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## Early Recollections Reveal the Effect of Birth Order on the Style of Life: An Examination of Some Adlerian Hypotheses

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EARLY RECOLLECTIONS REVEAL THE EFFECT  
OF BIRTH ORDER ON THE STYLE OF LIFE:  
AN EXAMINATION OF SOME ADLERIAN HYPOTHESES

by

Norman N Silverman

A Dissertation Submitted to the Faculty of the Graduate  
School of Loyola University of Chicago in Partial  
Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy

January

1983

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## DEDICATION

This dissertation is dedicated to the memory of my parents; would that they might have lived to see their son become a "Doctor."

## VITA

Norman N Silverman, the author, was born in St. Paul, Minnesota, on May 12, 1925, the son of Jacob and Sarah Silverman, both immigrants from the Jewish Pale of Tsarist Russia.

His elementary and secondary education was in the public schools of Oak Park, Ill., where he was graduated from Oak Park-River Forest High School in 1943.

In 1945 he received an Associate of Arts, with Honors, from the University of Florida. Subsequently he was matriculated in the interdepartmental Committee on International Relations in the Division of Social Science of the University of Chicago. After two years, including a summer at the Universidad Nacional Autonoma de Mexico, he left the academic world to take over his father's fur business. While in business he took courses in Great Books, Art History, Designing, and Stock Market Analysis. He also studied Italian, French, German, Spanish, and Yiddish.

Twenty-five years after leaving the University of Chicago he returned to academia full time. He took courses at Aurora College, Rosary College, and by correspondence from the University of Florida, while pursuing an undergraduate major in Psychology at George Williams College in Downers Grove, Ill. He was graduated from the latter with a B.A. in Social Science, Summa cum Laude, in 1973.

In 1973 he enrolled simultaneously in graduate programs at Loyola University of Chicago (in Clinical Psychology) and in the Alfred Adler Institute (in Psychotherapy). He interned in clinical psychology at Hines V.A. Hospital and the West Side V.A. Hospital, in counseling at the Loyola Counseling Center, and in psychotherapy at the Alfred Adler Institute, all of Chicago. In 1980 he received the degree of Master of Arts from Loyola University and the Certificate in Psychotherapy at the Alfred Adler Institute.

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## CHAPTER I

### INTRODUCTION AND REVIEW OF THE LITERATURE

#### *Introduction*

Many writers, both theoretical and empirical, have claimed that birth order has an effect on or correlates with the personality of an individual. This study attempts to research this claim through the use of early recollections (ERs). Personality is here understood to mean "style of life" as defined by Alfred Adler. Birth order effects are hypothesized to be those predicted by Adlerian theory (Individual Psychology). This research is designed to test the contention that one's ERs show a consistent attitudinal bias which is related to one's birth order. The ERs consist of three hundred incidents recounted by fifty college students, ten in each of five birth order categories.

First this paper reviews some of the literature concerning birth order, style of life, and ERs, in order to define the way these concepts are used here.

#### *Birth Order*

An extensive literature deals with the putative psychological effects of one's position in the family constellation. The literature refers to this position as "ordinal position," "sibling position," "sibling status," or "birth order," with little consistency in usage or definition.

"Ordinal position" clearly refers to a mathematical concept having to do with a numbered series. Thus, in a family with four children, their ordinal positions would be first, second, third, and fourth.

"Sibling position" is the term preferred by Toman (1976). He stated, "Sibling positions may be looked upon as roles that a person has learned to take in the family and tends to assume in situations outside the family, whether merely initially or more permanently" (p. 143). By combining ordinal position with consideration of sex, he came up with ten "basic types of sibling positions," viz., oldest brother of brothers, youngest brother of brothers, oldest brother of sisters, youngest brother of sisters, male only child, oldest sister of sisters, youngest sister of sisters, oldest sister of brothers, youngest sister of brothers, and female only child (p. vi).

Sutton-Smith and Rosenberg (1970) objected that "ordinal position," which "refers only to birth order" was inadequate since it neglected the sex status of the siblings, so they chose the term "*sibling status* to refer to both of these characteristics in combination, birth order and sex" (p. 2).

"Birth order" is the most popular term. It is generally used in the sense of "ordinal position" above. In this paper, however, the term is used as it was by Alfred Adler.

### *Adlerian Views on Birth Order*

Starting in 1918, Adler (1918/1973) often underscored the importance of the family constellation in the formation of one's personality. His is a social, or interpersonal psychology (Hall & Lindzey, 1970) which deals with the way people handle the problems of living together, rather than with intrapsychic conflicts. "The raw material with which the Individual Psychologist works is: the *relationship* of the individual to the problems of the outside world" (Adler, 1935a, p. 5). In his view the family of origin is the prototype of social living for most people. Consequently, the children's interpretations of their early experiences within the family shape their personalities for life.

Adler's use of the concept of birth order is like our modern sociological use of "rôle." The children's subjective perceptions of their rôle is to some extent determined by their birth order. This familial rôle in turn becomes a prototype for the social rôle they will play in later life. Children train themselves for this social rôle as they interact with their siblings and parents. They learn how to compete or coöperate, and they develop the character traits they think they need in order to feel significant in their world (Dreikurs, 1933/1950, p. 41).

➔ Although Adler taught that the actual order of birth was less decisive than the individuals' subjective perception of their place in the family, he considered that the understanding of an individual's birth position was one of the five most trustworthy means to explore personality--along with early recollections, childhood disorders, dreams, and

exogenous factors (Ansbacher & Ansbacher, 1956, p. 328). Harris (1964) said that Adler tended to emphasize the importance of siblings partly because he himself was a fourth-born\*, whereas his arch-rival, Freud, was a firstborn who focused on the intimate relationship of a child to his parents. Freud dealt with Oedipal conflicts while Adler dealt with the maneuvering for power, prestige, and status within the group. <sup>4th born</sup> Adler pointed out how this interpersonal maneuvering for a significant place in the family may lead to feelings of inferiority and to efforts to compensate for these feelings. Apparently the only mention Freud made of birth order effects was when, in the midst of a lecture on incest and the Oedipus Complex, he stated, "you will infer from this that a child's position in the sequence of brothers and sisters is of very great significance for the course of his later life" (Freud, 1916/1935, p. 343).

Adler described five basic birth order categories, which we can best understand as stances which the child might take in the family constellation. These categories are: firstborn, second born, youngest or lastborn, only child, and middle child.

Toman (1976), while crediting Adler for being "the first to try to characterize sibling position" (p. 284), charged him with being unsystematic about it, presumably because he only discussed five positions. One may ask why Adler did not classify birth order effects into ten types, as Toman did. Indeed, why not into even more conceivable

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\*Other authors (Ellenberger, 1970; Manaster & Corsini, 1982; Sperber, 1974) said Adler was a second born.

positions? The answer, of course, is that Adler did not mean for this to become a *typology* (English & English, 1958, p. 568; Maddi, 1976, p. 15), but rather used these five positions as *ideal types* (Wolman, 1973, p. 185). That is to say, they were not meant to be mutually exclusive and exhaustive partitions of the population. They were only meant as examples of what might, possibly or probably, become the style of life of an individual brought up in a given position in his micro-society. This micro-society, the child's family, in turn reflected the usually competitive, often sexist larger society in which Adler lived and in which we still live.

➤ The following quotations from Adler's works make it evident, (1) that he considered age differences between adjacent siblings to be important, (2) that he did advise taking sex into consideration, and (3) that he thought the determining factor was the child's *perception* of the situation, and his or her *decision* as to what to do about the situation.

It does not matter what really has happened, whether an individual is really inferior or not. What is important is his *interpretation* of his situation. (1927/1954, p. 124)

Various combinations are possible in which several brothers and sisters of the same or opposite sexes compete with each other. The evaluation of any one case therefore becomes exceedingly difficult. (1927/1954, pp. 127-128)

There has been some misunderstanding of my custom of classification according to position in the family. It is not, of course, the child's number in the order of successive births which influences its character, but the situation into which it is born. Thus, if the eldest child is feeble-minded or suppressed, the second child may acquire a style of life similar to that of an eldest child; and in a large family, if two are born much later than the rest, and grow up together separated from the older children, the older of these may develop like a first child. (1929/1964, p. 96)

The tension between a boy and a girl is higher than the tension between two boys or two girls. In this struggle the girl is favored by nature; till her sixteenth year she develops more quickly, bodily and mentally, than a boy. Such an older boy gives up the fight, grows lazy and discouraged. (1931/1958, p. 150)

I have not completed my researches in connection with the development of an only girl among boys and of an only boy among girls. According to what I have noticed up till now I expect to find that both will tend to extremes, either in a masculine or in a feminine direction. (1933/1964, p. 214)

Adler made it clear that he did not consider children doomed or predetermined to develop certain "typical" traits because of their birth order. Here he was advising parents on how to deal with a firstborn when another child comes into the family:

Children should have the situation explained and then be helped to socialize themselves.... If he sees that he is to have a new friend, that he has from everyone as much love as he had before, the belligerent, fighting element is replaced by a happy, coöperative attitude. (1928, p. 52)

"Although Adler's statements have a categorical ring to them, he made it clear that none of the effects needed to occur" (Sutton-Smith & Rosenberg, 1970, p. 4). Shulman and Mosak (1977, pp. 119-120), leading present-day Adlerians, drew attention to the following factors which influence birth order effects: age differences, large vs. small families, extra-familial competitors, sex differences, deaths, specialness of one sibling, and availability of rôles. Mosak went so far as to say, "the individual's perceptions of his position and rôle and his conclusions about them, rather than the position itself, would constitute the subject of the Adlerian's study" (p. 117).



Nevertheless, despite Adler's favorite maxim, "*Alles kann auch anders sein* [Everything can also be different]" (Ansbacher & Ansbacher, 1956, p. 194), some nomothetic statements may be made about the birth order effects he avouched. This paper will next consider what characteristics Adler ascribed to persons in each birth order category.

*Characteristics of the firstborn.* Adler referred to the attitudes of the firstborn as follows:

I have always found that the firstborn possesses a sort of conservative tendency. He takes the element of power always into consideration, comes to an understanding with it and exhibits a certain amount of sociability. (1918/1973, p. 321)

He is very likely to be conservative, to understand power and to agree with it. If he is strong enough he becomes a fighting child. (1928, p. 14)

The eldest child, partly because he often finds himself acting as representative of the parental authority, is normally a great believer in power and the laws. (1929/1964, p. 101)

Power is something which is quite self-understood for the oldest child, something which has weight and must be honored. It is not surprising that such individuals are markedly conservative. (p. 126)

Oldest children generally show, in one way or another, an interest in the past...he likes to take part in the exercise of authority and he exaggerates the importance of rules and laws...Among such oldest children we find individuals who develop a striving to protect others and help them...sometimes they develop a great talent for organization...a striving to protect others may be exaggerated into a desire to keep those others dependent and to rule over them. (1931/1958, p. 147)

The foregoing quotations seem to point to five general characteristics: (1) conservatism, that is, an interest in and respect for the past and for the status quo; (2) law and order, a feeling that the

established practices and morality are good and right; (3) power, a belief that the powers that be are the powers which should be respected and obeyed; (4) responsibility, the acceptance of the duty and right to protect and help other people; (5) leadership, a belief that they have the ability and the privilege to lead other people. These five attitudes are not independent; they are closely connected with one another. They add up to a syndrome: the style of life of the first-born.

*Characteristics of the second born.* These are some of the references Adler made to the attitudes of second borns:

The striving for power in the case of a second-born child also has its especial nuance. Second-born children are constantly under steam, striving for superiority under pressure: the race-course attitude which determines their activity in life is very evident in their actions....The second born may place his goal so high that he suffers from it his whole life. (1927/1954, pp. 126-127)

He is forever animated by a desire to win. But he does not value or recognize power. He fights against established power and is likely to be a revolutionary. (1928, p. 14)

By this feeling for life as a race, however, the second child usually trains himself more stiffly, and if his courage holds is well on the way to overcome the eldest on his own ground. If he has a little less courage he will choose to surpass the eldest in another field, and if still less, he will become more critical and antagonistic than usual, not in an objective but in a personal manner....In later development, the second child is rarely able to endure the strict leadership of others or to accept the idea of "eternal laws." He will be much more inclined to believe, rightly or wrongly, that there is no power in the world which cannot be overthrown. Beware of his revolutionary subtilities! (1929/1964, pp. 105-106)

He trains continually to surpass his older brother and conquer him. In dreams the firstborn is afraid of falling; the second "run after trains and ride in bicycle races." (1931/1958, p. 149)

These characteristics of the second born can be summarized as:

(1) **competitiveness**, a feeling that they are in a race, an eagerness to catch up; (2) **rebelliousness**, a refusal to accept the status quo, an attitude of challenging the given order; (3) **overambition**, setting such high goals that they either overexert themselves or give up in the face of such unattainable aims.

*Characteristics of the lastborn.* Adler enunciated some attributes of lastborns in these quotations:

He is able as a rule to attract to himself all the love and tenderness of the environment without giving anything in return....he thus learns to *expect to have everything done for him by others*.... A second type of last-born is the [biblical] "Joseph type." Restlessly pushing forward, they surpass everyone by their initiative, frequently transcending the normal and become pathfinders. (1918/1973, p. 322)

His very place in life makes a speeder, trying to beat out all others, of the youngest....Among the youngest we find active and capable individuals who have gone so far that they have become the saviors of their whole family....Another type, which grows secondarily from the first, is often found....When a youngest child of this type loses his courage he becomes the most arrant coward that we can well imagine. (1927/1954, p. 107)

In the former case (of over-indulgence) the child will strive throughout life to be supported by others. In the latter case [of over-stimulation] the child will rather resemble a second child, proceeding competitively, striving to overtake all those who set the pace for him, and in most cases failing to do so. Often, therefore, he looks for a field of activity remote from that of the other members of the family--in which, I believe, he gives a sign of hidden cowardice. (1929/1964, p. 107)

He faces the difficulties of a pampered child but, because he has many chances for competition, it often happens that the youngest child develops in an extraordinary way, runs faster than the other children, and overcomes them all....Youngest children are always ambitious; but the most ambitious children of all are the lazy children. Laziness is a sign of ambition joined with discouragement; ambition so high that the individual sees no hope of realizing it. (1931/1958, pp. 150-151)

To summarize, Adler described two possible consequences of this birth order position: In the one case children are pampered and they respond passively, becoming dependent. In the other case the children are over-stimulated and they respond actively, becoming highly ambitious. These latter may turn out either the most successful or the most dependent and discouraged. In either case, the youngest would tend to exhibit what Karen Horney (1950, pp. 24-25) called "the search for glory," a "neurotic ambition." This leads to an underlying attitude which Adler expected to find among the last borns: a sense of being somebody special, either especially destined for greatness, or especially inferior and needy of support.

*Characteristics of the only child.* Following are some of the pertinent comments which Adler made with respect to only children:

he becomes dependent to a high degree, waits constantly for someone to show him the way, and searches for support at all times. Pampered throughout his life, he is accustomed to no difficulties, because one has always removed difficulties from his way. Being constantly the center of attention he very easily acquires the feeling that he really counts for something of great value. (1927/1954, p. 127)

Retaining the centre of the stage without effort, and generally pampered, he forms such a style of life that he will be supported by others and at the same time rule them....Only children are often very sweet and affectionate, and later in life they may develop manners in order to appeal to others, as they train themselves in this way, both in early life and later. (1929/1964, p. 111)

The difficulties of an only child are more or less known. Growing up among adults, in most cases looked after with excessive solicitude, with his parents constantly anxious about him, he learns very soon to regard himself as the central figure and to behave accordingly. (1933/1964, p. 230)

Adler, then, saw only children as growing up under special family conditions. Firstly, they have no siblings, so they learn how to handle adults or authority figures, but do not learn to deal with peers. Secondly, they are likely to be more pampered. Thirdly, the parents who choose to have only one child may be more timorous or more egotistical than most (Ansbacher & Ansbacher, 1956, p. 381). How they typically might develop under these circumstances may be seen in the above quotations.

