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COPING AND DEFENSIVE EGO FUNCTIONING  
IN PERSONS SEEKING AND NOT SEEKING  
PSYCHOTHERAPY

By

Paul B. Jacobsen

A THESIS

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## ABSTRACT

### COPING AND DEFENSIVE EGO FUNCTIONING IN PERSONS SEEKING AND NOT SEEKING PSYCHOTHERAPY

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The Haan-Kroeber model of the ego specifies that, in addition to the traditional defense mechanisms, the ego also possesses a parallel group of coping processes. The most recent effort to operationalize this model has been the development of a set of 26 scales based on items from the California Psychological Inventory. The set is comprised of 10 coping scales, 10 defense scales, 4 factor scales, and 2 summary scales. In an effort to determine their validity, the scales were administered to 22 students (8 males, 14 females) applying for personal counseling at a university counseling service and a comparison group of 46 students (21 males, 25 females) from introductory psychology classes who indicated they had no experiences with and no interests in receiving any form of psychotherapy.

A general hypothesis was offered stating that the applicant group would manifest greater use of defense processes and less use of coping processes than the

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no-therapy group. Seventeen additional predictions were made as to each group's performance on the individual scales. The data were analyzed using an analysis of variance design with repeated measures on one factor. Results did not confirm the main hypothesis. Two unexpected significant interactions ( $p \leq .01$ ) indicated that greater relative use of a specific coping or defense process and of a specific pair of coping and defense processes paired under a generic process did differentiate the groups. With regard to the individual scale comparisons, five hypotheses were confirmed, and five others were in the predicted direction but failed to reach significance. The no-therapy group scored significantly higher than the applicant group on the coping scales of Sublimation ( $p \leq .05$ ) and Substitution ( $p \leq .05$ ) and on the defense scale of Denial ( $p \leq .01$ ). The applicants scored significantly higher on the defense scale of Doubt ( $p \leq .05$ ) and on the factor scale of Primitive Defense ( $p \leq .05$ ).

The results were interpreted as offering only limited support for the validity of the revised ego scales and for the usefulness of the Haan-Kroeber model. Relating ego process functioning more directly to behavior was suggested as one way of providing a clearer evaluation of validity. In addition, exploring different methods of assessing ego functioning and developing a more economical

model were identified as a few needed refinements in this area.

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Dedicated to my parents

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## INTRODUCTION

Empirical work in the assessment of ego functions is grounded in Sigmund Freud's theoretical ideas concerning the defensive operations of the ego (Freud, 1922/1955, 1926/1959) and in the further elaboration and development of these ideas by Anna Freud (1937). Their discussion of defensive operations coincided with and, in part, contributed to a major shift in psychoanalytic theory from an earlier focus on the id determinants of behavior to the role of the ego in both normal and pathological functioning. The defensive operations of the ego refer, in the classical sense, to the ego's mechanisms for defending itself against painful or unendurable ideas and affects emanating from the id. The ego mechanisms are used for the express purpose of restricting the development of anxiety and "pain" and for transforming the original nature of the id instincts. These transformations provide some measure of gratification in the outside world, but only through distorted, less anxiety-evoking expressions of the original impulses. The ego mechanisms of defense are thought to play a key role in the development of neurotic symptoms since they provide only partial, incomplete solutions for the

conflicts between id impulses, and ego and superego restrictions. Anna Freud (1937) has identified ten defense mechanisms: regression, repression, reaction formation, isolation, undoing, projection, introjection, turning against the self, reversal, and sublimation. She cautions, however, that this does not constitute an exhaustive list and that other defenses await identification.

Working from this traditional definition, several researchers have developed empirical methods for measuring defense mechanisms. In the field of projective techniques, Holt and Havel (1960) created a scoring system for the Rorschach that determines the presence and nature of defensive attempts to contain drive dominated responses. Blum (1956) developed the Defense Preference Inquiry (DPI), given in conjunction with the Blacky Pictures (Blum, 1949), where subjects rank various descriptions in terms of how well they reflect the main character's feelings or actions; each description is an operational definition of a defense mechanism. Objective methods for assessing defenses have also been developed. Gleser and Ihilevich (1969) constructed the Defense Mechanism Inventory (DMI), which assesses relative preferences among five clusters of defenses identified by the authors: turning against object, projection, principalization, turning against self, and reversal. Scores are obtained by having subjects indicate, in a multiple-choice format, how they would

respond to various stories involving interpersonal conflicts. Byrne has created (Byrne, 1961) and revised (Byrne, Barry & Nelson, 1963) an MMPI-based Repression-Sensitization (R-S) Scale, on the assumption that defenses can be placed on a one-dimensional continuum. High R-S Scale scores indicate preference for sensitizing responses and refer to the use of approach defenses such as isolation and intellectualization; low scores indicate preference for repressing responses and refer to the use of avoidance defenses such as repression and denial.

#### The Haan-Kroeber Model

The line of empirical investigation in this field that will be explored in greater detail includes one of the few major elaborations of the original theory of ego mechanisms of defense. The ego psychologists, notably Hartmann, have emphasized that the ego is capable of adaptive, healthy behavior as well as maladaptive, defensive behavior. Hartmann (1958) posited a conflict-free ego sphere in which ego functions, independent of conflict and instinctual vicissitudes, develop as part of the maturational process. The major focus of Hartmann's work was on the sources of adaptive ego behavior and, consequently, he offered few detailed descriptions of

the non-defensive ego functions. Sublimation and neutralization are the only specific ego processes identified by Hartmann (1955/1964) that are related to adaptive functioning. Haan (1963, 1977) and Kroeber (1963) have attempted to fill this gap concerning adaptive ego processes. They posit that, in addition to defense mechanisms, the ego possesses a parallel group of coping mechanisms.

Haan (1977) has conceptualized the ego as a collection of mental processes. Working with the traditional defense mechanisms described by Anna Freud (1937), Haan (1963) and Kroeber (1963) derived ten generic ego processes by identifying in the use of each defense an underlying psychological function. In the Haan-Kroeber model, these underlying psychological functions, referred to as generic processes, are hypothesized to be capable of two possible modes of expression. One mode is defensive functioning, and each generic process can be manifested as a defense mechanism, now referred to as a defense process. The other mode is coping, and the ten generic processes can also be manifested as coping processes; Haan (1963) and Kroeber (1963) have identified a coping process for each of the generic processes (see Table 1).

An example will illustrate the development of this model. From the defense mechanism of denial, which involves a negation of experienced reality, an underlying

cognitive capacity for selective awareness is identified and conceptualized as a generic ego process. In addition to being manifested as the defense process of denial, the generic process of selective awareness can also, according to theory, be expressed in a coping mode. Concentration is identified as the coping expression of selective awareness and the counterpart to the defense process of denial. In terms of analyzing behavior, one would predict that when selective awareness of the environment is being used for defensive purposes it will be manifested as denial, when being used more adaptively it will be manifested as concentration.

The ten coping processes share certain common properties that permit them to be distinguished from the ten defense processes. At the most general level, all the coping processes reflect healthy, adaptive mental functioning, whereas the defense processes reflect a more neurotic and less adaptive style of functioning. According to Haan (1977), coping implies purpose; choice, flexible shifts in behavior, and adherence to intersubjective reality and logic on the part of the user; it also allows and enhances appropriate affective reactions to interpersonal situations. Defensiveness, on the other hand, is compelled, negating, and rigid; it involves distortions of intersubjective reality and logic, allows only covert impulse and affective



TABLE 1  
Taxonomy of Ego Processes

Generic Processes		Modes	
	Coping	Defense	Fragmentation
1. Discrimination	Objectivity	Cognitive functions Isolation	Concretism
2. Detachment	Intellectuality	Intellectualizing	Words salads, neologisms
3. Means-end symbolization	Logical Analysis	Rationalization	Confabulation
		Reflexive-intrceptive functions	
4. Delayed response	Tolerance of ambiguity	Doubt	Immobilization
5. Sensitivity	Empathy	Projection	Delusional
6. Time reversion	Regression-ego	Regression	Decompensation
		Attention-focusing functions	
7. Selective awareness	Concentration	Denial	Distraction, fixation
		Affective-impulse regulations	
8. Diversion	Sublimation	Displacement	Affective preoccupation
9. Transformation	Substitution	Reaction formation	Unstable alternation
10. Restraint	Suppression	Repression	Depersonalization, amnesic

Note. From Haan (1977).

expression, and embodies the expectancy that anxiety can be relieved without directly addressing the problem. In an elaboration of the original model (Haan, 1969) a third mode of expression labelled fragmentation was identified, and ten fragmentation processes have also been derived from the generic processes. According to Haan (1977), fragmentation is usually reflected in psychotic or grossly maladaptive mental functioning; it is characterized by ritualistic, privately formulated, affectively-directed thinking, and is irrationally expressed in the sense that intersubjective reality and logic are clearly violated.

Haan (1977) has grouped the generic processes and their associated coping, defense, and fragmentation processes into four major areas for the sake of conceptual convenience. The cognitive functions include three generic processes (discrimination, detachment, means-end symbolization) which represent the active, outer-directed, instrumental aspects of man's problem solving efforts. The affective-impulse functions are comprised of three generic processes (diversion, restraint, transformation) involved in regulating the expression of desires and feelings. The three generic ego processes grouped under the title of reflexive-intrceptive functions (delayed response, sensitivity, time reversion) all refer to a person's reflective engagement with thoughts, feelings, and intuitions. The

attention-focusing functions are represented by one generic process (selective awareness) and involve the organization of perceptions. Haan (1977) states that this list of generic processes may not be complete and that future research may identify additional processes and suggest a different taxonomy regarding major areas of ego functioning.

