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THE RELATION OF DEGREE OF AUTONOMY TO DEGREE OF
COGNITIVE EXPANSIVENESS IN ADOLESCENT GIRLS

by

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

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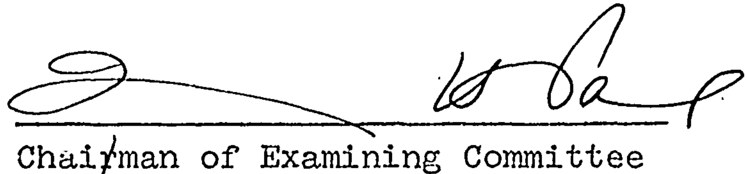
This manuscript has been read and accepted for the University Committee in Psychology as satisfying the dissertation requirement for the degree of Doctor of Philosophy.



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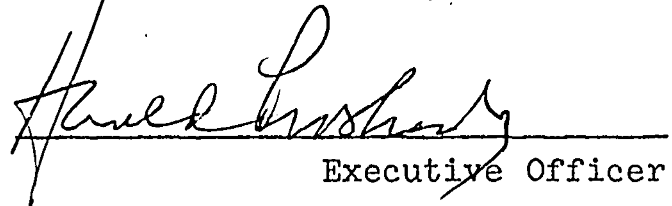

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INTRODUCTION

One of the primary functions of adolescence is the achievement of independence and relative autonomy. Adolescence is widely recognized as the developmental stage that is crucial for identity formation, and perhaps its central problem is the optimal detachment from parents and family. The present study examines the relationship between the achievement of this kind of personal independence and relative autonomy, and the degree of openness to cognitive experiences (i.e., cognitive expansiveness) in a population of adolescent girls.

For the purpose of this study, one aspect of expansiveness is particularly focused on: the array of informational cues (both internal and external) which are allowed to come into the organization of one's cognitive field. An expansive orientation is one in which there is an openness to a broad, but manageable and purposive, range of stimuli, including thoughts and feelings. A restrictive orientation, on the other hand, implies a guarding against a variety of stimuli. Attention is, to a large extent, rigid and channeled.

In much the same way, it would seem, the autonomous person is open to a wide variety of influences from a number of sources, whereas the non-autonomous person, for the most part, is limited to his family. The latter has not

established significant relationships with people outside of his family. He still sees his parents in an unrealistically important and powerful position. The former, however, to a large degree, has become oriented to a variety of experiences and persons. He is curious about and involved with people outside of his home environment, and he has come to see his parents and his own position in relation to them, in a more realistic way.

A related area, which has not been dealt with in the experimental literature, also is explored in the present study: the relation of beliefs about one's own autonomy to actual autonomy and to cognitive expansiveness.

CHAPTER I

DISCUSSION OF RELEVANT THEORY

The development of autonomy and of openness to cognitive experience have been viewed by various theorists as being necessarily interrelated. Each of the three theorists to be discussed below takes such a view, within the framework of his particular approach to personality development.

Sullivan's Interpersonal Approach

The interpersonal approach, as exemplified by Harry Stack Sullivan, consistently suggests a systematic relationship between the growth of the personality in general and the expansion of cognition. An example of the intimate interrelation between the two may be found in Sullivan's discussion of the development of recall and foresight. These functions become related to every critical human response pattern and become richer and more varied with increasing experiences.

The life of the mature person thus involves "eternally widening interests or deepening interests or both (Sullivan, 1953b, p. 310)." In discussing "restriction in freedom of living" in the late adolescent phase of development, Sullivan refers particularly to restricted contact with

others and restrictions of interest. He views the restrictive aspects of the personality as being organized so as "to continue to deny oneself a great deal of useful, educative and consensual validating experience (1953b, p. 306)." The cognitive functions involved in the process of life experience are restricted in close synchronization with the person's "security operations."

Sullivan views the restriction of cognition as reflecting "limitations and peculiarities of the home," which may be subject to "remedy" through a "broadening of the grasp of how many slight differences in living there are; how many of these differences seem to be all right. . . (1953b, p. 229)"; that is, the person must come to freely recognize diversity, attend to it, relate to it, and accept it.

A crucial factor enabling this development is "differentiation of the childhood authority figures--parents and their homologues--as simply people (1953b, p. 230)." In the situation in which one or both parents feel threatened by the exposure of their children to diverse perceptual experiences and alternate conceptual approaches, they may seek to invalidate their growing expansiveness. Sullivan goes on to describe some of the techniques which are available to parents for the inhibition of such openness in their offspring. The result of this inhibiting is that the parents remain the child's primary models; i.e., it becomes difficult or impossible for him to relate to experience with the broader repertory of responses that could be learned through the use of

a broader variety of human models. He must stay within the bounds of awareness dictated by his parental models. He must filter out those elements of awareness which are not congruent with those of his acceptable models. Conversely, the child who is encouraged to seek alternate models and to evaluate experience independently may be expected to expand the boundaries of awareness with greater freedom.

The constriction of awareness is maintained, according to Sullivan, through the operation of the self-system. The self-system is an abstraction referring to those behaviors acquired in the context of the empathic anxiety experienced in interaction with parent figures. The governing principle of these behaviors is to avoid or minimize such anxiety. In the service of the aims of the self-system, Sullivan describes several types of behavioral patterns, prominent among which is "selective inattention," an active response by which an individual fails to notice or react to events or to his own responses (1953a, p. 38ff.).

Although selective inattention has positive uses (e.g., concentration on the task at hand), Sullivan states: ". . . in many cases, there is an unfortunate use of selective inattention, in which one ignores things that do matter; since one has found no way of being secure about them, one excludes them from awareness as long as possible (1953b, pp. 233-234)." When the novel and the different have led to insecurity (anxiety), the contents of consciousness must be limited to the familiar and therefore secure, i.e., to that which does not

make one's parents anxious. This, of course, implies that interactions with various people and experiences outside of the family tend to be limited in order to avoid new and startling perceptions.

Such unfortunate restriction of awareness often has long-range consequences, since avoidance behaviors, once established, are quite resistant to change. This is due to the fact that avoidant behavior keeps a person from situations and responses likely to result in revised learning. Sullivan formulates this in his "theorem of escape": "the self-system from its nature--its communal environmental factors, organization, and functional activity--tends to escape influence by experience which is incongruous with its current organization and functional activity (1953b, p. 190)."

It follows from the above discussion that the person whose self-system has expanded beyond the family will not exercise selective inattention as frequently or as broadly as the person whose self-system was never allowed to expand beyond the family's cognitive boundaries. The person who has been encouraged to be open to diversity and novelty will be cognitively open to new ideas and belief systems, to a variety of response patterns within himself, and to new perspectives towards tasks and events.

Singer's Concept of Personality Growth

Another writer who views psychological health or

maturity in terms of openness to experience in all areas of living is Erwin Singer. Singer draws from a great variety of sources (clinical material, philosophy, literature, psychological theory) in formulating his notions of personality growth. Taking a broad view, he sees "psychological aliveness" as at the core of psychological well-being. This aliveness manifests itself in effortful activity, and the latter both requires and reflects itself in openness to stimulation--internal or external. In evaluating a person's degree of psychological maturity, Singer therefore looks for readiness to experience the new, the odd, the unforeseen, and the capacity to flexibly shift his focus of perception and inquiry.

Along with Sullivan, Singer postulates a relationship between cognitive openness and expansion beyond the family. He believes that new learning and understanding become possible only when one has the capacity to abandon that which has already been learned. He has found that many of his patients were strikingly similar in their inability to give up old perceptions and cognitions, and in the tenacity with which they clung to highly familiar views of the world and the people around them (usually negative and destructive in nature). Singer describes this style of behavior as ". . . remarkably stubborn adherence to rigid perceptual stereotypes which interfere with growth, satisfactions, experience and expanding vision. . . (p. 284)."

According to Singer, this maintenance of a "fixed world

image" serves to reduce or eliminate the anxiety which would accompany the person's awareness of "destructiveness from his real tormenters, past or present (p. 288)." He adds: "The more massively and early in his life the patient has encountered insistence on self-restriction, the more readily will he have developed such once-and-for-all parataxic generalizations (p. 265)."

Erikson's Concept of Psychological Maturation

For Erik H. Erikson, as for Sullivan and Singer, psychological maturity is defined by a person's capacity to have satisfying relations with others and by his general openness to experience and ability to expand his horizons. This is particularly clear in Erikson's discussion of the issue of "generativity vs. stagnation," in which he notes that intimacy with others leads to a gradual expansion of ego-interests, and that both are necessary for continued growth rather than stagnation to occur.

In order to be ready for the tasks of adulthood (intimacy and generativity), the individual must develop a sense of his "inner continuity" which will "bridge what he _was_ as a child and what he is about to become. . . (1959, p. 111)." This sense of "ego identity, . . . begins where the usefulness of identification ends. It arises from the selective repudiation and mutual assimilation of childhood identifications, and their absorption in a new configuration. . . (1959, p. 113)." It is based upon an early-formed

sense of separate identity: "Under favorable circumstances, children have the nucleus of a separate identity in early life; often they must defend it against any pressure which would make them overidentify with one of their parents (1959, p. 90)." This overidentification, in Erikson's system, can be traced back to under or overdevelopment of certain organ modes (1953) due to inadequate mutuality between parent and child. This distorted development of various organ modes affects all areas of functioning, e.g., cognitive and social. That is, the organ modes establish the person's "basic orientation to living." If a person has achieved "firm self-delineation," the major result will be "true 'engagement' with others (1959, p. 124)," which capacity for intimacy then allows for lifelong ego-expansion.

The need for a sense of separate identity and for openness to new experience outside of the family is clearly indicated in Erikson's discussion of a movie about the legend of Maxim Gorky's youth:

> Alyosha must not only learn to leave his mothers, but more, to leave without a residue of sinfulness which makes a straying soul penitently hold on to mother symbols; as if, in tearing himself away, he had destroyed his mother.
>
> By himself, and in secret agreement with kindred minds, he must learn to protest, and to develop--in the very widest sense--a "protestant" morality.
>
> He keeps his eyes open, if often narrow with inquisitiveness: He "lifts his head," focuses his vision, tries to apprehend and to perceive with clarity and to concentrate with discipline--all this in order eventually to grasp life . . . (1963, pp. 366, 368, 392).

Concepts of Sullivan, Singer, and Erikson

The three theorists discussed have similar perspectives along several dimensions relevant to this study. First, all three see psychological health or maturity as related to ego-expansion, i.e., to openness to varieties of experience, both internal and external. Second, all postulate a more or less systematic relationship between cognitive development and the development of autonomy. Finally, all see some diversification of interpersonal experience away from family figures or surrogates as being at the core of mature expansiveness.

The developing person's relationship with parental figures is thought by each of the theorists discussed to be crucial in the growth of expansiveness. For Sullivan, the important issue is the extent to which the parents feel threatened by the child's exposure to diversity and proceed to invalidate his growing expansiveness. Singer's concept is similar when he refers to the potent effect upon ultimate rigidity produced by "insistence on self-restriction" early in life. Erikson, in speaking of the development of ego-identity, points to the necessity for selectively repudiating and assimilating childhood identifications. This capacity is based on the success with which the child has defended his separate identity against any pressure to over-identify with one of his parents.

All three theorists indicate that if development has proceeded smoothly, then the person will have established

meaningful involvements with a variety of people in the world. Sullivan is clearest on the point of the necessity for the person, all through his developing years, to have a variety of human models other than his parents and to see diversity in behavior as acceptable. (He would, however, stress adolescence as the time when establishing close friendships with peers becomes crucial.)

Rapaport and Schafer on Autonomy and Cognition

A more intrapsychic and less interpersonal approach to the question of autonomy and cognition is that of David Rapaport (1957) (further elaborated by Roy Schafer, 1962). Rapaport is interested in the relative autonomy of the ego from pressures from the drives and from the environment. The achievement of optimal ego autonomy (i.e., the ego's not having to use a disproportionate amount of energy to deal with either of these pressures) is a precondition for the development of ego "apparatuses" that include attention, expectation, recall and thought. Rapaport states:

> . . . the organism is endowed by evolution with apparatuses which prepare it for contact with the environment, but its behavior is not a slave of this environment, since it is also endowed with drives which rise from its organization, and are the ultimate guarantees against stimulus slavery. In turn, the organism's behavior is not simply the expression of these internal forces, since the very apparatuses through which the organism is in contact with its environment are the ultimate guarantees against drive slavery. . . .
>
> Both kinds of protective intrapsychic structures are essential components of the ego's

> structure and organization, and the behavior attributes conceptualized as ego autonomies are characteristics of this ego structure and organization.
>
> . . . ego autonomy from the id and ego autonomy from the environment mutually guarantee each other only within an optimal range. Maximization or minimization of either disrupts their balances (pp. 740-741).

Relevant to the present thesis is Roy Schafer's (1962) elaboration of Rapaport's theory regarding the inclusion, in the category of pressures from the environment, of pressures from the internalized environment of super-ego models:

> . . . the superego's standards . . . are modeled after the prohibiting and punishing behaviors of the young child's parents and after certain of their protecting and rewarding behaviors. . . . The child internalizes these . . . standards and henceforth applies them to himself, mostly unconsciously.
>
> . . . given favorable parental conditions . . . the child's ideals will ultimately be characterized [by the fact that] . . . due weight will be given to the over-arching ideal of capacity for changing adaptations to inevitably changing inner and outer reality. . . (pp. 5, 19-20).

Piaget's Concept of Autonomy

Moving away from the psychoanalytically oriented theorists, it is worth considering certain relevant formulations of Jean Piaget (1948), whose theoretical notions are based on many empirical investigations. Throughout his work, Piaget refers to his central belief that autonomy is positively correlated with the child's opportunity to have new and different experiences with many other people outside of

the family: "The 'denser' the community, the sooner will the adolescent escape from the direct constraint of his relations and, coming under a number of fresh influences, acquire his spiritual independence by comparing them with one another (p. 336)."

Piaget believes that the child's "social differentiation" is inextricably related to his successful ability to see himself and others realistically and to reject his parents (and parent substitutes) as absolute authorities. He says:

> Social differentiation . . . applies a check to the theological symbols connected with conformity. . . .
>
> Frequent and legitimate in many respects as is the child's revolt (against the absolute authority of his parents), he is nevertheless inwardly defeated . . . if he cannot distinguish precisely between what is good in his parents and what is open to criticism (pp. 190, 342).

Linking his views of autonomy with cognitive development (or what could be called cognitive expansiveness), Piaget states: ". . . an individual has only to discover other points of view . . . and he will soon be capable of judging his parents, he will cease to deify them and will thus <u>liberate his mind</u> and <u>make it accessible to innovations</u> (p. 385)." (Italics added.)

CHAPTER II

RELATED RESEARCH

Autonomy and Cognitive Organization

This section considers those studies in which both autonomy and cognitive organization (openness and then other related aspects) are under investigation.

Milton Rokeach's (1960) theoretical position has grown out of his experimental work with cognitive belief systems. He is interested in what he labels the "open-closed" dimension of belief systems. An open belief system implies, among other things, an openness to ideas, a willingness to examine them critically, and a capacity for careful analysis of thought. Rokeach believes that the extent to which a child's belief system develops into an open or closed one may in part be a function of the breadth or narrowness of involvements with persons outside of the immediate family. He states:

> It is reasonable to assume that those who are characteristically more open in their belief systems will report that in childhood they were more influenced by persons beyond the confines of the immediate family. Conversely, it is reasonable to expect that those with relatively closed systems will report a constriction of extrafamily influences and identifications (p. 360).

In partial confirmation, Rokeach and C. Gratton Kemp found that 25 religious-minded persons, differing on the open-

closed dimension as measured by Rokeach's Dogmatism Scale, also differed in their attitudes toward their parents, with the reports of low (open-minded) scorers showing that they were more ambivalent toward their parents and more widely influenced by outsiders, and the reports of middle and high (more closed-minded) scorers indicating more glorification of parents and more restricted influence by outsiders.

E. Silber et al. (1961) added evidence for the combination of variables found by Rokeach. Their subjects were 15 college-bound high school seniors who were selected on the basis of their being assessed (by combined teacher ratings and interviews) as more competent than the other students on a number of behaviors. These subjects showed the following constellation: an active tendency to search for stimulation, a very positive "attitude toward newness," pleasure in mastery, self-reliance, a history of having established friendships and having dealt comfortably with strangers, and a pattern of pleasurably anticipating detachment from parents, together with a feeling of readiness to establish a more independent way of life.