Thus the characteristic attitudes one expects to find in only children are: (1) *dependency*, an expectancy that other people will do things for them; (2) *self-centeredness*, lack of empathy, a feeling of being of greater value than other people; (3) *manipulativeness*, a desire to rule others, to put them into their service, often by pleasing or charming them.

*Characteristics of the middle child.* Contemporary Adlerians often refer to the middle child concept, particularly with the term "squeezed middle." Adler's writings--at least those available in English--nevertheless, only hinted obliquely at this category. In fact, in a 1928 publication Adler referred to the first, the second, and the third or youngest as the "three most important types of children" (p. 14). Some of his case studies, however, make it clear that "middle child" was a noteworthy psychological birth order position (see, e.g., "A Student Repeats a Grade" in Adler, 1963.) This position can be defined only rather subjectively, by analyzing the phenomenology of the situation.

In a family with four children, for example, more or less equally spaced, numbers two and three might be called "middles." But more likely, number two is psychologically a "second," and number three is psychologically a "first," each being defined in terms of his or her relation with her/his perceived competitor. In a family of three, two of whom are close in age while one is more separated, they may be psychologically a first, a second, and an only, rather than a first, middle, and last. The middle child, in brief, is one who interacts and feels competitive with both the next older and the next younger sibling.

Several of Adler's epigones have given us descriptions of what may be the characteristic attitude of a middle child, viz.:

If there are three children, the middle child finds himself in a characteristic situation. He has neither the same rights as the older nor the privileges of the younger. Consequently, a middle child often feels squeezed out between the two. He may become convinced of the unfairness of life and feel cheated and abused. (Dreikurs, 1933/1950, p. 41)

Middle child--there is a standard bearer in front and a pursuer in the rear. He is surrounded by competitors. He may feel squeezed into a small area in his search for significance....The middle child tends to be sensitive to mistreatment or unfairness. He is afraid he will miss out on his share. (Shulman, 1977, p. 115)

The middle child, having neither the advantages of the first nor the youngest, sometimes gets lost in the shuffle unless he succeeds in making a place for himself. He tends to feel squeezed out of place, a percept often accompanied by a concern with fairness and unfairness. (Forgus & Shulman, 1979, p. 105)

It is expected, then, that a middle child would be particularly sensitized to issues of fairness and justice, with perhaps a feeling of being cheated or unfairly deprived.

### *Non-Adlerian Views and Research Literature*

Perhaps because birth order seems easily quantifiable, or because of its face validity, scholars keep churning out papers on this subject. Between 1967 and 1971, 272 studies appeared (Vockell, Felker, & Miley, 1973). Forer (1977) showed 375 of them merely between 1970 and 1976. *Psychological Abstracts* listed three hundred references under "birth order" between October, 1973 and March, 1979. Authors have reported significant correlations to interests (Verger, 1965), personality adjustment and problems, education, need for achievement, intelligence, anxiety, death anxiety (McDonald & Carroll, 1981), need for affiliation, dependence, and conformity (Adams, 1972).

Yet this research has been subjected to repeated criticism. In 1966 Warren reviewed the literature and decided that only two or three hypotheses were well supported, saliently, that "Firstborn of both sexes are more susceptible to social pressure and are more dependent than later born" (p. 38). He concluded that "birth order remains a confused but intriguing concept" (p. 48). Within a year both Altus (1967) and Kammeyer (1967) found significant birth order effects, but both of them said the reasons for these effects were unclear.

In 1972 two separate critical reviews of the birth order literature appeared. Adams (1972) commented on the lack of a good theory of early socialization with which to guide research. (He did not mention the phenomenological-cognitive Adlerian theory among the six which he listed and called inadequate.) He nevertheless concluded that at least

two findings seemed to be well supported: that firstborns are the most outstanding in educational attainment, and are the most affiliative and dependent. Schooler's (1972) critique was more mordant. He conceded that birth order may have affected personality in traditional societies, but not in modern America (pp. 172-173). He insisted that few birth order studies which control for social class or family size showed important birth order effects. Breland (1973), in a rejoinder to Schooler, demonstrated that firstborns had higher verbal achievement, even after allowing for Schooler's caveats. Howarth (1980) also disputed Schooler's critique, for he found significant differences even while controlling for family size.

In a 1975 dissertation Vaughn factor analyzed the answers 102 undergraduates gave to six objective personality tests, and reached the conclusion that birth order was indeed related to their personality characteristics.

Schneider and Reuterfors (1981) found a significant main effect for birth order,  $p < .001$ , when they compared the five birth order groups for social interest, using the Social Interest Scale (Crandell, 1975). Only some of the individual differences were significant, including those of onlies and last borns. However, they defined the second borns and the middle children somewhat differently than does the present study.

Among non-Adlerian authors who have written books about birth order effects are Forer (1969), Forer and Still (1976), Sutton-Smith and



Rosenberg (1970), and Toman (1976). The latter two books cited large numbers of empirical studies, whereas Forer's books were more theoretical, popular, and speculative. Innumerable others have done empirical research on the subject. At this point, I shall only cite studies which supported or contradicted the specific claims about birth order effects enunciated in the Adlerian literature.

*The firstborn.* Adlerian theory predicts that the following would be important issues or attitudes to firstborns: conservatism, law and order, power, responsibility, and leadership. Let us now look at what non-Adlerians have had to say about this.

In a 1956 sociological study, Bossard and Boll described the firstborn in a large family as typically the most responsible one. Becker and Carroll (1962) and Becker, Lerner, and Carroll (1966) found that firstborn children were the most likely to conform to group consensus in contrived group conformity experiments. Osgood, Suci, and Tannenbaum (1957) found firstborns scoring highest in the "power" dimension when rating themselves on the semantic differential. Schachter (1959) reported research indicating that firstborns, more than later borns, tended to adopt the values of their parents rather than those of their peers. Moran (1967) found that firstborns had a greater need for recognition by others than later borns.

Forer (1969) seemed largely in agreement with Adler, often using cognate terms. He described firstborns as: "strong-willed and stubborn" (p. 33), "their consciences are more severe" (p. 34), "more

socially conforming" (p. 35), "tends to carry the past into the present because he adheres to the standards of his parents and these standards come from the past" (p. 39), "The older child as an adult may still be controlling and anxious about achievement" (p. 53), "His seriousness, his adherence to relatively strict standards of behavior and his imposition of these on others, his tendencies to take charge of situations and to tell others what to do..." (p. 105).

In families with religious parents, firstborns were found by MacDonald (1969) to be the most religious of the children. Sutton-Smith and Rosenberg (1970) summarized a great many experiments as demonstrating firstborns were "conservative...of high conscience...powerful and domineering in their relationship to their subordinates" (p. 115).

Howarth (1980) used the Howarth Personality Questionnaire (Howarth, 1973, 1978) to study 170 female and 142 male undergraduates. He found firstborns to be lower in "Anxiety" and higher in "Superego" than others. In a study of forty four-member, task-oriented student groups, Klebanoff (1975) discovered firstborns to be significantly more likely to become task leaders. Toman (1976) cited experimental evidence that "oldest siblings and only children were found to be leaders of (male) youth groups (Bernhöft, 1967) and the elected class leaders in school (Oswald, 1963) more frequently than would be expected by chance" (p. 293).

A glance at vocational data demonstrates that firstborns tend to take leadership positions. Zweigenhaft (1975) demonstrated that U. S.

Senators (who would be expected to be interested in power, responsibility, and leadership) have been firstborns in a significantly high proportion. Only about 35% of the U.S. population consists of firstborns, yet twenty-one of the first twenty-three American space travelers were firstborns or onlys ("Is first best?" 1969). Sixty-six percent of attorneys are firstborns (Very & Prull, 1970). Firstborns are also over-represented in medical schools (Layman & Saueracher, 1978).

Nystul (1981) found that firstborn males from three-child families score significantly lower than others in self actualization as measured by the Time Competence and Inner Direction Scores of the Personal Orientation Inventory (Shostrom, 1966).

Thus, although the literature attributes many other characteristics to firstborns as well, such as mental health (Belmont, 1977), higher IQ (Matarazzo, 1972, pp. 332-333; Zajonc, 1976), need for achievement (Fakouri, 1974), etc., it generally agrees with those attributes which Adler assigned to them, if it agrees at all with birth order effects.

At least five clear disconfirmations, however, appear in the empirical literature. Penn (1973), using the Rokeach Value Survey on 168 female undergraduates, concluded that the value system structure of the firstborns was not markedly dissimilar from that of later borns. Sandler and Scalia (1975) failed to find firstborns occupying more leadership rôles in religious orders. Nystul (1976) administered the Tennessee Self-Concept Scale to 217 white undergraduates, and concluded

that the mean scores of firstborns did not differ at the .01 level from the mean scores of later borns. Grossman (1973) looked for projected "aggressive drives" in Thematic Apperception Test (TAT) stories of college students. He found no differences in "aggressive projection" between firstborns and later borns. Biegelsen (1976) studied 1883 students, looking for differences between first and later borns with respect to vocational, academic, and personality variables. He concluded that the birth order effects might be important for any particular individual, but common effects were not significant. Of course, these critics did not compare all five birth order positions, only firstborns vs. later borns.

• *The second born.* The Adlerian literature generalizes that the second born would be competitive, rebellious, and overambitious. This overambition could be expressed either through overexertion or through giving up in the face of an overblown goal.

The non-Adlerian literature deals with second borns far less than with firstborns, onlies, and lasts, and supplies less support for the Adlerian contentions. Often seconds are grouped with "later borns" (Forer, 1969; Forer & Still, 1976; Toman, 1976). Rarely is a distinction drawn between seconds and middles.

Kagen (1977, pp. 52-53) reported on some unpublished investigations by Sullaway (note 3), who discovered that among scientists, seconds and other later borns were more receptive to new, unorthodox, and revolutionary ideas than were firstborns. Sullaway calculated the

percentages of first- and later-born scientists who opposed or accepted such major scientific paradigm shifts as those of Darwin and Wallace, Copernicus, Bacon, Freud, Lavoisier, Einstein, and Wegener. He found that firstborn fellow-scientists tended to reject these unorthodoxies, while later borns were significantly more accepting of these revolutionary ideas.

Among their students, teachers who were surveyed found second borns (in fact all later borns) to be more incautious and impulsive than firstborns (Longstreth, Longstreth, Ramirez, & Fernandez, 1975). Harris (1964) suggested that the second child would be a revolutionary, and pointed to Hobbes and Machiavelli as examples.

Several studies indicated that the rebellious second borns were more creative than their conservative older siblings. Bliss (1970) found a larger than proportionate share of a group of eminent prose writers came from the younger half of sibships, while only 14% were first borns. Using objective tests of creativity, both Kaltsounis (1978) and Farley (1978) found second borns significantly more creative than their siblings. Farley found this effect in two-child families but not in three-child families. In this paper, of course, we would not designate the number-two of a three-child family as a "second" but as a "middle." Kaltsounis used four-child families, in which case we agree in defining the number-two child as "second born."

Perhaps researchers have not looked for competitiveness as a characteristic of second borns because of a problem in defining the con-

cept. Adler and his followers saw competition not only in obvious rivalry, but also in situations which others might interpret as accommodation. Dreikurs and Soltz (1964) pointed out, "Competition between children is expressed by their fundamental differences in interest and personality" (p. 29). Thus competition might consist in each seeking superiority, but via different routes. For example, one may set out to become an athlete, while the other may seek his significance in being an outstanding student. Adler enumerated three different ways second borns might compete with the firstborns, depending on how courageous the former might be. The second might set out to overcome the firstborn in the same area; he might try to excel in another area; or, being discouraged, he might become personally truculent and antagonistic (Adler, 1929/1964, p. 105).

*The lastborn.* The Adlerian position predicts that the youngest child would (1) be dependent, also (2) that they would have a sense of being somebody special: either destined for greatness, or especially inferior and needy of support.

Forer (1969) did not address himself to these propositions, but instead observed other characteristics of the youngest. Nevertheless, he did indirectly uphold the contention that they would feel dependent and needy of support when he wrote, "A frequent adjustment of the youngest is to find strength in his very weakness" (p. 125).

Brink and Matlock (1982) found that lastborns were more prone to nightmares than earlier borns, especially firstborns. They attributed

this to their lower social interest, a result of their being pampered, therefore having stronger inferiority feelings (cf. Ansbacher & Ansbacher, 1956).

Otherwise, the literature neither supports nor weakens Adler's view. This may be because almost all the research deals with overt behavior rather than with underlying attitudes or feelings about one's self.

*The only child.* Adlerians would expect to find dependency, self-centeredness, and a desire to rule others (manipulativeness) in an only child.

Rosenberg (1965) found only children to exhibit more self-esteem than others. This might be construed as self-centeredness. (See the subjective definition of self-centeredness on the self-rating form and the scoring sheet, appendices C and D, below.) Sutton-Smith and Rosenberg (1970) claimed that only children seemed "driven to school grades, to college, and to eminence by a need to achieve" (p. 79). In our competitive culture, this "need to achieve" might take the form of a desire to rule others or manipulateness. They also concluded that only children were more dependent and self-esteeming (p. 152). Forer and Still (1976) stated, "For the only child, particularly if a boy, the absence of competition seems to increase self-confidence" (p. 9). This "self-confidence" might equal self-centeredness plus a desire to rule others. Unfortunately all these terms are ill-defined.

Falbo (1977, p. 57), on the other hand, concluded in his review of the only child literature that, "there is no evidence that supports the popular belief that only children are selfish" (p. 57).

Many writers group onlies with firstborns in their analyses. In an empirical test of female only children as compared with firstborns, Feldman (1978) raised the question of whether they belonged together. She used three psychological tests followed by a factor analysis. She concluded that the two groups were indeed different, the firstborns being more responsible, and the onlies more confident, resourceful, and assertive. This would seem to buttress the Adlerian viewpoint about onlies being psychologically a different population from firstborns. What she calls the "resourcefulness" and "assertiveness" of onlies might well refer to traits like those this paper calls "manipulativeness" and "self-centeredness," but in less pejorative terms.

*The middle child.* The concept of the "squeezed middle," who is sensitized to fairness and unfairness, who tends to feel deprived, does not seem to exist outside of the Adlerian literature. Forer and Still recognized the middle child position, but said, "the second of three is wedged in a situation which stimulates maximum competitive potential" (1976, p. 154). This does not seem to confirm, but neither does it deny, the idea of the middle child as feeling cheated. However, it is questionable whether they defined "middle" the way an Adlerian would-- as one who feels competitive with both the next older and the next younger sibling. The non-Adlerians seem to mean any child between the oldest and the youngest.



*Summary.* The speculations about birth order effects which Adler derived from his clinical experience are thus only partially in agreement with other authors. Their disagreements may derive from differing source data. Most researchers look at quantifiable behaviors or test results, whereas Adler looked at "style of life." Since this investigation attempts to link birth order to style of life, in the next section I discuss the meaning of the latter concept.

### *Style of Life*

"Style of life" is a concept which may be thought of in either of two ways: as a characteristic of a person, or as a construct of the one who observes a person (what Kelly [1963] would call a personal construct.) It is a cognitive concept which refers to a person's basic motivations from a phenomenological, holistic, teleological, and sociological point of view. This study might have related early recollections to the "traits" (Cattell, 1957) of firstborns, second borns, and other sibling positions, or it might have investigated "needs" (Murray, 1951), "motives" (Maslow, 1970), "drives" (Brenner, 1955; Hull, 1951), or some other alleged elements of personality. For that matter, it might have related the recollections to some more global construct such as "personality," or "character." There is, however, a solid rationale for relating early recollections to style of life, as the term is understood by Adlerians.

