiles. Three distinct clusters were identified for both the incest and control groups. For the incest group, these were labeled "angry and confused," "overwhelmed," and "normal." For the control group, clusters were labeled "normal," "overwhelmed," and "somaticizer." The only profiles that clearly differentiated the incest group from the control group were the "angry and confused" incest cluster and the "somaticizer" control cluster. The groups were also differentiated by the percentage of clients in each category, with the incest group showing an overall higher percentage with clinical elevations. The results suggest that incest victims are a heterogeneous client group who may require differentiated treatment approaches. (Author/NB)
Effects of Incest:
A Cluster Analysis of MMPI Profiles

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Abstract

The current study assessed the effects of incest utilizing the Minnesota Multiphasic Personality Inventory (MMPI). Eighty-one women seeking counseling for issues related to an incestuous childhood, and 90 nonsexually abused adult female counseling clients completed the MMPI and a background information questionnaire. The groups were compared by completing cluster analyses on each group's profiles. Three distinct clusters were identified for both the incest and control groups. For the incest group these were labeled "angry and confused," "overwhelmed," and "normal." For the control group these were labeled "normal," "overwhelmed," and "somaticizer." Results suggest that incest victims are a heterogeneous client group who may require differentiated treatment approaches.
The topic of incest has been in the literature for many years. Clinicians have discussed the long term effects they observed in their clients (Bergart, 1986; Cole, 1985; Swink & Leveille, 1986, Westerlund, 1983). Researchers have begun to assess the effects more empirically. Many researchers have investigated the effects of incest utilizing clinical interviews and self report measures (e.g., Briere, 1984; Briere & Runtz, 1988; Courtois, 1979; Meiselman, 1978; Peters, 1984; Sedney & Brooks, 1984). Although these studies support many of the issues described in the clinical literature, a shortcoming of much of this research is the lack of psychometrically sound, objective measures used to assess the effects.

Some researchers have used the MMPI to assess the effects of incest. The appeal of the MMPI is that it is a well researched tool with sound reliability and validity. Secondly, it can address the long term effects suggested by clinicians such as low self
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Esteem, depression, anxiety, anger, psychosomatic complaints, interpersonal relationship difficulties, suicidality, and substance abuse.

Researchers have compared MMPI profiles of incest victims with various control groups (Meiselman, 1980; Scott & Stone, 1986a & 1986b; Scott & Thoner, 1986; Tsai, Feldman-Summers, & Edgar, 1979). The method of analysis has generally been to compare the mean profile of the incest group with the mean profile for the comparison group. Profiles have also been compared using two-point code types.

A major concern regarding the MMPI research is the use of mean profiles. This seems to force all individuals into a profile that may only be appropriate for a few of the victims. Examination of the variability of scores suggests that the mean profile may not be a good representation of the entire sample. Additionally, this "forcing" of profiles into a mean does not allow for the examination of differential impacts from the incest experience. A better alternative is to analyze the profiles through cluster
analysis, thereby allowing for several distinct profiles that may represent different subsets of incest victims and their distinct responses to the incest experience.

The goal of the present study was to research how incest may differentially affect particular victims. This could help clarify treatment issues and possibly lead to more specialized treatment programs.

**METHOD**

There were two groups of subjects (a) women seeking outpatient counseling for issues related to incest (n = 81), and (b) non-abused women seeking outpatient counseling (control group, n = 90). All subjects were at least 18 years of age. To be included in the incest group, the subject had to be a victim of childhood incest and had to be addressing unresolved issues related to the incest in her treatment. Criteria for inclusion in the control group were that the subject was seeking counseling and that she was not a victim of sexual abuse. All clients who were victims of sexual abuse, but not incest, were excluded from the
The instrumentation for the study included the MMPI and a demographic questionnaire. All participants in the study were asked to provide the following demographic information: age, marital status, ethnicity, and level of education. In addition, information was gathered regarding previous psychological treatment and length of present treatment prior to participation in the study. The participants in the incest group were asked to provide the following additional information: age of onset, identity of offender, frequency of incest, age the incest stopped, how the incest stopped, age of first disclosure, identity of person first told (e.g., parent, teacher, therapist), result of first disclosure, whether she ever disclosed to a non-offending parent, age of such disclosure, result of such disclosure, whether physical force was involved in the incest, and whether any other family members were sexually abused.