A study of creative persons by Donald W. MacKinnon (1962) also found a relationship between cognitive openness and autonomy. These variables were not singled out for special emphasis but were part of a large number of factors found to be associated with creativity. Extensive testing revealed that the creative person has, among many other

attributes, both an openness to the "richness and complexity of experience (p. 488)," and a "sense of personal autonomy" which is developed to a "marked degree (p. 491)." MacKinnon points out that the parents of the creative person "did not hesitate to grant him rather unusual freedom in exploring his universe and in making decisions for himself--and this early as well as late (p. 491)."

Other qualities of cognitive organization (which can be viewed as related to expansiveness) have been found to be related to degree of autonomy. Herman A. Witkin *et al.* (1962), for example, describe their concept of "separate identity" as manifesting itself in *both* a limited need for guidance and support from others and in the ability to establish and, within limits, maintain attitudes and judgments without continuous reference to external standards. The latter was assessed, for example, by counting the number of inapplicable Rorschach responses accepted by a subject after they had been suggested to him. V. J. Crandall *et al.* (1958) reached similar conclusions on the basis of a study with seven and eight year-olds. They found that children who were generally passive and non-assertive were cognitively more restricted than the other children. A representative item indicating constriction was: "Needs to have details spelled out more."

Very recently, David Ricks and Gene Nameche (1966) turned their attention to the dimensions of autonomy and cognition in schizophrenic children. Numerous case studies

led them to strongly suggest that the extreme inflexibility of cognitive functioning in psychotic children subserves their commitment to perpetuating symbiotic attachments with a parent.

Autonomy as Related to Adolescent Development

There have been a number of studies which have sought to define the concept of autonomy as it relates to adolescent development. Various aspects of the concept as it is being used in the present research have been touched upon. Arthur W. Chickering (1967), using data from case histories, questionnaires and personality inventories collected during a six-year study with college students, states the following: "The first step toward emotional independence is disengagement from the parents, a step taken with the support of peers, non-parental adults, and certain institutional forms and practices."

A. W. Blair and W. H. Burton (1951), having gathered and analyzed research from widely scattered fields, concluded that the adolescent's "increasing independence from adult domination" is based in large part on his social adjustment.

Elizabeth Douvan and Joseph Adelson (1966), as the result of their large-scale study, found that autonomy and self-direction are consistently seen among those adolescents whose parents allow and encourage them to gradually

detach themselves from the family. They discovered that the clearest demonstration of autonomy differences in girls came from an analysis of the question: "With whom do you spend your spare time (p. 151)?" The girls who spent spare time with the family were far less autonomous than those who spent time with peers.

Harold Webster, P. Heist and Phoebe Williams (1960) investigated personality differences between two groups of college students, one of which showed "much change" in the direction of "liberalization" after one year of college, and the other of which demonstrated no such change. The Changers were best characterized by their independence, a very important aspect of which was their attitude toward their parents. As Webster *et al.* state:

> . . . in contrast to the Nonchangers, they [the Changers] understand their parents rather well. The parents emerge more as human beings, and they are described with an admirable detachment. This detachment in turn makes possible a wide variety of positive and negative emotional expression about the parents and about all manner of other things as well (p. 9).

Nonchangers, on the other hand, usually described their parents in an undifferentiated and positive way. This was a significant aspect of their generally dependent orientation.

When studies involving autonomy have investigated parent-child relations, they have generally focused on the maternal relationship. Morton Bard's (1955) investigation of the relationship of dependence to psychogenic invalidism in women after radical mastectomy determined the degree to which

dependence was present by "the extent to which a patient was unable to free herself from maternal control (p. 154)." Lydia Jackson (1964) found that inability to openly express hostility and strivings for independence, in a group of adolescent girls who refused to attend school, was based on "a strongly ambivalent mother-daughter relationship."

An issue which has been raised in regard to the development of autonomy is that of defiant or rebellious behavior. Most investigators agree that rebelliousness shows a lack of true autonomy. Douvan and Adelson (1966) found many underlying similarities between the rebellious and the dependent adolescents. I. R. Hirsch and Erwin Singer (1961) report a study in which dependent and rebellious adolescent girls were given questionnaires which described conflicts between youngsters and authorities in a deliberately ambiguous way. They were asked to judge who was "right" or to withhold decision. Both groups tended to side blindly, the rebellious with the adolescents and the non-rebellious with the authorities.

A related issue which may be of interest is that of a person's insight about his own autonomy, as it relates to both autonomous perceptions and behavior, and to cognitive functioning. Although no study has been found which investigates insight about autonomy, there are many which deal with the broader concept of self-image. Ruth Strang's (1957) extensive study of college students led her to point tc some of the difficulties involved in obtaining an

accurate picture of an individual's self-concept: "Some adolescents depreciate themselves because they are afraid of appearing conceited. Others may lack the verbal ability to express their feelings about themselves. The very process of self-assessment may cause some changes as they see themselves in a somewhat different light (p. 83)."

Openness to Cognitive Experience

The general concept of openness to experience has been treated as a unitary variable by a number of investigators, since they have found it to be composed of distinguishable but related elements.

Morris Eagle (1962), for example, discussing his study of personality correlates of sensitivity to subliminal stimuli, states: "It is probably true that the different concepts employed in this study (attention deployment, degree of cognitive control, receptivity to inner cues) really represent different vantage points in viewing the same phenomena, and, dynamically, belong together in the sense that predictions can be made from one to the other (p. 10)." He found that the concept which best characterized his high-sensitive subjects was "greater cognitive and affective openness (p. 9)."

Martin F. Kaplan and Erwin Singer (1963), similarly, demonstrated that openness to experience is a broad concept expressing itself in various related forms. They hypothesized that dogmatism (close-mindedness), as measured by

Rokeach's scale, and adequacy on sensory discriminative tasks would vary negatively with each other. Using 26 subjects they found that on five of the six measures evaluated, the low-dogmatic group proved superior to the highly dogmatic individuals to a significant degree. (The sixth measure was one of visual acuity.) They concluded that ". . . openness to sense impressions apparently runs parallel to openness to ideas. . . (p. 490)."

Many questions have been raised concerning the etiology of cognitive attitudes or organizations, and various theoretical answers proposed. The perspective most congenial to the present research is that of the importance of experiential and environmental factors in the development of particular cognitive orientations. Sylvia Brody (1956), after interviewing and observing 32 mothers with their infants, suggested that the form the autonomous (cognitive) functions will assume is heavily predicated on the degree and type of facilitations offered by the environment or of the inhibitions imposed by it.

Ruth B. Dyk and Herman Witkin (1965) found that children, whose mothers gave them an opportunity to separate from them and helped them to form internalized controls and frames of reference, developed a greater degree of differentiation in many areas (such as perception, intellectual activities, articulation of experience, articulation of the body concept) than the children whose mothers did not provide such opportunities. Jerome Kagan, Howard A. Moss and

Irving E. Sigel (1963), basing their conclusions on a great great deal of longitudinal data, point out that parent-child interactions which produce conflict and tension in the child may interfere with cognitive processes. L. W. Sontag, C. T. Baker, and V. Nelson (1958), as one finding of their longitudinal study, noted that during the pre-school years, emotional dependence on parents appeared to be clearly associated with a loss in I.Q. during this period.

CHAPTER III

NEED FOR THE STUDY

Measurement of Autonomy

One of the main assumptions of this dissertation is that autonomy, in the sense defined above, is a core factor in the development of openness to cognitive experiences. That is, it is proposed that the degree to which an adolescent has an expanded range of awareness and a flexible variety of potential ideas and cognitions is influenced by the extent to which he has been able to develop an autonomous self or ego. Although several investigators have discovered autonomy (or aspects of it) to be among factors related to an expansive cognitive orientation, none has singled it out for intensive investigation in this regard. As a result, the information gathered about autonomy in any given study has been insufficient to allow judgments or formulations to be made on this issue.

Since the present research directs itself primarily to the question of the relationship of autonomy to cognitive expansiveness, a major emphasis is placed on the adequate measurement of autonomy. (There are several measures of cognitive expansiveness already available.) An interview schedule was developed in order to provide data from the main areas thought to be significant in the development of

autonomy. Thus, it is hoped that a base is provided for identifying relative degrees of autonomy, and for providing some answers to the question of whether autonomy is centrally related to cognitive openness.

Availability of Results to Generalization

Another assumption is that the relationship between autonomy and cognitive openness is a general one, which can be discovered in any population. The few studies which have found autonomy to stand in some relationship to cognitive openness have been carried out on rather special populations (e.g., extremely creative architects; very competent students). Therefore, the relationship might be interpreted as stemming from a third factor, common to all subjects in a given study (creativity; intellectual competence).

Although the above hypothesis cannot be tested adequately by any study using a small number of subjects, nevertheless, in the current study subjects were more representative of an unspecialized population. They were randomly chosen from a population fulfilling certain prerequisites. However, the conditions for being a subject were set up only for control purposes in terms of assessing the discriminating capacity of the interview. This did not make the subjects a very special population, since the conditions imposed were typical of life in this culture (e.g., living with natural mother from birth through adolescence and being a student in college).

Analysis of Various Aspects of Cognitive Expansiveness

Third, it is assumed that the concept of cognitive expansiveness, although capable of being operationally analyzed into various elements, can be viewed as an integral unit, since it expresses a general orientation that should be manifested in a variety of behaviors. It then follows from the first assumption (above) that all of these behaviors should be related to autonomy. Although the idea of cognitive openness has been abstracted (or can be inferred, along with the notion of autonomy and other cognitive and personality variables) from the large amount of data collected in several studies, no study has been found which is designed to isolate and measure this variable in relation to autonomy.

In the current research, three tests were specifically chosen to measure three different aspects of cognitive openness. This procedure allows for an analysis of the relation of different aspects of cognitive openness to autonomy and to each other.

Relationship between Perceived and Actual Autonomy

Finally, the present study may contribute to the understanding of the relationship between insight about one's autonomy, as measured by self-ratings, and actual success

(behavioral, attitudinal) in achieving autonomy. Although this issue has been raised in theory, no study has been found which has undertaken to investigate it.

CHAPTER IV

METHODOLOGY

Subjects

Twenty-one subjects were used in this study. They were 17-19-year-old female college (CCNY) students. The 17-19-year-age range was chosen because this period is viewed by most investigators (and in the culture in general) as the time when an emotional break from the parents becomes a crucial issue.

As a control for the factor of family constellation, the girls used as subjects were all first children with one sibling. Furthermore, the sample studied was kept consistent for continuous residence since birth with the biological mother. (This included the condition that at the time of participating in the study subjects had to be living at home with their natural mothers.)

Subjects were chosen in a random fashion from a population of girls who had volunteered to participate, under the following circumstances: The experimenter received a list of names from a Psychology 1 class in which a request for subjects had been made. She telephoned each of the girls in order to determine whether she met the conditions for inclusion in the study. Every girl who met the conditions was accepted as a subject, until 21 subjects had been selected.

When a subject finished her participation in the study, she was paid $10.00.

Data on their families, provided by the subjects, indicated that the population used in this study was relatively homogeneous with regard to economic status. Twelve of the 21 subjects, for example, reported their family's income to be between $5,000 and $10,000; one said it was $5,000, three said $10,000, and five reported it to be between $10,000 and $15,000.

Four sets of parents were born in Europe, and came to this country after World War II; the rest were born in the United States. The educational level attained by the subjects' parents was reported to be the following: One father completed junior high school, three finished at least two years of high school, nine graduated from high school, three attended college for at least two years, three graduated from college, and two obtained graduate degrees (MSW; MA). One mother finished junior high school, three went to high school for at least two years, twelve completed high school, two spent two years at college, and three graduated from college.

The occupational classifications of the subjects' fathers, who were the main wage earners in every case, were: two semi-skilled workers, five skilled workers, three small businessmen, four civil-servant-clerical workers, two businessmen in managerial positions, and five professionals. Nineteen of the 21 subjects grew up in New York City. One had spent

most of her childhood in a suburban town on Long Island, and one had lived in 11 American cities, never remaining in one place for more than three years.

Instruments

Cognitive Measures

Three measures of cognitive expansiveness were used in the present study.

Stroop C-W Test. The Stroop Color-Word Test presents subjects with a conflict or interference situation in which they must name the color of the ink of color-words when the color and the word are incongruous. Thus, they are forced to adopt a novel orientation to printed stimuli by responding to an unusual aspect of a field.

George Klein (1954), in his use of the Stroop Test, discovered that subjects who were high-interference (i.e., had difficulty identifying the colors) did not seem to be flexible in what they could attend to. On some tasks they could not conform to an adaptive requirement which called for a vigilant selectiveness. On others, they segregated certain features of the stimulus field to the exclusion of others. This combination of lack of directiveness, on the one hand, and omissions of stimuli, on the other, Klein interpreted as being indicative of a constricted cognitive orientation. Other subjects in Klein's study (low interference on the Stroop) seemed to be characteristically expansive in their cognitive approach. They tended to move in the direction

of inclusion rather than exclusion of a variety of segments of a field, while at the same time being able to attend to delimited aspects of a field when this was called for.

In a recent review article, A. R. Jensen and W. D. Rohwer (1966) note that the Stroop C-W Test, now in existence for over 30 years, "yields highly reliable and stable measures of individual differences on . . . basic aspects of human performances," and "has been used in a large variety of studies and has shown significant correlations with a host of other, often more complex psychological measurements (p. 36)."

Rorschach Index of Repressive Style. Murray Levine and George Spivack (1964) have recently developed a scoring system for the Rorschach, which they call the Rorschach Index of Repressive Style (RIRS). The RIRS score is seen by its authors as indicating "the extent to which images, emotions and past experiences are verbally labeled and thus available in consciousness in communicable terms (p. 135)."

The general conception underlying the RIRS scoring system is described as follows:

> The more the verbalization of a Rorschach response reflects vague, impersonal and unelaborated thinking, and lacks integration and flow of ideas, the more repressive functioning has been manifest. The more the verbalization of the response is stated in specific, effectively toned terms and is characterized by a continued and developing flow of words, the less repressive functioning is indicated (p. 17).

The authors point out that they are not necessarily using

the term "repressive" in its psychoanalytic context, but rather more generally to refer to limitations on the thought processes as inferred from the language employed in giving Rorschach responses. They suggest that they are dealing with some quality of a function or style which will be operative in a wide variety of circumstances. The general underlying conception was concretized by Levine and Spivack in seven scoring principles: 1) specificity, 2) elaboration, 3) impulse responses, 4) primary process thinking, 5) self references, 6) movement, 7) organization.

Levine and Spivack have done many reliability studies of their measure and found that it proved to be reliable under a variety of conditions. They further state, "From the extensive evaluation of the consistency of the measure, we can safely conclude the behavior under study . . . is relatively stable over long periods of time (p. 147)." Validity is a thornier problem since, as the authors point out, "The theoretical base of RIRS is hardly developed. . . (p. 149)." However, the RIRS has been found to correlate with a number of measures of what could be termed "availability of inner experience." For example, it correlated significantly with ratings of frequency and vividness of imagery and with the number of senses involved in the images, made by Robert Holt and Leo Goldberger (1959), in their study of responses to the sensory isolation situation.

Rokeach Dogmatism Scale. The Dogmatism Scale was developed by Rokeach (1960) primarily for the purpose of

measuring individual differences in openness or closedness of belief-disbelief systems. The belief system is conceived by Rokeach "to represent all the beliefs, sets, expectancies, or hypotheses, conscious and unconscious, that a person at a given time accepts as true of the world he lives in." The disbelief system "is composed of a series of subsystems rather than merely a single one, and contains all the disbeliefs, sets, expectancies, conscious and unconscious, that, to one degree or another, a person at a given time rejects as false (p. 33)." Rokeach is not interested in the content of particular belief-disbelief systems, however, but in the structural arrangement of their parts. A belief-disbelief system is conceived to be an organization of parts that may or may not be logically interrelated; the basic units are single beliefs and disbeliefs. Thus, he designed his Dogmatism Scale so that each statement in the scale "transcends specific ideological positions in order to penetrate to the formal and structural characteristics of all positions (p. 72)."