To review the main features of the Haan-Kroeber model, the ego is conceived of as a collection of ten generic processes which, for heuristic value, are grouped into four major areas or sectors of functioning: cognitive, reflexive-intrceptive, attention-focusing, and affective-impulse regulating. Each generic process is capable of three modes of expression, as a coping process, a defense process, and a fragmentation process. The formal characteristics or properties distinguishing these modes have been identified and suggest a continuum reflecting relative degrees of successful adaptation to reality.

#### Measurement of Haan-Kroeber Ego Processes

Measurement of Haan-Kroeber ego processes has been accomplished using several methods. The earliest means for identifying preferred ego processes involved clinical ratings made by trained judges. Haan (1963) first used the rating method on a sample of 49 males and 50 females

between the ages of 38 and 40. Ratings were made on ten coping and ten defense processes and were based on a series of intensive individual interviews (average length 12 hours). Two independent ratings were made, one by the interviewer and the second by a clinician who assigned ratings on the basis of interview summaries. Interrater reliability coefficients reported by Haan (1963) showed wide variability, ranging from  $-.11$  (tolerance of ambiguity-women) to  $.83$  (logical analysis-men, intellectuality-women). Four variables were considered unreliable: reaction formation (males) and isolation, tolerance of ambiguity, and substitution (females). Average interrater reliabilities were  $.69$  (males) and  $.43$  (females) for the coping processes and  $.62$  (males) and  $.52$  (females) for the defense processes. Adopting a criterion of  $r=.70$  for acceptable reliability, the interrater agreement was only moderate for males and poor for females. Morrissey (1977) points to three factors that may have adversely affected reliability: inadequate specification of the constructs, difficulty in assessing some processes from interview data, and the different raw materials from which ratings were made. The interviewer had both verbal and nonverbal cues to draw upon, whereas the second rater had to form judgments based solely on the verbal content of interviews. The observed sex difference in reliability can be attributed, according to Morrissey

(1977), to the women's more extensive use of non-verbal communication during the interview or the increased importance attached to these behaviors by the interviewer.

In another study using ego ratings, but with males only, Weinstock (1967a, 1967b) obtained mean interrater reliabilities comparable to, and slightly higher than Haan's (male coping-.75; male defense-.64). In a more recent study, Haan, Stroud, and Holstein (1973) obtained excellent reliability data for ratings of ego processes. Mean interrater reliability coefficients were .77 for coping, .71 for defense, and .77 for fragmentation. Due to the small sample size (N=58), results were not analyzed according to sex. Other researchers have generally not reported reliability data in much detail, however, the information available indicates mixed results. In two studies by Kuypers (1972, 1974) reliability coefficients for all ego ratings (coping, defense, and fragmentation) were greater than .50. Folkins (1970) obtained reliability coefficients ranging from -.25 to .82. Ratings for only three processes were deemed unreliable, and among the remaining ratings the average interrater reliability was .51. Margolis (1970) reported obtaining only moderate reliability ratings for ego processes, with the exceptions of global coping and global defense on which agreement was reported as "exceedingly high."

While several studies have been able to use the rating method with adequate reliability, it may still represent too great an expense of both time and money to be used in many large scale research projects. In an effort to extend the use and applicability of the ego process model, Haan (1965) explored the possibility that scores based on personality inventories could be substituted for clinical ratings. The initial investigation was based on data for the 49 males and 50 females, who had previously been rated by two independent judges (Haan, 1963). Scores for the ten defense and the ten coping processes were obtained by adding the judges' ratings on five-point scales. In addition, two summary measures were computed--summed coping (the sum of the ten coping scores) and summed defense (the sum of the ten defense scores). A factor analysis of the 20 basic ratings (Haan, 1963) had previously yielded four factors with parallel structures for each sex. Based on the ratings, four factor scores were also computed for each subject. Two factors were related to defense ratings--primitive defense (high loadings on repression and denial) and structured defense (high loadings on projection, displacement, and rationalization). Two factors reflecting coping patterns were also extracted--controlled coping (high loadings on substitution, suppression, and concentration) and expressive coping (high loadings on regression

[in the service of the] ego, empathy, and tolerance of ambiguity). Creation of the factor scores resulted in 26 scores for each subject.

In addition to clinical ratings of ego processes, responses to the California Psychological Inventory (Gough, 1957) and to the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1951) were also available for each subject. Contrast groups were created for both sexes to represent the upper and lower 25 percent of the range of scores for each coping and defense process, as well as for each summary and factor score. CPI items were found to be generally more effective than MMPI items in differentiating between high and low subgroups on the coping dimensions. On the other hand, the MMPI items were more effective in differentiating between high and low subgroups on the defense dimensions. Consequently, the MMPI was selected for developing empirical scales of defense variables, and the CPI was selected for developing empirical scales of coping variables. Scales were constructed wherever significant relationships between rating scores and inventory items could be obtained. This procedure resulted in the scales listed in Table 2.

The mean reliability for the coping and defense scales was .70. Preliminary data on validity, obtained by comparing the ego scales to standard and special scales

of the CPI and MMPI, were favorable. The standard CPI scales measure non-pathological functioning, and Summed Coping correlated significantly with 13 of the 18 standard CPI scales; the exceptions were Socialization, Self-control, Good Impression, Communality, and Femininity. Associations between coping and these more socially conventional attributes would not necessarily be predicted, since coping has been conceptualized as successful resolution of life conflicts and not as conformity to social demands. Among the individual coping scales, those concerned with cognitive capacities showed a stronger associations with CPI scales than those dealing with intrceptive processes, where there is a suspension of cognitive control (i.e., empathy, tolerance of ambiguity, regression ego). Haan (1965) speculated that the lack of significant associations between these coping variables and the standard CPI scales was probably due to the limitations of the CPI item pool and/or inherent difficulties in eliciting some forms of ego behavior, such as suspension of control, from a paper and pencil situation.

Among the defense scales, an interesting pattern of relationships between the Doubt, Denial, and MMPI scales was observed (see Table 3). Denial was negatively associated with psychopathology as measured by the standard scales of Depression, Schizophrenia, and Psychasthenia, and the special scales of Neurotic Overcontrol (Block, 1953),



TABLE 2  
Reliability of the Original Coping and Defense Scales<sup>a</sup>

<u>CPI-Based Coping Scales</u>	<u>Reliability (KR-20)</u>
Objectivity	.64
Intellectuality	.74
Logical Analysis	.68
Concentration	.85
Tolerance of Ambiguity (men only)	.48
Empathy	.59
Regression-ego	.57
Suppression	.83
Controlled Coping	.82
Total Coping	.81
<u>MMPI-Based Coping Scales</u>	<u>Reliability (KR-20)</u>
Intellectualization	.67
Doubt	.74
Denial	.81
Projection	.59
Regression	.83
Displacement	.75
Repression	.54
Primitive Defense	.70

Note. From Haan (1965).

<sup>a</sup>N=99.

Neurotic Undercontrol (Block, 1953), and Anxiety (Welsh, 1956); but it was positively correlated with the standard Lie scale and the Social Desirability scale (Edwards, 1957). This pattern was reversed for the Doubt scale, which correlated positively with the Depression, Schizophrenia, Psychasthenia, Neurotic Overcontrol, Neurotic Undercontrol, and Anxiety scales, and negatively with the Social Desirability scale. According to Haan (1965), these findings suggest that doubters are acutely aware of their psychological distress and are willing to disclose such signs publicly, whereas deniers consistently disavow all signs of malfunctioning and need to present themselves in a conventional, acceptable light to others. Correlations between the other defense scales and the MMPI scales were not reported in any detail.

The most recent development in the measurement of ego processes has been the creation of revised coping and defense scales. Basing their work on that of Haan (1965), Joffe and Naditch (1977) also used judges' ratings of coping and defensive ego processes and CPI and MMPI data; as an improvement of Haan's work, they utilized more sophisticated test construction methods and a larger sample. In addition, separate scales have been created for each sex.

Preliminary to scale construction, the sample for each sex was randomly divided into two smaller groups--

TABLE 3  
Correlations Between Original Doubt and Denial Scales  
and MMPI Scales<sup>a</sup>

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<u>MMPI Scale</u>	<u>Denial</u>	<u>Doubt</u>
Anxiety	-.50	.75
Depression	-.27	.57
Neurotic Overcontrol	-.46	.65
Neurotic Undercontrol	-.50	.45
Schizophrenia	-.43	.55
Psychasthenia	-.44	.71
Social Desirability	.52	-.69
Lie	.44	

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Note. From Haan (1965).

<sup>a</sup>N=99.

a test creation sample and a cross-validation sample. Using only the test creation sample, responses to the CPI and the MMPI were correlated with scores based on the 20 ego ratings. There were 22 scores for each subject: ten coping scores, ten defense scores, and the two summary scores previously described (summed coping and summed defense). Preliminary scales were developed by successively adding the highest correlated (most valid) items one at a time in order of descending significance. This procedure was repeated until there were approximately 60 scales ranging

from one item to 60 items for each of the 22 ego scores; then, using the cross-validation sample, the scale which resulted in the highest cross-validity, in other words, the scale which was the best predictor of actual ego ratings in the cross-validation sample, was selected as the first stage coping or defense scale. Arbitrary cut-off points of .30 for the MMPI-based scales and .20 for the CPI-based scales were selected as minimum acceptable levels for the cross-validity coefficients. The latter cut-off point is lower because a large number of subjects had completed the CPI. A few further statistical refinements were also made in the scales, and these are discussed in Joffe and Naditch (1977); only the basic scale construction procedures have been outlined here.

