

# Two Interpretations of Birth Order Position

*John B. Neld  
Donald E. Ward  
Thomas Edgar*

One of the key concepts of Adlerian theory is that of birth order as it relates to family constellation. A great deal of the research on the Adlerian model has attempted to examine the relationships between birth order and various psychological and behavioral attributes. These numerous investigations have not resulted in consistent findings. The frequency of contradictory results in the literature could be interpreted as indicating that birth order is an inappropriate or insufficient organizing concept for human behavior. It is evident that those committed to the Adlerian model must respond to the challenge presented by these contradictory findings.

The vast amount of research on birth order is an accurate reflection of the importance of this concept to the model. In fact, the contradictory research findings may lead to the conclusion that the use of birth order as a psychological variable is a mistaken assumption of many practicing Adlerians. In order to resolve the dilemma and meet the challenge presented by the contradictory research findings, a careful analysis of the literature was undertaken to ascertain whether or not a different perspective could lead to a redefinition of the foundation on which the concept of birth order rests.

Two psychological variables which researchers have frequently investigated as correlates to birth order are intellectual attainment and antisocial behavior. Ansbacher and Ansbacher quote Adler as saying, "In my experience the greatest proportion of problem children are the oldest; and close behind is the youngest" (Ansbacher and Ansbacher,

*John B. Neld, EdD, is Assistant Professor of Psychology and Counselor Education at Kansas State College of Pittsburg.*

*Donald E. Ward, PhD, is an Assistant Professor of Psychology and Counselor Education and a counselor at the College Counseling Center at Kansas State College of Pittsburg.*

*Thomas Edgar, EdD, is a Professor of Counselor Education at Idaho State University in Pocatello, Idaho. He is serving as the Treasurer of the American Society of Adlerian Psychology.*

1956, p. 379). An apparent contradiction of this statement by Adler is the conclusion drawn by Pepper that, from her observations, the middle child is the most likely to be discouraged and thus become a problem child (Nikelly, 1976, p. 53). Adler himself states that the middle child is characterized as being rebellious and envious, but he goes on to say that the middle child is usually better adjusted than the older or younger sibling (Hall and Lindzey, 1967, p. 125). However, Adler does not define what he means by rebellious. Rosen (1961) and Rosenow and Whyte (1931) found firstborns to be over represented among problem children. However Sletto (1934) and Altus (1966b) found the firstborn to be under represented among problem children. Sletto found an inverse relationship between oldest children and delinquency (1934). A study by Toman (1969) indicated that middle children are under represented both at child guidance clinics and in the ranks of the adjudicated juvenile delinquent. It is evident that the literature is inconsistent in terms of assumptions and findings on the relationship between birth order and antisocial behavior in children.

The same kinds of inconsistencies have been found in theoretical and experimental works attempting to relate birth order to intellectual attainment. Firstborns have been consistently characterized as demonstrating a higher degree of intellectual attainment than latter borns (Altus, 1966a; Breland, 1973). However, in a recent review of birth order effects, Schooler (1972) questioned the existence of birth order effects in both personality attributes and intellectual attainment. The primary factors upon which he based his position were that differences between firstborns and latter borns have not been consistently found and that the differences that have been found could be explained by the changing cultural trend toward smaller average family size. However, Breland (1973) found that, even with controls for population trends, firstborns are still over represented among National Merit Finalists. In another study Nichols (1966) found a preponderance of firstborns among 1,618 finalists in the National Merit Scholarship Competition.

A number of researchers have found that ordinal family position shows a relationship to college matriculation (Altus, 1966a; Capra and Dittes, 1962; Dankin, 1964; Hall and Barger, 1964; Schlacter, 1963; Warren, 1966). Bradley (1968) listed a number of psychological attributes in an attempt to explain this preponderance of firstborns on college campuses found by these researchers. Bradley also found that this tendency toward over representation of firstborns on measures of intellectual attainment begins at least as early as grade school. The firstborn children included in his study of Minneapolis grade schools tended to excel in academics in excess of their proportion of the total school population and also had the most extensive vocabularies.

Although the literature appears to be contradictory as it pertains to birth order and antisocial behavior and intellectual attainment, Dreikurs (1968) attempted to explain the inconsistencies as adjustments to dethronement within the family patterns. Pepper (Nikelly, 1976), emphasizing the concept of birth order as a dynamic explanation, states that child development is not so much a result of factors which converge on the child, but the result of the child's own interpretation of these factors. What seems to be more important than chronological birth order is the interpretation the person makes of birth circumstances. Thus, at times authors seem to be referring to psychological definitions of birth order, while the researcher is investigating chronological ordinal birth position.

## **Method**

Subjects included 54 delinquent boys from a state youth training center and 44 honor roll boys from the high school in the community at which the training center was located. The delinquent sample consisted of 15 to 18 year old males who had been adjudicated juvenile delinquent by the courts and who had been placed in the residential institution. The honor roll sample included 15 to 18 year old males who had maintained a composite grade point average of 3.5 or above on a 4.0 system at the local high school. It was decided a priority not to include subjects from single child families. Only one delinquent male met this criterion and was not included in the study, no honor roll subject was an only child, and all other males who met the respective requirements in each setting were included in the study.