### *Life Style as Generally Used*

The term "life style" is used sociologically and popularly as well as psychologically. Max Weber (Gerth & Mills, 1946 , pp. 187, 191, & 300; Weber, 1947, p. 429) used the term before Adler did. Weber, however, used life style to refer to what we would call subcultures or collective ways of life. He observed that those who earn their living in similar conditions--who belong to different classes--also show similarities in their dress, opinions, and habitual behaviors. It is probably from this use of the term that we derive the contemporary use of "lifestyle" (usually written as a single word or hyphenated) to refer to an aspect of group dynamics or group behavior, as in "suburban lifestyle," "the lifestyle of the surfers," or whatever the real estate agents peddle when they hawk luxury condominiums as "lifestyles for sale."

These sociological and popular uses of lifestyle do indeed share a feature with the psychological sense of style of life. In both cases they refer to a global, overall, holistic\* aspect of persons and imply a hypothesis that somehow human nature, group or individual, is an emergent Gestalt rather than an *Und-Verbindung* (Max Wertheimer's term for the way the structuralists characterized mind as a bundle of discrete elements [see Boring, 1950, p. 600; Marx & Hillix, 1973, p. 230 & p. 590]). This is why Michael Wertheimer (1980, p. 209) called a personality a *transum* (a whole which transcends a sum) rather than

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\*"Holism," from the Greek "holos" [complete or entire], is a term coined by Jan Smuts (1926/1961), with whom Adler corresponded. Gestalt psychology also emphasizes wholes.

an *andsum* (a whole which equals a heap of parts, such as a sum of money).

Style is what makes both the *Choral Symphony* and *Fidelio* unmistakably Beethoven although all the elements are different; it is what unifies Picasso's *Guérnica* with his *Demoiselles d'Avignon*. "Style represents the most complex and most complete form of expressive behavior.... It involves the very highest levels of integration, reminding one of the concept of the 'total personality,'" wrote Gordon Allport in 1937 (pp. 489-490). Twenty-four years later he still observed, "We have made some progress in manufacturing building blocks (traits) and in labeling them, but little progress in architecture.... Concepts such as congruence, life-style, total pattern remain for the most part mere concepts" (1961, p. 386).

Besides the global quality, another generally understood aspect of style is that it implies creativity and self-shaping. Allport wrote, "Style analysis refers to the study of all types of *creative* activity of a person" (1937, p. 379). We commonly think of a computer as having a program, but not a style; style is generally reserved for humans and their creations.

A third aspect of style is its consistency. If a writer's opus showed no consistency, it would be devoid of a style. Most personality theorists would agree with Coleman (1972) that, "The individual tends to develop a relatively consistent life style, an essential element of which is his motive pattern--the needs, goal objects, and means that

characterize his strivings" (p. 114). The Freudian ego psychologist David Shapiro had recourse to the term when he described certain neurotics in his book *Neurotic Styles* (1965). He said style is "a mode of functioning...that is identifiable, in an individual, through a range of his specific acts" (p. 1). In this sense, Edward Spranger's *Types of Men* (1928) and Erich Fromm's "character orientations" (1947) seem to refer to generalized styles of life. Indeed, "*Le style est l'homme même* [The style is the man himself]" (Buffon, 1753/1937).

### *Adler's Style of Life (Lebenstil)*

Alfred Adler began using the term *Lebenstil* in 1929, although he had referred to the developing concept earlier with such terms as *Lebensplan* [life's plan], *Lebenslinie* [life line], *Leitlinie* [guiding line], and *leitende Idee* [guiding idea] (see Ansbacher, 1967). For Adler, psychic life was movement, not fixedness; it was becoming, not being (Adler, 1963, p. ix); so he avoided reifying concepts or creating catchy neologistic terminology. *Lebenstil* might as well be translated "style of life," or even "style of living," as "life style." In this paper the former is preferred because it is more indicative of movement and less like the faddish "lifestyle."

*How Adler himself used the term.* Although Robert Woodworth could write in 1948 that Adler's "conception of a 'style of life' is a valuable contribution to the still embryonic psychology of character and personality" (p. 197), Adler was by no means clear in defining the

term. At different times he equated it with "self, ego, a man's own personality, the unity of the personality, individuality, individual form of creative activity, the method of facing problems, the whole attitude to life, and other terms" (Ansbacher, 1978, p. 353). Nowhere in his writings have I found an operational, or even a formal definition. Here I shall present a series of pertinent quotations from Adler, after which I shall attempt to summarize the concept as he used it and as his leading followers construe it.

Already in 1926 Adler was speaking of the "life line" as a person's "total attitude toward life" (p. 20). And he regarded the person as "a self-consistent being and thus as a goal-directed and purposeful whole" (p. 400). The following further quotations from Adler illustrate the breadth and depth of his concept of style of life:

The answers to the questions put by life are dictated, not by the truth of relations in themselves, but by certain automatised attitudes, which we call the *style* of the individual. (1929/1964, p. 7)

After his fourth or fifth year every individual possesses an established life style, and, according to his life style, the individual assimilates, applies, and digests the data of all later experiences. He draws from them only such conclusions as fit into his already established apperception schema, attaching importance only to those aspects of any experience which correspond with the picture of the world which he has already formed and with the particular life style which he has developed for coping with that world. (1930/1973, p. 122)

What is new in the outlook of Individual Psychology is our observation that the feelings are never in contradiction to the style of life. Where there is a goal, the feelings always adapt themselves to its attainment. (1931/1958, p. 30)

The life style dominates. The person is cast all of one piece. This you must find again in all its parts. In this self-consistent casting, the striving for fictive superiority is contained. (1932/1973, p. 198)

I am convinced that *a person's behavior springs from his idea*. We should not be surprised at this, because our senses do not receive actual facts, but merely a subjective image of them-- a reflection of the external world. *Omnia ad opinionem suspensa sunt*.\*... How we interpret the great and important facts of existence depends upon our style of life. (1933/1964, p. 19)

Thus we reach the conclusion that every one possesses an "idea" about himself and the problems of life--a life-pattern, a law of movement--that keeps fast hold of him without his understanding it, without his being able to give any account of it. (1933/1964, pp. 26-27)

The unity in each individual--in his thinking, feeling, acting, in his so-called conscious and unconscious--in every expression of his personality, we call the "life style" of the individual. What is frequently labeled the ego is nothing more than the style of the individual. (1935a, p. 7)

The style of life arises in the child out of his *creative power*, i.e., from the way he perceives the world and from what appears to him as success. (1937/1973, p. 25)

To recapitulate: what permeates these comments is, above all, that Adler was talking about the self, "the indivisible unity that makes a particular individual different from all others, consistently and peculiarly himself" (Sahakian, 1977, p. 153). The style of life, as described in the above quotations, is, however the self as discerned in a particular way--it is a statement about the essence and source of the self. Adler described some attributes of the style of life, made a statement about its genesis, and discussed its relation to overt behavior. Above all, though, Adler declared that the heart of the ego, self, or style of life was (a) the individual's idiosyncratic goal of superiority, his idea of what it means to be a success, to overcome, to have a place in the world (see Adler, 1963, p. 11, in which he asserted that anyone who

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\*[Everything depends on opinion.] Seneca (8 BC-65 AD).

was not feeble-minded had a goal, therefore a style of life.) This style of life included (b) one's **attitudes**, or opinions about oneself and about the environment. It also included (c) one's **apperceptive schema**, or the filter through which one selectively perceives and interprets reality, thus cybernetically reinforcing one's Weltanschauung.

Adler alternatively referred to this apperceptive schema as one's "private logic" (Adler, 1929/1964, p. 80), "private intelligence" (Ansbacher & Ansbacher, 1973, p. 44), and "tendentious apperception" (Adler, 1935b, p. 4). He would no doubt have agreed with the child psychiatrist who wrote, "The brain, it is now clear, far from merely sounding to the sensory tunes played upon its end organs, in fact orchestrates its own intake" (Eisenberg, 1960, p. 44). In terms of perceptual psychology, we may rephrase this metaphor by saying that perception involves both a technique of pattern recognition and a means to decide which patterns to recognize, which patterns have meaning for us (cf. Springer & Deutsch, 1981). We subceive before we perceive. It seems that our minds run ahead of our awareness, putting up "no trespassing" signs whenever our life style convictions are in danger of being refuted, and constructing "Potemkin's Villages\*" to make reality resemble our preconceptions.

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\*In 1787 the Tsarina Catherine the Great decided to personally inspect her empire. "Every town on the route, warned and instructed by [Catherine's minister, Field Marshal Grigory] Potemkin, was on its best behavior, washed and dressed as never before, happy for a day" (Durant & Durant, 1967, p. 459). Potemkin was even reported to have built sham villages so as to divert the Empress' attention from the genuine squalor of the Russian countryside.

Individual Psychology is, then, a cognitive approach to personality which adumbrated other cognitive theories such as Social Learning Theory (Phares, 1980; Rotter, 1954; Rotter, Chance, & Phares, 1972), Personal Construct Theory (Kelly, 1955), Information Processing Theory (Attneave, 1959; Haber, 1969; Neisser, 1967), and Cognitive Dissonance Theory (Festinger, 1957; McClelland, 1951). Cognitive concepts such as attitudes, convictions, goals, set, and apperceptive schema were the essence of Adler's style of life. He went on to describe some attributes of the life style: (1) it is what unifies and gives pattern to all aspects of one's thinking, feeling, and behaving; (2) it leads a person to be self-consistent, not, as Freud (1952-1974, *passim*) would have it, internally ambivalent and conflicted; (3) it is self-created by a trial-and-error process starting in pre-linguistic infancy, thus it is mostly non-conscious (cf. Ansbacher, 1978/1982, p. 36); (4) it guides overt behavior, emotions, symptoms, and thoughts, which are all goal-directed, and which serve reciprocally to maintain the style of life, in a sort of feedback loop.

*How later Adlerians view style of life.* Adler's epigones agree that most overt behavior is not a part of the style of life. "It seems that within a given life style a wide choice of actions is possible" (Dreikurs, 1967, p. 237). "Behavior may change throughout a person's lifespan in accordance with both the immediate demands of the situation and the long-range goals inherent in the life-style" (Mosak & Dreikurs, 1973, p. 40; cf. Sweeney, 1975, p. 7). Nevertheless, the "basic deci-



sions about *modi operandi*" (Forgus & Shulman, 1979, p. 103) give behavior its theme. In other words, the style of life may include convictions about what kinds of behavior are successful or moral. Ansbacher included one's "characteristic way of striving for his goal" (1978, p. 353) as an integral part of life style. Finally, Shulman (1973) included "methods that consistently throughout the life history of the person are used as behavioral techniques for striving toward the dominant goal" (pp. 25-26). One of his examples was the life style of the schizoid who consistently uses "distance-keeping" to achieve his goal of safety.

Mosak summarized the style of life as a group of attitudinal convictions, including (1) the self-concept, (2) the self-ideal, (3) the *Weltbild* [one's picture of the world], and (4) ethical convictions, ideas about personal right and wrong (Mosak 1954/1977, p. 52; Mosak & Shulman, 1961, p. 7). Shulman summarized the style of life as a "'rule of rules' for the individual" (1973, p. 17), which develops "according to the rubric: 'I am thus, the world is so, life demands such and such, therefore...'" (1965, p. 18). Allen (1971) added, "it is in terms of the proposition which follows the 'therefore' that the person thinks, feels, perceives, dreams, recollects, emotes, behaves, etc." (p. 5).

It is evident that style of life has certain similarities to formulations which other personality theorists have made to account for the consistency and unity of behavior. The following is a partial list of such constructs: assumptive system (Frank, 1961), being-in-the-world

(Binswanger, 1963; Boss, 1963), cognitive controls (Gardner, Holzman, Klein, Linton, & Spence, 1959), cognitive structure (Forgus & Shulman, 1979), dynamisms (Sullivan, 1953), Einstellung (Luchins, 1951), generalized expectancies of reinforcement (Rotter, 1966), mode-of-existence (Van Kaam, 1966), neurotic claims (Horney, 1950), person (Stern, 1938), personality syndrome (Maslow, 1970), phenomenal ego (Koffka, 1935), phenomenal self (Buhler, 1962; Snygg & Combs, 1949), plans (Miller, Galanter, & Pribram, 1960), projective systems (Kardiner, 1939), the proprium (Allport, 1955), Radix (Max Wertheimer, cited in Allport, 1937, p. 147 & p. 358), rule-governed behavior (Skinner, 1969), self (Kohut, 1971; Rogers, 1959), self-identity (Erikson, 1959), supraordinate constructs (Kelly, 1955), unity thema (Murray, 1938), *ustanovka* [set] (Uznadze\*, 1949/1966).

#### *Early Recollections as an Apperceptive Test*

It has long been suspected that early recollections are something other than random retrievals of recorded information from some sort of engram or memory bank. Psychologists have been researching childhood memories since 1895 (Dudycha & Dudycha, 1941). John Dewey's nine-

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\*It is interesting that this Soviet Georgian experimental psychologist, working from a wholly different tradition, came to a surprisingly similar formulation: "Throughout life and, in particular during childhood, when the basis of a person's outlook is established, a series of sets is built up on the training and education he has received, and these sets accompany him sometimes throughout life.... Usually, he is not aware of these sets although this does not stop them from being active forces controlling his activity in a given direction.... He cannot check or abolish these sets of which he is not aware...so that he is forced to control the act of his thought under the decisive influence of these sets" (Uznadze, 1949/1966, p. 243).

teenth century textbook already included the statement that, "memory is not a passive process in which past experiences thrust themselves upon the mind" (1891, p. 177). As early as 1900 Titchner expressed his conviction that adult remembrances could give accurate information about the content of the child's mind. In 1901 Potwin tried to ascertain the nature of childhood sensation through a "Study of Early Memories." For the most part, however, early academic psychology avoided the question of the significance of these recollections for those who recalled them.

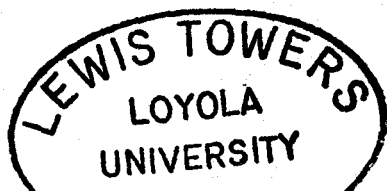
#### *ERs In Adlerian and Freudian Theory*

The use of early childhood memories, like the analysis of the family constellation, is a hallmark of Adlerian psychology. Already in 1911 Adler stated, "A person's true attitude toward life can be discerned from his earliest dreams and recollected experiences, proving that such memories are also constructed according to a playful procedure" (Adler, 1911/ 1928, quoted in Ansbacher, 1973, p. 135).

A member of Adler's original group presented a paper entitled "Individual Psychological Significance of First Childhood Recollections" at the International Congress for Medical Psychology and Psychotherapy in Vienna in 1913 (Schrecker, 1913/1973). Eighteen years later Adler wrote, "Individual Psychology has succeeded in making a new science of the interpretation of childhood reminiscences" (Adler, 1931, p. 3\*). To a great extent it serves Adlerians as a diagnostic tool of preference,

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\*my translation, NNS



rather than the MMPI, Rorschach, or TAT, although some Adlerians use all of these. Taylor (1975) reviewed the projective uses of ERs and concluded that they were clinically valuable, although more controlled experimentation was still needed to validate them.

The rationale for the use of ERs as a projective (or, more correctly, an apperceptive) test presupposes certain basic Adlerian doctrines, to wit, the unity of the personality (Adler, 1931/ 1958), the self-created individual apperceptive schema (Ansbacher, 1965), and the socio-teleo-analytic holistic interpretation of behavior (Dreikurs, 1960; Mosak & Dreikurs, 1973).

All psychodynamic theorists, Freudians as well as Adlerians, agree that memory is heavily influenced by emotions. In his 1941 monograph Rapaport (1971) showed that the dependence of memory on emotions was supported by both id- and ego-psychoanalytic theory, and also by experimental and clinical evidence. Most psychoanalysts, following Freud (1901/1938; cf. Jones, 1923; Rapaport, 1971), have paid more attention to what is forgotten or "repressed", while Adlerians have attended more to what is "remembered." Furthermore, Adlerians do not consider emotions as primary causative factors; they go beyond the emotions to the goals which the emotions subserve.

