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AN INVESTIGATION OF THE COMPOSITION OF
LOEVINGER'S MODAL LEVEL OF EGO DEVELOPMENT

by

 Barbara Schmalz
Hons. B.A., University of Waterloo, 1980

A Thesis
Submitted to the Faculty of Graduate Studies
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ABSTRACT

The present study examined the homogeneity of people scoring at the modal (I-3/4) level of ego development as measured by the Washington University Sentence Completion Test (WU-SCT) (Loevinger & Wessler, 1970). The Q method of factor analysis was used to isolate any subgroups of individuals within a larger group of 85 women all functioning at this modal level. Four groups of individuals emerged based upon their similar styles/characteristics of responding to the WU-SCT. One group consisted of older women whose response style was most clearly distinguishable from that of the other groups. This provided support for the hypothesis that I-3/4 individuals, who constitute the majority of the society, differ in many important ways. The nature of I-3/4 functioning was discussed in relation to the types of items which discriminated the groups.

Since subsets of WU-SCT items emerged as being characteristic of these groups all at the same ego level, it was suggested that (1) this procedure be extended to other levels in order that the individuals functioning within these levels be better understood, and (2) the WU-SCT is probably not measuring a unidimensional concept of ego development, rather, subsets of items exist within the test which tap separate aspects of ego functioning. It was recommended that this purported unidimensional structure of the test (Loevinger, 1970) be further investigated.

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CHAPTER I

INTRODUCTION

Purpose

A search for the understanding of human differences has intrigued men for centuries. Individuals develop unique personal psychological frameworks, which include the perception of one's self, the social world, and the relations of one's feelings and thoughts to those of others. The integration of these phenomena represents a compilation of psychological processes through which one subjectively imposes meaning on experience. The synthesis of these processes has been described as that of Ego Development, a modern perspective proposed by Jane Loevinger (1966). In this framework, the concept of ego represents psychological processes, not a thing or trait. For Loevinger, "the striving to master, to integrate, to make sense of experience is not one ego function among many but the essence of the ego" (Loevinger, 1969, p. 85).

The construct of ego development is drawn from several theories which have dealt with self, cognitive, character, moral, and interpersonal development (Adler, 1965; Harvey, Hunt, & Schroeder, 1961; Kohlberg, 1963; Peck & Havighurst, 1960; Piaget, 1932; Sullivan, 1953; Sullivan, Grant, & Grant, 1957). A focus on subjective experience and

the assumption of sequential stages of development has been common to all of the above theories. What is unique about Loevinger's crystallization of these theories is that she alone has established an empirical method for assessing this complex psychological process.

Ego development assumes that each person has a customary orientation to himself and to the world and that there is a continuum along which these frames of reference can be arrayed. The continuum refers to sequential changes in structures of meaning and character which can be operationally defined through a series of sequentially ordered stages (seven stages and three transitional phases). Individuals begin life at an undifferentiated ego level and thereafter evolve through stages of increasing interpersonal and cognitive complexity. Stages cannot be skipped in the course of development, and not all individuals develop through all the stages.

In order to measure an individual's ego level, Loevinger and her colleagues have developed a thirty-six item projective test entitled the Washington University Sentence Completion Test (WU-SCT) (Loevinger, Wessler, & Redmore, 1970). A structured scoring method allows a trained rater to assign a score to each item, and through the use of "give rules" given by the authors, to subsequently derive a Total Protocol Rating (TPR) which is assumed to reflect one's core level of ego functioning. On the basis of analyses at the time of test construction, the authors claim that this TPR of the WU-SCT measures a unitary dimension, and that no subsets of items exist which might reflect separate aspects of ego functioning (Loevinger & Wessler, 1970). Various investigators have challenged this claim (e.g., Lambert,

1972; Blasi, 1971) but their failure to obtain subsets would seem to support the idea of a unitary dimension of ego level. Such studies did, however, rely on restricted samples in terms of age and education (e.g., the over representation of first year psychology students) or were based on the experimenter's biased selection of subsets prior to test administration.

The possibility remains, therefore, that subsets of items measuring various aspects of ego level functioning do exist, but the investigations to date have not fully developed the methodology to detect them. All attempts have been post hoc or of secondary concern to the research effort. To date no systematic attempt, either methodologically or conceptually has focused on this issue. The criticisms as presented constituted the motivation for the present work. More specifically, the purpose of this study was to investigate, with more methodological rigor, whether there are identifiable subsets of ego functioning. A logical starting point in this endeavour would seem to be performing an analysis of only one particular level of ego development, and instituting controls for age, socio-economic status and education. A multivariate analysis of the items generated by this sample of people, all at the same core ego level, might identify the dimensional structure of the selected level. If more than one dimension reliably appeared then the subsets of items related to the dimensions could be identified and discussed in relation to the theory of ego functioning. Based on empirical and clinical findings, there appears to be a certain level especially amenable to an intensive investigation of this type. This stage is described below.

The second transition stage defined by Loevinger occurs between the conformist (I-3) and conscientious (I-4) stages. Individuals functioning at this level (I-3/4) presumably developed an understanding of self-awareness, self-criticism, and psychological causation. The outside social group no longer provides absolute guidelines for behavior. This stage while considered transitional in Loevinger's theoretical sense, appears to be a stable position in mature life cycle and probably the modal level achieved by adults in our society. In populations where subjects were either randomly selected or chosen on the basis of stratified sampling, most scores occurred at or below this level (e.g., Holt, 1980). The largest concentration of scores in the general population appear at the modal level I-3/4. Therefore, while many individuals may obtain the same I-3/4 score, they may also differ in many important ways. According to Loevinger's (1970) claim that the WU-SCT assesses a unitary dimension, one would be led to believe that such differences are undetectable at this level. This theoretical stance seems to contradict clinical impressions of people at the I-3/4 level. While many individuals may obtain the same I-3/4 score, they obviously differ in many ways. For example, an adolescent and a senior citizen may obtain the same score but their way of approaching life, their adaptive strategies, self-concept, etc., are indeed quite different. Thus there may be subsets of individuals and/or ego functioning strategies within this larger class that can be identified. In other words, individuals scoring at this modal level of self-awareness may not constitute a homogeneous group.

In summary, the initial methodological thrust of this study was

to examine whether subsets of individual's exist within the I-3/4 category, thereby challenging the purported unidimensional structure. If such subsets do exist, it would be valuable to define which WU-SCT responses define such groups. Therefore the second thrust of this research was to analyze the items and identify which item characteristics are associated with the defined group.

Stages of Ego Development

The first stage (I-1) is a presocial one during which the child learns to differentiate self from others. (Note: the symbols in parentheses given in this and subsequent stage descriptions are the code symbols used by Loevinger for each stage). This stage normally comes to an end at approximately the time that language is acquired. The child who remains at this level is typically referred to as being autistic. This early period is inaccessible to study by means of techniques which rely on verbal language. The second stage (I-2) is the impulsive one where impulse control is experienced as defective or undependable. Actions are seen as "bad" or "good" because they are either punished or rewarded. Conscious preoccupations are with the satisfaction of sexual and aggressive needs. The world is egocentric and concrete, and the person's time orientation is almost exclusively to the present rather than to the past or future. A child who remains too long at the impulsive stage may be called uncontrollable, since he likely sees his troubles as being located in a place, not a situation, and definitely not in himself. The third stage (Delta) is self-protective. It is now understood that there are rules, but these are obeyed only for self-interest or

immediate advantage. The child's main rule is "don't get caught", the result of which defines an action as wrong. An older child or adult who has remained at this stage may become opportunistic, deceptive, and preoccupied with control and his advantage in relations with other people. Life is a zero-sum game; what one person gains, someone else must lose. The good life is the easy life with lots of money and nice things. The next stage (Delta²/3) is considered a transitional one between the self-protective and upcoming conformist stages. The theoretical basis for this stage is unclear, but it mainly reflects an individual who is beginning to be conforming, obedient, and preoccupied with stereotypes (Hoppe, 1972).

The fourth stage (I-3) is the conformist one. Rules are obeyed because they are rules. Disapproval and shame for deviancy are important issues for the person functioning at this level. Interpersonal relations are seen in terms of actions and concrete events rather than feelings and motives. Conscious preoccupations are with material things, status, reputation, and appearance. The expression of inner states are in terms of stereotypes, cliches, and moralistic judgments. Belonging means security. A sense of self-awareness is evident in the next stage, a transition from the conformist to conscientious levels (I-3/4). There is a beginning acknowledgement that what is right may be relative to the context in which the person finds himself (Hoppe, 1972). An understanding psychological causation, self-awareness, and self-criticism is developing. The outside social group no longer provides absolute guidelines for behavior. As was described in the introductory comments, this stage is transitional only in the theoretical sense, for it

appears to be the modal level for adults in our society and numerous studies have found more persons at the I-3/4 stage than at any other stage (e.g., Haan, Stroud, & Holstein, 1973; Harakel, 1971; Lambert, 1972; Redmore & Waldman, 1975).

At the fifth stage (I-4), morality has become internalized. This is the conscientious stage wherein rules take precedence over those generated and enforced by peer or authority pressures. Interpersonal relations are seen in terms of feeling and motives rather than actions. Individual differences are perceived rather than broad stereotypes. Conscious thoughts focus on obligations, ideals, traits, and achievements. Characterizing this stage is a capacity for self-criticism, which was lacking in the previous stages. The third transitional stage (I-4/5) is marked by a heightened sense of individuality and a concern for emotional dependence. Conscious preoccupations and interpersonal relations are concerned with development and social problems. Relationships are highly valued, as opposed to the cherishing of ideals and achievements at I-4. The next stage (I-5) is called "autonomous". The characteristic issue here concerns coping with inner conflicting needs, ideas, and perceptions. Although such conflicts are present in earlier stages, they are not directly faced and coped with until this period. Interpersonal relations are characterized by mutual interdependence, and conscious thoughts focus on the complexity of options, role differentiation, individuality, and self-fulfillment. The highest stage (I-6) is the "integrated" one. Here the person is "proceeding beyond coping with conflicts to reconciliation of conflicting demands, and, where necessary, renunciation of the unattainable" (Loevinger,

1966, p. 200). Individual differences are cherished, rather than only recognized and tolerated. This, the theoretically highest stage, has meagre empirical description, for most social groups contain no more than one percent of persons at this stage. A brief summary of the characteristics of each stage of ego development can be found in Table 1.