The instrument used in the study was adapted from the "Family Constellation" section of the "Guide for Initial Interviews Establishing the Life Style" developed by Dreikurs (1967, p. 138). This adapted questionnaire contains questions concerning the family constellation and the description and rating of siblings and self on a ten trait adjective check list. Each subject completed the questionnaire, and chronological birth order positions were determined from the subject's listing of siblings and self. Because the birth order data were neither interval in nature nor normally distributed, nonparametric statistical procedures were applied.

## **Results**

The results of a chi square analysis of the combined chronological birth order data indicated that either delinquency or honor roll categorization or both were not independent of chronological birth order, chi square (2) = 9.16,  $p < .01$ . Scheffe's method of multiple contrasts for nonparametric data was applied to the data and indicated that, while honor roll categorization was independent of chronological

birth order, delinquency categorization was not. Middle born delinquent males were found to be over represented in the sample, chi square (2) = 24,  $p < .01$ .

The second major emphasis of the study was an investigation of the relationship between honor roll and delinquent categorization and psychological birth order. A method for determining psychological birth order from the ratings of siblings and self on the ten trait adjective check list from the adapted instrument was devised. The definitions of psychological oldest-, middle-, and youngest-born were:

1. The psychologically oldest child is the sibling who tends to be rule-, authority-, and past-oriented. These children are protective of others and tend to be responsible for others. They may be conservative, bossy, nosy, high achievers, dependable, ambitious, and have a dislike for change.

2. The psychologically second or middle child is very active, rebellious, subtle, liberally oriented, and a martyr. They are often sensitive to injustices, unfairness, feelings of being slighted, and having no place in the group.

3. The psychologically youngest child is the sibling who tends to be spoiled and is used to having his/her own way. These children often are manipulative and may cry, have temper tantrums in order to obtain their objectives or get special service. Often the psychologically youngest children are charmers.

Two post master's degree students, trained in both Adlerian theory and lifestyle assessment, were trained by the principal investigator to use this method to identify the psychological birth order of each subject. The two raters had no knowledge of the honor roll or delinquent categorization of the subjects. Their initial independent ratings of the 98 subjects resulted in 79 agreements, 38 of the 44 honor roll subjects,  $r = .93$ ,  $p < .01$ , and 44 of 54 delinquent subjects,  $r = .84$ ,  $p < .01$ . The raters were then asked again to rate independently each of the subjects on which there had not been initial agreement. This second rating resulted in total agreement by both raters on all 98 subjects. A chi square analysis was then applied to the combined psychological birth order data. As with the chronological birth order data, it was found that either delinquency or honor roll categorization or both were not independent of psychological birth order, chi square (2) = 31.54,  $p < .01$ . The Scheffe method of multiple contrasts for non-parametric data indicated that there were specific differences between psychological middle born and the other two birth order positions among delinquents and between psychological oldest borns and the other two birth order positions among honor roll students. Psychological middle born were over represented among delinquents,

chi square (2) = 52.15,  $p < .01$ , and psychological oldest borns were over represented among honor roll students, chi square (2) = 13.33,  $p < .01$ .

Table 1 presents a visual display of the results of the chi square analyses for both chronological and psychological definitions of birth order for both delinquent and honor roll subjects. An inspection of Table 1 reveals that, although the data did follow Adlerian theoretical assumptions for the delinquents, using chronological birth order definitions, they did not for honor roll subjects. Both delinquent and honor roll subjects' data followed Adlerian theoretical assumptions, using psychological definitions.

### Discussion and Implications

An interpretation of the results of the data from this study seems to support Adlerian theoretical assumptions, when psychological definitions of birth order are used. The psychological firstborn was over represented on the intellectual attainment variable, honor roll categorization, whereas the psychological middle born was over represented on the antisocial behavior variable, adjudicated juvenile delinquent categorization. However, the use of a chronological interpretation of birth order yielded inconsistent findings. Although a chronological interpretation of birth order effects would suggest that chronological firstborns would be over represented on the intellectual attainment variable, firstborns in the study were not found to be over represented on the honor roll. Nonetheless, the chronological middle born was over represented on the antisocial variable, adjudicated

**Table 1**  
**Comparison of Chronological and Psychological**  
**Birth Order in Relation to Delinquent**  
**and Honor Roll Categorization**

	Chronological				Psychological			
	Observed		Expected		Observed		Expected	
	n	%	n	%	n	%	n	%
Delinquent								
Oldest	10	18.5	18	33.33	6	11.1	18	33.33
Middle	35	64.8*	18	33.33	43	79.6*	18	33.33
Youngest	9	16.7	18	33.33	5	9.3	18	33.33
Honor Roll								
Oldest	17	38.6	14.7	33.33	26	59.0*	14.7	33.33
Middle	17	38.6	14.7	33.33	10	22.7	14.7	33.33
Youngest	10	22.8	14.7	33.33	8	18.2	14.7	33.33

\*  $p < .01$

juvenile delinquent categorization, which is consistent with a chronological interpretation of the effects of birth order.