RESULTS
A summary of the demographic data for these samples is provided in Table 1.

Insert Table 1 about here

According to Borgen and Barnett (1987) "cluster analysis is a classification technique for forming homogeneous groups within complex data sets" (p. 456). Ward's (1963) hierarchical clustering method was used to test the research hypothesis. This method was used to form similar groups of persons based on MMPI results. Ward's method was specifically recommended by Borgen and Barnett (1987) for this purpose. First, the 81 MMPI profiles of the incest victims were analyzed yielding three distinct clusters (see figure 1).

Insert figure 1 about here

Second, the 90 control MMPI profiles were subjected to a cluster analysis, and they also fell into a three cluster solution (see figure 2). Next, the incest
clusters were compared with the control clusters, using multivariate analysis of variance tests. Cluster 2 from the incest group and Cluster 2 from the control group are the only two clusters that are not significantly different from each other ($F = 1.71, p > .05$). Cluster 3 from the incest group and Cluster 1 from the control group appear to be similar but are significantly distinct ($F = 1.99, p < .05$). Although these clusters are statistically different from each other, for practical significance they can be considered comparable. They are both normal profiles and are remarkably similar in their elevations.

Cluster 1 from the incest group and Cluster 3 from the control group are not similar to each other or to any other clusters.

The following sections will describe each cluster profile based on the MMPI scale elevations. Descriptions of the supplementary scales for each
Effects of Incest

cluster profile will also be presented based on mean scale scores.

Incest Cluster 1 "Angry and confused cluster."

The first cluster is comprised of 20 of the 81 (24.7%) incest victims in the sample. This profile represents individuals who are unpredictable, impulsive, and peculiar in appearance and behavior. They view the world as a threatening place and respond to this threat by either withdrawing or lashing out in anger. They have a tendency to be in trouble with the law. Sexual issues may also be present and may be manifested by promiscuity, prostitution, or sexual deviations. Their interpersonal relationships are strained because they distrust others and have problems allowing others to become close to them. These individuals are angry, irritable, resentful, and tend to act out in asocial ways. They harbor deep feelings of insecurity and have intensely exaggerated needs for attention and affection. They tend to have extremely poor self concepts and may set themselves up for rejection and failure.
Examining the supplementary scales for this cluster (figure 3) reveals only one elevated scale (Lb). This scale represents individuals who feel anger or irritation but do not acknowledge it, perhaps because they are unaware of it. If they are aware of the anger, they may feel their needs are unimportant or they believe that expressing the anger/irritation is useless because the situation cannot be resolved (Duckworth & Anderson, 1986).

Incest Cluster 2 "Overwhelmed cluster."

Cluster 2 is the largest cluster in this sample, representing 41 out of the 81 incest subjects (50.6%). With 9 of the 13 scales being elevated, this represents a group who are feeling extremely overwhelmed with their feelings and issues. They seem to be experiencing emotional turmoil with overwhelming anxiety, depression, and confusion. An individual with this profile may be experiencing an identity crisis.
brought on by situational stress such as the resurfacing of incest issues. She feels isolated from her social environment. She is distrustful of others and keeps them at a distance. This profile is indicative of an individual who could be described as depressed, tense, irritable, and hostile. She seems to be aware of feeling angry, but does not know what to do with the anger.

The supplementary scales (see figure 3) further indicate that this woman has very little confidence in her ability to handle her situation and is currently feeling the need to psychologically lean on others rather than take charge of her own life. She has a high level of conscious anxiety. She may be pessimistic, easily upset, and not trusting of herself. Similar individuals tend to be influenced by others' evaluations of them, although this may not be overtly apparent.

Incest Cluster 3 "Normal cluster."