Freud and his followers looked upon ERs as "screen memories\*." "...what is important is represented...in the memory by something apparently trivial" (Freud, 1916/1935, p. 211). They postulated that

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\*The original German term is *Deckerinnerung*, literally "cover-up memory."

the seemingly trivial content of ERs were actually screens or covers which concealed significant events from awareness; they were devices which the Ego utilized to protect the Conscious from the unacceptable sexual impulses of the primary process. In other words, forgetting was postulated to be founded on a motive of displeasure, which gave rise to repression. They saw this repression as causing infantile amnesia. Their interest was in the repressed "latent" content of the memories. (Abraham, 1955; Freud, 1898, 1925a, 1925b, 1938, 1950; Glover, 1929; Langs, Rothenberg, Fishman, & Reiser, 1960).

Adler, on the other hand, emphasized the interpretation of the manifest content of ERs as an expression of the unified life style of the individual. He was interested in what was expressed rather than what was repressed. (Langs, et al., 1960; Mosak, 1958/1977, 1969).

We remember those events whose recollection is important for a specific psychic tendency [attitude], because these recollections further an important underlying movement. We forget likewise all those events which detract from the fulfillment of a plan. (Adler, 1927/1954, pp. 48-49)

Thus his memories represent his "Story of My Life"; a story he repeats to himself to warn him or comfort him, to keep him concentrated on his goal, to prepare him, by means of past experiences, to meet the future with an already tested style of action...Memories can never run counter to the style of life. (Adler, 1931/1958, pp. 73-74)

It can be easily understood that at a very early stage of my endeavours to throw light on the impregnable unity of the psychic life I had to reckon with the function and the structure of memory. I was able to confirm the statements of earlier writers that memory is by no means to be regarded as the gathering-place of impressions and sensations; that impressions are not retained as 'mneme', but that in the function of memory we are dealing with a partial expression of the power of the homogenous psychical life--of the ego. The ego, like perception, has the task of fitting impressions into the completed style of life and using them in accordance with it. (Adler, 1933/1964, p. 203)

When correctly understood in relation to the rest of an individual's life, his early recollections are found always to have a bearing on the central interests of that person's life. Early recollections give us hints and clues which are most valuable to follow when attempting the task of finding the direction of a person's striving. They are most helpful in revealing what one regards as values to be aimed for and what one senses as dangers to be avoided. They help us to see the kind of world which a particular person feels he is living in, and the ways he early found of meeting that world. They illuminate the origins of the style of life. The basic attitudes which have guided an individual throughout his life and which prevail, likewise, in his present situation, are reflected in those fragments which he has selected to epitomize his feeling about life, and to cherish in his memory as reminders. He has preserved these as his early recollections. (Adler, 1937b, p. 287)

Adler saw the ER as a creation of the individual, consistent with his or her unified holistic self-concept and manner of moving through life, whereas Freud saw the ER as a compromise formation between antagonistic psychological substructures (Mosak, 1969; Waldfogel, 1948).

Some ego psychologists (nominal Freudians who have moved closer to Adler-like positions) have reached a sort of half-way compromise. They continue to assume that ERs have latent, covered-up content, but they are interested in the adaptive ability of the ego as it defends against the latent content (Bruhn & Last, 1982; Mayman, 1968). Other ego psychologists have quite abandoned the concept of ERs as "screen memories."

Mayman (1968) wrote, "we have come to see that the distrust of manifest content is appropriate only in the context of an id-psychology" (p. 303). He pointed out that ERs were not so much reflections of what happened, but "retrospective inventions...selected (unconsciously) by a person to conform with and express ingrained images of himself

and others" (p. 304). At one point (before his break with Adler) Freud himself seemed on the brink of this same understanding:

This is often the way in which childhood memories originate.... They are not fixed at the moment of being experienced and afterwards repeated, but are only elicited at a later age when childhood is already past. In the process they are altered and falsified, and are put into the service of later trends so that, generally speaking, they cannot be sharply distinguished from fantasies. (Freud, 1910/1953 p. 82)

The ego psychologist Rapaport opined in 1941 that "Retention can no longer be thought of as a wax-plate,...retained material is organized...without our conscious contribution.... Reproduction is rather an active production" (1971, pp. 5-6). He asserted that "memory is a *motivated behavior phenomenon*" (p. 8). Schachtel (1947/1949, p. 348) observed that "memory...can be understood only as a capacity for the organization and reconstruction of past experiences and impressions in the service of present needs, fears and interests."

Eisenstein and Ryerson (1951) recommended using ERs for diagnostic, rather than psychotherapeutic purposes. They saw the ER as "a symbol of the patients' inner-orientation and a declaration of his basic problems" (p. 220). Writing in a psychoanalytic journal, Saul, Snyder, and Sheppard (1956) pointed out that ERs reveal a person's psychodynamics, motivations, neurosis, and problems. "They are *selected* ...and when they do not *fit* accurately, they are distorted...to fit and express the person's nuclear emotional constellation" (p. 230).

### *ERs in Philosophy*

It might be noted that some philosophers, recognizing that memory is dependent upon the person's psychological needs, anticipated the views of these psychologists. In the late nineteenth century Friedrich Nietzsche wrote: "'I have done that,' says my memory. 'I cannot have done that,' says my pride, and remains inexorable. Eventually--memory yields" (1886/1966, p. 80). In the same period Bergson wrote that the function of memory is "to evoke all those past perceptions which are analogous to the present perception...and so to suggest to us that decision which is the most useful" (1886/1911, p. 303), and later, "Memory...is not a faculty of putting away recollections in a drawer... [We admit into our awareness only] that which can cast light on the present situation or further the action now being prepared" (1907/1944, p. 6). In fact, a French poet of the same period, Ernest Renan, asserted, "What one says about oneself is always poetry" (1883, p. ii). Finally, according to Santayana (1905, p. 2), "The picture we frame of the past changes continually and grows every day less similiar to the original experience which it purports to describe."

### *Psychoanalytically Oriented ER Research*

Purcell (1952) studied the early memories of 126 college students, comparing the accuracy of those from different ages from the earliest to age eight. He found no greater distortion or omissions in childhood memories than in adult memories. He interpreted his findings as casting serious doubt on both the Freudian concepts of infantile amnesia as



a product of repression, and on the notion of the screen memory as the typical childhood recollection. He found it more useful to work from Adler's position that memories are evoked and distorted in accordance with the personality structure and the dynamics of the moment.

Another psychoanalytically oriented article (Kramer, Ornstein, Whitman, & Baldrige, 1967) discussed the use of ERs in the diagnostic process as well as in dynamic formulation, genetic formulation, transference and counter-transference, and treatment planning. They claimed that ERs reflect "long-range and characterologic aspects of the personality" (p. 369).

Langs, et al., (1960), in developing a scoring sheet and manual for tabulating the content of early memories, declared that the screen-memory approach, depending upon psychoanalytic settings, did not lend itself to experimental study, whereas

the "revealing memory" approach is feasible for workers in almost all psychological and psychiatric disciplines and settings. (p. 523)

such manifest material is psychologically important and useful. It appears that first memories may reveal a wide range of data and that they are related to clinical diagnosis in a gross manner. (p. 531)

In a later study (Langs, 1965a) he continued to express his theoretical support for the psychoanalytic position that ERs reflect "contributions from the id, ego, and superego," and that they are "a compromise between drive and defense" (p. 390). However, when he attempted to predict the personality features of forty-eight subjects from the manifest content of their first recollections, he found strong

confirmation of the "general hypothesis that the manifest content of the first memory is predictive of, and has a strong relationship to, personality" (p. 389).

In a third study, Langs (1965b) still interpreted early memories psychoanalytically as "a highly condensed precipitate of important aspects of the total personality, including id, ego and superego factors" (p. 318) which reflect a person's attempt to deal with nuclear conflicts. He related first memories with assessments of Rorschach Test protocols. His conclusions, while couched in psychoanalytic terms such as impulses and intrapsychic conflicts, tended to corroborate the Adlerian thesis that ERs illuminate the present *Weltanschauung* or style of life of the recollector (Adler, 1937b).

The first memory findings [writes Langs (1965b)] are strongly consonant with clinical observations. They reflect the obsessive's problems with aggression, and the inhibited obsessive's particular concern with losing control over these impulses. Possibly as a further means of maintaining controls, the former individuals also isolate themselves from others. The hysterics remember relationships with women and are active, suggesting heterosexual concerns and a tendency towards action. The narcissistic person is concerned in his memories with separation and loss. This is in keeping with clinical observations that separation is the major cause of anxiety in such persons. (p. 320)

An Adlerian would not have written in terms of inner drives as causative agents, but rather in terms of the use which the individual makes of his affect in order to strive toward his fictional goal of superiority. "Subjectively," wrote Dreikurs and Mosak (1967 p. 54), we may *feel* driven by emotions...[however] they are not our masters but our servants" (p. 53). Individual Psychology is a "psychology of use,"

not a "psychology of possession" (Ansbacher & Ansbacher, 1956, pp. 204-235).

### *Adlerian Oriented ER Research*

Adler seems to have adumbrated what Krech (1949) labeled as the "new look" in perception (Postman & Murphy, 1943; Watson & Hartman, 1939), but he and his followers were working in education, psychiatry, and counseling. Only recently have Adlerians had much involvement with academic experimental psychology (e.g., Ferguson, 1976; Forgas & Melamud, 1976).

Ansbacher (1946) conducted an experiment to substantiate the Adlerian hypothesis that ERs express an individual's basic goals and attitudes toward life, and that these basic attitudes and goals determine what will be recalled. He had 271 male college students complete "My earliest childhood recollection is...". He also had them complete the first twenty-five items from the Maslow Security-Insecurity Test (Maslow, Hirsh, Stein, & Honigmann, 1945). He interpreted the findings as supporting Adler's position. In particular, he found:

- a) Subjects who remember themselves as participating in group activities, as being active in general, as being treated kindly by others (33%) have more frequently high security scores than not.
- b) Subjects who remember themselves as cut off from the larger group, as getting or losing prestige, as having done something bad; or who remember others receiving kindness or attention, or suffering harm or inflicting harm on one another (20%) have practically always low security scores.

Contrary to expectations, recollections of receiving presents, a subgroup of 17 cases, were practically always found among the upper 40% of security scores....Apparently such recollections signify a generalized attitude of "people are good to me, the world is a relatively good place." (p. 205)

Gushurst (1971), in two out of three experimental groups, validated the hypothesis that life goals could be identified from early recollections data, using an interpretative manual he devised.

Barrett (1980) conducted an experiment in which she collected first memories from fifty college students. She had two judges rate the memories as to the degree of (1) anxiety, (2) need-approval, and (3) internal vs. external locus of control. The judges' scores were correlated to scores which the students achieved on three objective tests which were created to measure these traits, namely, the Manifest Anxiety Scale (Taylor, 1955), the Marlowe-Crowne Social Desirability Scale (Crowne & Marlow, 1960), and the Adult Norwiki-Strickland Internal-External Scale (Norwike & Duke, 1974). The average ratings of the two judges correlated with the objective tests at the .01 level for anxiety and locus of control. Need-approval correlated at the .05 level for the male subjects, but not for the female subjects.

#### *ER-Related Experimental Memory Research*

Adler's view is in accord with that of Bartlett (1932), who suggested that remembering is more a process of construction than one of reproduction. His experiments demonstrated to him that recollection originated from one's "attitude" and served to "justify" it. "Recall is inevitably determined by temperament and character" (p. 308), and "The past is being continually re-made, reconstructed in the interests of the present" (p. 309). What Bartlett called a *schema* seemed to refer to the same cognitive structure as what Adler called an *appercep-*

*tive schema.* Bartlett's and Adler's views were, of course, in line with the general position of the Gestalt psychologists\* who held that memory traces "undergo progressive changes according to the same principles of organization that govern original perception" (Chaplin & Krawiek, 1974, p. 158).

Adler's work also foreshadowed modern cognitive psychology, which recognizes that perception as well as memory is affected by previous knowledge and attitudes (Ansbacher, 1946; Bruner, 1951; Bruner & Goodman, 1947; Neisser, 1967; Zechmeister & Nyberg, 1982). An example from recent split-brain research illustrates that perception is really apperception since it depends upon the stimuli of internal cues, memories, and imaginations as well as upon external sensory stimuli. Split-brain subjects gazed upon chimeric pictures composed of the left half of one face and the right half of another face. By pointing, they reported seeing one complete normal face (that which the right hemisphere perceived.) Apparently from memory and imagination they had completed the apperception of a complete face while ignoring the other side of the chimera (Levy, Trevarthen, & Sperry, 1972; Springer & Deutsch, 1981).

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\*The affinity of Adlerian thinking to Gestalt Psychology is personified by Wolfgang Metzger, a leading Gestalt psychologist (Metzger, 1936/1975, 1940/1975) who helped revive Individual Psychology (Metzger, 1971, 1973, 1980) in the German-speaking countries after World War II.

Recently the area of "state-dependent memory" has received considerable experimental treatment (Bustamente, Jordon, Vila, Gonzales, & Insua, 1970; Eich, 1980; Weingartner, Eich, & Allen, 1973; Weingartner & Faillace, 1971). Gordon Bower (1981) reviewed some of the evidence as well as his own research, and concluded that people selectively tended to recall experiences "affectively congruent with the mood they were in during recall," and that "emotion powerfully influenced such cognitive processes as free associations, imagination, fantasies,..." (p. 129). His review of previous studies convinced him that "mood dependent retrieval is a genuine phenomenon whether the mood swings are created experimentally or by endogenous factors in a clinical population" (p. 134). We could think of one's style of life as tantamount to one's long-lasting state of consciousness. Then the evidence for state-dependent memory would also be evidence for life style-dependent memory.

Many recent experiments have substantiated Bartlett's (1932) contention that memory is constructive rather than merely reconstructive. Bransford, Barclay, and Franks (1972), Cofer (1973), Johnson, Bransford, and Solomon (1973), Sulin and Dooling (1974), all provided evidence that logical inferences from material were "remembered" as being part of the originally presented material. An experiment by Spiro (1980) indicated that differences between material presented to subjects and their later memories of the material were due more to errors in reconstruction (altered recollection) than to errors in construction (original apperception.) Furthermore, the errors were in the direction of accomodating the memory to the subjects' own logic.

The work of Loftus (1979a; 1979b; Loftus & Loftus, 1980) on the unreliability of eyewitness testimony, the impermanence and malleability of memory, and the possibility of insinuating material into memory, also attested to the Adlerian viewpoint that recollections are refracted through the style of life. Loftus claimed that memories were composed of inferences built up around stored bits of information and were quite liable to be changed by post-event input.

Zechmeister and Nyberg (1982, p. 323) summarized recent memory research by stating, "These results seem to contradict the apparently widely held view that memory is permanent." Describing research in a closely related field, hypnotic memory, Turkington (1982, p. 46) said, "There is no such thing as a tape recorder in the brain....Instead, scientists now believe the brain is at best an incomplete storehouse of impressions widely influenced by interpretation."

A recent review by Bruhn and Last (1982) elucidated the differences in approach to the interpretation of ERs exhibited by four schools of thought, viz.: Freud's, Adler's, the ego psychological, and one they adapt from experimental memory theory.

So it seems that both philosophical and scientific psychology show support for the Adlerian thesis that ERs relate powerfully to the current state, mood, convictions, or "style of life" of an individual.

### *Clinical Uses of ERs*

Grigg (1960) used autobiographical material and adjective check lists to find out whether he could predict the current self-impressions of subjects better from accounts of their early life or from knowledge of their current life. He found that the ERs postdicted self-impressions better than recent recollections,  $p < .025$ . Karon (1952) found that certain kinds of ERs were related to Gough scores and to the Allport-Vernon Study of Values. McCarter, Schiffman, and Tomkins (1961) used some ER characteristics to predict performance on a variety of scales of the Tomkins-Horn Picture Arrangements Test (PAT). They concluded that, "using PAT performance as a criterion, ER is a valid method of personality appraisal." They found it most valid for predicting degree of activity, including work, and for appraising social interest.