The Sentence Completion Test

The method of assessing one's level of ego functioning using the WU-SCT requires that the rater of the test be adequately trained by completing an extensive set of graduated exercises given by Loevinger (1970) and, if possible, by attending one of the annual training workshops given by Loevinger and her colleagues. The original scoring manual (Loevinger, Wessler, & Redmore, 1970) offers examples of responses at each level of ego functioning for the thirty-six items, with numerous categories within these levels. The rater, therefore, rates every response according to ego level as well as a specific category within that level. The manuals were constructed for women and girls, and, for the most part, are not applicable to men, though six variant forms of the test have been devised, three for females and three for males. More recently, Loevinger has collected norms and distributed scoring manuals for male items which do not appear on the female form (Loevinger, 1979). However, the system for scoring the entire male form remains inadequate since using female manual responses to score those of a male is not appropriate. In addition to this, the partial manual for males has not yet been crossvalidated. Therefore, ~~females are essentially the~~

TABLE 1
Some Milestones of Ego Development

Stage	Impulse control, "moral" style	Interpersonal style	Conscious preoccupations	Cognitive style
Presocial (I-1) Symbiotic (I-1)		Autistic Symbiotic	Self vs. nonself Self vs. nonself	
Impulsive (I-2)	Impulsive, fear	Receiving, dependent, exploitive	Bodily feelings, especially sexual and aggressive	Stereotypy, conceptual confusion
Self-protective (Delta)	Fear of being caught, externalizing blame, opportunistic	Wary, manipulative, exploitive	Self-protection, wishes, things, advantages, control	
Transition from self-protective to conformist (Delta/3)	Obedience and conformity to social norms are simple and absolute rules	Manipulative, obedient	Concrete aspects of traditional sex roles, physical causation as opposed to psychological causation	Conceptual simplicity, stereotypes
Conformist (I-3)	Conformity to external rules, shame, guilt for breaking rules	Belonging, helping, superficial niceness	Appearance, social acceptability, banal feelings, behavior	Conceptual simplicity, stereotypes, clichés
Transition from conformist to conscientious; self-consciousness (I-3, 4)	Dawning realization of standards, contingencies, self-criticism	Being helpful, deepened interest in interpersonal relations	Consciousness of the self as separate from the group, recognition of psychological causation	Awareness of individual differences in attitudes, interests and abilities; mentioned in global and broad terms
Conscientious (I-4)	Self-evaluated standards, self-criticism	Intensive, responsible, mutual, concern for communication	Differentiated feelings, motives for behavior, self-respect, achievements, traits, expression	Conceptual complexity, idea of patterning
Transition from conscientious to autonomous (I-4/5)	Individuality, coping with inner conflict	Cherishing of interpersonal relations	Communicating, expressing ideas and feelings, process and change	Toleration for paradox and contradiction
Autonomous (I-5)	Add: Coping with conflicting inner needs ^b	Add: Respect for autonomy	Vividly conveyed feelings, integration of physiological and psychological causation of behavior, development, role conception, self-fulfillment, self in social context	Increased conceptual complexity; complex patterns, toleration for ambiguity, broad scope, objectivity
Integrated (I-6)	Add: Reconciling inner conflicts, renunciation of unattainable ^b	Add: Cherishing of individuality	Add: Identity	

^a From Laevinger and Weisler, 1970; Hoppe, 1972.
^b "Add" means in addition to the description applying to the previous level.

group to whom the WU-SCT applies until adequate norms are collected for males.

The test is scored according to one of two techniques. The original scoring method, upon which the test was constructed, involves calculating the cumulative frequency distribution of the thirty-six scores. This distribution of scores is then matched with a set of "ogive rules" (Loevinger & Wessler, 1970). Therefore, a person's Total Protocol Rating (TPR) is based upon the number of ratings at each level for the thirty-six responses. For example, to obtain a TPR of I-3/4 one must have no more than twenty-one of the thirty-six responses rated at I-3 and below. The remainder can be distributed in any way at I-3/4 and above. More flexible borderline rules have also been devised, and are often applied when raters disagree on their decisions (though these are not as reliable). A second scoring technique is the item sum rating, which assigns a numerical value to each of the ascending ego levels. These values are simply added up and the resulting number describes a hypothetical position on a continuum of increasingly higher ego functioning. This method has been used in research designs that treat ego development as a continuous variable.

A critical issue for the WU-SCT is the component of construct validity that deals with the content of the test. Does the content of the test, including the task and scoring method, reasonably reflect an ego trait defined by the theory? The rationale for the WU-SCT is that ego development is, or reflects, the person's frame of reference and that an unstructured test is most appropriate in allowing the

respondent to supply his or her own frame of reference. "Studies of inter-rater reliability, in addition to their technical psychometric interest, testify to the communicability, hence the coherence of the underlying construct" (Loevinger, 1979, p. 284). Major studies were conducted using a sample that served as the cross-validation for the pre-publication manual (Loevinger & Wessler, 1970). The median inter-rater correlation for item ratings was .75 and for the core ego level score, .85. Since all raters had been involved and trained by Loevinger, further investigations using self-trained raters were conducted, with median correlations being between .76 and .92. Other reliability checks have been in agreement with these findings (e.g., Cox, 1974; Hoppe, 1972). The implications of these studies are, that the manual with its self-training exercises is sufficiently clear so that high agreement can be maintained across scorers.

The primary evidence for the structural component of validity is the homogeneity or internal consistency of the test itself. Redmore and Waldman (1975) report two studies where split-half reliabilities for groups of ninth graders and undergraduates were .90 and .85, respectively. Internal consistency coefficients ranged from .80 to .89 for both studies. These coefficients are in agreement with those reported originally by Loevinger and Wessler (1970), where coefficient alpha was .91. A principal components analysis, done on the original sample, resulted in the first component accounting for twenty percent of the total variance, with the contribution of the second component dropping to 5.6 percent or less. The second component could not be interpreted intelligibly, and was considered a chance deviation from

unity. Loevinger (1979) suggested that on the basis of this data, the WU-SCT is measuring a unitary dimension. She did, however, express a disappointment for being unable to make any sense of the factors beyond the first one, since second and third factors might have revealed what kinds of items are best for measuring ego levels and which kinds are tainted with other variables. As was discussed previously, further attempts at seeking subsets of items that measure separate aspects of ego development have confirmed Loevinger's findings, but once again, it must be emphasized that these studies appear to have suffered from methodological flaws.

Ego stages presumably always occur in the same order, with no stage being skipped and progress being irreversible. Evidence for such sequentiality is rather weak, though Loevinger and Wessler (1970) reported that the entire distribution of ego level shifts upward with age. The group under study, however, ranged from nine to eighteen years of age, as did a study by Coor (1970). This lack of evidence from various age groups reflects a major flaw in ego development studies. What happens after the first quarter of a person's life? If they continue to progress through stages, how is their final ego level manifested as compared to people with the same ego level who are of a different age? This presents an important issue and is one which the present study will address.

While longitudinal studies have not been conducted in the usual sense, Loevinger (1979) claims that correlations over a year and constant re-test scores provide evidence for sequentiality over time. Redmore and Waldman (1975) reported several small studies of short-term

retest effects and obtained test-retest reliability correlations ranging from .49 to .91. A few weeks separated the tests, and even then the respondents' (undergraduates) ego levels seemed to fluctuate, usually dropping down to a lower level. The test-taking set of the students at these times probably would account for these minor fluctuations. Redmore and Loevinger (1979) reported a mean increase in ego level for boys tested from grades six to twelve, with re-test correlations ranging from .14 to .92. Another study (Loevinger, 1979) showed a mean gain in college appears to be about half a stage. Loevinger concludes, on the basis of these data, that ego gains tend to level off at the end of high school and the beginning of college. This assumption, however, is based mainly on intuitive evidence, since few studies explored the ego functioning of older persons.

Evidence for construct validity of the WU-SCT has accumulated rapidly, and only a small sample has been described here. The test's usefulness, however, is somewhat hampered by the non-availability of adequate norms. In congruence with this is the fact that most of the work was conducted at universities. Holt (1980) emphasizes this point and as an attempt at improving the present understanding of the test's construct validity, is conducting a project with a large national sample. This study, when completed, should provide normative and descriptive data crucial to the WU-SCT and theory of ego development.

An additional validity issue that deserves to be addressed is that which considers other characteristics of an individual's functioning, both external and internal. Tests must demonstrate

incremental validity (Sechrest, 1963), in that they must predict better than can be done from age, sex, socio-economic status and educational level. Since cognitive complexity is an important criterion for rating ego development level, a crucial first question is whether the WU-SCT actually measures IQ level. Blasi (1972) found that between 16 and 25 percent of the ego development variance could be accounted for by IQ. Hoppe (1972) found no significant correlation between the two. Coor (1970) found a correlation of .27 between IQ and the WU-SCT, while Bonneville (1978) obtained a .59 correlation for sixth grade girls, and a .44 with sixth grade boys. Rock (1975) found a correlation of .30 between ego level and the WAIS. It is obvious that these results vary substantially, some suggesting a strong relationship between IQ measures and the WU-SCT with others finding little or no relationship. A probable reason for this variability stems from the differences in the IQ measures used in these studies. Findings were based on samples of grade school and high school students, whose ego level functioning would be expected to show little variability. Such a group provides little insight into the possible influences that IQ may have on scores on the WU-SCT. We are left unclear about how the relationship between the two measures might vary at different levels of ego development. For example, is the relationship a constant one throughout ego development, or are there certain levels of ego development (e.g., postconformist) where IQ and ego development are highly correlated (Hauser, 1976)? Lasker and Strodbeck (1978), in a study of ego development in Curacao, found that higher education results in higher scores. Taking into

consideration the fact that United States scores were higher than those in Curacao, a similar effect might still be evident in North America. Upon examining the socioeconomic status of the Curacoans the authors found an increase in ego level scores as the status increased. The end result is an intermingling of SES, IQ, education, and ego level. It is difficult to untangle any of these factors and discover the role they play in ego functioning as measured by the WU-SCT.