Initially, Joffe and Naditch attempted to construct defense scales using the MMPI since Haan (1965) had shown the MMPI to be more productive of items that differentiated the ratings on defense than the CPI. However, only two defense scales, Projection and Regression, achieved cross-validities greater than .30 when based on the MMPI. With the CPI, 8 of the 11 coping scales and 9 of the 11 defense scales yielded acceptable ( $> .20$ ) validity coefficients for men (see Table 4); three coping scales and none of defense scales yielded unacceptable validity coefficients for women. MMPI-based scales were created for the two

coping processes (concentration and suppression) which did not achieve acceptable predictive coefficients for either sex when based on the CPI; these MMPI-based coping scales had acceptable cross-validity. CPI-based scales with acceptable predictive coefficients could be created for regression and projection, the only defense scales which were successfully generated using the MMPI.

Joffe and Naditch (1977) performed a factor analysis on the ego ratings and developed scales for the resulting four factors. The factors extracted strongly resembled those obtained by Haan (1963) and, consequently, the same labels were used to describe them.

The first factor for males (see Table 5) was characterized by large positive loadings on the coping processes, notably objectivity, intellectuality, and sublimation, and by large negative loadings on three defenses--displacement, regression, and projection. The first factor for females was similar, except for the absence of large negative defense loadings. Joffe and Naditch believe that this factor, labelled controlled coping, described a well socialized and cognitively capable personality.

The second factor extracted for males was also characterized by positive loadings on coping and negative loadings on defense; but in contrast to controlled coping,

TABLE 4  
Validity Coefficients of the Revised Ego Scales<sup>a</sup>

	<u>Coping</u>			<u>Defense</u>	
	Male	Female		Male	Female
CPI-based scales					
Objectivity	.29	.25	Isolation	.28	.39
Intellectuality	.57	.44	Intellectualization	.37	.38
Logical analysis	.53	.41	Rationalization	-	.21
Concentration	-	-	Denial	.21	.57
Tolerance of ambiguity	.42	.43	Doubt	.36	.44
Empathy	.34	.22	Projection	.42	.24
Regression-ego	.38	.32	Regression	.31	.39
Sublimation	-	.23	Displacement	.29	.49
Substitution	.25	-	Reaction formation	.46	.31
Suppression	-	-	Repression	.34	.38
Total coping	.49	.36	Total defense	-	.35
Controlled coping	.29	.27	Structured defense	-	.47
Expressive coping	.20	.24	Primitive defense	.27	.40
MPI-based scales					
Concentration	.82	.64	Projection	.36	.49
Suppression	.66	.50	Regression	.62	.46

Note. From Joffe & Naditch (1977).

<sup>a</sup>N=100.

TABLE 5  
Factor Analysis of Ego Processes<sup>a</sup>

	Factor Loadings							
	Factor 1 Controlled Coping		Factor 2 Expressive Coping		Factor 3 Structured Defense		Factor 4 Primitive Defense	
	Male	Female	Male	Female	Male	Female	Male	Female
Objectivity	.74	.64	.34	.34	-.15	-.19	-.16	-.31
Isolation	-.02	-.01	-.52	-.38	.58	.66	.19	.20
Intellectuality	.72	.74	.47	.38	.07	.08	-.09	-.19
Intellectualization	.39	.32	.02	-.10	.74	.75	.17	.04
Logical analysis	.70	.74	.44	.36	-.07	-.15	-.23	-.25
Rationalization	-.21	-.23	-.22	-.10	.66	.70	.28	.06
Concentration	.69	.70	.12	-.03	-.06	-.20	-.48	-.09
Denial	-.30	-.36	-.46	-.09	.33	.10	-.18	.70
Tolerance of ambiguity	.38	.54	.65	.27	-.12	.05	.12	-.45
Doubt	-.07	-.36	-.09	.19	.27	.58	.80	-.02
Empathy	.16	.23	.75	.77	-.04	-.13	-.19	-.25
Projection	-.47	-.18	-.15	-.24	.61	.58	-.04	.36
Regression-ego	.17	.33	.79	.65	-.07	-.02	-.05	-.21
Regression	-.51	-.32	.15	.07	.43	.77	.49	.16
Sublimation	.15	.12	.44	.18	-.01	-.30	-.53	-.18
Displacement	-.61	-.15	-.15	-.25	.46	.60	.01	.15
Substitution	.71	.62	.17	.33	.04	-.19	.01	.19
Reaction formation	-.11	.12	-.56	-.10	.47	.30	.11	.73
Suppression	.40	.25	.51	.67	-.26	-.40	-.10	-.05
Repression	-.18	-.34	-.74	-.32	.11	.16	.13	.67

Note. From Joffe & Naditch (1977). <sup>a</sup>Males, n=175; females, n=188.

the highest positive loadings were on regression ego and empathy, and the highest negative loadings were on repression and reaction formation. With the females, only three coping processes had high positive loadings (empathy, suppression, and regression ego) and, again, there was an absence of large negative defense loadings. This factor was labelled expressive coping since it was thought to reflect an emphasis on intrapersonal and interpersonal accuracy as well as a heightened flexibility and creativity.

Factor three for males consisted of positive loadings on seven defense processes, with the highest loading on intellectualization, followed by rationalization, projection, and isolation. The pattern was similar for females, with positive loadings on seven defense processes, although here the highest loading was on regression, followed by intellectualization and rationalization. This factor was labelled structured defense since, according to Joffe and Naditch, it described a sophisticated and well-integrated pattern of self-protection. The sex difference, regression having greater relative importance for women than for men, was thought to reflect the predominant male sex-role stereotype: regression being a more acceptable means of defense for women than for men.

The last factor for males consisted of positive loadings on the defense processes of doubt and regression and negative loadings on the coping processes of concentration



and sublimation. For females, the last factor was characterized by positive loadings on the defense processes of reaction formation, denial, and repression and a negative loading on the coping process of tolerance of ambiguity. Although the last male and female factors share no major loadings on the same ego processes, Joffe and Naditch believed they both reflected thin, disorganized and poorly integrated pattern of defense in contrast with the previous factor labelled structured defense. Following Haan (1963), this factor was labelled primitive defense.

Scales were constructed for each factor using CPI items and the scale construction procedures previously described. The cross-validity coefficients for the factor scales were generally poorer than for the scales constructed on the basis of individual ratings. According to Joffe and Naditch, this suggests that the data reduction involved in factor analysis overgeneralizes the ego processes and that important distinctions are preserved by the individual scales.

No internal consistency measures of reliability have been published for the new ego scales, although Joffe and Naditch (1977) reported test-retest reliability coefficients based on a different sample of subjects. The median reliability for males was .71 and for females .70. Generally, the scales with lower cross-validities also had less than average reliability coefficients. Joffe and

Naditch (1977) generated preliminary data on validity by correlating the newly created ego scales with the established scales of the CPI and the MMPI. The coping scales tended to be positively related and the defense scales tended to be negatively related with the standard CPI scales. The same pattern held for the scales based on factor scores and summed scores. There were exceptions, though: intellectualization, which is theoretically a more sophisticated defense, was positively correlated with the CPI scales for both men and women. As expected, the two MMPI-based coping scales had large negative correlations with most of the standard MMPI scales.

#### Research Using Ratings of Haan-Kroeber Ego Processes

Research employing ego ratings can be classified into three groups: studies relating ego processes to longitudinal variables, studies examining current behavioral and personality correlates of ego processes, and studies using ego processes to categorize responses to stressful situations.

Six published reports using ratings of ego processes are longitudinal in nature, using data from two ongoing projects at the University of California at Berkeley--the Oakland Growth Study (OGS) and the California Guidance Study (CGS).

Haan (1963) found a relation between current ego process ratings and past intellectual functioning. Ratings of coping processes, especially the cognitive functions, tended to correlate positively with Stanford-Binet IQ scores obtained 20 years earlier; defense, with the notable exception of intellectualization, tended to correlate negatively with IQ. Kuypers (1974) observed a similar positive relationship between coping and intelligence, but found no negative relation between defense and intelligence.

Other longitudinal investigations were focused on the relationships between social class, social mobility, and ego functioning. Haan (1964a) found that membership in a higher status group as an adult was associated with higher scores on controlled coping processes (objectivity, intellectuality, suppression) and summed coping, and that certain primitive defenses (denial, regression) were negatively related to higher adult social status. Kuypers (1974) also found positive relationships between higher social status and coping, as well as negative relations with fragmentation. Results reported by Haan (1964a), comparing ego processes to social mobility, supported the general hypothesis that coping was related to gains in social status over time, while downward social mobility was related to the use of more primitive defenses. Weinstock (1967b) found that higher childhood social

class was positively related to the use of more elaborate defenses (intellectualization, projection) 30 years later; adult reliance on a more primitive defense (denial) was negatively related to higher childhood social class.

Haan (1974) undertook a study to determine the antecedents of adult ego functioning. Reliance on coping in adulthood was found to be preceded by a reorganization of ego processes with consequent changes in personality functioning during adolescence; this reorganization included a period marked by temporary disorganization in the personality structure. The "copers" generally passed through periods of inner and outer conflict during adolescence, accompanied by a working through of the disorganization, usually through dependence on cognitive functions. Subjects relying on defensive functions as adults had veered away from reorganization during adolescence. As part of the same study, subjects were rated by experienced clinicians, using Q-sort techniques, in terms of optimal personality adjustment. Only 50 percent of the males and 30 percent of the females identified as "copers" were classified as being optimally adjusted; all the persons identified as "defenders" were characterized as less than optimally adjusted. In a similar study, Weinstock (1967a) investigated the relationship between family environment and development of coping and defense processes. He found that, in line with theory, reliance on primitive

defenses (repression, denial) as an adult was more related to early family environment than to the environment at adolescence; on the other hand, the more differentiated defenses (isolation, displacement, projection) were more related to the adolescent family environment. Weinstock concluded that the individual's level of cognitive functioning at the time of family difficulties played an important part in determining which ego processes became part of the adult character structure.