An attempt by Hedvig (1965) to utilize ERs in differential diagnosis--a use Adler would probably not have been interested in--was less successful. Using ERs only, he asked three Adlerians to judge which of fifty-one students were psychoneurotic and which were suffering an adjustment reaction, conduct disturbance. The students had been previously diagnosed as one or the other by a clinical team. While the three judges correctly diagnosed an average of thirty-four out of the fifty-one students ( $p < .001$ ), their correlations to the diagnoses of the clinical team were: judge A,  $r = .70$ , judge B,  $r = .32$ , and judge C,  $r = .08$ . Hedvig concluded that the use of ERs in differential diagnosis was valuable, but only in conjunction with a battery of tests.



Attarian (1978) recommended the use of ERs in vocational counseling. Following up a suggestion by Adler (1931/1958), he conducted an experiment to see whether three Adlerians could predict the majors of college seniors by examining their ERs. Two of the three judges were able to make the predictions at a significant level,  $p < .001$ .

Rogers (1982) found ERs to be helpful in predicting college achievement. His studies showed that an analysis of the content of the ERs was more useful for this purpose than a study of the vocabulary, grammar, and writing skills of the ERs.

Two studies have compared ER material with TAT material, leading the authors to suggest that the two tests produce different classes of interpretable findings:

Kadis, Greene, & Freedman (1952-1953) found ERs to be predictive of "functioning traits" whereas TAT stories are predictive of "latent traits." They claimed the subject of an ER was always the self, whereas in other projective material there was a question of identification, whether it might be to self, ideal self, peer, elder, etc. Furthermore, the content of the ER always dealt with one's primary group, and these attitudes tended to generalize to others later on. They therefore hypothesized that a knowledge of ERs would improve the prediction of subjects' functioning traits in two specific categories of their activities: (1) an "approach" area--how they pursue a task, and (2) an "authority" area--how they relate to elders.

They had three judges rate twenty female high school students on both the "approach" and the "authority" categories. The ratings were based on (a) teachers' reports, (b) TAT stories, (c) TAT material plus ERs. Inferences made from the combination of TAT stories with ER material were decidedly closer to the teachers' reports than inferences made only from the TAT. Many of the TAT inferences did not show up in conduct. It was assumed that these may have been latent traits. "A specific value of ER is that when it is integrated with other test material, it clarifies for the observer the way in which the subject acts upon his latent traits" (p. 37).

(1) To restate some of our major conclusions, we noted that recollections viewed as perceptions of the past, are predictions of present conduct, specifically in the way a subject pursues a goal and relates to others. (2) Finally, by predicting conduct, recollections enable the observer to distinguish between characteristics which are functioning and those which are latent, thus organizing projective material around a point of relevance. (p. 38)

Another comparison of ER and TAT was done by Hedwig (1963). His hypothesis was that ERs had greater stability than TAT stories, and so had greater clinical validity as a projective technique in revealing personality characteristics.

While fantasy productions such as TAT stories will reflect recent emotional stimuli such as success or failure and hostility, it was predicted that ERs will show more stability, since they refer to what the individual considers a factual experience. The assumption that ERs will remain stable under changes of experimental conditions does not preclude the observation by Adler and Dreikurs (Dreikurs, 1958) that ERs will change when a person changes his entire outlook on life, as, e.g., in successful psychotherapy. (p. 49)

Hedwig had 360 college students write down either ERs or TAT stories under various experimental conditions: after experiences of suc-

cess, failure, or neutral experiences; or after experiences of hostility, friendliness, or neutral experiences. Thus there were 12 conditions, with 30 subjects in each. In both hostility themes and in need-achievement themes, TAT groups showed significant differences due to the immediately preceding experiences, while ER groups did not. The implication was that ERs adduced evidence about more stable aspects of personality than did TAT stories.

The clearest explication of the use of ERs as an apperceptive technique was given by Mosak (1958/1977). He discussed the method, the rationale, and problems involved in its application. He claimed "the technique is useful in rapid psychiatric screening, differential diagnosis [Eisenstein & Ryerson, 1951; Feichtinger, 1943; Friedmann, 1950], vocational guidance [Adler, 1933/1964; Bradley, 1982], and in the analytic psychotherapies" (p. 73). He took pains to distinguish between "reports," which were general impressions such as "I used to..." or which might refer to what others have told the client about his youth, and "recollections," which referred to specific childhood incidents which the client could actually visualize (whether veridical or not is irrelevant) (p. 64).

As is done with TAT stories, Mosak applied both a content analysis and a sequence analysis to the ERs, always from a phenomenological viewpoint.

Early recollections may be regarded as a prototype of the individual's fundamental attitudes (Adler, 1937a). Consequently, they are first interpreted thematically and second with respect to specific details.... The characters incorporated in the recollection are not treated in interpretation as specific individuals but as pro-

totypes. They represent people or men or women in general or authority figures rather than the specific individuals mentioned. (p. 64)

While the content of the recollection is given primary consideration, a sequential analysis provides a more rounded picture of the individual, adding some nuances of the personality. (p. 65)

When apparent contradictions occur, they must be understood in their total content. Occasionally the contradiction merely states that under a certain set of conditions, actual or perceived, the individual will respond in one manner and to another set of circumstances in a second way. (p. 65)

what is elicited are the individual's attitudes and not a mere description of his overt behavior.... The recollections describe a *modus vivendi* rather than a *modus operandi*. The characteristic outlook rather than the characteristic behavior is portrayed. (p.66)

Although behavioral response may sometimes be elicited or implied, it is the basic attitude which comes out most clearly. As an example: It may become evident that the client views the world as a hostile place, but he may characteristically react in countless ways to this *Weltbild*. He may retreat. He may use safeguarding devices ("defense mechanisms") to cope. He may become compulsive, relying upon ritual and a feeling of omnipotence. He may become hypochondriacal. He may become a "tower of strength" or contrariwise, may become dependent on a person or group he sees as "strong" (p. 66).

It is noteworthy that Mosak considered seemingly innocuous or trivial incidents in ERs more significant than "dramatic" or traumatic incidents "since the retention of the [dramatic] incident is at least partially determined externally" (p. 69), while innocuous memories are likely determined by the individual's needs and goals. He considered memories more significant the earlier they were, generally setting an

arbitrary limit at age eight. This is because later memories are more subject to lability according to one's present mood.

Papanek (1972) indicated, considering the clinical use of ERs, that the events related in ERs were not to be construed as causing present behavior, but rather, the ERs served as

hints; they help to understand the guiding fiction, they indicate the movement towards a goal and what obstacles have to be overcome. (p. 170)

Returning in conclusion to psychotherapy, we may summarize: The uses of early recollections are (a) to help the therapist understand the patient's life style, (b) to help the patient understand his own life style, and thereby (c) to open for the patient the possibility of choosing more healthy behavior and gaining the courage to try out new, socially and individually more useful attitudes. (p. 176)

Clinical reports (Dreikurs, 1952) indicate that ERs change as an individual's attitudes change in therapy.

The patient either (a) produces new memories, (b) "forgets" some of the old memories, (c) furnishes the same memory but divested of the original emotional tone, or (d) recasts the original memories with additions and omissions so that while the incident remains the same, the message it provides the patient is different. (Mosak, 1958/1977, p. 70)

"Does the recollection of first memories change?" asked Saul, et al. (1956, p. 321), and they answered, "In our clinical experience this seems to be synonymous with the question of how much any personality changes in its most basic and conscious motivations." Ekstein (1976), in an n=1 study, demonstrated experimentally that ERs changed as a result of counseling. Ackerknecht (1976) found in her work a "great sensitivity of ERs in reflecting even temporary attitudinal changes" (p. 53).

*Summary of Introduction and Literature Review*

Birth order effects are interesting and probably valid; style of life is a useful construct; ERs are worthwhile diagnostic devices; and yet, so far as I can ascertain, no previous research has attempted to use ERs to investigate the effects of birth order on life style attitudes and concerns. This is precisely what the present research sets out to do.

## CHAPTER II

### STATEMENT OF THE PROBLEM

#### *Predicting Birth Order Effects*

The present research, then, attempts to test a theoretically plausible, but until now untested, prediction about birth order effects in ERs. It tests whether ERs show evidence of the life style convictions attributed to persons in each birth order by Adlerian theory.

#### *Training Judges*

A first problem was to determine whether judges could be trained to score the ERs for the themes which were predicted to be salient for each birth order group, and whether suitable inter-judge reliability could be achieved. There were some precedents in the literature. At least six researchers had already succeeded in demonstrating good inter-judge reliability in scoring ERs:

Ferguson (1964) had three prominent Adlerians each collect ERs and write life style summaries based on them. They then tried to match one another's diagnostic summaries to the ER records. In terms of accuracy of matching ERs to the life style summaries based on them, the inter-judge reliability was highly significant for all three clinicians,  $p < .002$ . She then assigned six Freudian psychoanalysts, two Adlerians, and two eclectics the task of matching ten sets of ERs to ten life style

summaries which other Adlerians had prepared. Three of the Freudians "found the task incomprehensible" (p. 409). The other seven judges attempted 14 sets of matchings, and all but one were done significantly better than chance,  $p < .01$ .

Gushurst (1971) collected ERs from seventy-five subjects and gave them to three independent interpreters whom he trained to use an interpretative manual he devised. He then trained three independent judges to match sets of ten resultant interpretations on the basis of similarity in meaning. The ensuing inter-judge reliability was significant far beyond  $p < .0007$ . Different pairs of judges achieved agreements of  $r = .91, .82,$  and  $.78$ .

Altman (1973) devised an Early Recollections Rating Scale on which raters scored ERs for nine bi-polar attributes, such as withdrawn-gregarious, passive-active, etc. He obtained inter-rater reliabilities ranging from  $r = .56$  to  $.79$ , all significant beyond the  $p < .001$  level of confidence.

Roth (1977) collected one hundred earliest childhood recollections from fifth and sixth grade males. These were read, analyzed, and classified by two judges and by himself. He trained each judge independently to use a standardized manual to classify the ERs. The three of them achieved interjudge agreements of  $r = 86.7, 90.7,$  and  $98.7$ , all  $p < .001$ .

Colker (Note 1) used Gushurst's guidelines to interpret sixty ERs of twenty drug addicts and two non-drug abusers. He achieved near-



perfect agreement between three sets of two judges each, who independently paired ERs with the interpretations of those ERs,  $p < .0005$ .

Silverman (Note 2) had two judges score TAT stories for life style themes, using the same scoring sheet as in the present study. The two judges achieved an overall interjudge reliability of  $r = .89$ ,  $p < .0001$ .

### *The Experimental Hypotheses*

In the present study, if interjudge reliability is successfully demonstrated, then the principal problems can be investigated. These are, firstly, whether there really are birth order effects in the themes or attitudes which appear in the ERs. Are we actually dealing with five differing populations, or not? The second principal problem is whether the attitudes which subjects of different birth orders express in their ERs do indeed correspond to those predicted by Adlerian theory.

Ten themes, drawn from Adlerian theory, have been named and defined for the purposes of this study. For each theme or attitude, it is hypothesized that subjects of a certain birth order will exhibit it more than will other subjects. Thus are derived the following eleven hypotheses:

1. Firstborns exhibit conservatism in their ERs more than others do.
2. Firstborns exhibit responsibility and leadership in their ERs more than others do.

3. Second borns exhibit competitiveness in their ERs more than others do.
4. Second borns exhibit rebelliousness in their ERs more than others do.
5. Second borns exhibit overambition in their ERs more than others do.
6. Last borns exhibit specialness in their ERs more than others do.
7. Last borns exhibit dependency in their ERs more than others do.
8. Only children exhibit dependency in their ERs more than others do.
9. Only children exhibit self-centeredness in their ERs more than others do.
10. Only children exhibit manipulateness in their ERs more than others do.
11. Middle children exhibit fairness in their ERs more than others do.

A secondary question is also raised in the course of this investigation: How do the members of the various birth order groups view themselves in terms of the above traits or attitudes? Do their self-ratings show birth order effects? If so, do these effects correspond to the Adlerian predictions? Finally, do their self-ratings correspond to the way the judges rated them based on their ERs? No predictions are made about the self-ratings.

## CHAPTER III

### METHOD

#### *Subjects*

##### *Selection of Subjects*

The subjects were college undergraduates recruited from those taking Psychology 101 at Loyola University of Chicago. Volunteers filled out a "screening form" (see Appendix A) and an "informed consent form" (see Appendix B), which were distributed in class by the professor. Volunteers were asked to list on the "screening form" all their siblings, both dead and alive, as well as their siblings' and their own ages. They were also asked to include any adopted siblings, cousins, foster siblings, etc. who may have lived with the subject in the manner of a sibling.

These "screening forms" were turned over to a third party, a female social worker who was otherwise uninvolved in this project, for sorting into the five birth order groups. For the purpose of defining the members of each birth order, some idioms or restraints were laid down, as follows: (1) A ten-year gap between adjacent siblings was deemed to create a new and distinct sibship. As it turned out, two of the "onlies" had siblings twelve years older than they were. These were the only cases in which this rule had to be applied. (2) A gap of

from six to ten years between the subject and either an older or younger sibling eliminated the subject from consideration. (3) Firstborns were defined as those with no older sibling but with one or more younger siblings. (4) Second borns were defined as all those with one and only one older sibling. (5) Only children were defined as those with no siblings. (7) Middle children were defined as those with only one older sibling and only one younger sibling. In every case deceased, stillborn, and quasi-siblings (live-in cousins, foster siblings, etc.) were to be counted as siblings for purposes of establishing birth order; as it happened, none of the subjects reported any of these as the next older or next younger sibling.

The social worker wrote the names and telephone numbers of the prospective subjects on cards without any birth order information. She then assigned a random number to each subject and wrote it on the card. She delivered the cards to the experimenter in two piles--one each semester during which the interviews were conducted. Thus the interviewer-experimenter was blind as to the birth order of the subjects as he interviewed them. Of course, once in a while the early recollections would give a hint as to a subject's birth order, but there was no conversation about it between the subject and the interviewer.

The first ten in each birth order category who were selected by the social worker and who kept appointments with the investigator were used as subjects in the experiment. The fifty subjects included twenty-eight females and twenty-two males. Among the middle children

there were six males and four females. The other groups each contained six females and four males. Their ages were as follows: thirty-two eighteen-year-olds, eight nineteen-year-olds, seven twenty-year-olds, one twenty-one (an only), one twenty-two (a second), and one twenty-eight (a lastborn).

### *Instructions to the Subjects*

After being cordially greeted by the experimenter and thanked for their participation, the volunteers were instructed as follows:

The subject of this experiment is early recollections. I want you to tell me some incidents from your early childhood, preferably before six years old but definitely before eight. What I have in mind is a specific, one-time event, which you can picture in your mind's eye, not just conditions that existed over a period of time. Tell me how old you were when it happened. Please speak slowly enough for me to write it down.

If the students came up with a report instead of a recollection, that is if they described ongoing conditions instead of single events, they were told:

That sounds like something that happened over and over again, or like the way things used to be. Could you please think of a one-time event, something that you can remember happening once?

After they told their recollection they were asked:

Now let's pretend this is a movie or a television show, and let's stop the action at the most vivid, the most memorable frame. Describe the most vivid moment in the recollection.

Finally, unless it was already clearly manifest, they were asked, "Tell me how you were feeling then, at that moment." The responses were written down verbatim by the interviewer.

After telling the first ER, the volunteers were thanked, then informed that they were to give a total of six ERs. My experience and that of other clinicians has shown that it is usually no problem to collect six to eight or ten ERs. All of these fifty subjects produced their six ERs. Interviews lasted from twenty to forty-five minutes.

These instructions were fairly similar to the ones used by Ferguson (1964), Gushurst (1971), and Colker (1980).