The remaining 20 incest subjects comprise the third cluster (24.7%). This profile has no elevations
above a T score of 70 and, therefore, is considered within normal limits. This profile represents an individual who is inquisitive, investigative, and assertive. She would most likely adjust rapidly to new situations showing initiative and determination.

The supplementary scale of Es adds confirmation to this description suggesting a woman who feels confident in her problem-solving abilities and appears likely to bounce back from problems. The Dy and Do scales suggest that she neither feels the need to psychologically lean on others nor to take charge of her own life, but might feel some ambivalence about this.

Control Cluster 1 "Normal cluster."

The majority (58.9%) of the control group are contained within cluster 1 (53 of 90). The profile for this cluster is similar to the incest cluster 3. This also is a within normal limits profile. These women seem to have a readiness to assert themselves and to express their physical energy and drive. They would seem to adjust rapidly to new situations and show
initiative and drive. They tend to be sensitive individuals and probably display inquisitive and investigative behaviors. There were no significant elevations on the supplementary scales for this cluster (see figure 4).

Insert figure 4 about here

Control Cluster 2 "Overwhelmed cluster."

Twenty-nine of the 90 (32.2%) control subjects comprise the second control cluster. As mentioned previously, this profile is statistically the same as the second incest cluster. The description of the two profiles is identical and, therefore, it will not be repeated here.

Control Cluster 3 "Somaticizer cluster."

The final cluster included 8 of the 90 control subjects (8.9%). This profile has been referred to as the "conversion V" profile. These individuals convert psychological stress and difficulties into physical
complaints. They are pessimistic and complaining. They may or may not have valid somatic complaints. The issue is that they use their real or imagined somatic complaints to avoid facing emotional troubles. These women are depressed, worried, tense, and confused. They may have some hostility toward social sanctions and resentment for rules and regulations. They seem to feel alienated and remote from the social environment.

The supplemental scales (see figure 4) suggest that these women have a strong need to repress their feelings and prefer to avoid unpleasant topics or situations. They may have some underlying feelings of anger but do not allow themselves to recognize it or express it. This may be because they see themselves as "nice" and believe that anger is not nice and, therefore, should be repressed.

DISCUSSION

The results suggested that there are three distinct clusters of incest victims as measured by their MMPI profiles. These profiles can be labeled "angry and confused," "overwhelmed," and "normal."
When the control group profiles were analyzed by cluster analysis, they also were defined by three distinct clusters which can be labeled "normal," "overwhelmed," and "somaticizer." The only profiles that clearly differentiated the incest group from the control group were the "angry and confused" incest cluster and the "somaticizer" control cluster. The groups were also differentiated by the percentage of clients in each category, with the incest group showing an overall higher percentage with clinical elevations. Perhaps both groups have a proportion of subjects in counseling feeling overwhelmed by issues and a proportion of subjects in counseling for adjustment reactions or other issues that are not affecting their clinical scale elevations. The "angry and confused" cluster may represent the incest subjects who are at the heart of their treatment dealing with anger, identity, and confrontation issues. Conversely, the "somaticizer" profile may represent one class of clients who seek outpatient therapy.
The current research substantiates, through empirical analysis, some of the long term effects of incest described by clinicians. Secondly, it suggests that adults seeking counseling for issues related to childhood incest are not a homogeneous group, but may be classified into three groups. These three groups differ in regards to the specific effects associated with the abuse as well as the intensity of effects.

Cluster analysis proved to be a useful method for "...identifying patterns of problems that certain subgroups of clients are experiencing" (Borgen & Barnett, 1987, p. 461). Further research is necessary to demonstrate the reliability of the three clusters found for the incest group. If replication studies validate the existence of a three cluster or other multi-cluster solution, then perhaps treatment programs can be tailored more specifically to the needs of these diverse groups who share the experience of being victims of incest.
References


Effects of Incest


TABLE 1

SUMMARY OF DEMOGRAPHIC DATA

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Figure 1
MMPI Cluster Profiles - Incest

Figure 2
MMPI Cluster Profiles - Control
Figure 3
MMPI Supplementary Scales - Incest

Figure 4
MMPI Supplementary Scales - Control