One final possible distortion of measurement in the WU-SCT is verbal productivity, a known bias in projective tests. Using two different samples, Loevinger and her associates correlated the number of words in subjects' responses with their TPR and found the median correlation to be .31 and .35 for the two groups. The median correlation for words counted and item sum ratings was .65, suggesting that ego development scores obtained by simply summing the item ratings are more distorted by verbal fluency than are those scores derived from the method of Total Protocol Rating. Loevinger (1979) suggested that although verbosity is a distortion of measurement, it cannot be measured by counting the number of words per response (though she offers no alternative). Complex thoughts referring to interpersonal relationships, psychological causation, etc., (indicative of high ego levels) require more words than simple thoughts referring to having fun or being happy (indications of lower ego levels). She suggests that number of words reflects both verbosity and an element of complexity, with the latter being a legitimate index of ego level. Difficulty arises, however, in separating the two. Quite often a response can drone on and on, and

eventually build upon its simplistic idea to a more complex one.

Loevinger devised five rules for rating responses when using the manual. The first one, easiest and hopefully most commonly used, is to simply match the response with one in the manual. The second and third rules pertain to compound responses and the rater must decide whether the elements of the response together generate a more complex level of conception or not. If the former is the case, the rater assigns a rating one half a step higher than the highest element; if the latter rule is to be applied, the rater assigns a rating in the less frequent category or in the higher category. The point of the matter is that the complexity of a response is decided upon by the rater, at which time the manual is of little assistance. Most raters will agree that it is a rarity to obtain clear cut, mirror images of the manual's responses. Therefore, the scoring may be described as structured in one sense, but in applying rules for lengthy responses that involve several elements, the rater must make a subjective decision which probably reflects his/her own concept of complexity. Rule four states that when no appropriate category can be found in the manual for the response and the above rules do not apply, the rater is to use the general theory of ego development arrive at a rating.

The last rule given by Loevinger applies when a response is omitted or too fragmentary to be meaningful. The rater is to rate the response (or lack of it) at I-3, the conformist level. This approach presents a problem in that a certain response was possibly

omitted for a reason, unknown to the rater, and should not be forced into the conformist category. Refusing or choosing not to answer an item may be operating in individuals at a higher level than I-3. Since some of the items pertain to personal and sexual issues, leaving such uncompleted may provide valuable information about the individual. It would seem appropriate to examine which types of items were omitted or left unfinished. A recent study involving nuns (Schmalz, 1980) showed that these women omitted more items than did university women and grade nine girls, and that those omitted pertained to sex and intimacy. Examples were "When they talked about sex I", "A woman's body", etc. Despite these omissions and their assigned I-3 ratings, the nuns' TPRs and item sum scores were higher than the university women, since their verbosity and elaboration on the other items inflated their distribution. Perhaps in these instances scores should be prorated. This would seem to be an example of how both verbosity and item omission must be monitored and investigated in the hopes of devising a more appropriate method of scoring.

A final property of the WU-SCT that deserves attention concerns the nature of the stems and what it is that they require from the respondent. From experience with the test and intuitive examination, several types of stems seem to constitute the test. For example, fifteen items contain mention of the first person, either "I" or "me" (e.g., "I am"; "The thing I like about myself is"); twelve items require a response about social roles and popular societal attitudes (e.g., "Raising a family", "A wife should"). These items probably provide the least structure in terms of the freedom to personalize or

externalize one's response. The third type of stem pertains to sex and intimacy, as described with the nuns' responses, and test takers typically share their personal thoughts. These items may reflect a test-taking set of the respondent because they avoid (omit) them or take the advantage of the stimulus to express personal reactions. The contributions that each of these types of stems (or other groupings of stems, for that matter) makes to a TPR or item sum rating of ego level might reflect certain characteristics of the test taker, or possibly different dimensions of ego development, as measured by the WU-SCT. The present study may identify such dimensions through an item analysis.

The Validation of a Projective Test

Through continued use of the WU-SCT, an experienced rater begins to develop a feeling for the types of responses that are given to certain items by particular types of individuals. This intuitive sense leads the rater to formulate "hunches" about what meaning the various items have for different respondents. Despite the fact that the test purportedly measures a unitary dimension of ego functioning (Loevinger, 1970), a rater's experience may continue to challenge this issue, since types of items might differ for separate groups of people (as was described with the nuns, in the last section). Groups of items may be serving as differential stimuli to the respondent, and may therefore be measuring separate aspects of their ego functioning. This notion of validity, what the items are actually tapping in terms of ego functioning, cannot be examined with the global scoring system of assigning a TPR of ego functioning.

A well known obstacle in understanding projective tests are the difficulties encountered in attempting to obtain validity values of respectable meaning and magnitude. This has been a source of frustration in the area of clinical measurement for a long time. "A clinician using projective techniques soon develops a strong conviction that they, or at least the ones with which he has had rich experience, present important data about persons and personality dynamics" (Anderson & Anderson, 1951). Such convictions with the WU-SCT go beyond the information obtained by the TPR, which offers only an overall generalized level of ego functioning.

Typical research tools of validation usually prove to be inadequate for investigating these convictions that clinicians have about their projective techniques. One particular researcher, however, seems to have successfully challenged this inadequacy with a certain validation technique. J. Holley (1965, 1967), in collaboration with his co-workers, conducted several studies on the validity of the Rorschach test which yielded encouraging results. The present study was concerned with applying the statistical validation technique used with the Rorschach to the WU-SCT. The technique is applicable to this study's data, the nature of which will be described later.

Using Rorschach protocols from various clinical categories such as schizophrenia, depression, epilepsy, etc., Holley (1965) proposed a method to determine, in a systematic way, the factorial composition of these groups. He alleged that clinical categories, generally treated as homogeneous variables, are, in fact, heterogeneous, and that through the method of Q factor analysis,

Rorschach variables could unravel this homogeneity.

The Q method of factor analysis uses a matrix in which persons are the variables, as opposed to the R, or regular method which analyzes a matrix where tests are the variables. The former technique requires many items but relatively few persons while the latter utilizes the responses of many persons to relatively few tests. The intent of the Q technique is to identify classes of individuals and has been described as an analysis of relations between profiles of scores, a profile analysis, as opposed to the R analysis of relations between variables or variable analysis (Ryder, 1964). Burt (1937) has shown that the factors from an R analysis and from a Q analysis of a double-centered matrix could be directly translated from one another. Further formulas have substantiated this relation between the factors from R and Q techniques (e.g., Holley, 1970; Jones, 1967; Ryder, 1964; Ross, 1963; etc.) The details of such transpositions will not be explained here. For the purposes of the present discussion it is worthwhile to note that the decision to employ a Q or R technique depends upon the user's theoretical interest, with the Q technique being appropriate for developing a typology, as was the concern in the Rorschach investigations.

Holley (1967) extracted over 300 items from the Rorschach which described responses typically given by normals as well as psychiatric patients. These items included rejections, populars, locations, and various determinants, of specific cards. In the initial study (1965) 93 of these items were used and responses of 20 women (including normals, depressives, and schizophrenics) to these items were scored

in dichotomous form. Since the scoring directions of the items would result in differing correlations during analysis (e.g., yes-0, no-1 is different from yes-1, no-0) Holley scored each item twice - once positively and again as a negatively poled item. The resulting scores, which can be written in the form of a 'double-extended matrix' (Holley & Guilford, 1966) cannot be affected by changes in scoring direction. This method meets the requirements of the Q analysis in that the mean score for each column, indicating persons, is zero, and the standard deviation of each column is plus or minus one. And therefore, the correlations between persons are invariant to reversals in scoring directions. These properties warrant the variables in Q analysis as ipsative, as opposed to normative variables in the R technique. The double scoring matrix was then correlated using the G index of agreement, which is a statistical coefficient based on the probability of agreement of responses. The G index meets the ipsative score requirements for Q factor analysis (Holley & Sjoberg, 1968) and is appropriate for correlational computations in factor analysis.

After G indices were computed between the 20 persons, factor analyzed, then rotated, the loadings resulted in various factors, or psychiatric groupings. These emerged in a clear cut manner. This first step, therefore, revealed clusters of people which corresponded quite closely to the initial groups of normals, depressives, and schizophrenics. Following this, an item selection method was applied (Holley & Fallstrom, 1965) from which emerged the types of items that were characteristic of the clusters of people from step one. Some items which didn't discriminate with respect to any of the

factors (clusters) were considered residual. The end result, therefore, was a list of Rorschach responses characteristic of normals, depressives, and schizophrenics.

In an attempt to crossvalidate these results, a second sample of persons, similar in all relevant respects to the first, was chosen. Subsequent to this a third sample extracted from other sources (Holley & Frobarj, 1967) underwent the same analyses. The results of both analyses revealed validity of respectable magnitude - persons were able to be placed in the original factor groups with very high confidence on the basis of their similar Rorschach responses.

The results from each of the three portions of the first study supported the hypothesis that validity might be demonstrated with the Rorschach test with the analytical procedures used. Additional studies hypothesizing factorial heterogeneity were conducted by these investigators (Frobarj & Holley, 1968) and similar positive results were obtained. The method employed in these studies might be extended to investigations of other projective tests, given that the data is suitable to the statistical procedure used. The present study attempted to do this.

Hypothesis

The present study examined the homogeneity of people scoring at the modal (I-3/4) level of ego development. Just as clinical subclasses emerged from Rorschach responses, this study, employing the same statistical technique, attempted to identify any subsets of individuals within this larger modal class, based on their style of responding to

items of the WU-SCT. Possible subsets might emerge as a function of age, socio-economic status, marital status, or education. If these subsets do exist, an item analysis would be conducted to define which type of WU-SCT responses are characteristic of the defined groups.

The hypothesis of this study was, therefore, that a sample of individuals all functioning at the I-3/4 level of ego development will differ with respect to their manner of responding to certain items on the test, and hence, in their manner of adapting to themselves and to their world. Further to this, it was hypothesized that this sentence completion test may be tapping different aspects of ego functioning which would be reflected by certain characteristics of responses given by different individuals all functioning at this global modal level. An examination of these possibilities would provide support for the hypothesis that the WU-SCT may not be assessing a unidimensional concept of ego development.

CHAPTER II

METHOD

Subjects

Participants in this study were 125 women volunteers. In an attempt to obtain an adequate representation of age, education, socio-economic and marital status, these women were sampled from three populations.

Eighty-five women enrolled in an Introductory Psychology course at the University of Windsor, Windsor, Ontario, participated in the study. In return for participation in experiments within the Department of Psychology, they received credit toward their course grade. The women ranged in age from 17 to 45 years.