A second group of ego studies employing ego ratings related ego functioning to current behavioral and personality correlates. Haan (1964b), in an elaboration of a pilot study conducted by Kroeber (1963), reported relationships between coping and test-taking attitudes on the Rorschach. Elaboration of good F responses<sup>1</sup> and affective and intellectual enjoyment of the test situation all had positive relationships with coping, especially the expressive coping processes. Kuypers (1972) studied the relation between internal-external locus of control (Rotter, 1966) and ego functioning in old age. Internal locus of control was positively related to higher scores on the coping processes and negatively related to higher scores on the defense and fragmentation processes. In one of the most

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<sup>1</sup>A good F (F+) response indicates that not only has the subject perceived the inkblot (or part of it) as suggesting the form of an object, but, in addition, the specific nature of the form perceived reflects the presence of accurate and consensually validated perception.

wide-ranging studies using ego ratings, Haan, Stroud, and Holstein (1973) investigated the relationships between the level of moral development (Kohlberg, 1969), level of ego development (Loevinger, Wessler, & Redmore, 1970), and the use of coping, defense, and fragmentation processes (Haan, 1963, 1969) in a sample of "hippies" from the San Francisco Bay Area. Results indicated that higher levels of moral development were accompanied by increased use of cognitive coping processes, but were relatively independent of the defense dimension. Level of ego development was found to be independent of the coping dimension; however, higher levels of ego development were related to greater use of intellectualization and projection, which is explained by the authors as the "successful" use of defense.

Three studies have used the Haan-Kroeber model as a scheme for coding responses to experimentally induced stressors. Hunter and Goodstein (1967) administered a difficult symbolic reasoning test to college students classified either high or low on the Barron Ego Strength (Es) Scale (Barron, 1953); afterwards, subjects were asked to explain their "poor" test performance. As predicted, high Es subjects made greater use of the coping process of logical analysis than low Es subjects. Low Es subjects were also judged to be generally more defensive in their responses. However, contrary to one hypothesis,

high Es subjects made greater use of the defense process of rationalization than low Es subjects. Using a similar paradigm, Margolis (1970) first classified students as either high or low on Es; subjects then role-played with a confederate, each of four roles designed to induce varying levels of stress. Results showed that high Es subjects used significantly more coping responses across situations than low Es subjects.

Folkins (1970) used the coping, defense, and fragmentation dimensions to study the relationships between anticipation time and psychological stress reactions. Subjects were threatened with electric shock at the beginning of time intervals ranging from 5 seconds to 20 minutes. Results showed that ego functioning could be described as a function of anticipation time. Shorter intervals were characterized by greater use of coping processes, while longer intervals were associated with greater use of defense and fragmentation processes. A cluster analysis of the ego ratings was also performed; three separate clusters were identified, which resembled the dimensions of coping, defense, and fragmentation.

#### Research Using the Original Ego Scales

Several investigations were conducted using the original coping and defense scales published by Haan (1965).

Most of these studies examined the validity of only a few selected scales; no study reported results for the entire array.

Naditch, Gargan, and Michael (1975) examined the relationships between the Denial scale (Haan, 1965), locus of control (Rotter, 1966), and self-reports of anxiety and depression in a sample of 547 males in Army basic training. Negative correlations were observed between denial and anxiety ( $-.40$ ), depression ( $-.29$ ), and external locus of control ( $-.30$ ). The first two findings partially replicated previously observed relationships between use of denial and disavowal of psychological distress (Haan, 1965). The negative relationship between denial and external locus of control was seen as showing that deniers may also disavow any suggestion of manipulation or control from external sources.

In a series of studies, Naditch (1974, 1975a, 1975b) and Naditch and Fenwick (1977) examined the relationships between ego functioning and experiences with illicit drugs. Using a sample of 483 self-reported drug users, Naditch (1974) found that high scores on the Regression scale (Haan, 1965) were associated with LSD/mescaline usage, marijuana usage, and acute adverse reactions to both LSD/mescaline and marijuana. In addition, regression was negatively correlated with a measure of personal adjustment. These results were interpreted as supporting a hypothesis



that regressive individuals take drugs in an attempt to handle personal problems, and that this motivation increases the likelihood of having an adverse reaction. Naditch (1975a, 1975b) reports two further analyses of these data. Regression continued to show strong independent associations with drug usage and adverse reactions when considered in multiple regression equations which included motives for use (Naditch, 1975a). Regression also had the same relationships with the dependent variables when other ego processes were included in the regression equations (Naditch, 1975b). One other defense process (repression) was positively associated with adverse drug reactions; two defenses (intellectualization, denial) were negatively associated with adverse drug reactions. A high score on Summed Coping was related to avoiding acute adverse reactions to LSD/mescaline alone.

Using a sample of subjects from the previous study identified as LSD users, Naditch and Fenwick (1977) examined the relationship between ego functioning and reports of LSD flashbacks. Results showed that subjects who experienced flashbacks had higher scores on the Summed Coping, Tolerance of Ambiguity, and Intellectualization scales. Flashbackers were characterized as using more primitive defenses and as having less coping capacity. Only Repression and severity of acute adverse reactions made

significant contributions when several variables were included in multiple regression equations for predicting flashbacks.

Thelen and Varble (1970) attempted to use the coping and defense scales to differentiate college students seeking psychotherapy from no-therapy controls. Results were analyzed for each sex separately and were reported for all the scales developed by Haan (1965) except Controlled Coping, Summed Coping, and Primitive Defense. It was hypothesized that the controls would score higher on the coping scales and lower on the defense scales. Results were generally favorable; for the coping dimension, Suppression and Concentration differentiated groups of both sexes in the predicted direction and Objectivity did so for males only. However, one coping scale (Logical Analysis) yielded results in the opposite direction for both sexes, with the therapy group outscoring the controls. In general, the control group outscored the therapy group on processes related to controlled coping rather than expressive coping. For the defense dimension, Displacement and Projection differentiated groups of both sexes in the predicted direction, and Doubt did so for males only. However, Denial produced results in the opposite direction for both sexes, with the control group outscoring the therapy group. This last result is



consistent with previously noted negative relationships between the Denial scale and indices of psychological distress (Haan, 1965; Naditch, Gargan, & Michael, 1975). Help-seeking behavior usually involves the acceptance and admission of psychological difficulties, both of which are incompatible with the use of denial.

### Research Using the Revised Ego Scales

To the best of my knowledge, there are only two studies that have used the revised scales of coping and defense (Joffe & Naditch, 1977). Joffe and Bast (1978) examined the relations between ego functioning and accommodation to blindness defined in terms of employment status and travel mobility. The subjects (101 blind men) were divided into three groups: congenitally totally/partially blind subjects (Group 1), congenitally partially sighted subjects (Group 2), and acquired totally/partially blind subjects (Group 3). Results were reported for all 26 ego scales: 20 process scales, 4 factor scales, and 2 summary scales. Joffe and Bast (1978) report that among subjects in Group 2 there were significant differences in ego functioning on the basis of employment status, with employed congenitally partially sighted subjects scoring higher on four coping scales and lower on five defense scales. On one defense scale (Intellectualization)

employed subjects outscored unemployed subjects. Among subjects in Group 3, employed subjects scored higher on three coping scales and lower on six defense scales than unemployed subjects. Subjects with a high degree of travel mobility in Group 3 scored higher on nine coping scales and lower on six defense scales than less mobile subjects. More mobile subjects also scored higher on three defense scales (Intellectualization, Rationalization, and Structured Defense).

In a similar study, Joffe (1977) examined the relations between intelligence, ego functioning, and accommodation to epilepsy defined in terms of employment status. The subjects, 132 men and 82 women suffering from epileptic seizures, were administered the Wechsler-Bellevue Intelligence Test and the 26 ego scales (Joffe & Naditch, 1977). Among the males, those who were employed scored higher on IQ and five coping scales (Objectivity, Concentration, Regression Ego, Sublimation, and Substitution) and lower on four defense scales (Rationalization, Projection, Regression, and Summed Defense). Females who were employed scored higher than unemployed females on IQ and one coping scale (Sublimation) and lower on five defense scales (Doubt, Regression, Displacement, Summed Defense, and Structured Defense). Regression equations developed to predict employment status indicated that

coping and IQ exerted direct positive effects on employment, while defense exerted a direct negative effect. Coping and defense also affected employment status indirectly through their impact on IQ.

Taken together, these two studies suggest that coping ego functions play an important role in accommodation to physical disabilities and, with certain exceptions, defensive functioning, through its reality-distorting effects, hinders successful readjustment into society.

#### Summary and Integration of the Relevant Literature

In order to integrate the evidence which has been presented, it is first necessary to restate the original theoretical basis for organizing ego processes into the two independent dimensions of coping and defending. The distinction is based on the assumption that employment of coping processes (which reflects a more differentiated, purposive mode of personality functioning) can be expected to lead to more adaptive and rewarding experiences for the individual than can use of defense processes. The theorized behavioral differences between coping and defensive functioning are subtle ones, since Haan (1977) has generally eschewed directly identifying coping with

health and defense with neurosis. Instead, it is argued that the flexible, reality-oriented system of functioning characteristic of coping increases the likelihood of productive, life-enhancing experiences occurring, whereas the rigid, reality distorting system of functioning characteristic of defense reduces the likelihood of an individual profiting from experience and makes maladaptation more likely.