Structurally speaking, a system is defined to be "closed" to the extent that there is a high magnitude of rejection of all disbelief subsystems, an isolation of beliefs, a high discrepancy in degree of differentiation between belief and disbelief systems, and little differentiation within the disbelief system (p. 61)." <u>Isolation</u> implies the coexistence of logically contradictory beliefs within the belief system, the accentuation of differences and minimization of similari-

ties between belief and disbelief systems, the perception of irrelevance as regards what may be relevant by objective standards, and denial of contradiction. Differentiation refers to the relative amount of knowledge possessed, and the perception of similarity between adjacent disbelief subsystems, e.g., Hearst's concept of Communazi.

In more operational terms, the basic characteristic that defines the extent to which a person's system is open or closed is "the extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person" (e.g., unrelated habits, beliefs, and perceptual cues) "or from the outside" (e.g., reward and punishment from external authority).

Martin F. Kaplan and Erwin Singer (1962), supporting their use of the Rokeach Dogmatism Scale, state:

> Previous researches have established the usefulness of this device by finding satisfactory correlations between scores achieved on the Scale and personality variables serving as criteria measures. By and large it may be considered the best existing objective measure of closed-mindedness and a host of studies support the reliability and construct as well as criterion validity of the instrument (p. 488).

In an interesting study, Bernard Mikol (in Rokeach, 1960) found that subjects with open belief systems enjoyed and accepted unconventional music much more than did subjects with closed belief systems.

Summary: The Three Cognitive Measures

It was considered possible that the three cognitive tests discussed above would permit an assessment of cognitive expansiveness from three different but related perspectives. The Stroop Test is a task which requires moving against the universal (in this culture) set dictated by printed verbal stimuli. It explores an ability of the individual to exclude experience in a selective way, in order to attend to a novel aspect of a field.

The Rorschach Inkblot Test (as scored in accordance with the RIRS), and the Rokeach Dogmatism Scale specifically explore openness to experience. The Rorschach examines expansiveness in the context of an individual's spontaneous stream of associations in response to ambiguous shapes, both color and chiaroscuro. The RIRS may be seen as a measure of the availability in consciousness of perceptions, emotions and past experiences. The Dogmatism Scale measures expansiveness as it relates to systems of ideas. It taps an openness to new ideas, or an expanded range of awareness as regards new beliefs.

Autonomy Measures

Interview. The autonomy dimension was measured primarily through a clinical interview, following an interview schedule. The schedule, developed by the present investigator, was based mainly on the theoretical formulations and some of the empirical work on autonomy discussed above. It

was tried out and modified in a pilot effort with three adolescent girls who were not included as subjects in the study. The interview was divided into seven categories, each of which represented a different approach to the question of autonomy. The categories were utilized for the information they provided on both attitudes towards autonomy and behavior implementing autonomy, in a variety of fields of a subject's life. The main foci, however, were the subject's relationship with her mother and the quality of her interpersonal relationships in general. The particular areas used in the interview are found in the interview schedule (see Appendix A). The interview schedule was not meant to be exhaustive but rather to provide pertinent data from a variety of areas thought to be significant for the development of autonomy in adolescent girls. The interview was structured to provide enough data to enable trained judges to rank the subjects in terms of the extent to which they had achieved autonomy.

Reliance on the reports of 17-19-year-old girls was felt to be warranted as an extension and application of investigations of parent-child interaction by A. J. Brown, J. Morrison and G. B. Couch (1947) and Lois W. Hoffman and R. Lippitt (1960). These investigators concluded that the reports of children (up to age 16) tend to provide objectively valid data about the content of intrafamilial interactions. Morton Bard's (1955) study provides support for the use of

an interview to assess autonomy. He developed an interview to facilitate judgments of dependence in his subjects and found that of his three predictive techniques only the interview correlated significantly with the criterion, which was invalidism.

The possibility that some subjects would be influenced by a set towards the interview based on a wish to please the examiner was controlled for in several different ways. First, the length and intensity of the interview gave the subjects a chance to become seriously involved with the task. Second, the interviewer allayed misgivings and preconceptions when this was thought to be necessary. Third, the purpose of the interview was not revealed to the subjects until it had been completed. Prior to the interview, subjects were told: "I'll be asking you questions about yourself and your family and friends. If you'd like to know what it's all about, I'll tell you at the end; but it would be better if you didn't think about it now." Another method of strengthening the validity of the interview was to get specific examples of general statements and to ask for elaborations of vague points. The latter techniques provided a further basis on which to rate responses.

Self-Ratings. Self-ratings of the extent to which each subject believed she had achieved autonomy were obtained. There were four areas in which subjects were asked to rate themselves. These were represented by the following four questions:

1. How independent of your mother are you?
2. How independent of your father are you?
3. How independent of adults in general are you?
4. How independent are you regarding social pressures to conform?

The ratings were made on a seven-point scale, with "1" representing "highly dependent" and "7" being "highly independent" (see Appendix A). This was essentially an "insight" measure and, as such, was subject to many of the difficulties pointed out by Ruth Strang (1957, cited above) in regard to self-concept measures. However, following Elizabeth Douvan and Joseph Adelson's (1966) suggestion, it was expected that the most autonomous girls would perceive some dependency in themselves along with a realization of their essentially autonomous functioning.

Additional Rorschach Scoring Categories

As an exploratory addition to the present study, three Rorschach scoring categories were applied to the Rorschach protocols. These categories were identified on both theoretical and empirical grounds. That is, even though the experimenter had read the protocols prior to isolating the categories and, therefore, had a general idea of how they would "work," they are nevertheless of theoretical significance for the autonomy dimension. Each of the categories is presented below.

Total Response Score (R). The experience of interviewing the sample used in the current study suggested that various aspects of overt behavior would not discriminate among

the autonomy groups. It was believed that this would be reflected on the Rorschach in a purely quantitative measure such as the total number of responses produced. It was therefore expected that the R scores of the three autonomy groups would not be significantly different.

Human Movement Score (M). Although M is not independent of the RIRS score (i.e., M responses are typically expressed in verbs, and verbs enter into the index of repression score), M was thought to be of sufficient theoretical significance to warrant its isolation as a separate category.

Max Hertzman and Jane Pearce (1947) studied the M response by comparing Ms given by their subjects with data obtained from these subjects' therapy sessions. Human responses were most often found to be expressive of some aspect of the self picture. Therapeutic data indicated that "the failure to produce human responses or the production of a small number which then turn out to be uncommunicative is associated with suppression of the self-picture or a horror of the self as the person sees it (p. 421)."

The tendency to formulate Ms was therefore seen as reflecting the presence of a self-concept sufficiently developed to provide a base for engagement with the world. That is, the extent to which Ms were present in the record of a given subject was believed to demonstrate the extent to which she felt herself to be an operating entity, capable of action, motion, wide-ranging perception and so on. The absence of this sense of oneself as a person in one's own

right was thought to be associated with the kind of dependent orientation toward the world which characterizes earlier phases of development.

Another aspect of human movement responses significant for this study was their relation to a person's openness to experience. As Rorschach says, "In normals, the number of M responses rises in proportion to the . . . capacity to form new associative patterns (1942, p. 26)."

It was therefore expected that the more autonomous subjects would have significantly more M responses than the less autonomous subjects.

"Growth or Implied Separation or Departure" Score. The percepts scored in this category were those in which the content related directly to concrete issues associated with the process of becoming more autonomous. The category was identified on the basis of the belief that the perception of imagery involved with growth, separation and departure would be indictative of some ability to formulate, clarify, and, therefore, to make progress with such tasks as growth to adult status, emotional separation from parents, and physical and psychological departure from home.

The expectation with regard to this category was that the more autonomous subjects would report significantly more growth, separation and departure percepts than would the less autonomous subjects.

Procedures of the Study

General Plan

Subjects were seen individually for two sessions, on two separate days. In the first session, they were tested on the three cognitive measures. In the second, they were given the autonomy interview and the self-ratings. The interviewing was done by the experimenter. A graduate student in clinical psychology was employed to administer the cognitive tests. This procedure was instituted in order to control for experimenter bias in either the interviewing itself or in the rating of the interviews (see below).

The graduate student tester was given explicit written instructions as to the procedure to be followed. She introduced herself, got the name of the subject she was testing, assigned a code number to her, and noted it on the master sheet. When the subject was seated and comfortable, she said, "For the purpose of the research design, I will be giving you a color-word test called the Stroop Test, an inkblot test called the Rorschach, and a third test called the Rokeach Scale. The test data will be identified only by a code number. The code will be available only to the researcher for the purpose of the study. As used in the study, the data will be entirely anonymous. The identity of the subjects will be available to no one else for any purpose whatsoever. I am sure that Miss Moses, at a later date, would be available to tell you what the study is about,

if you wished."

Administration of the Cognitive Tests

Testing on the Stroop C-W Test began with a warm-up page of color names (red, blue, green, yellow) typed in black ink; subjects were told to call out the names of colors as quickly and as accurately as possible. After a one-minute rest, the subjects were shown a page of colored strips of asterisks and asked to read aloud the colors as quickly and as accurately as possible. The third and main part of the task consisted of color names printed in incongruous colors. Subjects were told to ignore the words and to read aloud the colors as quickly and as accurately as possible.

In each of the three sections of the task, the page contained 100 stimuli. Time scores were recorded as the index of performance.

Free associations to the Rorschach inkblots were obtained in the standard manner; subjects were told: "I am going to show you some inkblots. Tell me what you see, whatever it looks like to you. There are no right or wrong answers." An inquiry was made on a particular response only when further information was felt to be necessary to clarify issues of scoring the response. (This procedure was based on the fact that only verbalizations made during the free association period are scored for the RIRS.)

The Rokeach Dogmatism Scale is a paper and pencil test, which was preceded by the following instructions:

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1:	I AGREE A LITTLE	-1:	I DISAGREE A LITTLE
+2:	I AGREE ON THE WHOLE	-2:	I DISAGREE ON THE WHOLE
+3:	I AGREE VERY MUCH	-3:	I DISAGREE VERY MUCH

Form E of the Dogmatism Scale was used in this study.

The three cognitive tests were administered in the order in which they are presented above. The subjects were given a short rest period between tests. The testing took approximately one hour per subject. At the completion of the three tests, the auxiliary tester stated, "Miss Moses will be contacting you to set up an appointment for the next meeting. Thanks."

Administration of the Autonomy Measures

The autonomy interview was administered by the experimenter, who followed the interview schedule in a flexible manner. The schedule insured exploration of comparable aspects of autonomy with each subject. It was used in the sense of a guide, however, since divergences from the schedule and discussions of any item that seemed relevant to the study were allowed for, and occurred frequently. The

interview took between two and three hours to complete. It was taped, and typed verbatim.

Immediately following the interview, subjects were given the self-rating scales, and asked to rate themselves on the four areas of autonomy for which questions were constructed.

Scoring of the Cognitive Tests

The Stroop Test was scored in two ways. The first followed a method outlined by Harriet L. Barr (1967), which involved subtracting Part II (colors alone) scores from Part III (color names in incongruous colors) scores. The second method was in accordance with that suggested by Riley W. Gardner *et al*. (1959), and involved adjusting Part III scores by means of a regression formula, based on a correlation of Part II and Part III scores of all of the subjects. This resulted in an "interference" score which was independent of color-coding time. The scores deriving from each of these methods were found to be significantly correlated with each other.[1] Therefore, only the scores resulting from the subtraction scoring procedure were used in further analyses.

The RIRS for any Rorschach record is the mean of scores earned by the responses given in the free association portion of the record. All responses which are conventionally scored are scored in Levine and Spivack's system. Since each

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[1] The product-moment coefficient was $+.92$; $p < .001$.

free association is scored to indicate the <u>absence</u> of repressive functioning, the lower the RIRS score the more repressive functioning is said to characterize the individual.

In scoring responses, the scoring manual devised by Murray Levine and George Spivack (1964) was followed. Theoretically, the range of possible scores for any given response has a base of zero and no ceiling. (In actuality, the range found in the present sample was 0-36, with the median being approximately 2.2.) The RIRS for each subject was calculated by obtaining the total of all scores in the record and dividing by the total number of responses, thus controlling for variations in the magnitude of R.

Normative data for the RIRS are presented in Appendix B. The data indicate that the sample of RIRS scores obtained in the present study is representative of a larger population of persons of comparable age and educational status.

The Dogmatism Scale was scored, following Milton Rokeach (1960), by converting the agreement-disagreement scale (-3 to +3, with the 0 point excluded) to a 1 to 7 scale by adding a constant of 4 to each item score. The total score was the sum of scores obtained on all items in the test. (Note: As is typically done, items in the actual test of dogmatism were interspersed with items from other scales, in order better to disguise their purpose.) The higher the score on the Dogmatism Scale, the more closed-minded the subject is.

Normative data for Form E of the Dogmatism Scale are given in Appendix B. These data reveal that the distribution of scores obtained in this study is not biased; the present group of 21 subjects can be considered to be a representative sample of college students with respect to their Dogmatism Scale scores.

Scoring of the Autonomy Measures

The interviews were rated in the following manner: using the verbatim transcripts of the interviews, the experimenter rank-ordered the 21 subjects according to their degree of autonomy. The rank-ordering was carried out before the subjects' scores on the cognitive tests were available to the experimenter. The rankings were based on global judgments of the extent to which each subject had achieved autonomy. This method of making judgments was based on the view that autonomy, where it is found, is organically interwoven into the complex pattern of any given individual's entire life experience (a view clearly reflected in the structure and content of the interview). Thus, every item of relevant information in an interview protocol was seen as part of a total configuration, which configuration was assumed to be different for every subject. Judgments were also based on the belief that any question or group of questions could have been used, by a particular subject, as a starting point from which to communicate significant information about the level of autonomous development in her life. It followed

that no particular area or item was thought to be (or employed as) a crucial or determining one in regard to the population as a whole.

A specific issue related to the autonomy ratings, which is worthy of note, is that regarding extremely rebellious or defiant adolescents. The experimenter expected the more autonomous girls to manifest some degree of dependence along with indications of their autonomy. It was believed that girls who are living at home with their mothers are not likely to be militant in their denial of parental involvement except in the service of obscuring their real dependency. This belief was considered in making judgments of autonomy.

Subsequent to making the rankings of autonomy, the experimenter divided the subjects into three groups, with respect to their degree of autonomy: high autonomy, middle autonomy and low autonomy. These divisions were not made by establishing arbitrary cut-off points but rather on the basis of what seemed to the experimenter to be natural or logical groupings. The high, middle, and low groups were composed of eight, seven, and six subjects, respectively.

The self-ratings of autonomy did not require any additional scoring. However, in order to make the ratings amenable to further analysis, subjects were ordered according to the way in which they distributed themselves over the seven-point scale for each self-rating category.

Reliability of the Interview Ratings

The experimenter's rankings and groupings of the subjects based on the autonomy interviews were both tested for reliability. With regard to the rankings, it would have been ideal to have another rater rank all of the interviews, but this was unfeasible due to the size of the task. Therefore, three experienced clinicians were each asked to rank seven interviews. The particular set of seven given to each judge was not random but was selected so that the set distributed as widely as possible over the experimenter's rankings (i.e., Judge No. 1 got the cases ranked as follows: No. 1, No. 4, No. 7, No. 10, No. 14, No. 17, and No. 21; Judge No. 2 got cases No. 2, No. 5, No. 8, No. 11, and so on).

The judges were not given specific instructions. They were simply asked to rank the subjects according to their degree of autonomy as manifested in attitudes and behaviors which could be discerned from the interview records. They were told that they would not have to explain their rankings. When the judges had completed their rankings, three separate rank-order correlations were computed in order to compare each judge's set of seven with the ranking of those same seven by the experimenter. The three correlations were +.857, +.821 and +.926, which were significant at better than the .02, .05, and .01 levels, respectively. Thus, the experimenter's rankings of autonomy were considered to be reliable.

In order to check the reliability of the experimenter's autonomy groupings, the judges' rankings were analyzed in respect to them; it was found that the first judge placed five of his seven subjects in the correct group, the second judge placed seven out of seven correctly, and the third judge also placed seven out of seven correctly. Furthermore, the two interviews at each of the two division points were ranked with respect to each other by an experienced clinician. In both cases, the rankings were the same as those of the experimenter. Therefore, the experimenter's groupings were also considered to be reliable.