A second group of subjects were 21 mothers/caretakers who bring their children for speech therapy in the Speech Therapy Department of the Brantford General Hospital, Brantford, Ontario. These women were aged 23 to 35 years.

Finally, 19 women from the Senior Citizen's Centre, Windsor, Ontario, completed the WU-SCT. They ranged in age from 52 to 80 years, and are members of this active gathering place for seniors.

Procedure

Test Used. The Washington University Sentence Completion Test (WU-SCT) (Loevinger, Wessler, & Redmore, 1970) was administered to all subjects.

The WU-SCT consists of 36 items printed on three pages (see Appendix A). Form 9-62 for women was used, which is the original version upon which the test was devised and norms collected. The test takes approximately 30 to 40 minutes to complete.

A face sheet attached to the test offered instructions and requested demographic information of the participant. She was asked to give her age, education, marital status, number of children, whether she has ever been in therapy/counselling (yes/no), and gross family income. The levels of income were adopted from a survey used by Brown (1975) from which appropriate levels of socioeconomic status can be estimated.

Test Administration. The WU-SCT was administered to the university students in groups of 15 to 20. Periods of one hour, ample time to complete the form, were allowed.

The mothers/caretakers completed the form individually while in the waiting room of the Speech Therapy Department. They typically sit and read for one hour while their child is with the therapist. This provided ample time to complete the 36 items.

Senior citizens completed the form while at the Centre, in small groups of three to five, and in some cases, on an individual basis. With a few cases of impaired eyesight the test was administered orally. Administration was done between scheduled activities at the Centre.

All tests were coded following administration, and names were not used in this study.

Scoring. The recommended procedure for scoring the protocols

was used (Loevinger, 1970). All completions were rated out of context, thereby eliminating the possible bias of the rater growing familiar with scores on previous items, style of writing, or certain other reactions to the stems. All the subjects' responses to each item, in succession from one to 36, were typed together and rated in this manner (i.e., all 125 responses to item one rated, then item two, etc.). The typed responses included all grammatical errors, erasures, and omissions. All responses were rated following the scoring manual, which includes applying the five rules given by Loevinger (1970) (see discussion of the test in Introduction).

After all responses to each of the 36 items had been rated, these item ratings were transferred onto a sheet coded for each individual. The number of items rated at each level of ego development were summed, thereby giving a frequency distribution of a person's test scores. These frequencies were cumulated, starting from the lowest (I-2) level to the highest level obtained, until the 36 ratings have been accounted for. This cumulative frequency was then compared to ogive rules for obtaining the total protocol rating (TPR).

Since this study was concerned with examining only those individuals assigned an I-3/4 level of ego functioning, those subjects whose TPR was higher or lower than this were not included in analysis. Eight-five out of the total 125 subjects obtained a score of I-3/4 (68%), which would seem to be consistent with the contention that two-thirds of a population are functioning at this "modal" level of ego development. These 85 subjects consisted of 54 of the university

women (63%), 15 mothers/caretakers from the Brantford General Hospital (71%), and 16 of the senior women (84%).

Item Variables. Certain styles and characteristics of completing WU-SCT items were selected as variables. Holley (1972) recommended that the minimum number of item variables be 200, with more than 200 being desirable for analysis. The present study employed 438 variables in total, 19 of a demographic nature, and between 8-12 of the remainder representing each of the 36 test items (see Appendix B for a complete variable list). The rationale for selecting the variables evolved from various sources. These are described below.

A preliminary frequency analysis on the scored data (the 85 I-3/4 subjects) revealed distributions of scores for individual items, and pointed to those items which had a low or high pull for the subjects, or those which seemed to invite more concentrated scores (e.g., I-3, conformist scores). These items and their responses were examined closely, and trends were noted which seemed to characterize styles of responding to certain items. As an example, the item "Raising a family" was completed with a self focus (e.g., is something I want to do) or externalized, reflecting a more general response (e.g., is difficult for anyone these days). In terms of Loevinger's (1970) scoring system, such differences may receive the same score, yet a consistent pattern of responding in a certain manner may reveal important dimensions of ego functioning, which was, in essence, the rationale for this study. Exner (1972) devised a scoring system for a 30-item sentence completion blank (Self Focus Sentence Completion) (SFSC) which provides an index of egocentricity.

He utilizes six scores: self-focus responses, self-focus negative, external world focus, external world affective, ambivalence responses, and neutral responses. All completions are rated on one of these dimensions and summary scores cumulated, the proportions of which reveal an egocentricity index. Many of the variables used in this study were similar to those used with the SFSC and the examples provided by that author served as useful guidelines.

An additional basis for selecting variables involved the consideration of previous research with the WU-SCT. Relevant issues concerning item response styles, such as verbosity, needed to be examined and considered as a subject's style of responding to the test items, as well as a contributing factor to their level of ego functioning. Since all subjects were rated at the I-3/4 level of ego development, it would be important to understand, for example, what types of people needed to be verbose in obtaining that score, and, more generally, what items seem to demand more words from the I-3/4 individual. All 36 items were scored for verbal fluency by counting the number of words used to complete the item. Four categories were used for each of the 36 items (1-3 words, 4-7, 8-12, 13 and more words), and a score assigned for the appropriate category.

A final rationale for selecting variables that deserves mention was the investigator's intuitive sense of response styles and characteristics that have developed from extensive experience in rating WU-SCT items.

Each of the 36 responses for each subject were, then, rated on these dimensions (variables) and coded in either a yes (1) or no (0)

direction. Assigning a one simply means the presence of that variable in the response, while a zero reflects the absence. The coding resulted in an 85 x 438 matrix appropriate for the statistical analyses described below.

CHAPTER III

RESULTS

WU-SCT Scores

An inter-rater reliability coefficient of 0.87 ($p < .001$) was obtained after a second rater scored a random sample of 15 protocols, selected from the original group of 125. The second rater has been involved with the theory and assessment of ego development for four years, as has the primary rater.

The distribution of WU-SCT scores for each of the 36 items is presented in Table 2. This distribution explains the types of scores obtained by these I-3/4 subjects and introduces the fact that score patterns vary for different types of items.

Q Factor Analysis

The Guilford G index of agreement (Guilford, 1954) provided the correlational basis for the factor analysis. This statistical coefficient is considered appropriate for the Q, or inverted factor analysis where persons are the variables, not items as in R or regular factor analysis. The G index is based upon the probability of agreement of responses between individuals for dichotomous data. This probability is denoted p_c , where the subscript c refers to responses in common: yes-yes (1-1) and no-no (0-0). A simple linear transformation, $G = 2p_c - 1$, is required to extend the original range of p_c , 0 to 1.0 to a desired range of -1.0 to +1.0 which standardizes the columns of persons' scores (sum equal to zero and

TABLE 2
 FREQUENCY DISTRIBUTION OF WU-SCT SCORES^a

Item	Score				
	$\Delta/3$ & below	I-3	3/4	I-4	I-4/5 & above
1	8	21	31	41	4
2	5	34	31	12	2
3	8	32	35	9	2
4	4	40	32	8	1
5	3	35	22	22	3
6	3	20	41	21	0
7	1	40	27	13	5
8	3	32	30	18	2
9	6	34	31	13	1
10	1	44	27	11	2
11	0	24	30	27	4
12	1	30	36	15	3
13	6	26	33	17	2
14	2	33	41	8	1
15	0	22	36	22	5
16	2	36	41	6	0
17	2	24	53	6	0
18	2	24	42	17	0
19	3	30	35	14	3
20	4	36	26	19	0
21	4	32	38	10	1
22	8	19	34	21	3
23	3	25	35	18	4
24	2	26	44	12	1
25	2	12	48	22	1
26	8	28	36	11	2
27	1	35	35	12	2
28	1	23	37	22	2
29	5	30	27	21	2
30	0	33	38	11	3
31	5	24	39	17	0
32	11	20	37	16	0
33	4	28	35	16	2
34	1	14	43	26	1
35	4	30	41	8	2
36	3	14	39	26	2

^aN = 85

standard deviation equal to ± 1.00) and therefore ensures that the variance obtained is due to the items and not to the persons. This transformation serves the same function as a 'double-extended matrix' (Holley & Guilford, 1966) which is necessary to satisfy the ipsative score requirements for Q factor analysis.

The subjects' scores of either zero or one for each of the 438 item variables (see Appendix B) served as the matrix from which G indices were computed. The resulting 85 x 85 matrix represented the coefficients of agreement between subjects (see Appendix C for this matrix).

The correlation matrix was then analyzed using the principal components method of factor analysis, followed by the varimax method of rotation. Visual inspection of the factors which emerged resulted in the decision to retain the first four factors, which represented four groups of individuals. Within each factor, 85 factor loadings described each individual's contribution to that factor. The variance explained by each factor was as follows: Factor 1 - 3.86%; Factor 2 - 10.65%; Factor 3 - 6.18%; and Factor 4 - 3.54%. The factor loadings for the 85 individuals within each group (factor) were examined and those of respectable magnitude ($> .40$) were selected and these persons then defined each group. The factor loadings and the selected group members are given in Table 3.