Before the students were dismissed, they were also requested to fill out a self-rating form (see Appendix C). This form included the ten life style themes together with their phenomenological definitions, as follows:

1. CONSERVATISM. I respect law, order, and power. I believe that the best ways are the present or the old ways. Rebels, law-breakers, and upstarts deserve punishment. The powers that be and the established morality should be respected and obeyed.
2. COMPETITIVENESS. I am eager to catch up with and surpass other people. I feel like I am in a race.
3. FAIRNESS. I am sensitive to fairness and justice. I often feel cheated or unfairly deprived. It is important to me that people get their just deserts, no more and no less.
4. MANIPULATIVENESS. I tend to put other people into my service by charming them, by pleasing them, or by cajoling them.

5. SPECIALNESS. I feel either (a) that I have an important mission in life or am destined for greatness, or (b) that I am especially flawed, less capable than others, and in need of support.
6. SELF-CENTEREDNESS. I fail to take the feelings of other people into consideration. I feel that my point of view is the only valid one. I feel of greater value than other people.
7. DEPENDENCY. I consider it perfectly normal and right that other people should do things for me, protect me, and attend to me.
8. REBELLIOUSNESS. I think that things are not the way they should be. I refuse to accept the status quo. I want to challenge and change the established order.
9. RESPONSIBILITY and LEADERSHIP. I should do my duty. I have the right, ability, and the duty to help, guide, and protect other people. I believe I should be in charge.
10. OVERAMBITION. I set very high goals for myself, which are hard to achieve. In the face of such lofty goals I either (a) overexert myself, or (b) give up and cease trying.

For each attitude they were asked to rate themselves on a five-point Likert-type scale. The ratings were as follows:

1. No! I never feel like this..
2. Mostly I disagree but I sometimes feel this way.
3. Sometimes yes, sometimes no, 50/50.

4. Mostly I agree. Yes, most of the time.
5. Yes! These are my feelings exactly. And how! Right on!

### *Procedure*

#### *Judges*

Two judges scored the ERs. Neither of them had read any books or had any training in Adlerian psychology or birth order effects. One was a male in his early thirties, a high school graduate, and a retail salesman. The other was a male in his middle forties, a college graduate (in Business Administration), and a small manufacturer. The former was paid; the latter was not. They were aware that the project dealt with birth order and ERs, but did not know the hypotheses.

#### *Materials and Method of Scoring*

The three hundred ERs were allocated random code numbers and put into numerical order. The judges therefore had to score each one on its own merits and could not think in terms of sequencing or development within subjects from one ER to another. Each ER was typed on a separate 13x21 cm card which included (1) the code number of the ER, (2) the age at which the subject said the event took place, and (3) the ER, verbatim, divided into the spontaneous recollection, the response to "Describe the most vivid moment," and the response to "How were you feeling?"

I instructed each judge to read the ER, then to try to imagine he was the person who had recounted that recollection. "Ask yourself," I



said, "If I were the person who had this recollection, what kind of a person would I be? What issues would be important to me? How would I see the world and other people? How would I consider myself?"

They were given scoring sheets (see Appendix D) which described the same ten themes or attitudes as did the self-rating forms. The judges were instructed to pay attention to the subjective "I-statements" rather than to the headings. For example: "Conservatism" was to mean, "I respect law, order, and power, etc."; the judge was not to define conservatism in his own way.

Each judge was first to decide whether the ER showed evidence of any of the ten life style themes; then, if so, he was to check the saliency or intensity of the attitude on this five-point scale:

1. There is NO EVIDENCE of any interest in this theme. It is completely irrelevant.
2. There seems to be SOME INTEREST in this theme, but it does not seem of much importance or is not made explicit.
3. The theme is DEFINITELY PRESENT and made apparent in a clearly definable way.
4. The theme is REPEATED more than once, or is DOMINANT in the story.
5. The writer seems to make this theme the WHOLE POINT of the story.

The judges were trained as follows: I myself scored fifteen or twenty older ERs from my own files. Each judge was given these same

ERs to score by himself, and as he scored them, we discussed the reasoning and compared our scores, until I was satisfied he understood the nature of the task. Each judge then worked independently of the other and of me.

## CHAPTER IV

### RESULTS

#### *Total and Mean Scores*

Scores were calculated for each theme on each ER by assigning a value of 0 to "no evidence," 2 to "some interest," 3 to "definitely present," 4 to "repeated, dominant," and 5 to "whole point" on the scaling. It was felt that the psychological distance between "no evidence" and "some interest" was greater than that between any two other adjacent levels; for that reason the scoring started from 0 to 2 instead of 0 to 1. The scores reported by both judges were totaled and averaged for each theme across all six ERs for each subject.

Tables 1, 2, 3, 4, and 5 show the total scores and the mean scores (using the combined data from both judges) for each subject, in groups according to birth order. The average score for each subject on each life style theme was generally less than 1 because the great majority of scores were "0." In other words, most of the ERs demonstrated "NO EVIDENCE of any interest" in most of the themes. The themes which were predicted to be highest for each birth order group are underlined.

Table 1

Scores for Each FIRSTBORN Subject on Each Theme

Predicted Themes Underlined (Scores from Both Judges Are Combined)

	S U B J E C T S										
<u>THEMES</u>	<u>274</u>	<u>277</u>	<u>291</u>	<u>372</u>	<u>415</u>	<u>468</u>	<u>812</u>	<u>844</u>	<u>928</u>	<u>954</u>	<u>Firsts</u>
<u>Conservatism:</u>											
Total	7	0	6	14	27	2	4	11	12	11	94
Mean	0.58	0.00	0.50	1.17	2.25	0.17	0.33	0.92	1.00	0.92	0.78
<u>Competitiveness:</u>											
Total	0	0	0	2	0	0	0	9	0	0	11
Mean	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.75	0.00	0.00	0.09
<u>Fairness:</u>											
Total	4	0	0	10	20	0	10	23	0	2	69
Mean	0.33	0.00	0.00	0.83	1.67	0.00	0.83	1.92	0.00	0.17	0.58
<u>Manipulativeness:</u>											
Total	5	0	0	3	10	0	0	5	0	0	23
Mean	0.42	0.00	0.00	0.25	0.83	0.00	0.00	0.42	0.00	0.00	0.19
<u>Specialness:</u>											
Total	0	3	0	0	5	9	4	10	2	0	33
Mean	0.00	0.25	0.00	0.00	0.42	0.75	0.33	0.83	0.17	0.00	0.28
<u>Self-Centeredness:</u>											
Total	0	0	0	0	3	12	0	0	0	0	15
Mean	0.00	0.00	0.00	0.00	0.25	1.00	0.00	0.00	0.00	0.00	0.13
<u>Dependency:</u>											
Total	0	0	0	0	0	0	6	0	5	5	16
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.42	0.42	0.13
<u>Rebelliousness:</u>											
Total	0	0	0	0	0	0	0	0	0	0	0
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Responsibility &amp; Leadership:</u>											
Total	2	11	7	16	3	20	7	5	19	2	92
Mean	0.17	0.92	0.58	1.33	0.25	1.67	0.58	0.42	1.58	0.17	0.77
<u>Overambition:</u>											
Total	0	0	0	0	2	0	0	11	0	0	13
Mean	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.92	0.00	0.00	0.11

Table 2

Scores for Each SECOND BORN Subject on Each Theme

Predicted Themes Underlined (Scores from Both Judges Are Combined)

	S U B J E C T S										
<u>THEMES</u>	<u>100</u>	<u>210</u>	<u>269</u>	<u>287</u>	<u>288</u>	<u>345</u>	<u>545</u>	<u>550</u>	<u>556</u>	<u>711</u>	<u>Seconds</u>
Conservatism:											
Total	0	0	10	6	0	0	8	0	2	0	26
Mean	0.00	0.00	0.83	0.50	0.00	0.00	0.67	0.00	0.17	0.00	0.22
<u>Competitiveness:</u>											
Total	19	0	14	10	4	5	4	7	0	0	63
Mean	1.58	0.00	1.17	0.83	0.33	0.42	0.33	0.58	0.00	0.00	0.53
Fairness:											
Total	7	0	5	6	10	2	12	6	0	12	60
Mean	0.58	0.00	0.42	0.50	0.83	0.17	1.00	0.50	0.00	1.00	0.50
Manipulativeness:											
Total	0	0	0	0	0	0	0	0	2	0	2
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.02
Specialness:											
Total	9	8	0	5	0	2	2	5	0	3	34
Mean	0.75	0.67	0.00	0.42	0.00	0.17	0.17	0.42	0.00	0.25	0.28
Self-Centeredness:											
Total	2	4	7	0	6	3	0	7	2	17	48
Mean	0.17	0.33	0.58	0.00	0.50	0.25	0.00	0.58	0.17	1.42	0.40
Dependency:											
Total	0	0	4	2	7	3	0	4	0	0	20
Mean	0.00	0.00	0.33	0.17	0.58	0.25	0.00	0.33	0.00	0.00	0.17
<u>Rebelliousness:</u>											
Total	4	9	9	0	12	0	5	0	17	0	56
Mean	0.33	0.75	0.75	0.00	1.00	0.00	0.42	0.00	1.42	0.00	0.47
Responsibility & Leadership:											
Total	0	0	0	0	0	0	5	7	0	0	12
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.58	0.00	0.00	0.10
<u>Overambition:</u>											
Total	19	6	0	11	0	15	10	8	11	4	84
Mean	1.58	0.50	0.00	0.92	0.00	1.25	0.83	0.67	0.92	0.33	0.70

Table 3

Scores from Each LAST BORN Subject on Each Theme

Predicted Themes Underlined (Scores from Both Judges Are Combined)

	S U B J E C T S										
<u>THEMES</u>	<u>286</u>	<u>303</u>	<u>350</u>	<u>363</u>	<u>424</u>	<u>809</u>	<u>838</u>	<u>878</u>	<u>903</u>	<u>906</u>	<u>Lasts</u>
Conservatism:											
Total	0	0	0	7	0	2	0	0	0	9	18
Mean	0.00	0.00	0.00	0.58	0.00	0.17	0.00	0.00	0.00	0.75	0.15
Competitiveness:											
Total	0	5	5	0	4	9	0	0	10	0	33
Mean	0.00	0.42	0.42	0.00	0.33	0.75	0.00	0.00	0.83	0.00	0.28
Fairness:											
Total	16	7	4	0	11	7	0	0	3	5	53
Mean	1.33	0.58	0.33	0.00	0.92	0.58	0.00	0.00	0.25	0.42	0.44
Manipulativeness:											
Total	0	0	2	0	0	0	0	6	3	2	13
Mean	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.50	0.25	0.17	0.11
<u>Specialness:</u>											
Total	10	11	24	13	12	12	6	14	6	14	122
Mean	0.83	0.92	2.00	1.08	1.00	1.00	0.50	1.17	0.50	1.17	1.02
Self-Centeredness:											
Total	0	9	2	0	8	0	2	2	2	0	25
Mean	0.00	0.75	0.17	0.00	0.67	0.00	0.17	0.17	0.17	0.00	0.21
<u>Dependency:</u>											
Total	10	8	10	9	2	5	17	11	15	8	95
Mean	0.83	0.67	0.83	0.75	0.17	0.42	1.42	0.92	1.25	0.67	0.79
Rebelliousness:											
Total	0	0	0	0	0	0	0	0	0	0	0
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Responsibility & Leadership:											
Total	7	0	0	0	0	0	2	7	0	0	16
Mean	0.58	0.00	0.00	0.00	0.00	0.00	0.17	0.58	0.00	0.00	0.13
Overambition:											
Total	10	0	0	0	0	0	0	0	0	0	10
Mean	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08

Table 4

Scores for Each ONLY CHILD Subject on Each Theme  
Predicted Themes Underlined (Scores from Both Judges Are Combined)

	<u>S U B J E C T S</u>										
<u>THEMES</u>	<u>230</u>	<u>311</u>	<u>527</u>	<u>615</u>	<u>687</u>	<u>714</u>	<u>732</u>	<u>805</u>	<u>853</u>	<u>897</u>	<u>Onlies</u>
<u>Conservatism:</u>											
Total	0	6	0	0	0	4	4	0	4	0	18
Mean	0.00	0.50	0.00	0.00	0.00	0.33	0.33	0.00	0.33	0.00	0.15
<u>Competitiveness:</u>											
Total	0	0	0	6	0	0	0	0	0	0	6
Mean	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.05
<u>Fairness:</u>											
Total	0	7	2	6	0	3	0	0	5	0	23
Mean	0.00	0.58	0.17	0.50	0.00	0.25	0.00	0.00	0.42	0.00	0.19
<u>Manipulativeness:</u>											
Total	16	0	11	6	6	12	11	0	8	21	91
Mean	1.33	0.00	0.92	0.50	0.50	1.00	0.92	0.00	0.67	1.75	0.76
<u>Specialness:</u>											
Total	0	2	8	0	3	0	5	3	0	8	29
Mean	0.00	0.17	0.67	0.00	0.25	0.00	0.42	0.50	0.00	0.67	0.24
<u>Self-Centeredness:</u>											
Total	3	15	11	16	13	5	5	7	16	11	102
Mean	0.25	1.25	0.92	1.33	1.08	0.42	0.42	0.58	1.33	0.92	0.85
<u>Dependency:</u>											
Total	12	4	12	0	2	9	19	17	12	8	95
Mean	1.00	0.33	1.00	0.00	0.17	0.75	1.58	1.42	1.00	0.67	0.79
<u>Rebelliousness:</u>											
Total	0	4	0	3	0	0	0	0	4	9	20
Mean	0.00	0.33	0.00	0.25	0.00	0.00	0.00	0.00	0.33	0.75	0.17
<u>Responsibility &amp; Leadership:</u>											
Total	0	0	0	0	0	2	0	0	0	0	2
Mean	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.02
<u>Overambition:</u>											
Total	0	0	0	0	2	3	0	0	0	0	5
Mean	0.00	0.00	0.00	0.00	0.17	0.25	0.00	0.00	0.00	0.00	0.04

Table 5

Scores for Each MIDDLE CHILD Subject on Each Theme  
Predicted Theme Underlined (Scores from Both Judges Are Combined)

THEMES	S U B J E C T S										<u>Middles</u>
	<u>101</u>	<u>129</u>	<u>195</u>	<u>336</u>	<u>375</u>	<u>400</u>	<u>432</u>	<u>758</u>	<u>852</u>	<u>896</u>	
Conservatism:											
Total	0	0	0	3	0	3	7	0	3	0	16
Mean	0.00	0.00	0.00	0.25	0.00	0.25	0.58	0.00	0.25	0.00	0.13
Competitiveness:											
Total	0	0	9	0	0	0	0	0	0	3	12
Mean	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.10
<u>Fairness:</u>											
Total	15	30	17	14	27	19	24	38	29	12	225
Mean	1.25	2.50	1.42	1.17	2.25	1.58	2.00	3.17	2.42	1.00	1.88
Manipulativeness:											
Total	0	2	0	0	0	0	0	0	0	0	2
Mean	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Specialness:											
Total	7	2	0	0	0	7	4	0	9	2	31
Mean	0.58	0.17	0.00	0.00	0.00	0.58	0.33	0.00	0.75	0.17	0.26
Self-Centeredness:											
Total	2	5	5	8	2	2	0	0	9	0	33
Mean	0.17	0.42	0.42	0.67	0.17	0.17	0.00	0.00	0.75	0.00	0.28
Dependency:											
Total	5	0	0	2	0	7	0	9	2	2	27
Mean	0.42	0.00	0.00	0.17	0.00	0.58	0.00	0.75	0.17	0.17	0.23
Rebelliousness:											
Total	0	2	3	0	0	0	0	2	0	0	0
Mean	0.00	0.17	0.25	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
Responsibility & Leadership:											
Total	3	0	0	0	5	2	0	6	0	0	16
Mean	0.25	0.00	0.00	0.00	0.42	0.17	0.00	0.50	0.00	0.00	0.13
Overambition:											
Total	3	0	0	3	11	0	0	0	0	0	17
Mean	0.25	0.00	0.00	0.25	0.92	0.00	0.00	0.00	0.00	0.00	0.14



It can be seen *prima facie* that the tendency was for the highest scores to correspond to the predicted themes for each birth order. There was also an overall tendency for "rebelliousness" to be scored low and for "fairness" to be scored high. In fact, second borns scored "fairness" higher than one of their predicted scores, namely "rebelliousness." Table 6 summarizes these data.