The empirical evidence is not unequivocal, but it strongly supports many of the theoretical distinctions made between coping and defense. Coping has been found to be positively related to higher intellectual functioning (Haan, 1963; Kuypers, 1974), higher adult social status (Haan, 1964a; Kuypers, 1974), upward social mobility (Haan, 1964a), affective and intellectual enjoyment of the Rorschach test situation (Haan, 1964b); CPI measures of nonpathological functioning (Haan, 1965); higher ego strength (Hunter & Goodstein, 1967; Margolis, 1970), internal locus of control (Kuypers, 1972), higher levels of moral development (Haan et al., 1973), and accommodation to physical disabilities (Joffe, 1977; Joffe & Bast, 1978). Negative relationships have been reported with help-seeking behavior (Thelen & Varble, 1970), acute adverse drug reactions (Naditch, 1975b), and reports of LSD flashbacks in drug users (Naditch & Fenwick, 1977).

Defense, on the other hand, has been shown to be negatively associated with higher levels of intellectual functioning (Haan, 1963), and personal adjustment (Naditch, 1974), and to be positively related to lower adult social status and downward social mobility (Haan, 1964a), lower ego strength (Hunter & Goodstein, 1967), external locus of control (Kuypers, 1972), help-seeking behavior (Thelen & Varble, 1970), less than optimal personality functioning (Haan, 1974), acute adverse drug reactions (Naditch, 1974, 1975b), LSD flashback experiences (Naditch & Fenwick, 1977), and difficulties accommodating to chronic physical disabilities (Joffe, 1977; Joffe & Bast, 1978).

It should be noted, however, that not all results fit this general pattern. In some cases, use of defenses was not associated with self-defeating behavior or psychopathology: intellectualization was found to be positively related to IQ (Haan, 1963) and negatively related to reports of acute adverse drug reactions (Naditch, 1975b); blind subjects with travel mobility were observed to rely on intellectualization and rationalization in addition to several coping processes (Joffe & Bast, 1978); and intellectualization and projection were found to be positively associated with higher levels of ego development (Haan et al., 1973). As Morrissey (1977) has pointed out, these findings, in combination with the



fact that the summed defense variable has consistently failed to differentiate items in personality inventories (Haan, 1965; Joffe & Naditch, 1977), suggest that a global conceptualization of defense as maladaptive functioning is misleading. Specific defenses may be facilitative for certain persons and certain situations.

Furthermore, results such as these are not inconsistent with the distinctions made between coping and defense at the beginning of this section. Coping and defense were not considered synonymous with healthy and neurotic functioning; instead, they were offered as labels for what were conceived to be two independent dimensions of personality functioning. The model does not predict a strict pattern of relationships with other personality variables, but only that in the long run greater reliance on coping processes, rather than defense processes, will be associated with more success in adapting to the intellectual, social, and emotional demands of everyday life. The empirical evidence, especially the longitudinal data, generally supports this prediction. However, other non-longitudinal evidence suggests that coping and defense are more directly related to an underlying continuum of healthy versus maladaptive functioning; the correlations between coping and measures of adaptive and non-pathological functioning (Haan, 1965; Hunter & Goodstein, 1967;

Margolis, 1970; Kuypers, 1972), and between defense and measures of maladaptive and pathological functioning (Hunter & Goodstein, 1967; Naditch, 1974, 1975b) support this assertion. The distinctions made by Haan (1977) between coping and defense are more relevant when discussing long-term effects of reliance on either coping or defense processes; with regard to short-term effects and current personality correlates, the distinction is more simply explained as one between healthy, adaptive functioning and more neurotic, maladaptive functioning.

#### Outline of the Present Study

Having decided to work with the Haan-Kroeber model, an early consideration was the selection of a measuring instrument. Scales were determined to have several distinct advantages over the rating method. First, scales were deemed easier to administer and score since they did not involve any training of interviewers and judges. Secondly, scales also appeared more economical, incurring none of the expense of recording numerous hours of interviews. In terms of research planning, these considerations meant that a larger number of subjects could be tested using the scales rather than interviews and, consequently, a more complex design could be constructed.

Within the context of the development of measures of ego processes, scales also represented a methodological advance over interviews. Since the interview method has never been based on a standardized interview or on formal rating criteria, the raw material from which ratings are made and the means by which ratings are arrived at has differed appreciably from study to study. These methodological difficulties account, in part, for the large variations in interrater reliability achieved by different experimenters, as well as the inconsistent pattern of results that have been reported. The use of the scales has introduced standardization into the field of ego process assessment, permitting for the first time the direct comparison of measurements of ego processes from different research projects.

In comparing the two scale methods in existence, the revised scales developed by Joffe and Naditch (1977) were judged superior to the original scales for the obvious reason that they were constructed using more advanced statistical methods. However, having only recently been created, the revised scales have not been adequately validated as experimental measures of coping and defending. Secondly, their usefulness for populations other than those on which they were created has also not been proven. These factors determined the general orientation of the

present study. Having selected the revised ego scales as the best available measuring instrument, the state of the art dictated that determining their validity should be a primary consideration. Along these lines, the design utilized by Thelen and Varble (1970) seemed particularly appropriate since it allowed for a test of the entire ego process model, rather than tests of only a limited number of scales as reported in most studies. This design also allowed a test of theoretical assumptions concerning the distinctions between the coping and defense dimensions. In the Thelen and Varble (1970) study the coping and defense scores of applicants for psychotherapy and of a no-therapy comparison group were compared, and a global hypothesis was offered which predicted that the applicants would score higher on the defense scales and lower on the coping scales than the no-therapy group.

The present study also compared coping and defense scores of applicants for psychotherapy and a no-therapy group. However, numerous differences in methodology preclude considering the present study a simple replication of the earlier study. One major difference is that the present study used the revised coping and defense scales (Joffe & Naditch, 1977), whereas Thelen and Varble (1970) used the original scales (Haan, 1965); therefore, the results of the two studies are not directly comparable.



Secondly, the present study made use of analysis of variance techniques for a more clear-cut test of the global hypothesis described above. Another new feature of the present study was that, in addition to the global hypothesis, predictions about differences between the two groups on specific coping and defense scales were also offered.

A final methodological difference concerns criteria used to select subjects for a no-therapy comparison group. The difference between subjects in an applicant group and in a no-therapy group is not, strictly speaking, level of psychopathology (which may, of course, be a correlate of self-referral for psychotherapy), but the decision to seek professional help for personal and/or social problems. Implicit in this decision is a personal awareness of psychological distress and the recognition of the need for outside help. Help-seeking behavior involves acknowledging one has been experiencing difficulties in interpersonal relations and/or in meeting the demands of everyday life. The question then is: what constitutes an appropriate no-therapy comparison group? For Thelen and Varble (1970), the only criterion was that subjects had not received personal counseling or psychotherapy within the previous two years. This, however, does not exclude persons who would like to receive psychotherapy, or can

recognize how psychotherapy would benefit them, but have never made the necessary arrangements. It is questionable whether such persons belong in a no-therapy comparison group. The present study screened out these individuals from the comparison group, as well as former mental patients, persons consulting clergy, and persons who reported ever receiving personal counseling, psychotherapy, or out-patient psychiatric treatment.

## HYPOTHESES

### Overall Configuration

1) The applicant group will generally be characterized by greater use of defense processes and less use of coping processes than the no-therapy group.

Defensiveness, which reflects a rigid and reality distorting mode of personality functioning, will be more characteristic of persons seeking help for personal and/or social problems than of a no-therapy comparison group. Similarly, coping will be less characteristic of the help-seeking group and more characteristic of the no-therapy group.

### Cognitive Functions

Compared to the no-therapy group, the applicant group will make greater use of the following cognitive defense processes:

- 2) isolation
- 3) rationalization



No differences are expected for intellectualization, since use of this defense is almost universal among college students. Both groups should show similar use of the coping processes of objectivity, intellectuality, and logical analysis. The real differences between these groups of college students will not appear as a deficit in cognitive coping processes in the applicant group, but in the applicants' greater use of the two defense processes of isolation and rationalization.

#### Reflexive-intrceptive Functions

Compared to the no-therapy group, the applicant group will rely more on the following reflexive-intrceptive defense processes:

- 4) doubt
- 5) projection
- 6) regression

The no-therapy group will have a greater preference than the applicant group for the following reflexive-intrceptive coping processes:

- 7) regression ego
- 8) tolerance of ambiguity
- 9) empathy

A sex difference may be evident for the use of regression since a factor analysis of the ego scales

(Joffe & Naditch, 1977) suggested regression was a more acceptable mode of behavior for females than for males. Doubt, in particular, should be elevated for the applicant group, since self-referral for or an agreement to seek psychotherapy usually involves admission of psychological distress. Previous results (Haan, 1965; Thelen & Varble, 1970) showed a strong relationship between the Doubt scale and self-reports of psychological distress. Unlike the cognitive sector, the coping reflexive-intraceptive functions should differentiate the groups (the no-therapy group outscoring the applicant group), since use of these processes is not necessarily elicited by the college experience.

#### Affective-impulse Regulations

Compared to the no-therapy group, the applicant group will make greater use of the following affective-impulse defense processes:

- 10) displacement
- 11) reaction formation
- 12) repression

The no-therapy group will rely more than the applicant group on the following affective-impulse coping processes:

- 13) sublimation
- 14) substitution
- 15) suppression

A preference for defensive, rather than coping affective-impulse regulations should be evident in a group of persons seeking help for personal and/or social problems at a university counseling service since difficulties in interpersonal relations frequently involve maladaptive modes of affective expression.

#### Attention-focusing Functions

- 16) The no-therapy group will make greater use of the defense process of denial.

Previous research has consistently showed negative relationships between the use of denial and indices of psychological distress (Haan, 1965; Thelen & Varble, 1970; Naditch, Gargan, & Michael, 1975). Help-seeking, which is assumed to involve acknowledgement of problems in living, will largely preclude the use of denial as a defense. No differences are expected for the use of concentration, which is an important part of successful college performance.

Factorial Dimensions

17) The no-therapy group will have a greater preference for the factorial dimension of expressive coping.