The size of these groups (a function of the method of rotation) were as follows: Group 1 - 6 individuals; Group 2 - 16 individuals; Group 3 - 13 individuals; and Group 4 - 6 individuals. Forty-one subjects were therefore able to be placed in one of four groups as a

TABLE 3

FACTOR LOADINGS FOR EIGHTY-FIVE SUBJECTS

FACTOR1	FACTOR2	FACTOR3	FACTOR4
0.20030	0.14283	0.20079	0.27803
*0.45228	0.11802	0.25292	0.21281
0.20163	0.05724	0.34927	-0.32587
0.29127	0.05896	0.21444	0.10562
0.21322	0.27118	0.37530	0.17999
*0.13410	0.13671	0.28830	0.21315
0.12010	0.19430	*0.44504	0.19868
0.23302	0.13671	0.14484	0.21499
*0.41207	0.13154	0.16705	0.09067
0.20280	0.18255	0.44334	0.11230
0.11709	0.13294	0.14204	0.20332
0.22453	0.05232	0.22838	0.12100
0.27779	0.07758	0.17182	*0.53464
0.21451	0.12111	0.19244	0.17744
*0.12305	0.24455	0.25500	0.23554
*0.45467	0.06100	0.18841	0.23501
0.22588	0.17719	0.17000	0.21829
0.17948	0.19258	0.25840	*0.60942
0.07214	0.26708	0.10082	*0.43140
0.24838	0.32244	*0.51507	0.19882
*0.64257	0.15707	0.13249	0.02830
0.23492	0.23325	0.14173	0.26225
0.05914	0.25679	*0.41412	0.25715
-0.00454	0.22726	0.22850	0.15534
0.23000	0.34109	*0.56990	0.12132
0.12245	0.25730	0.25980	0.25705
0.24402	0.08525	0.07201	0.10438
0.21467	0.23051	0.22754	0.08590
0.12709	0.09598	0.35851	0.28202
0.12293	0.36471	0.16813	0.24703
0.12451	0.24402	0.22371	*0.42257
0.14567	0.23460	0.25739	0.11726
0.38220	0.16362	0.22370	0.09329
0.28722	0.24677	0.25002	0.16834
0.22097	0.21416	0.20013	*0.46108
0.09046	0.29907	0.16587	0.00188
0.25795	0.21945	*0.40335	0.39375
0.12832	0.15547	0.15504	0.13347
0.01813	0.28204	*0.42510	0.25131
0.21208	0.28637	*0.50060	0.20315
0.20347	0.27732	*0.32204	0.02759
0.06345	0.36498	*0.47795	0.18464
0.05175	0.28285	0.21039	0.17440
0.22555	0.22767	*0.54257	0.03822
0.01087	0.30296	*0.45099	0.05536
0.09434	0.12635	0.15057	-0.01727
0.33141	0.32781	0.20144	0.05602
0.04718	0.32916	0.25712	0.06040
*0.40714	0.19950	0.33900	0.09711
0.13657	0.32682	0.20497	0.20401
0.22051	0.12841	0.10062	0.17750
0.12580	0.19000	0.10034	0.05388
0.01903	0.24141	*0.45370	0.08708
0.15545	0.28252	0.02714	0.22719
0.02392	0.36526	0.17829	0.26821
0.04323	0.36040	0.22266	0.17804
-0.04362	0.18395	0.25125	0.07210
-0.02172	0.33205	*0.40821	0.25078
0.21522	0.22001	0.10080	0.12297
0.03702	*0.40952	0.12876	0.12313
0.18067	0.25262	0.20750	0.07162
0.20440	0.16140	0.12599	0.05313
0.16689	0.28135	0.15567	0.10635
0.02924	0.29228	0.17750	0.16443
0.13029	0.29999	0.19487	0.04738
0.23674	0.25564	0.19372	0.19787
0.05811	0.24372	0.27287	0.31340
-0.04871	0.21935	0.21834	*0.42947
0.14305	0.26901	0.25085	0.07407
0.28542	0.34455	0.15380	0.17178
0.19143	*0.62403	-0.02048	-0.07475
0.08214	*0.56726	0.32155	0.00103
0.13326	*0.50835	0.19008	0.12153
0.15968	*0.61857	0.20295	0.24702
0.06149	*0.66462	0.07139	0.10148
0.14561	*0.58807	0.17305	0.11025
0.09028	*0.57612	0.16667	0.18780
0.02545	*0.54962	0.15583	0.12083
0.04904	*0.63835	0.13353	0.16422
0.14311	*0.44286	-0.03221	0.20020
0.06499	*0.67217	0.12709	0.12358
0.03357	*0.69781	0.11830	0.07578
0.03279	*0.65581	0.19827	0.05518
0.10882	*0.82474	0.15011	0.04467
0.04912	*0.80277	0.13330	0.01896

* Group member

result of the factor analysis. Group two, the largest group, represented the statistically most powerful group, since the factor loadings were considerably higher than were most of the other group members.

Once the four clusters of persons had been obtained, a final analysis was required to discern which items provided the basis for these clusters. This knowledge would therefore define the characteristics which contributed to the similarity between group members. In order that this be established, point-biserial correlations were computed between the 438 items and the individual's factor loadings. A correlation coefficient of .40 or greater was selected as the criterion for inclusion of an item as a contributor to the discrimination of individuals to their respective groups. These discriminating items for each group are given in Table 4 through Table 7.

Given these four sets of discriminating items which statistically described some sort of similarity between group members, it was necessary, then, to visually examine these persons' scores for the items. The inspection of the scores supported the groupings to a considerable degree and confirmed the patterns of similar response characteristics found in analysis. Table 8 offers a presentation of a sample of this confirmation. This sample score matrix (see Table 8) consists of four members of each group as well as four sample discriminating items for these groups. All persons' scores for all items offers a flavor for the power with which these items discriminated their respective groups. The diagonal reveals each group's scores for their own items and, as this sample shows, it was evident that Group

TABLE 4
DISCRIMINATING ITEMS FOR GROUP 1

1.	Age 17-19 years
6.	High school education
9.	Single
19.	Gross family income more than \$30,000
146.	Item 11 "Women are lucky because": used more than 12 words
149.	Item 11 "Women are lucky because": comparison to men
159.	Item 12 "My father": used more than 12 words
215.	Item 17 "When I am nervous, I": used 8-12 words
226.	Item 18 "A woman's body": used 8-12 words
238.	Item 19 "When a child won't join in group activities": used 8-12 words
249.	Item 20 "Men are lucky because": used 8-12 words
261.	Item 21 "When they talked about sex, I": used 8-12 words
274.	Item 22 "At times she worried about": used more than 12 words
284.	Item 23 "I am": used 8-12 words
287.	Item 23 "I am": time component involved
378.	Item 31 "When she thought of her mother, she": used more than 12 words
423.	Item 35 "My conscience bothers me if": used 8-12 words

TABLE 5
DISCRIMINATING ITEMS FOR GROUP 2

-
-
- 4. Age 36 and older
 - 5. Less than high school education
 - 11. Widowed
 - 13. Has children
 - 16. Gross family income \$5,000 to \$10,000
 - 25. Item 1 "Raising a family": used 1-3 words
 - 30. Item 1 "Raising a family": - past reference
 - 31. Item 1 "Raising a family": self focus
 - 39. Item 2 "Most men think that women": used 1-3 words
 - 44. Item 2 "Most men think that women": positive response
 - 50. Item 3 "When they avoided me": used 1-3 words
 - 55. Item 3 "When they avoided me": retaliation
 - 65. Item 4 "If my mother": past reference
 - 70. Item 5 "Being with other people": conformist (1-3) score
 - 74. Item 5 "Being with other people": used 1-3 words
 - 100. Item 7 "My mother and I": past reference
 - 107. Item 8 "What gets me into trouble is": used 1-3 words
 - 122. Item 9 "Education": self focus
 - 143. Item 11 "Women are lucky because": used 1-3 words
 - 148. Item 11 "Women are lucky because": self focus
 - 162. Item 12 "My father": past reference
 - 175. Item 14 "When my mother spanked me, I": used 1-3 words
 - 185. Item 14 "When my mother spanked me, I": single response "cried"
 - 192. Item 15 "A wife should": used 4-7 words
 - 224. Item 18 "A woman's body": used 1-3 words
 - 240. Item 19 "When a child won't join in group activities": external/
general response
 - 247. Item 20 "Men are lucky because": used 1-3 words
 - 253. Item 20 "Men are lucky because": because of women

Continued

TABLE 5 CONTINUED


-
255. Item 21 "When they talked about sex, I": conformist (1-3) score
259. Item 21 "When they talked about sex, I": used 1-3 words
271. Item 22 "At times she worried about": used 1-3 words
282. Item 23 "I am": used 1-3 words
375. Item 31 "When she thought of her mother, she": used 1-3 words
404. Item 33 "Usually she felt that sex": private and personal
response
414. Item 34 "For a woman a career is":- qualified response (2 or more
contrasting ideas)
422. Item 35 "My conscience bothers me if": used 4-7 words
437. Item 36 "A woman should always": external concern; appearances
-
- 

TABLE 6
DISCRIMINATING ITEMS FOR GROUP 3

9.	Single
54.	Item 3 "When they avoided me": internal emotional reaction or discomfort
66.	Item 4 "If my mother": self focus
108.	Item 8 "What gets me into trouble is": used 4-7 words
136.	Item 10 "When people are helpless": external/general response
175.	Item 14 "When my mother spanked me, I": conformist (I-3) response
183.	Item 14 "When my mother spanked me, I": hostile/negative response
283.	Item 23 "I am": used 4-7 words
295.	Item 24 "A woman feels good when": used 4-7 words
306.	Item 25 "My main problem is": used 4-7 words
359.	Item 30 "When I am with a man": conformist (I-3) score
363.	Item 30 "When I am with a man": used 1-3 words

TABLE 7.
DISCRIMINATING ITEMS FOR GROUP 4

-
-
- | | |
|------|---|
| 1. | Aged 17-19 years |
| 16. | High school education |
| 54. | Item 3 "When they avoided me": emotional reaction/discomfort |
| 68. | Item 4 "If my mother": negative/hostile response |
| 72. | Item 6 "The thing I like about myself is": conscientious
(I-4) score |
| 87. | Item 6 "The thing I like about myself is": used 8-12 words |
| 187. | Item 15 "A wife should": conformist (I-3) score |
| 248. | Item 20 "Men are lucky because": used 4-7 words |
| 307. | Item 25 "My main problem is": used 8-12 words |
| 373. | Item 31 "When she thought of her mother, she": conscientious
(I-4) score |
| 393. | Item 32 "If I can't get what I want": negative reaction |
| 408. | Item 34 "For a woman a career is": conscientious (I-4)
score |
| 436. | Item 36 "A woman should always": others involved |
-
-

TABLE 8

SAMPLE SCORE MATRIX

Items	Persons															
	Group 1				Group 2				Group 3				Group 4			
	2	6	9	16	82	83	84	85	37	40	41	44	13	18	19	31
Group 1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
146	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
159	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
226	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0
238	1	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0
Group 2	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
4	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
39	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
162	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
375	0	0	0	0	1	1	1	1	0	1	1	0	0	0	0	1
Group 3	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0
108	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0
183	0	0	0	1	0	0	0	0	1	0	1	0	1	1	0	0
359	0	0	0	1	0	1	0	1	1	1	1	1	0	0	0	0
363	0	1	0	0	0	1	0	1	1	1	1	1	0	0	0	0
Group 4	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1
68	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1
248	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1
393	1	1	0	1	0	0	0	0	1	0	0	1	1	1	1	1
408	1	1	1	0	0	0	0	0	0	1	0	0	1	1	1	0

2 items had the greatest discriminating power and that this group's members had the least "misses" for both their and other groups' items. This was consistent with the fact that this group explained the most variance (10.65%) of all groups in the factor analysis.