An important methodological contribution of this study was the use of two distinct psychological attributes, intellectual attainment and antisocial behavior, as dependent variables in the same quasi-experimental design. Most of the studies in the literature investigated only one dependent variable as a correlate of birth order. Thus, it has been difficult to identify the source of the inconsistent and sometimes contradictory findings, because the inconsistency could have been due to methodological differences, differences in experimenter operational definitions of birth order, or empirically valid inconsistencies in the theory.

Another important methodological contribution resulted from the consistent findings of the investigation of the relationship between birth order, using psychological definitions, and both psychological attribute variables, intellectual attainment and antisocial behavior. These findings lend support to the hypothesis that the concept of psychological birth order is a valid concept within Adlerian theory.

It was demonstrated that the use of psychological definitions of birth order is a parsimonious, reliable, and valid procedure for translating Adlerian theory into both research and practice. Graduate students were trained in the accurate and reliable use of the procedure with a minimum of time and difficulty.

Thus, the results of the study indicate that the reason for the inconsistency and contradiction in the literature on the effects of birth order on psychological variables has not been an inadequacy in the Adlerian theory nor in methodological differences among researchers. Rather, the confusion has resulted from the differences in the definitions of birth order which have been used.

Adler himself found contradictions in his observations of human behavior as it relates to birth order (Hall and Lindzey, 1967, p. 125). It is ironic that, although the major reason for Adler's break from Freud was his rejection of a biological and deterministic interpretation of human behavior and personality development, some Adlerians have continued to use a deterministic and biological factor such as chronological birth order as a major construct in their work. It is apparent that some people have not recognized the importance of Adler's statement that a person must be trained to use birth order as a psychological tool, because it is not a simple chronological definition of birth order that is important.

We have often drawn attention to the fact that before we can judge a human being we must know the situation in which he grew up. An important moment is the position which a child occupied in his family constellation. Frequently we can catalogue human beings according to this view point after we have gained sufficient expertness, and can recognize whether an individual is a firstborn, an only child, the youngest child, or the like. (Adler, 1949, p. 149)

The results of the study indicate that the Adlerian construct of birth order is a valid and reliable organizing concept for understanding human behavior. It was also found that the use of a psychological interpretation of birth order is perhaps the most viable and valid way in which to operationalize the concept into practical terms. This finding is consistent with Adler's own work and recommendations and provides an explanation and solution for the past difficulties in using birth order as a research and therapeutic tool.

## References

- Adler, A. *Understanding human nature*. New York: Perma Books, 1949.
- Altus, W.D. Birth order and achievement. *Science*, 1966a, 152, 1177-1184.
- Altus, W.D. Birth order and its sequelae. *Science*, 1966b, 151, 44-49.
- Ansbacher, H.L., & Ansbacher, R.R. *The individual psychology of Alfred Adler*. New York: Harper & Row, 1956.
- Bradley, R.W. Birth order and school related behavior. *Psychological Bulletin*, 1968, 70, 45-51.
- Breland, H.M. Birth order effects: A reply to Schooler. *Psychological Bulletin*, 1973, 80, 210-212.
- Capra, P.C., & Dittes, J.E. Birth order as a selective factor among volunteer subjects. *Journal of Abnormal and Social Psychology*, 1962, 64, 302.
- Dankin, D.G. *An introduction to KSU students*. Unpublished report, Kansas State University, Student Counseling Center, September 1964.
- Dreikurs, R. *Psychology in the classroom* (2nd ed.). New York: Harper & Row, 1968.
- Hall, E., & Barger, B. Background data and expected activities of entering lower division students. *Mental Health Project Bulletin*, 1964, 7, University of Florida.
- Hall, C.S., & Lindzey, G. *Theories of personality* (2nd ed.). New York: John Wiley & Sons, Inc., 1967.

- Nichols, R.C. The origin and development of talent. *National Merit Scholarship Reports*, 1966, 2, No. 10, Evanston, Illinois: National Merit Scholarship Corporation. (Mimeo)
- Nikelly, A.G. *Techniques for behavior change*. Springfield, Illinois: Charles C. Thomas, 1976.
- Rosen, B.C. Family structure and achievement motivation. *American Sociological Review*, August 1961, 30, 574-584.
- Rosenow, C., & Whyte, A.H. The ordinal position of problem children. *American Journal of Orthopsychiatry*, 1931, 1, 430-444.
- Schlachter, S. Birth order, eminence, and higher education. *American Sociological Review*, October 1963, 2, 757-768.
- Schooler, C. Birth order effects: Not here, not now! *Psychological Bulletin*, 1972, 78, 161-175.
- Sletto, R.F. Sibling position and juvenile delinquency. *American Journal of Sociology*, 1934, 39, 687-699.
- Toman, W. *Family constellations*. New York: Springer, 1969.
- Warren, J.R. Birth order and social behavior. *Psychological Bulletin*, 1966, 65, 38-49.