### *Inter-Judge Reliability*

The judges' scores were correlated by calculating a Pearson  $r$  for each of the ten themes on all sixty ERs produced by each of the five birth order groups, and on the three hundred ERs produced by all fifty subjects taken together. This would have yielded fifty inter-judge reliability coefficients (ten themes x five birth orders.) However seven of the  $r$ 's could not be calculated because one or both judges had no scores in that cell. Of the remaining forty-three  $r$ 's--which ranged from .32 to .91-- only four failed to reach the  $p < .05$  level of significance; thirty-seven were significant at the  $p < .001$  level; two were significant at the  $p < .01$  level.

The inter-judge correlation of all subjects on all themes was  $r = .675$ ,  $p < .001$ . The inter-judge correlations for the *predicted* effects (such as conservatism for firstborns, competitiveness for seconds, etc.) ranged from  $r = .58$  to .91, with a mean of  $r = .72$ , all significant beyond  $p < .001$ .

Table 7 shows all the fifty inter-judge reliability coefficients, plus the correlations for each theme x all subjects, and each birth order group x all themes.

Table 6

## Scores for All Birth Order Groups on Each Theme

Predicted High Scores Underlined (Scores from Both Judges Are Combined)

THEMES	First- borns	Second- borns	Last- born	Only Child	Middle Child	All Subjects
Conservatism:						
Total	<u>94</u>	26	18	18	16	172
Mean	<u>0.78</u>	0.22	0.15	0.15	0.13	0.29
Competitiveness:						
Total	11	<u>63</u>	33	6	12	125
Mean	0.09	<u>0.53</u>	0.28	0.05	0.10	0.21
Fairness:						
Total	69	60	53	23	<u>225</u>	430
Mean	0.58	0.50	0.44	0.19	<u>1.88</u>	0.72
Manipulativeness:						
Total	23	2	13	<u>91</u>	2	131
Mean	0.19	0.02	0.11	<u>0.76</u>	0.02	0.22
Specialness:						
Total	33	34	<u>122</u>	29	31	249
Mean	0.28	0.28	<u>1.02</u>	0.24	0.26	0.42
Self-Centeredness:						
Total	15	48	25	<u>102</u>	33	223
Mean	0.13	0.40	0.21	<u>0.85</u>	0.28	0.37
Dependency:						
Total	16	20	<u>95</u>	<u>95</u>	27	253
Mean	0.13	0.17	<u>0.79</u>	<u>0.79</u>	0.23	0.42
Rebelliousness:						
Total	0	<u>56</u>	0	20	0	76
Mean	0.00	<u>0.47</u>	0.00	0.17	0.00	0.13
Responsibility & Leadership:						
Total	<u>92</u>	12	16	2	16	138
Mean	<u>0.77</u>	0.10	0.13	0.02	0.13	0.23
Overambition:						
Total	13	<u>84</u>	10	5	17	129
Mean	0.11	<u>0.70</u>	0.08	0.04	0.14	0.22

Table 7

INTER-JUDGE RELIABILITYPearson  $r$ 's for the Recollections of Each Birth Order Group on Each Theme ■

## B I R T H O R D E R G R O U P S

T H E M E S	First- borns	Second- borns	Last- born	Only Children	Middle Children	All Subjects by Theme
Conservatism:	0.7921	0.8238	0.9257	0.1169 #	0.2430 #	0.7121
Competitiveness:	0.7360	0.5833	0.6713	1.0000	0.7963	0.6632
Fairness:	0.8111	0.6071	0.6223	0.4391	0.7323	0.7396
Manipulativeness:	0.6446	**	0.5792	0.9133	**	0.8224
Specialness:	0.0838 #	0.3201 *	0.7586	0.6966	0.4501	0.5809
Self-Centeredness:	0.7587	0.4433	0.0569 #	0.6924	0.6406	0.5648
Dependency:	0.6122	0.4293	0.7081	0.5793	0.5020	0.6295
Rebelliousness:	**	0.8599	**	0.3707 *	**	0.6899
Responsibility & Leadership:	0.6677	0.6205	0.9012	**	0.6804	0.7134
Overambition:	0.7064	0.6253	1.0000	**	0.7087	0.6579
All Subjects by Birth Order Group	0.6826	0.5939	0.7040	0.6752	0.7229	0.6749

NOTES:■ Unless indicated otherwise, all correlations are significant at the  $p < .001$  level.\* Significant at the  $p < .01$  level# Not significant at the  $p < .05$  level.

### *Overall Significance of Birth Order*

Before considering the tenability of the initial hypotheses about the effects of birth order on attitudinal themes, it was first considered important to test for the overall significance of birth order. That is, did birth order really make a difference in which themes the subjects exhibited? If not, any further statistical analysis would have been unwarranted. One or another effect may seem to be significant, yet still be accidental, because there were so many individual effects to be tested.

A multivariate analysis of variance was computed, which compared the factor levels of birth order on all themes simultaneously. The results indicated that there was a significant overall effect of birth order:  $F(40, 138) = 9.83, p < .0001$ . Independent analyses for specific birth order effects were therefore justified.

### *Birth Order Effects*

All birth order hypotheses were supported. Table 8 shows the scores (mean of the two judges for the ten subjects) for each birth order group on each theme. An analysis of variance was performed for each theme to test for the effect of birth order. As table 8 shows,  $F(4,45)$  ranged from 3.67 to 15.77, all highly significant,  $p < .01$ . The percentage of variance ( $100r^2$ ) accounted for ranged from 24.59% to 58.37%, with a mean of 42.4%.

Table 8

## Results of ANOVA Tests for Effects of Birth Order

Using Mean Theme Scores per Person and 2 Judges for Each Birth Order on Each Theme

THEMES	B I R T H O R D E R G R O U P S					$F(4,45)^*$	% of Variance accounted for ( $100r^2$ )
	First- borns	Second- borns	Last- born	Only Child	Middle Child		
Conservatism:	0.78	0.22	0.15	0.15	0.13	5.80	34.03
Competitiveness:	0.09	0.53	0.28	0.05	0.10	3.67	24.59
Fairness:	0.58	0.50	0.44	0.19	1.88	15.77	58.37
Manipulativeness:	0.19	0.02	0.11	0.76	0.02	11.57	50.69
Specialness:	0.28	0.28	1.02	0.24	0.26	11.31	50.12
Self-Centeredness:	0.13	0.40	0.21	0.85	0.28	6.88	37.96
Dependency:	0.13	0.17	0.79	0.79	0.23	10.31	47.83
Rebelliousness:	0.00	0.47	0.00	0.17	0.00	5.96	34.64
Responsibility & Leadership:	0.77	0.10	0.13	0.02	0.13	9.65	46.17
Overambition:	0.11	0.70	0.08	0.04	0.14	7.38	39.61

\* Result of balanced analysis of variance  $F(4,45)$  for significance for the effects of birth order on the scores that were assigned for each theme. Birth order effects were found to be significant for each of the themes at  $p < .01$ .

Multivariate analysis of variance  $F(40,138) = 9.83$  demonstrated the existence of an overall birth order effect on all themes at  $p < .0001$ .

Table 9 shows the results of planned comparison contrasts which were calculated in order to test the predicted differences among birth orders for each theme. In each case the weighting was placed on the birth order group which was hypothesized to exhibit that theme. The specific predicted birth order effects were supported,  $t(1,45)=3.443$  to  $7.754$ ,  $p<.001$ .

### *Self-Ratings*

#### *Mean Scores*

The self-ratings which the 50 subjects completed were subjected to some of the same statistical analyses as were the judges' ratings. The total and mean self-rating scores for each birth order group and for all subjects combined are shown in table 10.

#### *Birth Order Effects in Self-Ratings*

As table 11 shows, Analyses of variance for birth order effects in the self-rating scores of each birth order group for each theme found no significant effects.

Table 12 shows the results of planned comparison contrasts testing the differences among self-rating scores for each theme. These self-rating scores failed to show the same birth order effects which the judges' scores showed. Three of the effects (those predicted for only children: manipulativeness, self-centeredness, and dependency), however, reached near-significant levels of  $p<.062$ ,  $.051$ , and  $.053$ .

Table 9

Planned Comparison Contrasts for Predicted Effects

Results of ANOVA A Priori Contrasts to Test Hypotheses  
About Birth Order Effects

WEIGHTS					T H E M E S	POOLED VARIANCE ESTIMATE	
<u>Birth Order Group</u>						<u>t(1,45)</u>	<u>p</u>
F	S	L	O	M			
4	-1	-1	-1	-1	Conservatism	4.786	0.000
-1	4	-1	-1	-1	Competitiveness	3.443	0.001
-1	-1	-1	-1	4	Fairness	7.754	0.000
-1	-1	-1	4	-1	Manipulativeness	6.612	0.000
-1	-1	4	-1	-1	Specialness	6.717	0.000
-1	-1	-1	4	-1	Self-Centeredness	4.911	0.000
-2	-2	3	3	-2	Dependency	6.393	0.000
-1	4	-1	-1	-1	Rebelliousness	4.579	0.000
4	-1	-1	-1	-1	Responsibility & Leadership	6.136	0.000
-1	4	-1	-1	-1	Overambition	5.385	0.000

Table 10

## Self-Rating Scores for All Birth Order Groups on Each Theme

Predicted High Scores Underlined

THEMES	First- borns	Second- borns	Last- born	Only Child	Middle Child	All Subjects
Conservatism:						
Total	<u>35</u>	33	35	38	36	177
Mean	<u>3.50</u>	3.30	3.50	3.80	3.60	3.54
Competitiveness:						
Total	28	<u>26</u>	34	26	35	149
Mean	2.80	<u>2.60</u>	3.40	2.60	3.50	2.98
Fairness:						
Total	28	35	38	34	<u>31</u>	166
Mean	2.80	3.50	3.80	3.40	<u>3.10</u>	3.32
Manipulativeness:						
Total	30	17	19	<u>21</u>	26	113
Mean	3.00	1.70	1.90	<u>2.10</u>	2.60	2.26
Specialness:						
Total	26	28	<u>35</u>	30	34	153
Mean	2.60	2.80	<u>3.50</u>	3.00	3.40	3.06
Self-Centeredness:						
Total	22	8	15	<u>11</u>	15	71
Mean	2.20	0.80	1.50	<u>1.10</u>	1.50	1.42
Dependency:						
Total	25	17	<u>17</u>	<u>23</u>	17	99
Mean	2.50	1.70	<u>1.70</u>	<u>2.30</u>	1.70	1.98
Rebelliousness:						
Total	26	<u>29</u>	26	21	28	130
Mean	2.60	<u>2.90</u>	2.60	2.10	2.80	2.60
Responsibility & Leadership:						
Total	<u>39</u>	34	35	30	34	172
Mean	<u>3.90</u>	3.40	3.50	3.00	3.40	3.44
Overambition:						
Total	31	<u>32</u>	36	30	37	166
Mean	3.10	<u>3.20</u>	3.60	3.00	3.70	3.32



Table 11

ANOVAs for Birth Order Effects in Self-Ratings  
Using the Self-Rating Scores Across 10 Subjects on Each Theme

THEMES	B I R T H O R D E R G R O U P S					$F(4,45)^*$	% of Variance accounted for (100r <sup>2</sup> )
	First- borns	Second- borns	Last- born	Only Child	Middle Child		
Conservatism:	3.50	3.30	3.50	3.80	3.60	0.45	3.84
Competitiveness:	2.80	2.60	3.40	2.60	3.50	1.28	10.24
Fairness:	2.80	3.50	3.80	3.40	3.10	1.05	8.54
Manipulativeness:	3.00	1.70	1.90	2.10	2.60	1.51	11.84
Specialness:	2.60	2.80	3.50	3.00	3.40	0.91	7.51
Self-Centeredness:	2.20	0.80	1.50	1.10	1.50	1.46	11.52
Dependency:	2.50	1.70	1.70	2.30	1.70	1.02	8.33
Rebelliousness:	2.60	2.90	2.60	2.10	2.80	0.85	7.04
Responsibility & Leadership:	3.90	3.40	3.50	3.00	3.40	0.96	7.88
Overambition:	3.10	3.20	3.60	3.00	3.70	0.60	5.05

\* Result of balanced analysis of variance  $F(4,45)$  for significance for the effects of birth order on self-rating scores assigned by subjects on each theme. Birth order effects were found not to be significant at  $p < .05$ .

Multivariate analysis of variance  $F(40,128) = 0.69$  did not show the existence of an overall birth order effect that was significant at  $p < .05$ .

Planned Comparison Contrasts for Predicted Effects in Self-RatingsResults of ANOVA A Priori Contrasts to Test Hypotheses

About Birth Order Effects

WEIGHTS						POOLED VARIANCE ESTIMATE	
Birth Order Group						All Subjects	
-----						-----	
F	S	L	O	M	T H E M E S	t(1,45)	p
4	-1	-1	-1	-1	Conservatism	-0.989	0.328
-1	4	-1	-1	-1	Competitiveness	1.503	0.140
-1	-1	-1	-1	4	Fairness	1.434	0.158
-1	-1	-1	4	-1	Manipulativeness	1.912	0.062
-1	-1	4	-1	-1	Specialness	-0.167	0.868
-1	-1	-1	4	-1	Self-Centeredness	2.005	0.051
-2	-2	3	3	-2	Dependency	1.989	0.053
-1	4	-1	-1	-1	Rebelliousness	0.669	0.507
4	-1	-1	-1	-1	Responsibility & Leadership	-0.137	0.892
-1	4	-1	-1	-1	Overambition	1.055	0.297

### *Comparison to Judges Ratings*

The results of the self-ratings were compared with the results of the judges' ratings the same way the two judges' ratings had been compared, that is, with fifty Pearson *rs*. The results may be seen in table 13. Of the fifty correlations between the judges' scores and the self-rating scores, only four were significant: "manipulativeness" for first-borns, "competitiveness" for second borns, "conservatism" for last-borns, and "fairness" for all subjects.

Table 13

Correlations of Combined Judges' Scores to Self-RatingsPearson  $r$ 's for Each Birth Order Group on Each Theme

T H E M E S	B I R T H O R D E R G R O U P S					
	First-borns	Second-borns	Last-born	Only Children	Middle Children	All Subjects by Theme
Conservatism:	-0.1249	0.3663	0.6588 $\square$	0.4297	0.1328	0.0474
Competitiveness:	-0.3272	0.7465 *	0.0290	0.2500	0.3564	0.2433
Fairness:	0.4793	0.3756	-0.1770	0.1814	-0.0832	0.2896 $\square$
Manipulativeness:	-0.7041 $\square$	**	0.2889	-0.2714	**	0.0214
Specialness:	0.3802	-0.1852	0.0539	0.0552	0.6119	0.1188
Self-Centeredness:	-0.2660	-0.1393	-0.2665	-0.5138	-0.1056	0.0010
Dependency:	-0.0754	0.2174	0.1938	0.1940	-0.6140	0.1951
Rebelliousness:	**	-0.0364	**	-0.2195	**	0.0011
Responsibility & Leadership:	-0.4448	-0.2731	0.4576	**	0.6098	-0.0844
Overambition:	0.2384	0.4431	0.0000	**	-0.0301	0.2341
All Subjects by Birth Order Group	0.1709	0.2161 $\square$	0.0912	-0.1827	0.1789	0.1009 $\square$

## NOTES:

 $\square$  Significant at the  $p < .05$  level.\* Significant at the  $p < .01$  level.

\*\* Not calculated because one or both judges did not submit scores for that cell.

## CHAPTER V

### DISCUSSION

"Have you lost something?"

"Yes, my key."

"Did you lose it here?"

"No, a bit further down there."

"Why are you looking for it here, then?"

"Because there is much more light here."