The implications of each group's composition and discriminating items to the WU-SCT and theory of ego development are many and varied. These are described in the next section.

CHAPTER IV

DISCUSSION

This study set out to explore the nature of the I-3/4 individual, described by Loevinger (1970) as functioning at a self-awareness level of ego development. It was hypothesized that a sample of individuals all functioning at this modal level of ego development as measured by the WU-SCT, would differ in some way and that they would constitute not a homogeneous group but several subgroups whose members share similar characteristics. Further to this, the present study has attempted to provide some basis for the hypothesis that the WU-SCT of ego development may not be unidimensional and that different aspects of ego functioning are being assessed. A focused attempt was made to explore this possibility by conducting a thorough statistical analysis of the I-3/4 modal level, the most prevalent theoretical stage for understanding human psychological functioning. The support which emerged for each of these hypotheses is described below.

Group Discrimination

Group One. Single-women aged 17 to 19 and currently attending university formed the basis for group one. Eleven of the 13 discriminating WU-SCT items characterized this group as exercising verbal fluency, using many words to complete certain items.

Inconsistent with Loevinger's (1979) claim that verbal fluency is indicative of conceptual complexity was the fact that group one's lengthy responses were not complex. They generally contained one simple idea, using many words, and rarely required consideration under Loevinger's (1970) Rule Two which provides guidelines for rating lengthy responses containing two or more contrasting ideas.

The content of the items which demanded many words from these people seemed to reflect a few general themes. They chose to be verbose on items concerning the roles of women, their bodies, men, father and mother. In addition to this, they took the opportunity to elaborate on personal reactions to being nervous, moral "conscience" concerns, as well as offering a lengthy response to the item "I am". The content of those stems would seem to be realistic concerns for women at this age, probably in the final throws of establishing an identity. The implications of these items, however, were vague since the verbal productivity was probably a function of the university setting and the level of education of these subjects. Group one was therefore considered to reflect a consistent response style to approaching the test, rather than any prevalent aspect of their ego functioning (though these may not be mutually exclusive).

Group Two. Several striking characteristics defined this group, the most obvious being the age of these women, which clearly distinguished them from the other groups. All but one member (aged 28) was aged 60 and older and all had children. The majority were widowed and had obtained less than a high school education. Just as verbosity described group one, minimal response length characterized

group two. Thirteen items described these women as utilizing very few words (one to three) to respond to this sentence completion test. This style of responding holds an important implication for the validity of the WU-SCT. The fact that these women used very few words yet obtained the same (I-3/4) score as those who responded with many words partially contradicts the belief that verbal productivity highly influences ego development scores. An additional contradiction is evident in that the majority of these women were not highly educated (less than high school) and therefore the WU-SCT may, in fact, be assessing more than level of education, a confounding variable identified in many studies with the WU-SCT. This study presented an example where these variables have been unravelled. These contradictions, however, may be a reflection of the I-3/4 level. Perhaps this level is not sensitive to number of years in school, since a large number of people in the general population are stabilized at the I-3/4 level. It is highly likely that education and verbal productivity are important contributing factors to those functioning at higher levels of ego development. These findings, however, reveal the diversity of I-3/4 individuals and support the contention that this level is a stable position in mature life. The presence of group two seemed to indicate that such stability might undergo certain fluctuations with age, and that these could have relevant implications for developmental theory.

An additional similarity among group two members was a pre-occupation with the past on certain items, as well as a focus on oneself. These characteristics would seem to be a function of their

age, since the items were concerned with activities and persons of their past (e.g., "Raising a family; "Education"; "My mother and I"; "My father"). This group also seemed to share a rather stereotyped, conformist style to items concerning reactions to the roles and functions of a wife, men, sex, and others in general. This consistency combined with the brief responses, most likely reflect their uncomplicated, relaxed style of living at this point in their lives.

Group two, then, represented a clustering of older women functioning at the same level of ego development as many younger women, yet their approach to taking the test and their attitude and strategies in understanding and adapting to themselves and to their world, were somewhat different, providing support for this study's hypothesis.

Group Three. The basis for this group remains somewhat unclear, though the age variable of 26-35 years contributed quite strongly to the group's makeup, yet fell short of meeting the statistical inclusion criteria. The items discriminating group three suggested an internalized response style, by focusing on oneself and offering completions reflecting emotional discomfort and negative reactions. Several I-3 (conformist) scores and the use of an average (four-to-seven) number of words seemed to define this group as having taken a rather usual, expected approach to the test. It was interesting to note that group three consisted of subjects from the Brantford General Hospital Speech Therapy Department who, unlike subjects from the other populations, were neither completely immersed in a testing (university) atmosphere, or completely removed (seniors). This group seemed to be mid-way between the two both in test taking ability and

response style as well as in age.

Group Four. These women were aged 17 to 19 years, had obtained a high school education, and were currently attending university. Demographically, they were identical to group one, but clear differences were obvious from their discriminating items. They were not characterized by a high word count, rather by a more average completion length. The content of the items and their responses were less ego-centric than were those of group one, since they extended their thoughts to others, presenting an emphasis on the relationship of themselves to others. These responses obtained higher (I-4, conscientious) scores, a similarity not evident in the other groups. The primary difference between these women and their (group one) peers seemed to involve a style of internalizing, a capability to look at both themselves and others, and perhaps a more pensive, introspective personality trait.

Conclusions. The results of this study supported the hypothesis that a sample of individuals all functioning at the I-3/4 level of ego development do differ in some way, and that this homogeneous group can be divided into several subgroups whose members share similar characteristics. The description of these groups presented here must be considered speculative, since cross validation is necessary to confirm and elaborate upon these findings. Though four groups did emerge, all cannot be described with the same degree of confidence. A possible methodological barrier that hindered a clearer picture of these groups was the composition of the initial subject pool. The overrepresentation of university women in analysis created an

imbalance relative to the subjects from the other populations. The inclusion of fewer students may have resulted in a clearer picture of the characteristics defining these I-3/4 women. Employing fewer subjects, therefore is recommended for future analysis of this nature.

The four groups that emerged did not differ on many of the same characteristics, rather, they each reflected a unique composition of similarities. The most pervasive explanation for the differences between the four groups seemed to lie with each group's approach to taking the test. The marked differences in verbal productivity supported the fact that within this I-3/4 group, people do approach both the nature of the task and item content differently.

Given that certain items were able to discriminate many individuals and place them into groups based on their responses, the possibility remains that the WU-SCT may be measuring more than one global construct of ego development. In order that this possibility be explored here, it is necessary to further examine the I-3/4 individual through recombining the information already acquired from each group's stylistic patterns. A better understanding of persons functioning at this level of ego development, as measured by their response styles to the WU-SCT, would then suggest any subsets of items which may be tapping different aspects of functioning for the I-3/4 individual.

The Nature of I-3/4 Functioning

Loevinger (1976) suggests that the I-3/4 level of ego development is "...the easiest transition to study since it is

probably the modal level for adults in our society" (p. 19). The findings of this study would seem to contradict this statement, given the diversity that evolved within this particular level. The modal level is probably most easily accessible, since the majority of society's members are stabilized here, but for this very reason it is the most difficult to study. This author is in agreement with Holt (1980) who suggests that I-3/4's have been overlooked precisely because they represent the predominant North American type. These modal, average persons may have "constituted the ground against which the other types stood out as figures, being almost as invisible as water is to the fish who swim in it" (p. 919).

This stage has rarely been described by theorists previous to Loevinger. She has attempted to define this developmental level as a transition from a lower to a higher level. Perhaps one of the other stages should be considered transitional, and the I-3/4 level acknowledged as the stable position in mature life --the probable "setting point" on the continuum of ego development. Loevinger (1976) defines this I-3/4 level by suggesting ways in which it differs from the I-3 (conformist) level. Two salient differences are offered, those being (1) an increase in self-awareness (not living up to social norms any longer) and (2) an appreciation of multiple possibilities in situations (absent in I-3 and directing towards the conceptual complexity of I-4). The modal level commands a "pseudotrait conception" which, Loevinger explains, includes the nature of moods, norms, and virtues. Norms reveal the transitional nature of these conceptions, midway between the group stereotypes of the conformist level and the

appreciation for individual differences at higher levels. Having considered Loevinger's description of the I-3/4 level, let us now re-explore the findings of the present study and extract any implications these may hold for this theory.

The total number of discriminating items in this study included 30 of the 36 WU-SCT items. Of these, 15 of the same items served as discriminating stimuli for two groups or more (see Table 9 for these items). If these 15 are considered somewhat representative of the group of I-3/4 individuals, then this general description of I-3/4 styles can be considered indicative of this level of ego functioning as measured by the WU-SCT. In an attempt to confirm this possibility a visual analysis of subjects' scores for these items was done, and remarkable consistencies were evident.

The items in Table 9 are placed into sections since a few themes seemed to be evident. The first group represented six of a total of 15 WU-SCT items which contain mention of the first person. All of these items (with the exception of "I am") deal with what are usually considered to be undesirable/uncomfortable actions or thoughts, the response to which, even if not offered, requires a certain degree of internal self reflection. These items would seem to be consistent with Loevinger's description of the I-3/4 level, since they demand that some thought be given to the awareness of oneself. Five items were concerned with women and their roles, identities, and opportunities, two with men, one with mother, and finally, one with a child outside of the group. Items such as "Raising a family" and "Education" which typically pull a stereotyped response from the subject were not

TABLE 9

DISCRIMINATING ITEMS FOR TWO OR MORE GROUPS

-
-
25. My main problem is
 3. When they avoided me
 35. My conscience bothers me if
 23. I am
 21. When they talked about sex, I
 14. When my mother spanked me, I

 11. Women are lucky because
 18. A woman's body
 34. For a woman a career is
 36. A woman should always
 15. A wife should

 20. Men are lucky because
 12. My father

 31. When she thought of her mother, she
 19. When a child won't join in group activities
-
-

present in this list, providing support for Loevinger's belief that I-3/4 individuals have "graduated" from the stereotypical preoccupation evident at the conformist level.