18) The applicant group will have a greater preference for the factorial dimension of primitive defense.

Expressive coping is expected to differentiate the groups because the reflexive-intrceptive coping processes have high loadings on this factor. Primitive defense is also expected to differentiate the groups because it reflects a thin, disorganized, and poorly integrated pattern of defense; persons in psychological distress are presumed to be suffering because of the failure of the defenses to bind anxiety. Controlled coping, on which the cognitive and affective-impulse regulating coping processes have high loadings, is not expected to differentiate the groups, since few differences in coping functioning are expected in the cognitive sector. Structured defense, characterized by high loadings on the defensive cognitive functions, reflects a sophisticated pattern of defensive functioning; because of the high loading of intellectualization on this factor, significant differences between the two groups are not expected here either.

## METHOD

Two samples of college students were used in the experiment: an applicant group consisting of 8 male and 14 female students applying for personal/social counseling and a group of 33 male and 36 female students enrolled in introductory psychology classes from which subjects for the no-therapy comparison group were selected. The students in each group were recruited and tested separately.

### Applicant Sample

Persons requesting personal/social counseling at branches of the Michigan State University Counseling Center were given an information sheet (see Appendix) for the Ego Research Project (official title of the study) along with the standard intake material all applicants complete. Anyone requesting more information or indicating interest in participating was subsequently given an informed consent form (see Appendix). Applicants were asked to participate only if they had not received any counseling

or psychotherapy within the past two years. Persons giving their informed consent were administered the California Psychological Inventory (Gough, 1957) individually at their convenience at Counseling Center locations. The CPI contains 480 items that are endorsed either true or false by the respondent. In addition to completing the CPI, subjects in the applicant group were also asked to supply a limited amount of demographic data (see Appendix). All securing of informed consent and testing was done by the staff of the Counseling Center, and the experimenter did not have direct contact with any of these subjects. All applicants were tested no later than following their second session with a therapist.

#### No-therapy Sample

To secure subjects for the no-therapy sample, notices were posted in introductory psychology classes at Michigan State University. Volunteers were given additional course credit in return for their participation.

In a group administration each student completed the California Psychological Inventory (Gough, 1957), a demographic data sheet (see Appendix), and a questionnaire designed to screen subjects for the no-therapy comparison group (see Appendix). These last two instruments were

constructed by the experimenter. The screening form contains items relating to experiences with and attitudes toward psychiatric treatment, personal counseling, psychotherapy, and vocational guidance. This information was used to select subjects for the no-therapy comparison group. Twenty-one males and 25 females indicated they had no experiences with or any strong interests in receiving any of these forms of treatment (except possibly vocational guidance), and also indicated they had never received suggestions from friends or relatives that they receive professional help for personal and/or social problems. These 46 subjects constituted the no-therapy comparison group, and their CPI responses were used in the data analysis. CPI data for all other persons in this group were not utilized.

### Safeguards

To safeguard confidentiality and anonymity, all subjects were identified by a subject number on all research records. Subjects' names appeared only on the completed informed consent forms, which were stored separately. The experimenter was the only person with access to the data, and results for any individual record were not made available to the subjects or to anyone else.

### Scoring

The CPI data were computer scored for the 26 revised ego scales developed by Joffe and Naditch (1977). Raw scales scores were computed using the appropriate male or female form of each scale. In most cases, the two versions of a scale for an ego process contained different numbers of items. In order to analyze the data for both sexes together, the raw scale scores were converted into t-scores. This was accomplished by summing across the applicant and no-therapy groups for each sex separately, and then finding the mean and standard deviation for both versions of every scale. All the reported data analyses and group means are of t-scores.

### Data Analysis

The data were arranged in a four factor analysis of variance design with repeated measures on one factor (Winer, 1971). This design, in terms of the statistical tests it provides, is analogous to the profile analysis technique developed by Block, Levine, and McNemar (1953). The four independent variables were: applicant status (A), sex (B), coping vs. defense dimension (C), and generic process (D). Repeated observations were made on the last



factor (D), since each generic process is manifested in both a coping and defense mode. The dependent variable was the scale score derived by transforming all the raw scores for each scale into comparable t-scores. Computations were made using a version of the BALANOVA computer program.

## RESULTS

### Demographic Characteristics

The demographic data are presented in Table 6. Summarizing the results, the applicant group was slightly older than the no-therapy group; the median age was 20.6 for the applicants and 19.3 for the no-therapy group. This age difference is reflected in the fact that the applicant group was farther ahead in their secondary education and consisted of relatively fewer persons who had never been married. Parents' marital status was roughly equivalent for the two groups: 81 percent of the no-therapy group and 68 percent of the applicants were members of intact families. The no-therapy subjects, through self-report, indicated they came from more affluent families. Sixty-one percent of the no-therapy subjects and 36 percent of the applicants stated that their parents' incomes exceeded \$30,000 per year. Finally, the applicants reported higher grade point averages than the no-therapy subjects: 11 percent of the no-therapy subjects and 36 percent of the applicants reported their G.P.A. was between 3.5 and 4.0.

Overall Configuration

Hypothesis 1: In terms of the experimental design, Hypothesis 1 was tested in two different ways. First, it translates into a prediction that the applicant group will score higher on the Summed Defense scale, while the no-therapy group will score higher on the Summed Coping scale. Secondly, it translates into a prediction there will be a significant interaction between applicant status and coping vs. defense (AxC interaction).

There were no significant differences between the groups on either Summed Defense or Summed Coping (see Table 7). Results were in the predicted direction for the Summed Defense scale, where the applicant group out-scored the no-therapy group. On the Summed Coping scale, however, results were not in the predicted direction; the applicant group scored higher on Summed Coping than the no-therapy group.

The second test also did not lead to direct confirmation of this hypothesis. Inspection of the summary analysis of variance table (Table 8) shows that the AxC (applicant status x coping vs. defense) interaction was not significant. However, two other interactions were significant: the AxD (applicant status x generic process) interaction and the AxCxD (applicant status x coping vs.

TABLE 6  
Summary of Demographic Data

	Percentage of each group <sup>a</sup>	
	No-therapy Applicant	
Marital status		
Single	98	82
Married	2	9
Divorced		9
Year in School		
Freshman	50	18
Sophomore	33	18
Junior	13	27.5
Senior	2	27.5
Graduate student		9
Grade Point Average		
3.5-4.0	11	36
3.0-3.49	26	14
2.5-2.99	33	36
2.0-2.49	23	14
below 2.0	7	
Parents' marital status		
Married	81	68
Separated		4.5
Divorced	3	23
Father deceased	2	4.5
Mother deceased	2	
Not available	2	

	Percentage of each group <sup>a</sup>	
	No-therapy	Applicant
Parents' annual income		
Above \$30,000	61	36
\$25,000-29,999	11	14
\$20,000-24,999	15	18
\$15,000-19,999	4	4.5
\$10,000-14,999	7	14
\$5,000-9,999		4.5
Below \$5,000		4.5
Not available	2	4.5

<sup>a</sup>No-therapy group, n=46; applicant group, n=22.

defense x generic process) interaction. Greater reliance on coping as opposed to defense processes did not vary according to whether a subject was a member of either the applicant group or the no-therapy group. Applicant status was related to greater preference for certain generic processes, as well as to greater reliance on a specific coping or defense process within the pair derived from a generic process.

The interaction between applicant status, coping vs. defense, and generic process (AxCxD interaction) was examined individually for each of the ten generic processes. In effect, this meant looking at the AxC (applicant status x coping vs. defense) interaction at each level of D (generic process). This procedure was carried out to determine whether the hypothesized relationship between applicant status and coping vs. defense (that the no-therapy group would rely more on coping processes and the applicants would rely more on defense processes) existed for any of the coping and defense processes paired under a generic process. None of the comparisons reached significance, and only one pair of coping/defense processes yielded the expected interaction pattern: the paired processes of sublimation and displacement. The no-therapy group scored higher on the coping scale of Sublimation, while the applicant group scored higher on the defense scale of Displacement.

TABLE 7  
Individual Scale Comparisons

		<u>Group Mean<sup>a</sup></u>		<u>F Ratio</u>
		<u>No-therapy</u>	<u>Applicant</u>	
<u>Summary Scales</u>				
Summed Coping		49.00	52.25	1.49
Summed Defense		49.80	50.24	.03
<u>Cognitive Functions</u>				
Coping	Objectivity	49.11	52.15	1.31
	Intellectuality	49.33	51.41	.61
	Logical Analysis	49.12	51.52	.82
Defense	Isolation	51.17	47.42	1.99
	Intellectualization	50.01	49.76	.01
	Rationalization	49.61	50.67	.16
<u>Reflexive-intrceptive Functions</u>				
Coping	Tolerance of Ambiguity	48.92	52.48	1.80
	Empathy	48.85	52.78	2.19
	Regression Ego	50.18	50.27	.00
Defense	Doubt	48.06	54.50	5.88*
	Projection	50.44	48.63	.46
	Regression	49.33	51.46	.64
<u>Affective-impulse Regulations</u>				
Coping	Sublimation	51.88	45.95	4.98*
	Substitution	51.58	46.52	3.63*
	Suppression	49.83	50.63	.09
Defense	Displacement	49.82	50.27	.03
	Reaction Formation	50.55	48.53	.58
	Repression	49.85	49.86	.00

	<u>Group Mean<sup>a</sup></u>		
	<u>No-therapy</u>	<u>Applicant</u>	<u>F Ratio</u>
<u>Attention-focusing Functions</u>			
Coping - Concentration	50.59	48.24	.78
Defense - Denial	52.48	44.42	9.21**
<u>Factor Scales</u>			
Controlled Coping	49.80	50.68	.11
Expressive Coping	49.50	51.88	.80
Structured Defense	49.99	49.46	.04
Primitive Defense	48.36	53.69	4.04*

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<sup>a</sup>No-therapy group, n=46; applicant group, n=22.