(Chérel, 1957, p. 52)

Previous investigators have usually looked for birth order effects where there was "more light," that is, where actions or test scores could be easily quantified. Perhaps the reason this research showed more positive birth order effects than many others is because it set out to relate these effects to Adler's "style of life" rather than to actions. In Adlerian theory, thinking, feeling, and acting derive from intentions, goals, and convictions, that is to say, from the style of life. Therefore these variations in the life style attitudes of different birth orders would be expected to affect overt behavior, but only indirectly.

As long as actions are the focus of study, birth order differences may become obscured, because the same action can be motivated by quite different life style attitudes and goals. The question is, for what purpose or due to what world-view does the person act? X may become a policeman due to a respect for law and order; Y may do the same as a way to fulfill a mission; Z in order to manipulate other people. Thus

the same behavior may be undertaken for reasons related to the style of life of a firstborn, a lastborn, or an only child. The analysis of early recollections helps uncover the style of life, but to analyze actions the observer must also consider the exogenous situation and the individual's typical *modus operandi*. There is nothing in this research to indicate how these attitudes become operative in any behavior other than in recounting ERs.

This seems to be the first experimental study which has used ERs to test the principal Adlerian hypotheses about the relation of life style convictions to birth order. The results were supportive in every case. This research indicates that firstborns have learned to be sensitive or favorable to conservatism and responsibility/leadership; second borns to competitiveness, rebelliousness, and overambition; middle children to fairness; lastborns to specialness and dependency; and only children to manipulateness, self-centeredness, and dependency. At least this seems to be the case when these themes are defined as they are in the scoring forms used in this study, that is, as certain attitudes about oneself, one's relations with others, the nature of the environment, and ethical postures (life style convictions).

It was also demonstrated that two judges could reliably rate ERs for Adlerian attitudes.

The self-ratings failed to show birth order effects or to correlate with the judges' ratings, although only children's scores reached near-significance for the themes hypothesized for them. Adler believed that

a person's style of life was "hidden" (not understood, unconscious), that it "keeps fast hold of him without his understanding it, without his being able to give any account of it" (1933/1964, pp. 26-27). It is not surprising, therefore, that the students in this experiment rated themselves quite differently than did the judges. Undoubtedly pride, self-esteem, social acceptability, wishful thinking, shame, and personal mythology were also factors in the self-ratings.

The theory which this research supports can be useful in clinical work, in vocational counseling, in personality assessment, and in personality research. Just to know the psychological birth order of patients or subjects can suggest some probabilities about their personalities and about the particular convictions and attitudes under which they operate. Presented with a compulsive client, for example, a therapist might investigate what psychological function this compulsiveness subserves. In the case of a firstborn it may be an exaggerated demonstration of responsibility. ("I must see that everything goes perfectly.") In a second born it may show overambition. ("Anything worth doing at all is worth overdoing.") A lastborn may use compulsiveness as a "side show" to keep looking busy while depending on others to take care of the real business of life. ("I would help with the housework, but I'm too busy making sure all the pictures are hanging perfectly straight.") In an only child it might subserve self-centeredness. ("I'll do it my way.") In a middle child over-scrupulosity about fairness may come across as compulsivity. ("Let me weigh the slices a fourth time to be sure they are even.")

Another finding, which might bear some theory-based research, emerged from a perusal of the mean scores per theme (table 6) "Fairness" was the highest scored theme. "Rebelliousness" was the lowest. Indeed, second borns scored "fairness" as high as their predicted "rebelliousness," while three of the birth order groups did not score "rebelliousness" at all. This finding might say something about the attitudes of the undergraduates at Loyola, which is a Jesuit Catholic University. It may also be a commentary on the Zeitgeist in a period which has seen conservatism grow to become a leading ideology in the United States. On the other hand, it may be that "fairness" is just easier, and "rebelliousness" harder, to express and to score. Finally, it may indicate something about the sensitivity of the judges, both of whom would be defined here as only children and both of whom were of upper middle class background.

Birth order positions, seen as ideal types, can be fruitful and expedient concepts for the clinician or the student of personality. In clinical situations, which do not require rigid operational definitions or experimental controls, these constructs can be particularly useful. In individual cases we can recognize "firstborn" types in persons who were not born first, and "second born" types in persons who were not born second. For example, the second born could assume the role of a first-born by surpassing and overcoming the first, or an only boy among several sisters could develop the style of life of a pampered only child. Clinicians or students of personality may also recognize mixed types.



As Mosak says (1977b, p. 118), "It is the *psychological* position of the child within the family which is crucial. This can only be understood for each subject idiographically."

One advantage to thinking in terms of birth order is that it impels us to look at an individual in his social context. The growth of the family therapy field attests to the increasing acceptance of the contextual viewpoint in clinical practice\*. Personality theorists are dealing more and more with the interaction of person and situation rather than with traditional approaches (Bevan, 1968; Dunne & L'Abate, 1978). Birth order effects are compatible with this approach, for they are primarily interpersonal, not intrapsychic events. Consequently birth order types are more analogous to Fromm's (1973) orientations, "receptive, exploitative, etc.," than to Freud's (1925c) types, "anal, oral, etc.," or to Jung's (1933) types, "introversive-rational-feeling, extraversive-irrational-intuiting, etc."

A second advantage to thinking in terms of birth order is that it provides a set of hints of "what goes with what" in personality. If a person seems conservative, we may guess that he is responsible. If she is competitive, we may guess that she is overambitious and rebellious, and so forth. Any valid typology can serve this purpose. The psychoanalytic construct of the "anal" character type, for instance, alerts us to the possible correlation of the traits of orderliness, parsi-

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\*See such journals as *The American Journal of Family Therapy*, *Family Process*, *The Journal of Marriage and Family Counseling*, and *The Family*.

mony, and obstinacy, together with the defense of intellectualization, albeit we may reject the "libidinal cathexis" etiology of this character syndrome.

Further research would be needed to adjudge whether the traits, themes, attitudes, or behaviors which the various personality theories describe as clustering in a typological syndrome do indeed show a cluster effect. Specifically, further statistical analyses would be needed to show whether the life style themes described in this study form the clusters which the theory seems to predict.

One wonders whether the overall salience of the themes--"fairness" being high while "rebelliousness" and "competitiveness" are low--would be the same with (1) different judges, or (2) different subjects. It would be instructive to use, for example, non-college educated working class subjects, and perhaps admittedly non-conformist or radical-minded judges. Different judges and different subjects may also adduce different birth order effects, although one would then be hard pressed to explain this theoretically.

Assuming the birth order effects on style of life as uncovered in this paper are valid, one should be able to demonstrate these effects using operational definitions of life style other than ER themes. Perhaps some objective or projective tests which purport to measure these same attitudes could be used in further research.

## SUMMARY

This paper elucidates the significance of "style of life," of early recollections (ERs), and of birth order. It then reports on an experiment which tested some hypotheses about birth order effects, derived from the theorizing of Alfred Adler. An analysis of three hundred ERs was used to demonstrate the effect of birth order on life style attitudes.

Adlerians emphasize the importance of a person's early social atmosphere for the formation of personality. As children strive for a place in the family, the fact of their birth order is a salient stimulus or a given, to which they must make a psychological response. While there are countless other given conditions to which the developing personality must respond (such as constitution, parental demands, family atmosphere and values, and various real and fictive rôle models), Adler held that birth order is highly significant. This is because competition and accommodation among siblings and parents leads to characteristic attitudes and traits, that is to a "style of life." This fecund but imperfectly defined concept of Adler's refers to how people see life, to their most basic belief systems, their perceptual biases, and their fictional goals--those inadequately understood goals in which they seem to believe and which seem to guide their movements through life.

The ERs which people bring to mind, whether they refer to actual events or figments, are selected in order to remind them about their attitudinal system and to guide them in coping with life. In this paper

ERs are treated as apperceptive test devices with which to analyse life style attitudes or themes. The experimental hypotheses were that the saliency of these life style themes would be effected by the birth order of the recollectors in theoretically predictable ways.

Fifty college students, ten in each of five birth order groups, each recounted six ERs to the researcher. The latter defined, in phenomenological, subjective terms, ten life style themes which Adlerian theory hypothesized would be divergently important to the five birth order groups. Two naive judges scored the three hundred ERs for the presence and prepotency of these themes. Adequate inter-judge reliabilities ( $r=.72$ ,  $p<.001$ ) were achieved. Highly significant results ( $p<.01$ ) sustained the Adlerian hypotheses about birth order effects on style of life. Firstborns were the highest scorers in conservatism and responsibility/leadership; second borns in competitiveness, rebelliousness, and overambition; middle children in fairness; lastborns in specialness and dependency; and only children in manipulativenness and dependency.

The subjects also scored themselves on the same ten themes. No correlations of birth order with self-scorings had been hypthesized, and none were found, although some approached significance.

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## APPENDIX A

SCREENING FORM

(Reduced in Size)

SCREENING FORM

Silverman

for psychological experiment

Volunteers who are accepted for this experiment will talk to a Doctoral Candidate in Clinical Psychology for approximately a half hour. They will be asked to discuss some events of their early lives. The conversation will be private and may be tape recorded. The researcher agrees to protect the anonymity and confidentiality of the student volunteers.

If you wish to volunteer, please fill out this questionnaire and sign it.

INSTRUCTIONS

List the name, age, and relationship of each of your brothers and sisters, in descending order from oldest to youngest. Include yourself and your age and sex.

Include any brothers or sisters who have died. State their age when they died and how old they would be now.

Include any adopted brothers or sisters and any other children (such as cousins, step-brothers, or foster sisters) who lived in the same household with you while you were a child under eight. State the relationship and how old you were while that person lived with you.

NAME	PRESENT AGE	RELATIONSHIP (e.g. brother, sister, adopted sister, step-brother, cousin)	age at death or your age when then lived with you.
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Your signature \_\_\_\_\_ telephone(s) \_\_\_\_\_

Date \_\_\_\_\_

## APPENDIX B

## INFORMED CONSENT FORM

(Reduced in Size)

## INFORMED CONSENT for Silverman's psychological experiment

Volunteers who are accepted for this experiment will talk to a Doctoral Candidate in Clinical Psychology (the researcher) for approximately a half hour. They will be asked to discuss some events of their early lives. The conversation will be private and may be tape recorded. The researcher will not request any embarrassing material. The purpose of the experiment is to test some hypotheses regarding the relation of early recollections to birth order.

Any tape recordings will be erased as soon as the pertinent material (without any volunteers' names) has been transcribed by the researcher.

The "screening forms" will be seen by only two persons: (1) an assistant who lives far from Loyola and has no relation to Loyola. She will select which volunteers will be interviewed. Thereafter she will give up the forms and will have no record of them, and (2) the researcher, who will use them for this experiment and then destroy them. No names will appear in the research. There will be no further contact between the volunteers and the researcher unless a volunteer initiates the contact. Any volunteer who requests it of the researcher will have the right to see the research when it is finished. Any volunteer who begins an interview may terminate it before finishing.

I consent to volunteer \_\_\_\_\_ date \_\_\_\_\_

Witnessed \_\_\_\_\_



## APPENDIX C

Subject number _____	1 No! I never feel like this.	2 Mostly I disagree, but I some- times feel this way.	3 Sometimes yes, sometimes no, 50/50.	4 Mostly I agree. Yes, most of the time.	5 Yes! These are my feelings exactly. And how! Right on!
CONSERVATION. I respect law, order, and power. I believe that the best ways are the present or the old ways. Rebels, law-breakers, and upstarts deserve punishment. The powers that be and the established morality should be respected and obeyed.			C O N S E R V A T I S M		
COMPETITIVENESS. I am eager to catch up with and surpass other people. I feel like I am in a race.			C O M P E T I T I V E N E S S		
FAIRNESS. I am sensitive to fairness and justice. I often feel cheated or unfairly deprived. It is important to me that people get their just deserts, no more and no less.			F A I R N E S S		
MANIPULATIVENESS. I tend to put other people into my service by charming them, by pleasing them, or by cajoling them.			M A N I P U L A T I V E N E S S		
SPECIALNESS. I feel either (a) that I have an important mission in life or am destined for greatness, or (b) that I am especially flawed, less capable than others, and in need of support.			S P E C I A L N E S S		
SELF-CENTEREDNESS. I fail to take the feelings of other people into consideration. I feel that my point of view is the only valid one. I feel of greater value than other people.			S E L F - C E N T E R E D N E S S		
DEPENDENCY. I consider it perfectly normal and right that other people should do things for me, protect me, and attend to me.			D E P E N D E N C Y		
REBELLIOUSNESS. I think that things are not the way they should be. I refuse to accept the status quo. I want to challenge and change the established order.			R E B E L L I O U S N E S S		
RESPONSIBILITY and LEADERSHIP. I should do my duty. I have the right, ability, and the duty to help, guide, and protect other people. I believe I should be in charge.			R E S P O N S I B I L I T Y and L E A D E R S H I P		
OVERAMBITIOUSNESS. I set very high goals for myself, which are hard to achieve. In the face of such lofty goals I either (a) overexert myself, or (b) give up and cease trying.			O V E R A M B I T I O N		

SELF-RATING FORM  
(Reduced in Size)

## APPENDIX D

<p>Story number _____</p> <p>Reader _____</p>	<p>1</p> <p>There is NO EVIDENCE of any interest in this theme. It is completely irrelevant.</p>	<p>2</p> <p>There seems to be SOME INTEREST in this theme, but it does not seem of much importance or is not made explicit.</p>	<p>3</p> <p>The theme is DEFINITELY PRESENT and made apparent in a clearly definable way.</p>	<p>4</p> <p>The theme is REPEATED more than once, or is DOMINANT in the story.</p>	<p>5</p> <p>The writer seems to make this theme the WHOLE POINT of the story.</p>
<p>CONSERVATISM. I respect law, order, and power. I believe that the best ways are the present or the old ways. Rebels, law-breakers, and upstarts deserve punishment. The powers that be and the established morality should be respected and obeyed.</p>		C	O N S E R V A T I S M	I S M	
<p>COMPETITIVENESS. I am eager to catch up with and surpass other people. I feel like I am in a race.</p>		C	O M P E T I T I V E N E S S	S	
<p>FAIRNESS. I am sensitive to fairness and justice. I often feel cheated or unfairly deprived. It is important to me that people get their just deserts, no more and no less.</p>			F A I R N E S S	S	
<p>MANIPULATIVENESS. I tend to put other people into my service by charming them, by pleasing them, or by cajoling them.</p>		M	A N I P U L A T I V E N E S S	S	
<p>SPECIALNESS. I feel either (a) that I have an important mission in life or am destined for greatness, or (b) that I am especially flawed, less capable than others, and in need of support.</p>			S P E C I A L N E S S	S	
<p>SELF-CENTEREDNESS. I fail to take the feelings of other people into consideration. I feel that my point of view is the only valid one. I feel of greater value than other people.</p>		S	E L F - C E N T E R E D N E S S	S	
<p>DEPENDENCY. I consider it perfectly normal and right that other people should do things for me, protect me, and attend to me.</p>			D E P E N D E N C Y	Y	
<p>REBELLIOUSNESS. I think that things are not the way they should be. I refuse to accept the status quo. I want to challenge and change the established order.</p>		R	E B E L L I O U S N E S S	S	
<p>RESPONSIBILITY and LEADERSHIP. I should do my duty. I have the right, ability, and the duty to help, guide, and protect other people. I believe I should be in charge.</p>		R	E S P O N S I B I L I T Y	a n d	L E A D E R S H I P
<p>OVERAMBITION. I set very high goals for myself, which are hard to achieve. In the face of such lofty goals I either (a) overexert myself, or (b) give up and cease trying.</p>			O V E R A M B I T I O N	I O N	

(Reduced in Size)  
 SCORING SHEET

A P P R O V A L    S H E E T

The dissertation submitted by Norman N Silverman has been read and approved by the following Committee:

Dr. James E. Johnson, Chairman  
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Rev. Michael J. O'Brien  
Professor of Psychology, Loyola

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

11-30-82

Date

  
\_\_\_\_\_  
Director's Signature