The content of the items in Table 9 suggested concerns/pre-occupations that the I-3/4 individuals in this study had and/or the types of items that may have invited certain styles of responding. The fact that these items were discriminating may not allow them to be extended to the I-3/4 level in general, if one assumes that these groups are, in fact, valid. They did, however, provide some insight into the meaning that WU-SCT items have for such individuals and have offered some support for and additions to Loevinger's description.

Implications for the WU-SCT

This study has indicated that the WU-SCT is capable of discriminating among a sample of individuals all functioning at an identical global level of ego development. It would seem then, that a similar procedure of discriminating between several levels would provide both valid and valuable information concerning the nature of these levels and the individuals functioning with them.

Such analyzes would contribute to the construct validity of this test.

The various discriminating styles/characteristics to WU-SCT items suggested that these test items represent differential stimuli to different individuals and may, therefore, define subsets of items. While this was evident with the I-3/4 level in this study the possibility that similar subsets exist for other levels has, for this author, become a probability. Continued investigation into this issue

seems warranted, for the benefit of both the theory and measurement of ego development.

In addition to these implications for the WU-SCT, the statistical procedure employed in this study might be extended to aid in the investigation of other projective tests. Perhaps it would be valuable and refreshing to reverse the usual psychometric direction of analysis (R-technique) to Q factor analysis, in order to understand the types of individuals taking the tests. They may not constitute a homogeneous group, and may, indeed, consist of heterogeneous, unique individuals.

APPENDIX

A

THE WASHINGTON UNIVERSITY
SENTENCE COMPLETION TEST

INSTRUCTIONS: DO NOT PUT YOUR NAME ON THIS FORM.
THIS PROJECT IS CONCERNED WITH
STUDYING MANY PEOPLE AS A GROUP,
THEREFORE COMPLETE ANONYMITY CAN
BE ASSUMED.

PLEASE COMPLETE THE FOLLOWING AS
THEY APPLY TO YOU, THEN TURN THE
PAGE AND BEGIN.

AGE _____

EDUCATION _____

MARITAL STATUS _____ SINGLE
(check one) _____ MARRIED
_____ WIDOWED
_____ DIVORCED
_____ OTHER

HOW MANY CHILDREN DO YOU HAVE? _____

HAVE YOU EVER BEEN IN THERAPY/COUNSELLING? _____ YES
_____ NO

YOUR GROSS FAMILY INCOME YEARLY (check one):

Under \$5,000 _____
5 to \$10,000 _____
10 to \$20,000 _____
20 to \$30,000 _____
Over \$30,000 _____



Name (I.D.#) _____

Age _____ 9-62

Marital Status _____

Education _____

Instructions: Complete the following sentences.

1. Raising a family _____

2. Most men think that women _____

3. When they avoided me _____

4. If my mother _____

5. Being with other people _____

6. The thing I like about myself is _____

7. My mother and I _____

8. What gets me into trouble is _____

9. Education _____

10. When people are helpless _____

11. Women are lucky because _____

Name (I.D.#) _____

2

12. My father _____
_____13. A pregnant woman _____
_____14. When my mother spanked me, I _____
_____15. A wife should _____
_____16. I feel sorry _____
_____17. When I am nervous, I _____
_____18. A woman's body _____
_____19. When a child won't join in group activities _____
_____20. Men are lucky because _____
_____21. When they talked about sex, I _____
_____22. At times she worried about _____
_____23. I am _____
_____24. A woman feels good when _____

Name (I.D.#) _____

3

25. My main problem is _____
_____.
26. Whenever she was with her mother, she _____
_____.
27. The worst thing about being a woman _____
_____.
28. A good mother _____
_____.
29. Sometimes she wished that _____
_____.
30. When I am with a man _____
_____.
31. When she thought of her mother, she _____
_____.
32. If I can't get what I want _____
_____.
33. Usually she felt that sex _____
_____.
34. For a woman a career is _____
_____.
35. My conscience bothers me if _____
_____.
36. A woman should always _____
_____.

APPENDIX
B
ITEM VARIABLE LIST

VARIABLE LIST

A Demographic Variables

- Age
1. 17-19 years
 2. 20-25
 3. 26-35
 4. 36 and older
- Education
5. less than high school
 6. high school
 7. more than high school (college or some university)
 8. university degree
- Marital Status
9. single
 10. married
 11. widowed
 12. divorced
13. has children
 14. has been in therapy
- Income
15. less than \$5,000
 16. 5-10,000
 17. 10-20,000
 18. 20-30,000
 19. more than \$30,000

B Item VariablesItem One: Raising a family...

- *20. Delta/3 and below
21. I-3
22. I-3/4
23. I-4
24. I-4/5 and above
- **25. 1-3 words used
26. 4-7 " "
27. 8-12 " "
28. 13 or more words used
29. future reference: eg. ...is something I want to do.
30. past reference: eg. ...I raised a healthy one.
31. self focus: eg. ...is not for me.
32. concern with difficulty; negative reactions: eg. ...is not an easy task.
33. external/general response (no personal reference): eg. ...is a big responsibility to anyone.

*ego level score assigned to item } these variables used in all
 **verbosity } 36 items; notation will be
 used in subsequent items

Item Two: Most men think that women...

- *34. to 38.: ego level variables
- **39. to 42.: number of words
- 43. reference to inferior status and/or double standard:
eg. ...are inferior both physically and mentally.
- 44. positive response; reference to assets and independence;
(absence of 43. above): eg. ...are capable of providing
a strong future for themselves.

Item Three: When they avoided me...

- *45. to 49.: ego level variables
- **50. to 53.: number of words
- 54. emotional reaction/discomfort: eg. ...I was deeply
hurt and sad.
- 55. retaliation: eg. ...I avoided them.

Item Four: If my mother...

- *56. to 60.: ego level variables
- **61. to 64.: number of words
- 65. Past reference: eg. ...had only told me about this.
- 66. self focus (as opposed to concern with mother, herself):
eg. ...were here I'd be happy.
- 67. concern with relationship: eg. ...was not so bossy we'd
get along better.
- 68. negativity/hostility: eg. ...gossips I could hit her.

Item Five: Being with other people...

- *69. to 73.: ego level variables
- **74. to 77.: number of words
- 78. self focus: eg. ...makes me feel happier.
- 79. external/general: eg. ...is important to people.

Item Six: The thing I like about myself is...

- *80. to 84.: ego level variables
- **85. to 88.: number of words
- 89. altruism/concern with friends and being friendly: eg. ...I
am friendly with everyone and have many friends.
- 90. identity/independence: eg. ...my independence and beliefs
in myself.

Item Seven: My mother and I...

- *91. to 95.: ego level variables
- **96. to 99.: number of words
- 100. past reference: eg. ...were very close, when she was
alive.
- 101. comparison to other relationships: eg. ...are like best
of friends, not mother and daughter.

Item Eight: What gets me into trouble is...

- *102. to 106.: ego level variables
- **107. to 110.: number of words
- 111. internal affective: eg. ...not being able to say what I feel.
- 112. impulsivity/problem with control: eg. ...speaking before I think.

Item Nine: Education...

- *113. to 117.: ego level variables
- **118. to 121.: number of words
- 122. self focus: eg. ...is a necessary part of my life.
- 123. general/external focus: eg. ...is a very important factor of a good future.
- 124. value (in itself): eg. ...is the foundation of life.
- 125. rewards/means to an end: eg. ...is necessary to get a job.

Item Ten: When people are helpless...

- *126. to 130.: ego level variables
- **131. to 134.: number of words
- 135. self focus: eg. ...I try to help them.
- 136. external/general: eg. ...others should be willing to help them.
- 137. sympathy/concern: eg. ...I feel sorry for them.

Item Eleven: Women are lucky because...

- *138. to 142.: ego level variables
- **143. to 146.: number of words
- 147. external/general: eg. ...they get admiration for the wonders they perform.
- 148. self focus/first person: eg. ...we can work or not work in family situations.
- 149. comparison to men: eg. ...they are smarter than men.
- 150. time perspective: eg. ...they are independent now.

Item Twelve: My father...

- *151. to 155.: ego level variables
- **156. to 159.: number of words
- 160. critical/negative: eg. ...doesn't fit as a father - he doesn't know how to be one.
- 161. self focus: eg. ...is my favorite parent.
- 162. past reference: eg. ...was very strict when I was young.

Item Thirteen: A pregnant woman...

- *163. to 167.: ego level variables
- **168. to 171.: number of words
- 172. negative/dislike: eg. ...feels rotten most of the time
- 173. emotion/affect involved: eg. ...is feeling the joy and love of the unborn.

Item Fourteen: When my mother spanked me, I...

- *174. to 178.: ego level variables
- **179. to 182.: number of words
- 183. hostility/negative reaction: eg. ...was very angry.
- 184. acceptance (of blame): eg. ...felt sorry for I knew I had done wrong.
- 185. "cried" (as a single response): eg. ... cried.

Item Fifteen: A wife should...

- *186. to 190.: ego level variables
- **191. to 194.: number of words
- 195. concern with independence/individual life: eg. ...have other outside activities.

Item Sixteen: I feel sorry...

- *196. to 200.: ego level scores
- **201. to 204.: number of words
- 205. self focus: eg. ...that I lost my first love.
- 206. external - specific people: eg. ...for my boyfriend.
- 207. external - general: eg. ...for people in unhappy homes.

Item Seventeen: When I am nervous, I...

- *208. to 212.: ego level scores
- **213. to 216.: number of words
- 217. internal, unobservable reactions: eg. ...feel tense.
- 218. observable reactions: eg. ...smoke and bite my nails.

Item Eighteen: A woman's body...

- *219. to 223.: ego level scores
- **224. to 227.: number of words
- 228. possession/personal and private: eg. ...is hers and nobody else's.
- 229. concern/care of body: eg. ...should be kept in shape.
- 230. comparison: eg. ...is more beautiful in an artistic sense than a man's.

Item Nineteen: When a child won't join in group activities...

- *231. to 235.: ego level variables
- **236. to 239.: number of words
- 240. external/general (not self-referenced): eg. ...he may need encouragement.
- 241. reasons/blame: eg. ...he is afraid of other people.

Item Twenty: Men are lucky because...

- *242. to 246.: ego level variables
- **247. to 250.: number of words
- 251. comparison to women (have something women don't): eg. ...they are much free-er than women.
- 252. denial/challenging statement: eg. ...they are??
- 253. because of women: eg. ...they have women.