Scoring of Additional Rorschach Categories

The three additional Rorschach scoring categories were applied to the 21 protocols as follows:

R: The total number of responses produced by each subject was counted.

M: The M score was given to percepts of humans and human-like beings in which any form of muscular tension was present. It was also given to animals involved in behavior of which only humans would be capable. A subject's total number of M responses was divided by her total number of responses, in order to control for variations in R.

Growth or Implied Separation or Departure: Any percept involved with the process of growth, maturation or metamorphosis was scored for "growth." "Separation" was scored when there was specific mention of the fact that

people or animals were separated (or being separated) from each other. The "departure" score was given to any percept involved with leaving, departing, or moving away from someplace. Examples of responses which were scored under each heading in this category are presented below:

Growth:

Some kind of plant growing.

A caterpillar coming out of a cocoon.

Separation:

Siamese twins, Negro twins, undergoing an operation of separation.

Departure:

Seems to be some kind of central figure shooting out of a mountain. Shape of a man. It's probably a woman. I'm not sure.

The number of percepts for which a subject received a score in this category was divided by that subject's total number of responses. A percentage score was thus derived, and distortion due to differences in R avoided.

Since, to the experimenter's knowledge, this category had not been used before, it was thought advisable to assess the reliability of the experimenter's scoring. Therefore, a fifth-year graduate student in clinical psychology scored the 21 Rorschachs for percepts relating to growth, separation and departure. There were only three differences of opinion between the experimenter and the second scorer.

Considering the fact that there was a total of 544 Rorschach percepts produced by the subjects in this study, disagreements on only three percepts is indicative of a very high reliability for the scoring of the category presented here.

Hypotheses

The following hypotheses, while not explicitly stated in the writings of the theorists cited in Chapter I, seem to be clearly implied:

1. The three tests of cognitive expansiveness (Stroop Test, RIRS, Dogmatism Scale) should be significantly interrelated, so that subjects who score in the expansive direction on one test should do so on the other two tests, and subjects who are low on expansiveness on one test should be low on the other two tests.

2. Subjects who are ranked as more autonomous on the basis of the interview should attain scores indicating more expansiveness on each of the tests of cognitive expansiveness (Stroop Test, RIRS, Dogmatism Scale) than subjects who are ranked as less autonomous on the basis of the interview.

3. With the exception of subjects who rate themselves as "highly independent," the ratings obtained from the self-rating measure should be significantly related to the autonomy groupings and to the ratings of cognitive expansiveness; subjects who rate themselves as more autonomous should be ranked as more autonomous on the basis of the interview and should score in the expansive direction on the cognitive tests, and subjects who rate themselves as being less

autonomous should be ranked as less autonomous on the basis of the interview and should score in the restrictive direction on the cognitive tests. Subjects who place themselves in the "highly independent" category should not be rated as autonomous on the basis of the interview and should not obtain scores in the expansive direction on the three cognitive tests.

CHAPTER V

RESULTS OF THE STUDY

Cognitive Tests

Table 1 presents the Pearson product-moment coefficients between the scores on the three cognitive tests, taken in pairs. The results indicate that the RIRS and the Dogmatism Scale are not significantly related;[1] neither are the Dogmatism Scale and the Stroop Test. The correlation between the RIRS and the Stroop Test is significant, but in the negative direction. This unexpected finding indicates that the less repressive subjects were less able to handle the "interference" task presented by the Stroop Test, while the more repressive subjects were better able to deal with the task. The subject's degree of dogmatism, on the other hand, is not related to his ability to succeed on the Stroop Test.

Table 1

Product-Moment Correlations between Scores on Cognitive Tests

Tests	r	P
RIRS and Dogmatism Scale	+.24	NS
Dogmatism Scale and Stroop C-W Test	-.05	NS
RIRS and Stroop C-W Test	-.50	.03

[1] Note: All tests of significance in this study are non-directional.

Association between Autonomy Ratings and Cognitive Tests

The rank-order correlation between the rankings of autonomy derived from the interviews and the RIRS rankings is +.69, which is significant at beyond the .001 level. This indicates a positive relationship between autonomy and repressive style, the more autonomous subjects being less repressive.

In order to further analyze this relationship, the three autonomy interview groupings are compared on their mean RIRS scores. Table 2 presents these results along with the results of an analysis of variance. The results indicate that significant differences exist among the groups. By inspection of the means presented in Table 2, it is obvious that the mean RIRS score is substantially higher for the high autonomy group than for both the middle and low group and that the latter two groups are not different from each other. A *t* test comparison was made between the means of the high and middle groups; the resulting *t* of 3.50 was significant at better than the .01 level.[1] (The mean of the

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[1] The variance of the RIRS scores of the high autonomy group is significantly greater than that of the middle group. Allen L. Edwards (1963) and Quinn McNemar (1962) point out that the analysis of variance is little influenced by heterogeneity of variance. However, an alternative *t* test was performed in which significance levels were determined by a formula which takes inequality of variances into account. The difference between the groups remained significant ($p < .02$).

Table 2

A Comparison of the RIRS Scores of the Three Autonomy Groups (Higher Scores = Less Repressive Style)

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	4.54	1.99	1.88
Standard Deviation	2.09	.79	.69

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	33.61	2	16.81	8.28	.01
Within groups	36.55	18	2.03		
Total	70.16	20			

low group is less than that of the middle group and their variability is similar. Thus, the difference between the high and low group would also be significant.) The high autonomy group, then, is significantly less repressive than the middle and low autonomy groups, which do not differ.

The t test result indicates that the scores of the middle and low autonomy subjects distribute over the middle and low range, without being associated with interview grouping. This is confirmed by the finding that the rank-order correlation between the autonomy rankings and the RIRS rankings of the middle and low subjects is +.05, which is not significant.

The same statistical treatments are employed in assessing the relation of scores on the Dogmatism Scale to degree of autonomy. The rank-order correlation between the rankings of autonomy derived from the interview and the Dogmatism Scale rankings is +.52, which is significant at better than the .02 level. This shows that the more autonomous subjects are, to a significant degree, less dogmatic than the less autonomous subjects.

The mean Dogmatism Scale scores for the three autonomy groups are shown in Table 3. They are distributed in the expected direction, with the high autonomy group having the lowest mean, the low autonomy group having the highest mean, and the mean of the middle autonomy group falling in the middle. The difference between the means of the high and low groups is significant at beyond the .01 level ($t = 3.25$), the difference between the means of the high and middle groups falls somewhat short of statistical significance ($t = 1.86$, $p < .08$), and the difference between the means of the middle and low groups is not significant ($t = 1.43$). It can, therefore, be concluded that the high autonomy subjects are significantly less dogmatic than the low autonomy subjects, and show a trend in the direction of being significantly less dogmatic than the middle autonomy subjects. The middle and low subjects, however, are not significantly different from each other with respect to the extent to which they are dogmatic.

Table 3

A Comparison of the Dogmatism Scale Scores

of the Three Autonomy Groups

(Higher Scores = More Dogmatic)

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	127.4	148.9	166.7
Standard Deviation	21.37	28.28	14.54

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	5,352.06	2	2,676.03	5.34	.03
Within groups	9,028	18	501.56		
Total	14,380.06	20			

The Stroop C-W rankings are not significantly correlated with the autonomy rankings. The correlation of -.30 falls at a level of probability greater than .10.

As shown in Table 4, calculating the means and standard deviations of the three groups suggests the inverse trend. The analysis of variance demonstrates, however, that the difference among the means of the groups are not significant.[1]

[1] The very low F obtained from the analysis of variance led the experimenter to calculate an F based on the ratio, within group variance estimate over between group variance estimate. This F is 1.46, which is clearly within the range to

Table 4

A Comparison of the Stroop C-W Test Scores of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	63.4	58.7	47.9
Standard Deviation	37.43	18.01	14.67

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	837.26	2	418.63	.588	NS
Within groups	12,813.55	18	711.86		
Total	13,650.81	20			

Thus, although there is an apparent trend in the direction of an inverse relationship between degree of autonomy and degree of success on the Stroop Test, there are no statistically significant differences among the three autonomy groups in their scores on this test.

Self-Ratings and Autonomy Ratings

Tables 5, 6, 7 and 8 present the mean self-ratings of

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be expected by chance alone. Therefore, the variance based on errors of sampling and/or measurement is not greater than the variance based on mean values, and the means are not unusually homogeneous.

Table 5

A Comparison of the "Mother" Self-Ratings
of the Three Autonomy Groups
(Higher Self-Ratings = More Independent)

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	5.38	3.71	5.50
Standard Deviation	1.40	1.38	1.05

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	13.87	2	6.94	4.06	.05
Within groups	30.70	18	1.71		
Total	44.57	20			

the three autonomy groups for the "mother," "father," "social pressures," and "adults" self-ratings, respectively. It can be seen from these four tables that self-ratings in all categories tended to be made in the upper half of the self-rating scale. Eleven of the 12 means are above 4.0 (the median point on the rating scale), and eight of the 12 means are above 5.0. The extreme rating point of "7" ("highly independent") was not used by low autonomy subjects, exclusively, as had been expected. On the "mother" self-ratings, for example, this rating was used by one high and one low subject;

on the "father" self-ratings, it was used by five high, one middle, and one low subject.

The four tables show that, for every self-rating category, the middle autonomy group has the lowest mean. This finding is statistically significant in the case of the category "Independence from Mother," as shown in Table 5. The difference between the means of the high and middle groups and between the middle and low groups is significant at beyond the .05 level ($\underline{t}$ = 2.49 and 2.45, respectively). The two extreme groups are not, by observation, significantly different from each other. Thus, although the high and low autonomy subjects rate themselves as equally independent of their mothers, the middle autonomy subjects rate themselves as significantly lower in independence from their mothers.

In the case of the category "Independence from Father," presented in Table 6, the self-rating means of the high and low groups are not significantly different from each other (by inspection). The mean of the middle autonomy group is significantly lower than the mean of the high autonomy group ($\underline{t}$ = 2.15, $p < .05$), but not from that of the low autonomy group ($\underline{t}$ = 1.29, NS). The trend indicated here appears to be in the direction of the relationships found for the "mother" self-rating category, i.e., high and low autonomy subjects tend to rate themselves as equally independent of their fathers, whereas middle autonomy subjects tend to rate themselves as less independent of their fathers (although, here, only the difference between the middle and high groups is

Table 6

A Comparison of the "Father" Self-Ratings
of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	6.38	4.86	5.83
Standard Deviation	.95	2.16	.41

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	8.75	2	4.38	2.35	.10
Within groups	33.54	18	1.86		
Total	42.29	20			

significant).

The two remaining categories, "Independence from Social Pressures to Conform," and "Independence from Adults in General," do not generate statistically significant results, but the observed trend is the same as for the first two categories. (See Tables 7 and 8.)

It can be concluded that, although the self-rating category, "Independence from Mother" is the only one which achieves statistical significance, there is a similar observed trend across all four categories in the direction of self-ratings of the high and low groups being similarly high

Table 7

A Comparison of the "Social Pressure" Self-Ratings of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	5.63	4.14	4.83
Standard Deviation	1.31	1.57	1.60

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	8.25	2	4.13	1.79	NS
Within groups	41.56	18	2.31		
Total	49.81	20			

Table 8[1]

The "Adults" Self-Ratings of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	5.50	5.29	6.00
Standard Deviation	1.31	1.11	.89

[1] The means presented in Table 8 are obviously not significantly different, and no analysis of variance was performed.

(independent) and the self-ratings of the middle groups being lower (less independent) than for the two extreme groups.

Self-Ratings and Cognitive Tests

It appeared that the only self-rating categories which had any possibility of showing some degree of association with any of the cognitive tests were those of "Independence from Mother," and "Independence from Father." On the other hand, it also seemed clear, on inspection of the self-ratings within the autonomy groupings, that one could not expect an overall correlation of the self-ratings with the cognitive test scores. Nonetheless, the experimenter undertook, working from the base line of natural groupings of the cognitive test scores, to determine whether there was any relationship between these sub-groups and the "mother" and "father" self-ratings.

As shown in Table 9, the distribution of scores on the RIRS was divided into three groups, at what seemed to be natural division points. The resultant high, middle, and low groups have six, seven, and eight subjects, respectively. The mean self-rating of independence from mother of each of the RIRS groups is given in Table 9. It can be seen that the middle RIRS group has a higher mean than the other groups.

A t test comparison between the means of the high and the middle RIRS groups yielded a t of 2.85, which is sig-

Table 9

A Comparison of the "Mother" Self-Ratings of the Three RIRS Groups

	RIRS Groups		
	High (N = 6)	Middle (N = 7)	Low (N = 8)
Mean	4.67	5.86	4.12
Standard Deviation	1.03	1.07	1.32

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	11.51	2	5.76	4.14	.05
Within groups	25.06	18	1.39		
Total	36.57	20			

nificant at beyond the .02 level. (This result indicates that the difference between the middle and low groups would also be significant, since the mean self-rating of the low group is less than that of the high group, and their variability is similar.) Therefore, a subject's RIRS group is significantly related to her self-rating of independence from mother; subjects in the middle RIRS group rate themselves as more independent of their mothers than do subjects in either the high or low RIRS group.

Table 10 demonstrates that there are no significant differences among the three RIRS groups regarding their self-

Table 10

A Comparison of the "Father" Self-Ratings of the Three RIRS Groups

	RIRS Groups		
	High (N = 6)	Middle (N = 7)	Low (N = 8)
Mean	5.83	6.14	5.25
Standard Deviation	1.60	.90	1.39

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	3.10	2	1.55	.895	NS
Within groups	31.19	18	1.73		
Total	34.29	20			

ratings of independence from their fathers.

Natural groupings of the distribution of scores on the Dogmatism Scale resulted in three groups of sizes four, seven, and 10, with the group of four being the least dogmatic, and the group of 10 being the most dogmatic. As can be seen by inspection of the mean self-ratings presented in Table 11, the differences between the groups are very slight. It can be assumed that group position in terms of score on the Dogmatism Scale is not related to self-rating of independence from mother or father.

Table 12 demonstrates that, as in the case of the

Table 11

The "Mother" and "Father" Self-Ratings

of the Three Dogmatism Scale Groups

	Dogmatism Scale Groups		
	Low (N = 4)	Middle (N = 7)	High (N = 10)
"Mother" - Mean	4.71	5.00	4.86
"Father" - Mean	5.71	5.86	5.57

Table 12

The "Mother" and "Father" Self-Ratings

of the Three Stroop C-W Test Groups

	Stroop C-W Test Groups		
	Low (N = 6)	Middle (N = 10)	High (N = 5)
"Mother" - Mean	5.17	4.70	4.80
"Father" - Mean	5.83	5.90	5.40

Dogmatism Scale, the means of the self-ratings of independence from mother and father, for the three Stroop C-W Test groups (of sizes six, ten, and five) are, by inspection, not significantly different. Thus, "mother" and "father" self-ratings are, in this small sample, unrelated to Stroop C-W Test groupings.

Additional Rorschach Scoring Categories

Tables 13, 14, and 15 present the scores and the analysis of variance results for each of the three Rorschach scoring categories (R, M, "Growth," respectively) employed by the experimenter, for the three autonomy groups.

The rank-ordering of R is not correlated with the autonomy ranks (p = -.06, NS). With regard to the autonomy groups, Table 13 shows that the mean number of responses of any one autonomy group is not significantly different from those for the other groups.[1] In each of the three autonomy groups,

Table 13

A Comparison of the Mean Total Number of Rorschach Responses of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	22.25	24.71	32.67
Standard Deviation	9.09	10.10	28.02

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	390.75	2	195.38	.684	NS
Within groups	5,137.20	18	285.40		
Total	5,527.95	20			

[1] The F resulting from the analysis of variance treatment of the data was so low that another F was calculated in order to determine whether the variance based on sampling error was significantly greater than that based on mean values. This is not the case, however, since the resulting F of 1.46 is not significant.

the subjects' R scores are widely distributed over the range of total response scores.