\*  $p \leq .05$

\*\*  $p \leq .01$



TABLE 8  
Summary of Analysis of Variance

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F Ratio</u>
<u>Between Subjects</u>				
A (Applicant status)	1	7.31	7.31	.05
B (Sex)	1	7.54	7.54	.05
AxB	1	47.67	47.67	.34
Subjects within groups	64	8927.52	139.49	
<u>Within Subjects</u>				
C (Coping vs. defense)	1	14.05	14.05	.04
AxC	1	49.21	49.21	.13
BxC	1	33.63	33.63	.09
AxBxC	1	204.07	204.07	.52
CxSubjects within groups	64	25189.0	393.58	
D (Generic process)	9	345.09	38.34	.37
AxD	9	2206.90	245.21	2.38**
BxD	9	155.65	17.29	.17
AxBxD	9	708.63	78.74	.77
DxSubjects within groups	576	59278.2	102.91	
CxD	9	172.65	19.18	.33
AxCxD	9	1230.36	136.71	2.33**
BxCxD	9	81.43	9.05	.15
AxBxCxD	9	508.88	56.54	.96
CDxSubjects within groups	576	33833.9	58.74	
Total	1359	133002		

\*\*p ≤ .01.

### Cognitive Functions

Hypothesis 2: The defense scale of Isolation failed to significantly differentiate the groups.<sup>2</sup> Furthermore, the results were not in the predicted direction; the no-therapy group outscored the applicant group.

Hypothesis 3: The defense scale of Rationalization also failed to significantly differentiate the groups. However, the results were in the predicted direction, with the applicant group scoring higher than the no-therapy group.

Other cognitive functions: As expected, there were no major differences between the groups in the use of the coping cognitive functions of objectivity, intellectuality, and logical analysis, or in the use of the defensive cognitive function of intellectualization.

### Reflexive-intrceptive Functions

Hypothesis 4: As predicted, the applicant group scored significantly higher ( $p \leq .05$ ) than the no-therapy group on the defense scale of Doubt.

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<sup>2</sup>Results for hypotheses 2 through 18 are presented in Table 7.

Hypothesis 5: A significant difference between the groups was not in evidence for the defense scale of Projection, and the results were in the opposite direction to that predicted, with the no-therapy group outscoring the applicant group.

Hypothesis 6: Results for the defense scale of Regression were in the predicted direction, with the applicant group scoring higher than the no-therapy group, but failed to reach significance. There was no strong evidence of a sex difference as had been expected.

Hypothesis 7: Results for the coping scale of Regression Ego were in the opposite direction to that predicted, with the applicant group outscoring the no-therapy group, but did not reach significance. Closer inspection revealed a sizable, but non-significant, sex difference: for the males, the applicants outscored the no-therapy group, whereas for females the reverse was true.

Hypothesis 8: The coping scale of Tolerance of Ambiguity failed to significantly differentiate the groups. Results were in the unpredicted direction, with the applicants outscoring the no-therapy group.

Hypothesis 9: This pattern of results was also evident for the coping scale of Empathy. No significant difference was obtained, and, contrary to the hypothesis, the applicant group outscored the no-therapy group.

#### Affective-impulse Regulations

Hypothesis 10: The defense scale of Displacement failed to significantly differentiate the groups. However, results were in the predicted direction, with the applicant group scoring higher than the no-therapy group.

Hypothesis 11: For the defense scale of Reaction Formation the results did not reach significance and were in the opposite direction to that predicted: the no-therapy group outscored the applicant group.

Hypothesis 12: Results were in the predicted direction for the defense scale of Repression, with the applicant group outscoring the no-therapy group, but failed to reach significance. Closer inspection again revealed a sizable, but non-significant, sex difference: for the males, the applicants outscored the no-therapy group, while for the females the reverse was true.

Hypothesis 13: As predicted, the no-therapy group scored significantly higher ( $p \leq .05$ ) than the applicant group on the coping scale of Sublimation.

Hypothesis 14: Likewise, a predicted relationship was evident on the coping scale of Substitution: the no-therapy group scored significantly higher ( $p \leq .05$ ) than the applicant group.

Hypothesis 15: The coping scale of Suppression failed to significantly differentiate the groups, and results were in the unpredicted direction, with the applicant group outscoring the no-therapy group.

#### Attention-focusing Functions

Hypothesis 16: As predicted, the no-therapy group scored significantly higher ( $p \leq .01$ ) than the applicant group on the defense scale of Denial.

#### Factorial Dimensions

Hypothesis 17: A significant difference failed to emerge on the factor scale of Expressive Coping. Results were in the unpredicted direction, with the applicant group outscoring the no-therapy group.

Hypothesis 18: As predicted, the applicant group scored significantly higher ( $p \leq .05$ ) than the no-therapy group on the factor scale of Primitive Defense.

### Summary

Summarizing the results, five hypotheses were confirmed and results for five others were in the predicted direction but failed to reach significance. Significant predicted results were obtained with the coping scales of Sublimation and Substitution, the defense scales of Doubt and Denial, and the factor scale of Primitive Defense. Two separate tests failed to confirm the major hypothesis that the applicant group would be higher in the use of defense processes and lower in the use of coping processes than the no-therapy group. However, results did show that use of generic processes and use of coping or defense processes within generic processes did vary as a consequence of applicant status.

## DISCUSSION

The results of this study provide only partial support for the validity of the revised ego scales (Joffe & Naditch, 1977), and, consequently, offer only limited evidence of the utility of the ego process model (Haan, 1963, 1977; Kroeber, 1963). Certain scales performed as expected, whereas many others failed to even yield results in the predicted direction. Before examining the possible reasons why many of the scales failed to differentiate the groups, the implications of the confirmed hypotheses will be discussed.

All the results in this study which reached significance confirmed predictions that had been made earlier; in this sense, the model performed as predicted. The strongest results were for the defense scales of Denial and Doubt. The applicant group's high scores on the Doubt scale are presumably a reflection of their awareness of psychological distress. Results reported by Haan (1965) showed that high scorers on the original Doubt scale were characterized, in terms of MMPI correlates, as expressing anxiety and depressiveness, being alternately neurotically overcontrolled and neurotically impulsive, and being

aware of and willing to report odd and socially undesirable behaviors. In seeking professional help for personal or social problems at a university counseling center, the applicants were not only aware of their psychological distress, but were willing to admit it to others in order to obtain relief.

The greater use of the defense process of denial by the no-therapy comparison group is less readily explained. Denial has traditionally been understood as a primitive defense involving the negation of experienced reality (A. Freud, 1937). However, other writers have made a distinction between denial of external versus internal reality. For example, Rycroft (1968) defines denial as the "defense mechanism by which either (a) some painful experience is denied or (b) some impulse or aspect of the self is denied" (p. 29). In the manual for rating ego processes, Haan (1977) states that the denial process involves the "denial of present or past facts and feelings that would be painful to acknowledge" (p. 305). The original and revised scales of Denial appear to measure not so much the process of denying facts and painful experiences, but the denial of impulses and aspects of the self including painful feelings. Haan (1965) characterized high scorers on the original Denial scale, in terms of their MMPI correlates, as individuals who disavow anxiety, depressiveness, and difficulties with control, and need





to present themselves as very ordinary and socially desirable persons. Naditch, Gargan, and Michael (1975) found strong negative correlations between high scores on the original Denial scale and self-reports of depression and anxiety. Correlations reported by Joffe and Naditch (1977) showed that high scores on the revised Denial scale were positively related to such standard CPI scales as Sociability, Sense of Well Being, Socialization, Self Control, and Good Impression.

Reliance on the defense process of denial appears to reflect a strong sense of other-directedness (Riesman, 1950), in terms of greater awareness of and willingness to live by societal expectations of acceptable behavior. The use of the defense process of denial does not appear to involve significant distortions of external reality that would make adequate social functioning impossible. Instead, it is more akin to the traditional defense mechanism of repression, where the individual may distort or ignore subjective experiences of negative affects or uneasiness and anxiety in order to maintain good relations with others.

The no-therapy group can, in one sense, be said to be comprised of better socially adjusted individuals; through their greater use of the defense process of denial, they are more likely than the applicant group to conform to the expectations and demands of society and less likely

to experience discomfort in doing this. On the other hand, the applicant group's greater use of the defense process of doubt may reflect greater awareness of subjective states, which could be a consequence of a greater willingness to engage in self-reflection.

Conceptually, the two processes appear to be antagonistic, and this is supported by the data. Inspection of scores for individuals typically shows a high score on one scale and a low score on the other. These findings raise as many questions as they answer. Are the scales differentiating two basic styles of adaptation, or do levels of denial and doubt really correspond to a person's current negative or positive psychological outlook as influenced by interpersonal relationships and other experiences? This cannot be answered by the present study. What is clear is that awareness of and willingness to discuss psychological problems is strongly related to seeking professional help at a university counseling center. Conversely, little awareness or denial of psychological distress is strongly related to not having an interest in receiving and not seeking personal counseling. These findings partially replicate previous observations by Thelen and Varble (1970). Using the original ego scales (Haan, 1965), they found that males in the applicant group scored significantly higher on the Doubt scale ( $p < .01$ )

and that males in the no-therapy group scored significantly higher on the Denial scale ( $p < .01$ ).

The two coping scales yielding significant results were Sublimation and Substitution, which are both affective-impulse regulations. The results indicate that inability to function in a coping mode in this sector of ego functioning is more characteristic of persons seeking professional help for personal or social problems than of persons who are not interested in and do not seek such help. Relative use of defensive affective-impulse regulations did not differentiate the two groups. The failure of the Suppression scale (the third coping affective-impulse regulation) to significantly differentiate the groups may have been due to the fact that it did not achieve adequate cross-validity for either males or females during test construction (Joffe & Naditch, 1977).