Item Twenty-one: When they talked about sex, I...

- *254. to 258.: ego level variables
- **259. to 262.: number of words
- 263. active participation: eg. ...added my feelings and comments.
- 264. discomfort/uneasiness: eg. ...felt nervous and uncomfortable.
- 265. passive participation: eg. ...listened and learned.

Item Twenty-two: At times she worried about...

- *266. to 270.: ego level variables
- **271. to 274.: number of words
- 275. future concern: eg. ...her future plans.
- 276. others/ concern with relationships: eg. ...understanding her husband's values.

Item Twenty-three: I am...

- *277. to 281.: ego level variables
- **282. to 285.: number of words
- 286. dissatisfaction/criticism: eg. ...depressed quite often.
- 287. time component involved: eg. ...going to become a nurse.
- 288. others involved: eg. ...very much like my mother.

Item Twenty-four: A woman feels good when...

- *289. to 293.: ego level variables
- **294. to 297.: number of words
- 298. achievements/feelings of worth: eg. ...she's accomplished something.
- 299. others involved: eg. ...someone pays her special attention.

Item Twenty-five: My main problem is...

- *300. to 304.: ego level variables
- **305. to 308.: number of words
- 309. others involved: eg. ... the control my parents enforce upon me.
- 310. personal internal attributes: eg. ...I'm too shy.

Item Twenty-six: Whenever she was with her mother, she...

- *311. to 315.: ego level variables
- **316. to 319.: number of words
- 320. positive/being content, happy, satisfied: eg. ...felt so happy and secure.
- 321. negative/discomfort, dislike: eg. ...argued and complained.

Item Twenty-seven: The worst thing about being a woman...

- *322. to 326.: ego level variables
- **327. to 330.: number of words
- 331. others involved: eg. ...is that people expect alot of you.
- 332. personal, private physical reasons: eg. ...is having menstrual cramps.
- 333. comparison to men: eg. ...is that we are physically weaker than men.

Item Twenty-eight: A good mother...

- *334. to 338.: ego level variables
- **339. to 342.: number of words
- 343. roles/duties: eg. ...cleans house and takes care of the kids.
- 344. concern with love in a relationship: eg. ...raises her children with love and understanding.
- 345. concern with individuality and/or reciprocity: eg. doesn't smother her children, or herself.

Item Twenty-nine: Sometimes she wished that...

- *346. to 350.: ego level variables
- **351. to 354.: number of words
- 355. personal, individual focus: eg. ...she could get away from herself.
- 356. external wish: eg. ...the world would be perfect.
- 357. past concern: eg. ...she had not married him.

Item Thirty: When I am with a man...

- *358. to 362.: ego level variables
- **363. to 366.: number of words
- 367. positive reaction/behavior: eg. ...I feel relaxed and comfortable.
- 368. negative reaction/discomfort: eg. ...I am very ill-at-ease.
- 369. qualified: eg. ...whom I like, I feel happy.

Item Thirty-one: When she thought of her mother, she...

- *370. to 374.: ego level variables
- **375. to 378.: number of words
- 379. discomfort/dislike: eg. ...had nightmares about what her mother used to do to her.
- 380. past reference: eg. ...remembered how she used to hide things from her.
- 381. positive/pleasant, comfortable thoughts: eg. ...smiled as she remembered how wonderful she was.

Item Thirty-two: If I can't get what I want...

- *382. to 386.: ego level variables
- **387. to 390.: number of words
- 391. acceptance of situation: eg. ...I'm satisfied with what I have.
- 392. other options/alternate routes: eg. ...I find another way to get it.
- 393. negative reaction; upset: eg. ...I am angry.

Item Thirty-three: Usually she felt that sex...

- *394. to 398.: ego level variables
- **399. to 402.: number of words
- 403. concerned with a relationship: eg. ...should be saved for marriage.
- 404. private; personal; value in itself: eg. ...had to have a purpose and meaning.

Item Thirty-four: For a woman a career is...

- *405. to 409.: ego level variables
- **410. to 413.: number of words
- 414. qualified response; two or more contrasting ideas:
eg. ...for some a waste of time and rewarding for others.
- 415. concern with advancement/fulfillment: eg. ...great to
keep like balanced and exciting.

Item Thirty-five: My conscience bothers me if...

- *416. to 420.: ego level variables
- **421. to 424.: number of words
- 425. others involved: eg. ...I lie to my mother.
- 426. personal, internal reason: eg. ...I'm not honest with
myself.

Item Thirty-six: A woman should always...

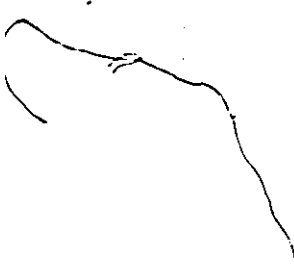
- *427. to 431.: ego level variables
- **432. to 435.: number of words
- 436. others involved: eg. ...be kind and good to men.
- 437. concern with external personal things-appearances;
selfish superficial concerns: eg. ...be neat and look good.
- 438. personal, internal concern/individuality: eg. ...be
proud of herself and do what she does with a clear
conscience.



APPENDIX

MATRIX OF G INDICES OF AGREEMENT

ROW	COL1	COL2	COL3	COL4	COL5	COL6	COL7	COL8	COL9	COL10
ROW7	0.43379	0.442922	0.47032	0.39726	0.479492	0.47032	1	0.420091	0.383562	0.493151
	0.429224	0.424658	0.369861	0.369861	0.424658	0.392694	0.406391	0.369861	0.424658	0.452924
	0.39128	0.429224	0.456623	0.511416	0.415225	0.378995	0.378995	0.424658	0.452924	0.488284
	0.392694	0.406391	0.438350	0.410359	0.382466	0.365997	0.392694	0.319615	0.310522	0.426284
	0.44018	0.415225	0.410359	0.429224	0.415225	0.392694	0.429224	0.447489	0.350922	0.437017
	0.36164	0.39726	0.378995	0.356164	0.456623	0.478486	0.456623	0.447489	0.370177	0.370177
	0.38164	0.326767	0.378995	0.410359	0.351599	0.442924	0.456623	0.420091	0.337471	0.319615
	0.237443	0.442922	0.333333	0.363297	0.328767	0.440182	0.406391	0.387032	0.287671	0.319615
	0.324201	0.324201	0.333333	0.360731	0.328767	0.440182	0.406391	0.387032	0.287671	0.319615
	0.452924	0.37449	0.37449	0.395297	0.415225	0.39726	0.47032	0.420091	0.454621	0.424658
ROW9	0.369861	0.37449	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.452924	0.37449	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
	0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658
0.37449	0.452924	0.401826	0.401826	0.37449	0.39726	0.47032	0.420091	0.454621	0.424658	
ROW9	0.410959	0.465751	0.383562	0.420091	0.465751	0.383562	0.420091	0.465751	0.383562	0.410959
	0.415225	0.442922	0.401826	0.401826	0.415225	0.442922	0.401826	0.401826	0.415225	0.415225
	0.420091	0.415225	0.424658	0.424658	0.420091	0.415225	0.424658	0.424658	0.420091	0.415225
	0.342466	0.456621	0.453151	0.43379	0.378995	0.383562	0.383562	0.383562	0.342466	0.342466
	0.30731	0.333333	0.392694	0.392694	0.30731	0.333333	0.392694	0.392694	0.30731	0.30731
	0.161128	0.156164	0.156164	0.156164	0.161128	0.156164	0.156164	0.156164	0.161128	0.161128
	0.333333	0.333333	0.333333	0.333333	0.333333	0.333333	0.333333	0.333333	0.333333	0.333333
	0.246575	0.27449	0.27449	0.27449	0.246575	0.27449	0.27449	0.27449	0.246575	0.246575
	0.410959	0.465751	0.383562	0.420091	0.465751	0.383562	0.420091	0.465751	0.383562	0.410959
	0.415225	0.442922	0.401826	0.401826	0.415225	0.442922	0.401826	0.401826	0.415225	0.415225
ROW10	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452
	0.37449	0.452924	0.401826	0.401826	0.37449	0.452924	0.401826	0.401826	0.37449	0.452924
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0.37449	0.452924	0.401826	0.401826	0.37449	0.452924	0.401826	0.401826	0.37449	0.452924	
ROW11	0.438356	0.438356	0.438356	0.438356	0.438356	0.438356	0.438356	0.438356	0.438356	0.438356
	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452	0.479452
	0.383562	0.424658	0.452924	0.452924	0.383562	0.424658	0.452924	0.452924	0.383562	0.424658
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ROW12	0.465751	0.465751	0.465751	0.465751	0.465751	0.465751	0.465751	0.465751	0.465751	0.465751
	0.37449	0.452924	0.401826	0.401826	0.37449	0.452924	0.401826	0.401826	0.37449	0.452924
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ROW37	COL1 0.378995	COL2 0.378995	COL3 0.415225	COL4 0.310502	COL5 0.378995	COL6 0.424658	COL7 0.39726	COL8 0.374429	COL9 0.292237	COL10 0.465753
ROW38	COL1 0.378995	COL2 0.378995	COL3 0.310502	COL4 0.310502	COL5 0.378995	COL6 0.424658	COL7 0.39726	COL8 0.374429	COL9 0.292237	COL10 0.465753
ROW39	COL1 0.378995	COL2 0.378995	COL3 0.310502	COL4 0.310502	COL5 0.378995	COL6 0.424658	COL7 0.39726	COL8 0.374429	COL9 0.292237	COL10 0.465753
ROW40	COL1 0.378995	COL2 0.378995	COL3 0.310502	COL4 0.310502	COL5 0.378995	COL6 0.424658	COL7 0.39726	COL8 0.374429	COL9 0.292237	COL10 0.465753
ROW41	COL1 0.378995	COL2 0.378995	COL3 0.310502	COL4 0.310502	COL5 0.378995	COL6 0.424658	COL7 0.39726	COL8 0.374429	COL9 0.292237	COL10 0.465753
ROW42	COL1 0.378995	COL2 0.378995	COL3 0.310502	COL4 0.310502	COL5 0.378995	COL6 0.424658	COL7 0.39726	COL8 0.374429	COL9 0.292237	COL10 0.465753

COL	Value
COL1	0.273973
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COL5	0.424658
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COL27	0.573774
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COL30	0.365207
COL31	0.347032
COL32	0.401826
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COL41	0.360731
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