The subjects' M percent is, on the other hand, highly correlated with their degree of autonomy. The rank-order correlation here is .65, which is significant at beyond the .002 level. Table 14 shows that the pattern of the distribution of M scores for the three autonomy groups is similar to that found for the RIRS (of which M is a part). The mean score of the high autonomy group is substantially higher than that of either the middle or low group. A *t* test, comparing the means of the high and low groups, resulted in a *t* of 3.62, which is easily significant at the .002 level. This significant difference between the high and low groups

Table 14

A Comparison of the Rorschach M Percent Scores of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	.298	.073	.099
Standard Deviation	.158	.050	.037

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	.223	2	.112	10.18	.001
Within groups	.196	18	.011		
Total	.419				

indicates that the difference between the high and middle groups would also be significant, in view of the mean M score and the standard deviation of the middle autonomy group. (The middle and low groups are not, by inspection, significantly different.) It can be concluded that high autonomy subjects report significantly more human movement percepts in response to Rorschach inkblots than do middle or low autonomy subjects. The latter two groups are, however, not different from each other in this regard.[1]

The rank-order of (percentage) scores in the Rorschach category, "Growth or Implied Separation or Departure" is significantly correlated with the autonomy ranks ($r = .55$, $p < .01$). Table 15 presents the percentage scores for this category for the three autonomy groups. As in the case of the M response category presented above, the means of the middle and low groups are very close but are clearly lower than the mean of the high group. The means of the high and middle groups are significantly different ($\underline{t} = 2.44$, $p < .03$). The difference between the means of the high and low groups, therefore, would also be significantly different, since the mean of the latter group is less than that of the middle group. Thus, high autonomy subjects report significantly

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[1] Although M is scored as part of the RIRS, a rough estimate of the correlation between the two measures was obtained through the use of a rank-order correlation. The r of .70 which was produced was significant, as expected, at the .001 level. Thus, it would appear that subjects who obtain high scores on the RIRS as a whole report more M than subjects who obtain low RIRS scores.

Table 15

A Comparison of the Rorschach "Growth" Percent

Scores of the Three Autonomy Groups

	Autonomy Groups		
	High (N = 8)	Middle (N = 7)	Low (N = 6)
Mean	.149	.027	.025
Standard Deviation	.141	.086	.029

Analysis of Variance

Source	SS	df	MS	F	P
Between groups	.075	2	.038	3.80	.05
Within groups	.188	18	.010		
Total	.263	20			

more Rorschach percepts involving growth, separation or departure than do either middle or low autonomy subjects.

In order to assess the relationship between this scoring category and the RIRS, a product-moment correlation was computed. The obtained r of +.76 is significant at beyond the .001 level, indicating that subjects who score high on the RIRS (less repressive) generally report more "growth" percepts than do subjects who score low on the RIRS (more repressive).

High and Low Autonomy Subjects: Qualitative Evaluation of Discrepancy between Self-Ratings and Judges' Ratings, Reality and Self-Deception

One of the interesting and puzzling findings reported in the Results section above (see Tables 5 and 6) concerns the relationship between autonomy as judged from the interview and degree of independence as perceived by the subject herself. When subjects were asked to rate themselves on "Independence from Mother," the high and low autonomy groups were not significantly different from each other but were both significantly higher than the middle autonomy group. In the case of self-ratings of "Independence from Father," there was a trend in the same direction, but the magnitude of the differences among the groups fell somewhat short of statistical significance.

The question arises: Why did the subjects who were judged to be low in autonomy rate themselves just as independent of their parents as did the highly autonomous subjects? An answer to this question may perhaps be found in the content of the interviews which were employed in the present research in assessing degree of autonomy.

The interview protocols of six subjects were used in this part of the investigation. They were chosen on the basis of autonomy grouping and self-rating category on the "mother" self-rating. The six records were those of the three high autonomy subjects and the three low autonomy

subjects who rated themselves in one of the two highest self-rating categories (6, 7).

The experimenter, who was familiar with the protocols, restudied them with the question of the self-rating findings in mind. The data provided in the interviews led to the following general conceptions in regard to the self-rating results.

During adolescence, there is a development of the need for autonomy. (This is one of the premises upon which the current study is based.) This leads to a practically inevitable conflict, within the adolescent, between the wish for the security of the original dependence on parents and the growing push for independence from them. In the subjects who were judged to be low in autonomy, this conflict appears to be, for most purposes, almost totally removed from consciousness. That is, compliance to the parental framework is so thorough that independent, and therefore conflicted, thoughts do not get into focal awareness. In a state of subjective non-conflict, a confabulatory or illusory sense of autonomy may be organized. This substitution would be likely to occur, first, because the concept of "independence" has a positive value in this culture and, more importantly, because the false sense of autonomy would serve as one defense against awareness of the conflict.

The self-deception may be built upon one or more of a number of events (behavioral or ideational), which are equated with independence by the adolescents. Some categories of

operations upon which illusions are built, taken from the interview records, are the following: acts or thoughts of superficial disagreement with parents; self-restrictive acts of rebellion against parents; the use of clichés and cultural labels relating to autonomy in describing essentially non-autonomous acts; the impression of having arrived <u>independently</u> at exactly the same value systems and beliefs as those espoused by parents; the perception that compliance to parental wishes occurs in, and only in, a specific, delimited area of living; the belief that the convenience of living with one's parents is the only reason for continuing dependence; the assigning of one's continuing dependence to the wish to avoid "hurting" the family.

In the context of these beliefs, the low autonomy girls, while subjectively convinced of their independence, appear to remain in a position in which their main connectedness (i.e., human relatedness, emotional interaction, and communication) is with their parents, and particularly with their mothers. This connectedness is at the cost of movement outward into the world, of openness to new people and experiences, of integration with peers. The lack of meaningful contact with a variety of people seems to be an additional reason why the low autonomy girls rate themselves as autonomous; i.e., they lack perspective about what others their age are doing, thinking and feeling. They are more or less locked into the particular framework in which they grew up; the (usually limited) number of people with whom they do

have social contact generally share beliefs and feelings similar to their own.

The high autonomy subjects, on the other hand, are aware of the conflict between their co-existing dependent wishes and need for independence. The conflict may have come into awareness because while successfully carrying through one or more experiences in the terrain of truly independent behavior, perception, or thinking, they have been made anxious or uncomfortable. Nonetheless, they have maintained their independent perceptions or actions, without yielding. These independent experiences may constitute important symbols of their ability to become autonomous adults. They form the basis for the more autonomous self-rating of this group. As an additional contributing factor, in contradistinction to the low autonomy subjects, the high autonomy girls, in their more independent explorations have usually established relationships with a more diversified sample of their peers. They have gained perspective on a wider range of behaviors and beliefs, and may therefore have an adequate experiential base for their self-ratings.

Examples from Interviews Illustrating Qualitative Factors in the Self-Ratings

The interview record of each of the three low autonomy subjects provided various examples of the ways in which she achieved her conviction of being independent. Examples

from each are given below.[1]

Rona S.: Low Autonomy, High Self-Rating of Independence (Category 7)

Rona says that she does not pay attention to her mother's ideas and suggestions. She sees herself as being somewhat rebellious; yet the examples of "rebellion" which she provides are superficial, and clearly remain within her parents' framework:

I: At what age do you expect to get married?

S: . . . my father's given me a deadline of 20. I gave me an extension of a year, and I said 21. I mean, my father's deadline doesn't affect me, except that he's going to drive me out of my mind, yelling at me all the time. . . . But, anyway, I think I'd want to be married before I was 21; at least, you know, going steady and almost engaged.

I: Could you explain a little more of what you mean by being "fresh"?

S: Um, well, um, sometimes I guess--sometimes it's my fault, and I feel bad about it. My mother tells me to do something, and sometimes she tells me twice and three times, and I say, "Wait," you know, "Wait."

I: Do you have any explicit rules at your house?

S: Um, well, I guess my parents are always trying to institute some rules. I can't think of anything in particular. We don't pay too much attention, though. . . .

I: In what ways do you do differently from what your parents would want?

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[1] When an interchange between interviewer and subject is presented, the interviewer is designated by I and the subject is designated by S.

S: . . . on Saturday we have a regular meal, and on Saturday you should come dressed to the table nicely. But like I walk in with a roller and slip. And, well, my father doesn't like it, and he tries to make a rule about it, but, like I don't listen, and I just walk in the way I want to.

S: . . . my mother's completely against wearing pants. . . .

I: Do you wear pants?

S: Well, occasionally, like when my mother doesn't see. Like if I'm away somewhere in the summer, or if I go away for the weekend, I'll put on a pair of pants. And I keep on threatening; I keep on saying, "Okay, today I'm wearing pants to school." And this really upsets my mother. So, so far, I really haven't.

Rona acknowledges her connectedness to her parents, but she views it as residing in one encapsulated area: religion. She said, "I find my parents are a very strong influence over my religious beliefs . . . but that's the only thing where I really feel my parents' influence. In religion." This statement must, however, be related to Rona's remark in another context earlier in the interview: ". . . everything comes down to religion; almost everything."

Another way in which Rona maintains the illusion of her independence is through the perception that she and her parents have arrived at certain of their respective identical values independently. Asked about areas of disagreement with her mother, she said, ". . . as far as values, they're Jewish values, and they're similar to mine."

Rona also tends to use clichés and self-deceiving generalizations relating to autonomy, which are belied by more

specific thought and facts. One example of this is Rona's statement, "I won't let my father influence my choice of a husband once I choose one," which is quickly followed by, "But I think they'll accept--I mean, unless the boy's not religious; and the way it looks now, I think I'll marry--I hope to marry somebody Orthodox."

Another defensive maneuver used by this subject in denying the extent of her dependence is her expressed concern for her parents. In regard to making decisions about her own life, she says, ". . . something where your parents might be inconvenienced or it might make them unhappy, I think you should think about your parents."

Rona does not establish relationships with people whose values and ideas are different from hers. This is demonstrated in the following interchange:

S: . . . like so many times I've turned down dates because the boys aren't religious. I guess it occurs to me too that I want to go out with an Orthodox boy. I know if I went out with a non-Orthodox boy it would hurt my parents terribly. . . . So I tend to stick to going out with Orthodox boys.

I: Where do you meet Orthodox boys?

S: Well, um, I guess like I met a few at City. And then we had parties together sometimes--functions. Just like a regular sorority and fraternity would have parties.

I: Oh, your sorority is an Orthodox one?

S: Yes, we're Orthodox.

Deborah B.: Low Autonomy, High Self-Rating of Independence (Category 6)

The major events supporting this subject's illusion of independence are her impending marriage and move to Israel. She uses many clichés in describing these events, e.g., "To like to really take root from them into my own life." ". . . it's [she is] still their own child, and then, no longer, but somebody else's wife." "It's something that can be done very easily, just to live at home. But there's like other forces in me that want my own life." In actuality, however, Deborah is not making any real emotional, ideological, or even physical break with her family. In response to the question of what her mother would think would be the greatest thing that could happen in her (Deborah's) life, she said, "To get married. She likes him. She thinks he's a good man. And to go to Israel, and to continue our lives there." Not only does her mother endorse the marriage and the move but also she is expected to follow. The following interchange elaborates this point:

I: What could she (mother) do to make her life happier?

S: I think it would be to go to Israel. She grew up in a very Zionistic background, and I think what she'd like most of all is to go with my father to Israel . . . and they're probably going to do this, because I'm going there once I'm married. My brother will probably go as soon as he's out of school, and then we're all going to go. It's something to look forward to.

Deborah obviously believes that it is natural to follow your parents' goals:

I: Why does your fiance want to go to Israel?

S: He also was brought up, you know, his parents also came from camps and he was born in a displaced persons camp over there, so they brought him up with a leaning toward Israel, so he wants to spend his life there.

That Deborah has accepted her mother's philosophy of life is clear in the following:

I: Can you give me an example of something she (mother) might tell you in any of those areas?

S: . . . you just live for your own self, and that your husband will help you. And that's all that there's going to be to the whole world is you two, and your children. And don't look for anybody to help you out of anything.

I: How do you feel about that?

S: It's something to look forward to.

When Deborah does recognize an act of compliance, she actively minimizes its importance. For example, although she and her boyfriend were not planning to become engaged for several months, her mother, "wanted to see something tangible," and, for that reason the engagement occurred. Deborah said, "I felt like that--just to soothe her as much as possible. . . . So just to make it quiet for her; it's no skin off my back. . . . It's just easier all around."

Interpersonally Deborah has been rather restricted. In grammar school, for example, she "never particularly had a great deal of friends. I was like always with my brother; never separated." Throughout her school years, she never

belonged to any clubs or groups. Also, she never dated any boys other than the one to whom she is engaged. Her life has always been exclusively family-oriented.

Allison D.: Low Autonomy, High Self-Rating of Independence (Category 6)

Allison believes that she has been independent in two important ways over the last year. In effect, both of these "rebellions" have led to her becoming more isolated from her peers, and have, therefore, been in the direction of greater dependence. The first area is that of having a steady boyfriend. According to Allison, her parents "hate" both the idea of going steady, and the boy she is dating; but she has maintained the relationship. The result of her having a steady relationship is expressed in the following comment: "The last two weeks . . . I've been seeing him just about every day. . . . I'm afraid last term, I spent it also mostly seeing him. . . . I guess I've been sheltering myself too much."

The second area of "defiance" was Allison's decision not to go to an out-of-town college, although her parents clearly wanted her to go:

S: They wanted me to go to an out-of-town school. It was taken for granted. . . .

I: You didn't want to go?

S: Not really. I mean, one can't generalize, but, I mean, from what I saw of the people from all those out-of-town schools, I didn't see anything that--and I don't want to leave New York City.

Thus, she maintained a living situation which was more tied to the family than one she could have organized.

Other examples of actions which Allison has self-deceptively regarded as expressive of independence are taking drugs, lying, and cutting herself with a razor (in anger at her mother).

This subject nurtures a fantasy of leading what she considers to be the height of an independent, humanitarian existence. When asked what the most wonderful thing that could happen to her would be, she stated the fantasy as follows:

> I'll marry Robert and go off to a castle, and be able to read and write poetry all day, and have piles and piles of money every day, and say, you can use the proceeds from your book--it's number two on the best seller list, but you expect it; it's been there for three and a half years; and, well, I'll bring this gold to the peasants of India, and bring this to the peasants of Africa; just make everyone happy. And I'd want to get letters every day from the people who I made happy. But that's impossible.

In reality, Allison expects, at 35, to be working on a book with her father, "or helping him with it, or him helping me; close with my family." Furthermore, even the fantasy itself is a repetition of her mother's earlier life plan, which, as seen by Allison, involved helping "starving peasants." Thus, through an unrealistic and imitative fantasy, Allison helps maintain her illusion of independence.

Another way in which she achieves the illusion is her conviction that she is sophisticatedly perceptive about her mother. On closer inspection, however, Allison's apparent

objectivity about her mother can be seen to cover a secret admiration and imitation of her. When she says, for example, that her mother is an "instinctive conniver," she expresses both sides.

Allison is aware of some compliance to her parents' values, but she locates it in an area which is essentially unimportant to her current functioning. In response to the question of what ways her parents' values influence her choices, she said, "Um, politically, because I don't know if I would have been as openly anti-Viet Nam if it wasn't for them."

Allison's social life always has been limited. She "hated" school from the first day and was never popular. Her attitude toward this situation is basically a resigned one. When asked whether her mother would put friends above family at any time, she said, "No. I don't think any of us would, 'cause we're a very close family."

The interview records of the high autonomy subjects provide various examples of successful independent behavior, perception and ideation, examples which are almost entirely absent in the records of the low autonomy subjects.

Karen G.: High Autonomy, High Self-Rating of Independence (Category 6)

Several statements and interchanges from the interview protocol of the subject, who was ranked as No. 1 in the sample, are presented below. They indicate that she has

thought, felt, and acted in an autonomous manner on numbers of occasions, that she is aware of the conflict involved in any serious move toward independence and that she has had contact with diverse groups and types of people.

On the issue of <u>leaving home</u>:

I: You mean she's (mother) afraid you're going to leave home?

S: Well, I am, and she's not trying to stop me. I've gotten past that point, but she tried to talk me out of it previous to that point, and now she's just telling me she's not going to give me money when I move out.

I: When are you planning to move?

S: As soon as this term is over, because in June I think I'm going to California, and then I'll try to get some money somewhere, somehow; then by August 1, I should be back in N. Y.