The only factor scale that significantly differentiated the groups was the Primitive Defense scale, where the applicants outscored the no-therapy group. This result can be attributed, in large part, to the differences between the two groups on the Doubt and Sublimation scales, since each of these processes has a high loading (in opposite directions) on the primitive defense factor. Thus, this last finding condenses many of the previous findings. The real differences in ego functioning were

not in the greater relative use of coping processes by one group and defense processes by the other group, but in the selective preference of each group for certain coping and defense processes. The applicants, through their reliance on the defense process of doubt, focused more on their feelings of psychological distress. Compared to the no-therapy group, they also made lesser use of two coping processes for the regulation of impulses and emotions: sublimation and substitution. Concerns about psychological well-being and deficiencies in regulating impulses and emotions reflect breakdowns in adaptation that are important elements of primitive defensive functioning.

A final consideration is the failure of many scales to perform as predicted. One possibility is that the negative results are due to problems in the experimental design. The small number of subjects in the applicant sample was an undesirable design characteristic, since it may have unduly increased the size of some error terms. Another possible design factor was the relative homogeneity of the subjects, who were all full-time college students; differences in ego functioning may have been more apparent if groups with greater economic, cultural, and educational diversity had been tested. Finally, the assumption that help-seeking behavior is a reflection of



defensive functioning ignores elements of coping which may have been involved in the decision to seek professional help for personal problems.

A second possibility, which cannot be ruled out, is that the failure of many hypotheses to be confirmed is a reflection of the lack of validity of some of the ego scales. One piece of evidence supporting this view is the fact that the revised scales were created using samples much older than the present one. Administering the scales to a group unlike those on which they were created may result in much reduced validity. Another possible explanation is that the failure of certain scales to perform as predicted is due to their being only minimally related to the theorized distinctions between coping and defense. A more economical model, using only a few, better validated scales, might well have yielded the expected differences between the two groups on the coping and defense dimensions.

This study does not conclusively establish the usefulness of the Haan-Kroeber model or the validity of the revised ego scales (Joffe & Naditch, 1977). Results do indicate that certain scales can accurately differentiate groups on the basis of help-seeking behavior, and that the ego process model can be used to interpret the results in a meaningful way. Even though theoretical

distinctions between coping and defense did not translate into an expected pattern of results in this study, the fault may not lie in the model proper, but in the difficulties involved in operationalizing the model and testing it through experimental research. One difficulty with the present study was the level of inference at which hypotheses were made. Although help-seeking behavior was determined by a public event (applying for counseling), the motivation for such behavior was inferred. This motivation was then hypothesized to be differentially related to coping and defensive ego functioning which are also "internal events." Future studies should attempt to specify the behavioral outcomes of ego process functioning in order to provide more definitive results on validity. One such way to use the ego process model would be to select situations where observations of behavior and other objective measures provide the external criteria by which to gauge the validity of the scales and the usefulness of the model. Studying persons undergoing a major life change (i.e., retirement), and relating the quality of their adjustment to ego process functioning would be an example of one way to make a more clear-cut evaluation of the coping/defense distinction. The work of Joffe (1977) and Joffe and Bast (1978) examining accommodation to physical disabilities is another example of how ego process functioning can be related to behavioral outcomes.



Besides developing better research designs for evaluating the Haan-Kroeber model and validating the revised ego scales, future research also needs to widen its perspective in order to advance work in this field. One area deserving study is the investigation of new methods for assessing ego functions. The difficulty involved in measuring some ego processes is most likely related to the selection of the CPI as a measuring instrument. The limitations inherent in the CPI item pool and format for eliciting certain forms of ego behavior could be circumvented by either the addition of new true/false items or the development of a projective instrument, such as a sentence completion test. A second area for future research, suggested by Haan (1977) but so far not investigated, is the reorganization of the taxonomy of ego processes. Future research needs to evaluate whether a more economical model can be created. Including only ego processes that can be reliably measured or collapsing together several similar generic processes are two possible strategies. A reorganization which yields better internal structure may also produce greater acceptance and application of the Haan-Kroeber model in both research and assessment situations.

## APPENDIX

## INFORMATION SHEET -- EGO RESEARCH PROJECT

TO: All applicants for personal/social counseling services  
FROM: Paul Jacobsen -- Graduate Student, Clinical Psychology  
RE: The Ego Research Project

HELP!!!

HELP!!!

HELP!!!

These are the cries of a graduate student trying (desperately) to complete his Master's thesis. My research involves looking at what differences, if any, there are between college students applying for personal/social counseling services and students not applying.

HERE IS HOW YOU CAN HELP: To complete one part of this study I need as subjects students applying for personal/social counseling services who have not received counseling or psychotherapy during the last two years. What I am asking for is about one hour of your time in order to complete two forms -- a biographical information sheet and a personality inventory (a series of statements to be marked true or false.)

Participation in this project is neither demanded or expected of you, and is not related in any way to your receiving services here. Rather, this is an opportunity to help a fellow student conduct research which may lead to a better understanding of how college students deal with their life experiences. Also, some people find they learn something about themselves by completing this inventory.

If you are interested in participating, or would like more information about the study, please speak with the receptionist sometime before your second session with a counselor. Ask for the Informed Consent Form for the Ego Research Project.

Thank you for your time.

## INFORMED CONSENT FORM -- EGO RESEARCH PROJECT

Experimenter: Paul Jacobsen -- Graduate Student, Clinical  
Psychology

Date: Fall, 1979

PLEASE READ CAREFULLY!

I have studied the Information Sheet for the Ego Research Project and I understand that I am being asked to:

- 1) supply certain biographical data (not including my name)
- 2) complete a personality inventory (a form comprised of true/false statements).

I understand that this will take approximately forty-five minutes to an hour. I further understand that I will receive no monetary or therapeutic benefits by participating, and that whether or not I volunteer has no bearing on my receiving counseling services. I also know that I am free to withdraw my consent and discontinue participation in the project at any time without it affecting my application for counseling.

To protect my confidentiality, I understand that at no time will my name appear on any research materials. Throughout this project I will be identified only by a subject number (which is not my student number). I understand that the results of my individual record will not be available to me or anyone else.

If I have any further inquiries about the project I can contact the experimenter (Paul Jacobsen) at the following address:

Psychology Department  
Snyder Hall, M.S.U.  
East Lansing, MI 48824  
Phone: (517) 355-9561

As indicated by my signature below, I do hereby voluntarily consent to serve as a subject in the proposed

continued

activity identified and explained in the Information Sheet and the Informed Consent Form.

---

Student Number

---

Age

---

Date

---

Subject's Name (printed)

---

Subject's Signature

continued

## APPROXIMATE ANNUAL PARENTAL INCOME (check one):

<input type="checkbox"/> Above \$30,000	<input type="checkbox"/> \$10,000 - \$14,000
<input type="checkbox"/> \$25,000 - \$29,999	<input type="checkbox"/> \$ 5,000 - \$ 9,999
<input type="checkbox"/> \$20,000 - \$24,999	<input type="checkbox"/> Below \$5,000
<input type="checkbox"/> \$15,000 - \$19,999	

## THERAPY SCREENING FORM

DIRECTIONS: For each of the following questions, circle the one most appropriate answer. For Items 1 - 4 circle either YES or NO. For Items 5 - 8 circle only one number on the scale of 1 to 5.

1. Have you ever sought professional help for vocational guidance? YES NO

2. Have you ever sought professional help for personal and/or social problems from either:

a) The Counseling Center YES NO

b) Clergy (priest, minister, rabbi, etc.) YES NO

c) Others (psychologist, psychiatrist, social worker, guidance counselor, hotline worker, etc.) YES NO

Specify: \_\_\_\_\_

3. Have friends or relatives ever suggested that you receive professional help for personal and/or social problems? YES NO

4. Have you ever received treatment for psychological problems in either a general hospital, psychiatric hospital, or community mental health center? YES NO

5. Have you ever felt that you could benefit from professional help for vocational guidance?

1	2	3	4	5
No, not at all		Possibly		Yes, very much so

6. At the present time are you interested in receiving professional help for vocational guidance?

1	2	3	4	5
No, not interested		Possibly interested		Yes, very interested

continued



7. Have you ever felt that you could benefit from professional help for personal and/or social problems?

1	2	3	4	5
No, not at all		Possibly		Yes, very much so

8. At the present time are you interested in receiving professional help for personal and/or social problems?

1	2	3	4	5
No, not interested		Possibly interested		Yes, very interested

DIRECTIONS: Circle the one most appropriate answer for the following questions.

9. Did you apply for counseling for counseling for personal and/or social problems at any branch of the MSU Counseling Center between September 1, 1979 and today? YES NO

IF YOU MARKED YES FOR QUESTION 9, PLEASE CONTINUE. IF YOU MARKED NO, STOP!!!

10. Are you currently on the waiting list to receive counseling for personal and/or social problems at any branch of the MSU Counseling Center? YES NO
11. Are you currently receiving counseling for personal and/or social problems at any branch of the MSU Counseling Center? YES NO

IF YOU MARKED YES FOR QUESTION 11, PLEASE CONTINUE. IF YOU MARKED NO, STOP!!!

12. How many sessions have you had with your counselor? 1-3 3 or more

continued

IF YOU MARKED 1-3, PLEASE CONTINUE. IF YOU MARKED 3 OR MORE, STOP!!!

13. Other than these 1-3 sessions with your counselor, have you received any counseling, psychotherapy or psychiatric help for personal and/or social problems within the last two years? YES NO

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