. . . .

I: How definite are your plans?

S: They're pretty definite. I'm not exactly sure where I want the apartment or anything like that, but I know I want to get out. . . . I'm putting money away now. . . .

On <u>value systems</u>:

I: What are your areas of disagreement with your mother in re politics, values and moral codes?

S: The first one is politics. I guess you could say I'm part of the New Left or something, but all she associates New Left with is Communism, and this is a major area of disagreement. And the next one was values; and moral codes. I don't really know my mother's true moral codes, I don't think, because there's this thing. She's engaged three times, and she claims to have gotten married when she was still innocent, and I don't know how much I believe that, you know. Although, alright, if that's what she says, that's what she says. I believe in free love as long as there's love there. Like I don't believe in sex just for the sake of having it; but she doesn't believe, as far as she tells me, in sex before marriage.

On <u>perception of influences bearing on her generation</u>:

I: What do you think of your generation?

S: A lot of them are mixed up kids. But basically they're not bad, you know; not as bad as everyone says they are. It all comes from being a war baby and everything. That's my whole idea, and constantly being pressured by your parents. I guess it's not just my theory, but I feel that when the men came from WWII, the women had taken over a lot of the male roles, and the males were emasculated more or less, and yet they're taught that the men are supposed to be dominant, and the kids got very mixed up. Being told one thing and seeing another. I think it's basically this; and there are other things. And they felt themselves being choked, and this is their way of release.

On <u>resolution of a conflict of interest</u>:

I: How do you and your mother usually resolve a conflict of interest?

S: I tell her I'm going to do it anyway, and usually she condescends.

I: You mean you usually get your way?

S: Yeah.

On <u>life plan</u>:

I: What would your mother think would be the greatest thing that could happen in your life?

S: The greatest thing that could happen from my standpoint or her standpoint?

I: From hers.

S: I guess to get married and have children. . . .

. . . .

I: How do you expect to distribute your energies and interests after you're married?

S: . . . as far as working goes, I still want to work after I get married, because I think I want to become a psychologist, I think. I don't know yet. . . . I don't

believe, at least in my taste, I don't believe that woman's place is at home, totally and all the time. You have to have a life of your own.

On friends:

I: How many informal groups would you say you've been a member of since you started school?

S: Below fourth grade, there wasn't really any groups, I guess. Definitely in the sixth grade there was; fifth grade. Seventh grade I was friendly--I wasn't really friendly with one group in particular. Eighth grade I was, and ninth grade, yeah, that's another one. Two in ninth grade, at the same time. Tenth and eleventh, I was friendly like with three or four different groups of people. So I guess that makes it around nine.

I: What delineated the different groups?

S: Different interests.

. . . .

I: Are any of your friends people your mother would disapprove of?

S: Yes. I'm sure.

I: Can you tell me why?

S: Why? Because they're a little bit extreme, unconventional. Kind of strange. Did you ask me before if there were any friends that I knew but really didn't know? . . . Because there is someone else I'm pretty friendly with but I don't really know, and that's this Indian girl. Like I know her, and I'm a little bit more friendly than an acquaintance, and I'm kind of like a friend, but I really don't know her.

I: You mean you really don't understand what she thinks or how she feels?

S: Yes. I think that's because we've been brought up in different cultures.

. . . .

I: What kind of people do you consider superior?

S: People with more education than I have now.

I: Do you seek them out?

S: Yeah. I don't go out of my way to find them, but I have this whole big thing, like I want to get very smart, and all that, and develop my brain, and I think the best way to develop yourself is to be surrounded by, I guess you would call them intellects or something.

Joan S.: High Autonomy, High Self-Rating of Independence (Category 6)

Similarly, the record of Joan S. demonstrates various examples of autonomy:

On physical separation from parents:

I: You said you spent two summers away from home. When was that?

S: Just sleep-away camp when I was around 14. That was great. It was very nice. At first, I was very homesick--the first week. But then I got over that fast, and when my parents came, I couldn't stand seeing them. . . .

. . . .

I: Have you given much thought to having your own apartment?

S: Uh huh. I want to so badly. The only thing I want is for them to understand my moving out. I'm not doing it because I hate them or anything. It's just that I want to be an individual, and I really don't think if I stay home 'till I finish college, and after I start working and then I get married, I'm never going to be alone. I'm just going to be so caught up in everything. I'll never be alone, and I'll never have the chance to find myself. I don't think I'll find any great revelation or anything like that, but to be independent.

I: What do you think are the probabilities of its happening?

S: I'll probably end up moving out. . . .

On aspect of plans for future:

I: What do you want to be doing at 35?

S: The same thing I'm doing now. Living abroad for a while, I think. I've always wanted to go to the East.

On breaking with parents:

S: . . . my mother feels that she wants to know everything about me. Like what I do is her business; and I don't feel that at all. . . .

. . . .

I: Do you usually tell your mother where you're going and whom you'll be with?

S: I usually lie. . . . I started out by not lying, but they got so upset, it wasn't worth it, so I just lie now.

. . . .

S: . . . my father says he's not trying to change me, but he'll tell me to go out and make the kind of friends he wants. So he is, but he just won't admit it. And I'm never going to do what he wants. His solution to everything is, if I marry out of my religion, he'll disown me; if I move out, he'll disown me; if I do anything he doesn't agree with, he'll disown me. So sooner or later, he's got to disown me, because I'm bound to do something sooner or later that he won't agree with.

On behavior in general:

S: I do what I want to. It's just that in my own house--It's funny, because in my own house, I have to abide by these rules and everything, but it's little rules, which really don't mean anything. When I go out of the house, I do things so much more radical.

On ideas about society:

S: I was friendly with my English teacher this term, and I used to write compositions for her, but they were very personal. . . . I was going with a Negro guy, and in

one composition, I told her about him, and I told her something about that I couldn't wait for the time that people don't have to be sensitive to other people's feelings when they go with another person who is black.

On friends and attitudes:

S: . . . the friends I have are very, very close to me, and I see them every day and every night.

. . . .

S: I'm meeting people, and I'm meeting the kind of people I want to meet.

. . . .

S: They (parents) play very little part in my decisions. . . . She doesn't approve for the same reasons that I do approve. . . . The fact that I have no one to speak to in my own house about my opinions makes me think about them all the more to myself, and develop them. The more I read, the more I get new ideas. And then, I'm exposed to a completely different element outside of my own house. Mostly all the people I know are living outside of their houses; they're not living at home anymore. So this independent attitude is pretty much widespread among my friends, and it rubs off. I see it in them, and I think it's great.

. . . .

S: Those kids (who) just believe nobody has sex before marriage, and it's only the hippies in the Village that smoke pot . . . are really sick because they're just carbon copies of their parents.

Paula B.: High Autonomy, High Self-Rating

of Independence (Category 7)

On perception of mother:

(She is dissatisfied with her mother's prudish and disapproving ideas.)

S: My mother, in a way, is a little bit on the prudish side for a woman who looks as young as she is. She sort of doesn't want to listen to the current things. She passes judgment before she really knows anything about a subject. ...

(She is dissatisfied with her mother's righteousness, prejudices, and vindictiveness.)

S: . . . and I think she is the type of person who gets very wound up fast, like I think she could get very emotional just on the wrong word; if somebody is ambiguous, of course she will take it the wrong way. And if somebody is very prejudiced--not against her--but talks about a group in general, although my mother's feelings would be the same, she would never come out and say it. She doesn't use strong language usually, and it would be sort of--she would take offense at things easily.

. . . .

(She is aware of her mother's envy.)

S: . . . and we have had some run-ins where I came out and said something nasty, like "Why don't you go back to school, and see what is going on?" And in a way, I think she was sort of--I think that sometimes parents get jealous of younger children. Sometimes they wish they could do it all over again.

On <u>physical separation from parents</u>:

I: Have there been any significant periods of time when you lived away from your mother?

S: Not significant periods. But I was away at school for one semester in the fall, 1965; and two summers I've had my own apartments to go to summer school when my family left the city.

On <u>independent behavior</u>:

I: Are there things about you that you definitely wouldn't want your parents to know about?

S: They know about everything now, and they don't like it. They found my little pills. I am getting married in a few months. I started taking them in July. Of course, it has aged them 10 years. . . . They have such misconceptions about sex and birth control and everything else. And my boyfriend found this out, too, after talking to my father; discussing that we were together all summer, in the same apartment at least the last half of the summer. . . . I think they lack a lot in their education, my parents.

. . . .

S: And she (mother) keeps saying, "You can't do it. You can't go to school and work and get married, and be this and that. . . . I said, "I can do it, and I did it." I said, "Don't you understand that is why I did what I did this summer?"

On <u>attitudes towards and experiences with friends</u>:

I: Do you think a person can be as close to a friend as he can be to his own family?

S: I think a person could be closer to a friend than to his own family. I think friends will take you more on their own level--a peer level--than your family will. I think in our own family, there is too much of a generation conflict.

. . . .

I: How do you feel in a situation in which you are meeting new people?

S: Very expectant; like looking forward to it. . . .

. . . .

I: Do you seek out the kind of person who can accept differences?

S: I don't seek out. Usually, it is an accident. You know, when you first meet somebody, you are very restrained. And, all of a sudden, something happens--just a turn of conversation. It may happen again and again, and pretty soon--boom--you find out there is somebody who is like you. You find out that there are so many people who are like you. The only thing is, you have to be not afraid to listen to what somebody else's opinions are. Even if they are different from yours. And you can't say, "Well, you are wrong."

. . . .

I: What is your usual position in the group?

S: . . . most of the time I got along great with most of the people. . . . And my position was that they always liked me and understood me; especially in my senior year. If I did something crazy, they would say, "Oh, that's Paula."

> But this is the type of acceptance you get finally when you find a group of people you like that you can call and you can go somewhere, or they will call you--and a very nice, close feeling.

Correspondence of Self-Ratings of Middle Autonomy Subjects with Judges' Ratings

Subjects who were judged as being in the middle range in autonomy rated themselves as significantly less independent of their parents than did subjects in either of the extreme groups. A study similar to that presented above was undertaken in order to explain the fact that the middle autonomy subjects could perceive their dependence, while the low autonomy subjects could not. The interview records of three of the four subjects, who placed themselves in either category 3 or 4 of the self-rating scale, were used in this part of the study. (The three were chosen at random from the four possibilities.) The following general conceptions were arrived at by the experimenter:

The subjects who were judged to be in the middle autonomy group were aware of their dependence-independence conflicts, as were the high autonomy subjects but they seem to have had much less success than the latter in moving in an independent direction. In the middle group, there appears to be a prevalence of failures with specific acts of attempted independence. Instead of holding onto their independent ideas or actions, these subjects have tended to retract them, to be too beset by fear to carry them through,

or to submit to parental authority.

The desire to have their own thoughts and perceptions is less completely removed from awareness in this group, however, than in the low autonomy subjects. Thus, while being, to some extent, aware of their wishes for independence, and of the conflict involved, they are simultaneously aware of how often the conflict has been resolved in favor of the more dependent orientation. The result is that the middle autonomy subjects tend to view themselves as very dependent.

Examples from Interviews Illustrating Qualitative Factors in the Self-Ratings

Examples of unsuccessful experiences with acts (ideas, perceptions, behavior) of attempted independence abound in the records of the middle autonomy subjects. Several are given below:

Wendy L.: Middle Autonomy, Low Self-Rating of Independence (Category 4)

(The earliest memory is often seen as having special significance in that it is a capsule statement of a person's life-style.)

I: What is your earliest memory involving your mother?

S: This is hard. Well, I can remember one time--I don't remember how old I was--I must have been about six. It was in the winter time, and I was sleigh riding down the hill. I got to the bottom, and I was playing with my friend, and we had shovels, and we were digging in the snow. And, accidentally, I got cut right across the eye, and my mother came running down from the house. I was bleeding down--I couldn't feel it, and I didn't know

what was heppening, and my mother was there, and she was practically hysterical, and she carried me upstairs, and she doctored it and everything. Sort of protective.

I: Have you ever given any thought to having your own apartment?

S: Yes. Sometimes when I have those fits of anger, I want to be away from everybody, and sometimes I think about it. But I don't really think I would do it. (Why?) I don't know. I guess I'm sort of afraid. It seems like it would be lonely. Like when I'm studying. . . . I have to hear my mother puttering around in the kitchen, or some other noise going on, so that I know there are other people around.

I: Did you ever think about sharing an apartment with somebody else your age?

S: I discussed it, too, with one girl, my girlfriend, Dale. . . . But I don't really know if I'd do it.

. . . .

I: Did you give any thought to going to an out-of-town college?

S: Yes, I did; and originally, I was going to go. This was when I was in high school, when I first started high school. I figured that it might be nice to get away because I'd never been away to sleep-away camp. Then I thought maybe I would be homesick because I'd never actually been away a long time. And then, the college I was considering was Stoneybrook, and I did make it, but I heard some sort of bad reports about it, and so I just decided not to go.

S: . . . sometimes I just don't agree with the things she (mother) does, but I don't want to say anything, so I walk inside to my room, and I get mad by myself, and then I cool off back inside.

I: Do you think a person can ever be as close to a friend as he can to his own family?

S: I think so.

I: Have you ever had that experience?

S: Not yet, but I probably will have. I think a really close friend is important.

I: How do you and your mother usually resolve a conflict of interest?

S: You just talk it over, and usually I end up just doing what she wants. Occasionally, I do what I want.

I: Why do you usually end up doing what she wants?

S: I was brought up that way. You know, what your parents say, goes.

S: . . . I guess my values are sort of her (mother's) values, because all along she's been bringing me up, and telling me this is right and this is wrong, and I've followed her. I've never really rebelled. So we're sort of on the same track.

S: I think people that are too independent can get into trouble if they don't know where they're going, or what they're doing. (What kind of trouble?) They could be influenced, you know, bad influences. They could fall into groups where they could find trouble. For instance, I know my brother started to hang out with some friends--sort of the long hair and the drugs and things like that, and he got out of it just in time. He wanted to be independent, and my mother was giving him his way, and he found out he was going in the wrong direction. . . . When my parents saw it, they sort of pulled him in.

Jill G.: Middle Autonomy, Low Self-Rating
of Independence (Category 3)

I: When have you been aware of being lonely?

S: This summer, I was away at Canada for five days. . . . We were five friends. And I got homesick (laughs). I really did, as much as there were a lot of people around me. I'd say it was swarming, and there was a lot to do. But I really did get homesick, and I found, you know, I was a little teary in the evenings, because my parents were

really worried, and this was my first real trip out of the country, you know; and by the fourth day, I--it wasn't that I couldn't wait to get home, but I wanted to be home.

S: I would love to do so many things that I can't do; I've never attempted. But maybe some day. (Like what?) Like skiing, ice skating, swimming. I can't swim. Uh, I've tried, you know, but when I was younger, I almost drowned at one time, and I guess that has left a terrible--I won't go into the water. I just can't do it.

I: How do you feel about being by yourself?

S: I don't like to be by myself. I like a lot of people around me, or the TV or radio going. I don't like to be alone in the house, or by myself. I don't like to be by myself because--too much time to think, I guess.

I: What do you think about when you're by yourself?

S: I think about everything, but I don't know . . . but I wouldn't want to spend a day at home by myself, you know what I mean?

I: When you face a major decision, do you think of how your parents would feel?

S: Yes. As I said before, I'm terrible at making decisions. I'm very bad. It takes me a long time . . . like I always feel that if I take one thing, I'll be wrong if I don't do the other thing.

I: What do you think are your special talents or aptitudes?

S: Dancing, um, writing, to write. I'll never do anything with it. . . .

Joanne T.: Middle Autonomy, Low Self-Rating of Independence (Category 4)

I: What is your earliest memory involving your mother?

S: I think she came to visit me in summer camp. . . . I think I was crying when she was going home, 'cause I was, at that time, I didn't really want to go home, but I didn't want to let her go, so I was crying, and I was saying, "Take me home." . . . I think that was when I was seven, come to think of it.

S: I think I know what I want to do (this summer). I want to get away. I know I do; and like I can't really go, because--because of my parents. I think they want, uh, my mother doesn't think. . . . First of all, we've been in the mountains before, and she doesn't--she says, "I don't care, like I trust you and everything, but like I know what goes on there. It's everybody has a great time. It's no good. You'll never get any sleep. You'll just be there, you know." She says it's not going to be good, and this is what, you know, she feels, and like I know that I don't feel that way. I want to have a good time, but I don't, you know . . . we have conflicts about that; like what she thinks does affect me, you know.

I: Have you ever given any thought to having your own apartment?

S: Yes (laughs). Well, see, my friend, well, she works, and she wants an apartment and I--well, I couldn't. The way it is now, I couldn't. First of all, I know my mother would never go along with it. My parents would completely--oh, they wouldn't like it at all. But I've given thought to it because . . . just sometimes, you know, it gets to be so much of the time, you just can't stand it any more, and you just think of, you know, just being away, and having your own life, sort of. So we just talk about it.

I: Did you give any thought to going to an out-of-town college?

S: Yeah, but my par--first of all, it was like money, because like if I was going to go to an out-of-town college, we'd have to start loans and everything, and like I don't really mind going to City College, and I didn't really give it that much thought. I, you know, could have gone, but I-- Yet, a lot of friends--not a lot, a couple of friends of mine, are away, and they love it there and they really-- it's great. So I--I think it's better to get away. I really do, but I'm not, so. . . .

I: Do you have your own room?

S: No.

I: Why not?

S: I don't know. I used to have my own room; then we moved. It was either the neighborhood, you know, or extra rooms, so we took, you know--like it was a nice building, nice neighborhood, so we moved, and, well, I had to sacrifice my room, so we could live in a nice neighborhood.

I: You said before that your mother called you selfish when you put friends above family?

S: Yeah.

I: How do these things usually get resolved?

S: They don't really, because, see, sometimes if I do something that I like, she'll tell me it's selfish. I don't even consider it selfish to begin with sometimes. But I'll try to make up for it. Like I'll say, "Oh, I'll do this for you." You know, I'll do something around the house or something, and she. . . . Then she'll still be a little mad, but, like, I'll try and make up for it. Usually, that's what happens, you know, and just, you know--they're not really serious things anyhow.

CHAPTER VI

DISCUSSION OF THE FINDINGS

This study is a successful demonstration of the interdependence of a major personality and interpersonal variable, on the one hand, and an important aspect of cognitive functioning, on the other. The hypothesis that autonomy and cognitive openness are interrelated is generally supported by the findings. In considering these findings, one should bear in mind that the sample used as the population of this study was small and selected, and that the specific measures employed to tap cognitive openness were limited in scope.

Relationship between Degree of Autonomy and Degree of Openness to Inner and Outer Experience

The RIRS and the Dogmatism Scale proved to be significantly associated with autonomy: the most autonomous subjects were less repressive and less dogmatic than the remaining subjects. These observed differences must generally correspond to fairly large real differences, to judge from the relatively small size of the sample.

The difference between the high and middle autonomy groups on the Dogmatism Scale fell short of the .05 level of significance--$p < .08$. In the experimenter's judgment, the small number of subjects makes .08 a respectable level of

probability, and justifies basing conclusions on the finding that the high and middle groups were, in fact, different.

Thus, it seems reasonable to conclude that both the openness to inner experience and the openness to a diversity of ideas are particularly characteristic of relatively autonomous adolescents. Such cognitive expansiveness, however, was not found among adolescents who are in the middle range or low in degree of autonomy.

Although both the RIRS and the Dogmatism Scale were significantly correlated with degree of autonomy, the middle and low autonomy groups did not differ on these tests. Rank-order correlations were computed between the autonomy rankings of these subjects and their RIRS and Dogmatism Scale rankings, and these correlations are virtually zero--+.05 and -.02, respectively.

These findings are open to several interpretations:

Cognitive openness may not vary directly with degree of autonomy; instead, it may simply be a characteristic of those subjects who have achieved a relative degree of autonomy. There would, then, be a difference between autonomy groups as regards cognitive expansiveness rather than a continuous relationship between the two variables.

If this were the case, it might be explained by the following conceptions. As stated previously, in late adolescence, two broad processes are occurring with respect to autonomy: the inner pressure towards autonomy or identity, and the concomitant pressure to stay within the bounds of the values and ideas of the family. Thus, it is a period of

particularly sharp conflict. The middle autonomy subjects may be somewhat aware of this conflict but it may be especially painful. (It will be recalled that to the extent that autonomy was present in these subjects, it was quite fragile.) The result could be an antagonism to the awareness of the need for autonomy. It is very likely that autonomy and cognitive openness enhance each other; therefore, antagonism to autonomy could lead to the inner repudiation of cognitive openness. Although the middle autonomy subjects may have more potential than the low subjects for both autonomous development and cognitive expansiveness, they are currently manifesting a similar cognitive restrictiveness.

Another interpretation of the findings is the possibility that the middle and low autonomy groups are not, in fact, different in degree of autonomy but only in a stylistic variable that accompanies their failure of autonomy. The middle group was markedly ambivalent in its motivation and reported behavior which consistently cancelled out their own moves toward independence. This personality style may be different in kind but not in degree of autonomy from the low autonomy group.

The fact that the high autonomy subjects were found to be less repressive and less dogmatic than the other two groups should be qualified by an additional finding. For this group, the rank-order correlation between autonomy rankings and RIRS rankings was +.643 ($p < .09$), and the correlation between autonomy rankings and Dogmatism Scale rankings was

-.142 (NS). Although the former correlation may be assumed to be indicative of a real relationship, the latter obviously is not. Thus, although the RIRS, the Dogmatism Scale and the autonomy interview are all capable of discriminating out a group of high autonomy subjects, the relationship between the latter two measures is not a continuous one, even for the high group.

Relationship between RIRS and Dogmatism Scale

It was hypothesized that the three tests of cognitive expansiveness used in this study would be positively correlated with each other. This hypothesis was based on the assumption that each of the tests measured a different aspect of cognitive openness and that the latter could be considered as a unitary variable. The findings failed to confirm this hypothesis. The tests were not found to be correlated with each other. One exception was the correlation between the RIRS and the Stroop C-W Test which was significant, but in the negative direction. (This finding will be discussed below in connection with the relation of the Stroop Test to autonomy.)

Although the test scores of the total sample of subjects were not inter-correlated, the RIRS and Dogmatism Scale scores of the high autonomy subjects were significantly related insofar as their scores on each of these tests were significantly higher than those of the middle and low subjects.[1] It might

[1] RIRS: $\overline{X}_{High} = 4.54$, $\overline{X}_{(Middle + Low)} = 1.94$; $t = 4.06$, $p < .001$. Dogmatism Scale: $\overline{X}_{High} = 127.4$, $\overline{X}_{(Middle + Low)} = 157.1$; $t = 2.96$, $p < .01$.

be that the hypothesis was stated too generally, since it may hold for only certain parts of the autonomy distribution; but it would require new and preferably larger samples to shed much light on this issue. It may be that for middle and low autonomy subjects, openness to inner experience does not necessarily imply openness to outer experience, and vice versa. It might frequently be the case that there is an uneven development, in a given individual, of the particular qualities of cognitive openness measured by the RIRS, on the one hand, and the Dogmatism Scale, on the other. The former measures openness to such qualities of inner experience as emotions, ideas and images. The latter measures openness to belief systems received from the culture. This differential between the tests, in the context of the above-mentioned unevenness of development, could account for the lack of correlation between them in regard to the middle and low autonomy subjects. It is precisely in these two groups of subjects that unevenness in the development of cognitive openness would be expected. In high autonomy subjects one would expect a more even development of the various strands of openness measured by both tests, although, even here, differences within the group could be expected. In fact, the finding that the autonomy rankings of the high subjects were significantly correlated with their RIRS rankings but not with their Dogmatism Scale rankings indicates that such intragroup differences do exist.

The Stroop C-W Test

The finding that people can be open to one kind of experience but not to another is also demonstrated by the results of the Stroop C-W Test. It was found that the less repressive subjects were less successful in handling the color-word task than were the more repressive subjects. It was further found that the rank-order correlation between the Stroop C-W Test and the autonomy interview rankings yielded a rank-order coefficient which was in a negative direction, at a level of probability between .10 and .15. Since the number of subjects was small, a correlation at this probability level is suggestive of a trend in the direction of greater autonomy being associated with less success on the Stroop C-W Test. A possible explanation for this inverse trend and for the inverse relationship between the Stroop Test and the RIRS follows:

It was originally thought that the Stroop Test would provide a measure of cognitive openness to new learning. For the subjects of this study, however, this instrument may have been inappropriate. The nature of the task is such that an individual must actively suppress experience. In the service of performing the task, subjects must inhibit a strong habit as well as a highly valued skill; namely, reading words. Only when that inhibition or suppression is easily achieved can the subject proceed to the task of relating to the novel aspect of the field, i.e., naming the colors.

It may be that the dependent subjects did better on

the Stroop Test because of their greater facility in suppressing experience. It would seem that this group is engaged much more frequently than the autonomous subjects in suppressing or inhibiting aspects of their behavior and in excluding segments of their experience. This personality trait or style would be a significant factor in the maintenance of their dependence.

For the more autonomous subjects, inhibition and suppression may be undesirable ways of behaving. In adolescents who are judged to be relatively autonomous, autonomy is likely to be integrated at a tenuous level and accompanied by conflict. The more autonomous subjects may feel that they must, if they are going to keep developing in an autonomous direction, make use of all of the learning to which they have been exposed. They cannot yet be expected to have achieved efficiency in their differentiation of those occasions in which experience needs to be suppressed from those in which it needs the most open inclusion.

It might be that autonomous individuals would tend to excel in the color-word task only after their autonomy had been sufficiently integrated so that they could be comfortable in a task requiring the exclusion of experience. This development would probably not occur until some time after adolescence.

The Interview

The interview used in this study was found to be an

effective instrument for tapping the phenomenon of autonomy. There was a high degree of reliability between judges in their rankings of autonomy based on the interview protocols. Furthermore, significant associations were found between the autonomy rankings and the scores on two of the three cognitive tests employed. It was the impression of the experimenter that the extensiveness and depth of the interview were, in large part, responsible for its efficacy.

Although subjects volunteered to participate in the study, it could be assumed that they would manifest varying degrees of both witting and unwitting defensiveness. The extended and intensive interview gave the subjects an opportunity to become more seriously engaged with the interviewer and with the task. For example, during the first 20 minutes of the interview, in response to the question, "What kind of person is your mother?" one of the (high autonomy) subjects said, "She tries to understand. I can't say what kind of person she is. It's very hard. I like my mother but as I get older I'm drifting away from my mother." Two hours later, in response to the question, "Are there things about you that you definitely wouldn't want your parents to know?" the same subject said:

> Yes. I think so. The way I feel about them--like I hate. It's a hard word to use. And I wouldn't want them to know that I feel that way. I feel that way very often, and I hate to make my mother feel bad. I can really say that at some points I can't stand them--up to a really

> awful point of not being able to tolerate them. I always say that one of these days I'm going to look at them and I'm just going to have to get out. Maybe it will help. I don't know.

Another impression of the experimenter's with regard to the value of an extensive interview was that different parts of the interview were productive with different subjects. One high autonomy subject, for example, shared many of her attitudes and feelings about her mother's values, but was rather uncommunicative when asked directly about her own values. In response to the question, "Where would your mother think your present family should fit into your life 15 years from now?" she said:

> Fifteen years from now? My father's attitude and my mother's was that if you alienate yourself from your family, you are going to be lonely, you will have nobody; you be good to us and we will be good to you. They think that I am just going to live for visits from them and that I am always going to be over there--which isn't the ideal situation because like that kind of feeling just does not exist. At this point they don't realize that when two people get married they have lives of their own. And that they should be left to make their own decisions. And they feel as if they were the all-important influences and that they should be included in everything. And as far as fifteen years from now--who knows--who knows just what will be then.

Asked where she thought her present family should fit into her life in 15 years, she said, "I don't know where they're going to fit in. I don't know what's going to happen."

For another subject (low autonomy in this instance), however, questions relating to her mother's values were relatively unproductive, but those concerning her own elicited useful

information. On the issue of the place of the subject's present family in her life in 15 years, this subject responded to the question of her mother's opinion by saying, "Well, she always talks about her sister in Israel who visits her mother every day, but she lives close enough. It depends on, you know, where I live. We really haven't discussed it." Her own opinion on this topic was:

> Well, I expect my parents to be grandparents, and I think, I think once I marry, relations are going to be really great. You know, better than they are now. And I expect to visit my parents often, have my parents come often. My mother will be very happy to see me, you know taking care of the house, and everything (laughs). I think, you know, I think things will be fine between me and my parents--if they approve of my husband (laughs).

A third advantage of the extensiveness of the interview became manifest. The responses in any one part of the interview were subject to illumination and elaboration by the responses in other parts of the interview. At one point in the interview, a middle autonomy subject stated that she often feels lonely, even when she is surrounded by people. At another point in the interview, she said that when she worked as a counselor at a summer camp, she did not like any of the people. In response to another question, she said that she had never belonged to a formal group or club because she "just didn't want to associate with so many people." These additional statements provided indications of one of the ways in which she maintains her loneliness, i.e., she keeps herself from liking people.

This information was relevant in the investigation of the quality of this subject's interpersonal relationships.

Additional Rorschach Categories

The application of three additional scoring categories to the Rorschach protocols allowed some further tentative propositions about the correlates of autonomy to be posited. For example, the fact that the subjects did not differ in the total number of Rorschach responses which they produced, indicates that there may be broad areas of functioning which would not vary according to an adolescent girls' degree of autonomy but rather would be attributable to other factors. Scholastic achievement may be one of these areas. R is generally seen to measure "a raw intellectual productivity, or responsivity (Samuel Beck, 1951, p. 109)," a factor which is certainly involved in academic achievement. Also, Levine and Spivack (1964) found that the RIRS was not correlated with measures of scholastic achievement in females. Since, in the present study, the RIRS and degree of autonomy were found to be associated, Levine and Spivack's finding seems to provide support for the proposition that academic achievement and autonomy are either not associated, or only minimally so. Analysis of the answers of subjects in the current study to the question, "How are you doing in college?" demonstrated that, for this population, scholastic achievement, as measured by grades, was not significantly related to degree of autonomy. The number of subjects in each

autonomy group, who placed themselves in each of the four grade categories represented, is presented below:

B+ : One high, one middle, one low

B : Two high, one low

Between B and C: Four high, four middle, two low

C : One high, two middle, two low

A study of the relationship of such variables as intellectual and academic achievement to autonomy may, however, be one area for future research.

It was found that the high autonomy subjects reported significantly more percepts relating to growth, separation and departure than did the middle and low autonomy subjects. This would seem to confirm the assumption that adolescents who are moving in the direction of an increasing degree of autonomy in their lives tend more to think about, formulate, and clarify issues having direct bearing on the autonomy process. They seem to be more aware than are the less autonomous adolescents of the conflicts and difficulties involved in becoming more autonomous. They appear to devote more of their thoughts and perceptions to working on the relevant problems than do the other subjects.

It is understandable that this category was significantly correlated with the RIRS, since both seem to be measures of openness to inner experience. The difference between the two resides in the fact that the RIRS seems to be tapping a generalized state of openness, whereas the "growth" category was focussed on tapping openness to a

particular aspect of inner experience which was felt to be especially relevant for this population.

The M response category clearly differentiated the high from the middle and low autonomy subjects. This fact may be taken as evidence supporting the proposition that the high autonomy subjects can, to some extent, see themselves as "people in motion" (i.e., capable of action and interaction). Since people have a wider variety of potential perceptions, ideas and actions than any other living beings, one could also say that the high autonomy subjects are becoming aware of their own potential as people and, concomitantly, of the potential and the qualities of the people around them. The low autonomy subjects, on the other hand, seem to be defending against their responsiveness to themselves and others. This can be seen to be in the service of maintaining their dependent status, since awareness of themselves as maturing individuals capable of affecting the world in some way would tend to evoke awareness of the need to organize more actual independence in their lives. At the level of perception, a major defense against self-awareness takes the form of substitution of other content for that of people, particularly people in action. Hertzman and Pearce (1947) suggest that "one of the factors which may be behind the absence of or meager representation of human content and movement in the Rorschach records of some people . . . [is] the need to avoid self-awareness and the need not to know one's deeper

attitude toward others, particularly parental figures (p. 417)."

Although the high correlation which was found between M responses and the RIRS may be due to the incorporation of M in the RIRS scoring, it would seem likely that this does not account for all of the relationship observed. Levine and Spivack (1964) explored the relationship between M and the index of repression score computed without verbs and consistently found a positive relationship between the two. Similarly, Hertzman and Pearce (1947) found an association between the perception of human content, on the one hand, and meaningfulness (or individuality) of percepts (the ones they studied were Ms) on the other. It therefore seems reasonable to conclude that, with regard to the Rorschach, the high autonomy subjects were particularly characterized by the perception of human movement, and by the communication of specified and personalized attitudes and feelings through the details and elaborations of their percepts.

The more autonomous adolescents in the present study may be viewed as being "engaged" with life and with themselves, to various degrees. They focus their awareness not only on their positive feelings and experiences but also on their conflicts and problems (in order, it could be assumed, to clarify and deal with them). In general, they are involved in relating to a wide variety of features in their experience, both inner and outer. The less autonomous

adolescents, on the other hand, are characterized by a narrowing of attention with regard to both their awareness of themselves and of the world.

Implications of the Study

One of the main findings of this study was that cognitive openness to both inner and outer experience is particularly characteristic of autonomous adolescents. This finding may have important implications for educators, parents, and developmental specialists. Approaching the issue of autonomy from a developmental perspective, one could hypothesize that the kinds of cognitive openness measured by the RIRS and the Dogmatism Scale are crucial elements in the *development* of autonomy. If this were the case, one might then ask: Could openness to both inner and outer experience be trained?

The views of MacKinnon (1962), with regard to creative talent, would support the present writer's notions, in providing an affirmative answer to this question. He states:

> We would do well then to pay more attention in the future than we have in the past to the *nurturing* of those . . . traits which in our studies have been shown to be intimately associated with creative talent. (Italics added.)
>
> There is the openness of the creative person to experience both from within and without which suggests that whether we be parent or teacher we should use caution in setting limits upon what those whom we are nurturing experience and express. . . . It is the duty of parents to communicate and of professors to profess what they judge to be true, but it is no less their duty by example to encourage in their children and in their students an openness to all ideas and especially to

> those which most challenge and threaten their own judgments (p. 493).

It can be speculated that the growing child is trained by his parents or parent surrogates to have a given cognitive orientation, ranging from open to closed. It may be that the more narrow and restrictive the parent, the more he withholds support of the kind of openness tapped by the Dogmatism Scale and the kind tapped by the RIRS. The observations by Witkin _et al_. (1962), on the development of "differentiation," (which, like "cognitive openness," is a concept referring to certain structural aspects of psychological make-up) would seem to support this point:

> The process of structuring experience begins very early in infancy. . . . Later in childhood mothers continue in varying degree to define the world for their children, _depending largely on the ways in which they themselves experience the world_ (pp. 359-360). (Italics added.)

Suggestions for Future Research

Clearly, a great deal of further investigation is desirable in this area. Since the present study found autonomy and cognitive openness to be related in late adolescence, it might be fruitful to explore systematically the association between autonomy and cognitive expansiveness at different stages of development. The measure of "autonomy" would have to be age-appropriate. For children below the level of adolescence, the behavior in question might better be called "assertiveness" or "non-compliance."

The role of parenting person(s) in structuring experience for their children might be explored, first, by studying the cognitive orientations of mothers of expansive and restricted adolescents. Following this, it would be necessary to explore parental orientations and parent-child (or particularly, mother-child) interactions at various stages of development, in order to assess what type of parent-as-person, and what type of parent-child interactions foster or restrict the development of cognitive openness in children.

It might also be worthwhile to organize research on two dimensions of cognitive development. The first would involve the charting of those aspects of cognitive functioning (related to openness) which remain stable over long periods of growth. The second would involve the identification of modes of expression of cognitive expansiveness (or restrictiveness) in different stages of development, since these may be different in content but equivalent in formal characteristics.

It might be possible to further refine the nature of the differences in cognitive expansiveness among and within groups of varyingly autonomous subjects. The interview procedure itself might serve this purpose.

Further research in this area might consider the use of a variety of tests of cognitive openness. Tests of perceptual openness, for example, such as have been used in studies of field dependence (Witkin, 1962) and other studies of flexibil-

ity and sensitivity in the area of cognition (e.g., Eagle, 1964), might be employed. These might further illuminate the cognitive correlates of autonomy.

Another interesting area for future research might be an exploration of the ways in which one would proceed to train children in cognitive expansiveness. MacKinnon (1962) presents several general principles, which seem to this writer to be particularly cogent:

> The danger in all parental instruction, as in all academic instruction, is that new ideas and new possibilities of action are criticized too soon and too often. Training in criticism is obviously important . . . I would argue that . . . an equal emphasis be placed on perceptiveness, discussing with our students as well as with our children, at least upon occasion, the most fantastic of ideas and possibilities. . . .
>
> . . . .
>
> I would suggest . . . a seeking for symbolic equivalents of experience in the widest possible number of sensory and imaginal modalities, exercises in imaginative play, training in retreating from the facts in order to see them in larger perspective and in relation to more aspects of the larger context thus achieved. . . (pp. 493-494).

It is the experimenter's opinion that exploratory empirical research in the use of techniques to increase cognitive openness would serve as a particularly useful approach to the task of more precisely clarifying the relationship between cognitive expansiveness and autonomy.

APPENDIX A

AUTONOMY MEASURES

Clinical Interview Schedule

The interview schedule is divided into the following major categories:

1) Prerequisites for subject
2) Face Sheet
3) Subject's perception of mother
4) Subject's interpersonal relations
5) Mother's interpersonal relations
6) Values and directives of mother
7) Values, expectations and behavior of subject
8) Direct interaction between mother and subject

The schedule is administered in the following sequence:

Prerequisites for Subject:

1) How old are you?

2) Do you have any brothers or sisters?

3) What is your place in the birth-order of siblings?

4) Is your mother your natural mother?

5) Have there been any significant periods of time when you lived away from your mother?

6) What year are you in in college? Are you matriculated? How are you doing?

Face Sheet:

1) Where were you born?

2) How old is your sibling? Sex of sibling? Where lives?

3) Who lives in your home?

4) (If father does not live in the home): Are your parents divorced or separated? Since when?

5) How old is your father?

6) What kind of work does your father do?

7) How much education did your father have?

8) What is your mother's age?

9) Does your mother work? Did she ever work? What kind of work? Full or part-time?

10) How far did your mother get in school?

11) What would you think your family income is? Below $5,000, $5,000-$10,000, $10,000-$15,000, Above $15,000.

12) How many rooms are there in your apartment?

13) Do you have your own room? (If yes): How long? (If not): How come?

Subject's Perception of Mother:

1) What is your mother like? (What kind of a person is she? Would you tell me about her?)

2) What does she enjoy?

3) How does your mother dress?

4) How would the neighbors describe your mother? (What would they say about her?)

5) How would her best friend describe her? (What would she say about her?)

6) Who are the most important influences in her life?

7) What do you think are her major problems?

8) What could she do to make her life happier?

Values and Directives of Mother:

1) What would your mother think would be the greatest thing that could happen in your life?

2) What would your mother like to have happen about your working?

3) What would she like to see happen to you eventually in terms of general life situation?

4) Where would your mother think your present family should fit in your life 15 years from now?

5) What does your mother think are your strong points as far as talents and special aptitudes are concerned?

6) What does she think are your weak points?

7) Which of your personality traits does your mother consider fortunate? (desirable)

8) Which of your personality traits does she consider unfortunate? (undesirable)

9) What does your mother think of girls your age going steady?

10) What place does your mother think friends have in one's life?

11) What would she make of someone who put friends above family?

12) What kind of people does your mother consider "superior"? Does she seek them out?

13) What does your mother think of your generation in general? (Or): Which of these would best characterize your mother's view of your generation: a) Quite hopeful and approving b) Quite despairing and disapproving.

14) What does your mother make of the educational system? What kinds of complaints does she have about it?

Subject's Interpersonal Relations:

1) What is your earliest memory involving your mother?

2) What is your earliest memory involving your father?

3) Do you remember your first day of school?

4) Did you have many playmates before you went to kindergarten? Who were they?

5) How were you thought of in the family at that time? (Before kindergarten)

6) Did you enjoy elementary school?

7) Did you have any special friends in your early school years? Still friendly?

8) What fights did you get into with other kids? (Explain)

9) What did you do after school?

10) (Same type of questions in re high school)

11) Were there any adults other than your parents who were particularly important to you during your childhood years?

12) How many formal groups have you been a member of since you started school? (List) Currently?

13) Did you ever hold any offices?

14) Did you help to organize any of the groups?

15) How many informal groups (i.e., having a group of friends who are also friendly with each other) have you been a member of since you started school? Currently?

16) Where are you in the group? (What is your usual position in the group?)

17) What was your social position in class in early grammar school; later grammar school: high school? (If "marginal"): As you look back on it now, do you think you were really marginal or did you just think you were then?

18) About how much time over the last month have you spent with relatives outside of your immediate family?

19) Do you generally visit relatives by yourself or with your family?

20) Are there any relatives you're especially friendly with? Who?

21) Do you have any hobbies or interests outside of school? With whom do you share them? How often?

22) What friends have you had dates with in the last two weeks? (List)

23) When did you see him (her; them) before?

24) Where do you usually meet your friends?

25) What kinds of things do you usually do with your friends?

26) Do you date different boys or always the same one?

27) (If always the same one): Do you go steady?

28) (If dates different boys): Would you like to have a steady boyfriend?

29) Who is your "best" girlfriend? What topics would you avoid discussing with her?

30) What would you do if a friend came to you in trouble? Ex.?

31) How do you feel about being by yourself?

32) When have you been aware of being lonely?

33) If you tried to list the people whom you would miss if they moved out of town, who would they be?

34) Whom do you know whose problems you think or worry about when you are not with them? Was there ever such a person in your life?

35) If something is troubling you very deeply, can you think of yourself as talking it over in detail with anyone? Whom have you gone to? Whom would you turn to currently? If that person had not been available, what would you have done? (Same for--making you very happy; has made you very angry.)

36) How do you feel in a situation in which you are meeting new people? What do you usually think about? Ex.?

37) If you wanted to go to a discotheque, but you didn't have anybody to go with, would you go? (Same for a movie)

38) What do you generally do when girls try to talk to you at bus stops, subway stations, etc.?

39) Have you ever gotten to know anyone to whom you were not formally introduced? (Details)

40) I'd like to ask you some things about aquaintances. I'm defining as acquaintance as someone you know by name, are on speaking terms with, know something about, would ask a minor favor of, and have occasional short conversations with: How many people would you say you have that kind of relationship with?

41) Thinking of a typical example, under what circumstances did you get acquainted? (If it was a structured situation): Does that situation still exist? Have you ever begun an acquaintanceship with somebody outside of school or work--just spontaneously?

42) How did you spend the last 24 hours? (Whom did you see?)

43) How did you spend the last week-end?

44) Thinking back over the last few months, to what extent are the last 24 hours and the last week-end typical? Have there been more meaningful periods? Periods of greater isolation?

45) How did you spend last summer? summer before?

46) Have you ever started to like someone, but then found they were unlikable? Did your parents warn you?

Mother's Interpersonal Relations:

1) If you tried to list the people your mother would miss if they left town, who would they be?

2) Does your mother belong to any clubs or groups?

3) Does your mother have any interests or hobbies outside of work (if works) or home (if housewife)?

4) Has your mother spent any time with friends in the last two weeks: (If yes): Was it by herself or with your father?

5) What kinds of things does your mother do with her friends?

6) As far as you know, how did your mother spend the last 24 hours?

7) How did she spend the last week-end?

8) Thinking back over the last month, how typical are the last 24 hours and the last week-end in your mother's life? Have there been more sociable or more isolated periods for her in the last month?

9) Are the summers pretty much the same as the rest of the year for your mother, or are they different? How did she spend last summer?

10) From what you know of your mother's life, what period was best? worst?

Values, Expectations and Behavior of Subject:

1) Do you have or have you had any good friends whom your parents know about, but don't know well? Do you have any your parents don't know at all?

2) Are any of your friends people your mother would disapprove of?

3) Do you ever bring anyone to your house?

4) Do you ever go to a friend's house? (If yes): Do you ever sleep over?

5) What kind of people do you consider "superior"? Do you seek their company?

6) What adult do you admire most? What do you admire about that person?

7) What kinds of food do you enjoy that your mother never served?

8) Do you earn any money? (If yes): How much of it do you keep?

9) Do you periodically get a lump sum of money from your parents, or the amount you need when you have to spend it?

10) Is there a phone in your house? (If yes): Do you have an extension or a number of your own? (Or): How much freedom do you have in using the family phone?

11) Have you ever given any thought to having your own apartment? (Moving out of the house?)

12) At what age do you expect to get married? How do you expect to distribute your energies and interests after that?

13) What do you think would be the most wonderful thing that could happen to you in your life? Currently?

14) What do you want to be doing at 35?

15) Where do you think your present family will fit in? (in 15 years)

16) What are your special talents or aptitudes?

17) Are there any areas you're particularly weak in?

18) What do you like about yourself? (your personality)

19) What do you dislike about yourself? (your personality)

20) What role do you think friends play in one's life?

21) Do you think a person can ever be as close to a friend as he can to his own family?

22) What do you think of your generation?

23) How do you feel about the educational system?

<u>Direct Interaction between Mother and Subject</u>:

1) On an average day, how many hours of the 24 do you spend doing things with your mother? What kinds of things? (If "talks"): What about?

2) Who do you usually go shopping with?

3) Who picks out your clothes? (Or): Whose opinion do you trust most in choosing clothes?

4) Do you have any part in making the rules at your house? (If no): Do you think you should?

5) Are you expected home at a particular time? What do you do if you are late?

6) Do you generally tell your mother where you are going and whom you'll be with?

7) Do you tell your mother what goes on on your dates? (If no): What would happen if she asked you?

8) Does your mother still open your mail? (If yes): Have you ever asked for it not to be opened?

9) Are there things about you that you definitely wouldn't want your parents to know? (If yes): A few? Many? What would happen if they found out?

10) What do you do when you have upset your mother in some way?

11) Is your mother often lonely? (If yes): Have you tried to do anything about it? What?

12) Would you like to be closer to your mother? (If yes): In what way?

13) What are your areas of disagreement with your mother--re politics, values, moral codes? In a word, what are your respective positions? Do you ever discuss them with each other?

14) If you do something your mother disapproves of, what does she do?

15) How do you and your mother usually resolve a conflict of interest? (specific example)

16) When did you have the last quarrel with your mother? What was it over? Is this a usual area of friction?

Self-Rating Scale

1	2	3	4	5	6	7
Highly Depen-dent	Rather Depen-dent	Some-what Depen-dent	Neither more De-pendent nor more Indepen-dent	Somewhat Indepen-dent	Rather Indepen-dent	Highly Indepen-dent

Appendix B

Normative Data on Cognitive Tests

Normative Data for RIRS for Individual Records

(Higher Scores = Less Repressive Style)

Group	Sex	Age or Education	N	Median	Inter-quartile Range	Range
Present Study CCNY	F	17-19 (College Students)	21	2.41	1.55-3.47	1.06-8.23
Univ. of N. Carolina	M	College Students	84	1.94	1.47-2.76	.87-7.35
Louisiana State Univ.	26M 5F	Medical Students	31	2.23	1.86-3.13	1.27-4.10
Student Nurses	F	Student Nurses	68	2.15	1.75-2.70	.95-4.25
NYU-Sensory Depriv. Exper.	M	College Students	14	2.65		1.50-3.84
Univ. of Bridgeport	F	College Students	18	2.87		1.50-12.00

Normative Data for Form E of Rokeach Dogmatism Scale

(Higher Scores = More Dogmatic)

Group	No. Cases	Mean	S.D.
Present Study - CCNY	21	145.7	26.8
English Colleges II	80	152.8	26.2
Ohio State Univ. I	22	142.6	27.6
Ohio State Univ. II	28	143.8	22.1
Ohio State Univ. III	21	142.6	23.3
Ohio State Univ. IV	29	141.5	27.8
Ohio State Univ. V	58	141.3	28.2

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