

BIRTH ORDER AND ILLNESS BEHAVIOR

HUBERT WEINER¹

Northern Illinois University

While birth-order effects have been investigated with respect to a large variety of behaviors (4, 7), one of the neglected areas has been that of health. Adler's observation that the oldest born tends to be conservative and to respect authority (2, pp. 378-379) suggests that such a person would be concerned about his health, act on this concern, and utilize institutional health care services where such would be available. The youngest born, on the other hand, as an individual who tends to be more ambitious and faster, also less conventional, (1, pp. 150-151), would have less "time" to be concerned about his health and be less inclined to visit a health care service.

Regarding the first born, two studies by Schachter lend support to our interpretation of Adler's observations. (a) When exposed to experimental electric shock, first born were less willing or able to withstand pain than the later born (5, pp. 47-49). (b) They were more likely to be conformers than the later born (5, pp. 86-88). These findings suggest that, to the degree to which the older born would react to illness as they do to pain, they would be motivated to alleviate illness and, as conformers, would turn to the provided channels.

Behavior related to concern about one's health has been termed by Mechanic and Volkart, "illness behavior," defined as "the ways in which given symptoms may be differentially perceived, evaluated, and acted (or not acted) upon by different kinds of persons" (3, p. 87).

Spilken and Jacobs (6) in a study of illness behavior which also considered birth order, among other factors, found that among college students requesting medical care, 61% were oldest born, while among those not requesting such care, only 50% were oldest born. But the difference was not statistically significant.

The purpose of the present study was to investigate further the relationship of birth order to illness behavior by comparing oldest born and youngest born.

METHOD

From the 4,262 freshmen entering Northern Illinois University in 1968 a 10% sample was selected at random, with a final sample of 408 students, 155 males and 253 females. Their records were reviewed for the years 1968 to 1972. By the

¹For reprints write to author, Northern Illinois University, University Health Service, DeKalb, Illinois 60115.

end of the fourth year, precisely one-half of the sample, 204 students, were still enrolled at the University.

Birth order information was obtained from the medical record which the students completed before entering school. Data on illness behavior for the four successive years at the University were obtained from the University Health Service records. This service is open 24 hours, seven days a week, while school is in session. Every student registered for more than six semester-hours is entitled to its care without charge beyond the fixed fee assessed at registration.

The number of visits of each student per school year was tabulated, excluding visits for non-medical reasons, e.g. clearance for student teaching, or to the mental health unit of the service.

RESULTS

Although among the male students the birth-order effect on illness behavior was somewhat greater than among the females, the results are shown, on account of the small number of subjects in each category, for both sexes combined. The Chi square test of relationship was used.

Table 1 shows that consistently each year more Health Service visits were made by the oldest than by the youngest born students, although none of these differences are statistically significant.

TABLE 1. STUDENTS MAKING ONE OR MORE HEALTH SERVICE VISITS, DURING THEIR 1ST, 2ND, 3RD AND 4TH YEAR IN COLLEGE, BY BIRTH ORDER. PERCENTAGES IN TERMS OF ALL STUDENTS OF THE SAMPLE IN EACH CATEGORY.

	.Oldest born.		Youngest born	
	N	%	N*	%
First year	78	52	37	42
Second year	57	51	27	41
Third year	58	57	25	42
Fourth year	40	48	20	42

*Chi square test of relationship found none of the differences between oldest and youngest to be significant.

DISCUSSION

One limitation of the present study is that seriousness of illness was not taken into account. Conceivably, the less serious, more common illnesses would be responded to more according to personality characteristics affected by birth order than the more serious illnesses. Some evidence supporting this position is provided by Mechanic and Volkart (3). They found that students rated higher on tendency to

adopt the sick role appeared significantly more often at the Health Service for minor illnesses such as a cold, than did those rated lower on this tendency. But regarding more serious illnesses no such significant relationship was found.

Despite our lack of differentiation of seriousness of illness and lack of consideration, on account of small number, that males showed the birth-order effect on illness behavior more strongly than female students, the general direction was consistent, from year to year, although statistically not significant. This replicates the findings of Spilken and Jacobs (6) reported above. Our interpretation is that the oldest born may be more attentive to symptoms and more inclined to seek recognized medical care. In contrast, the youngest born may either ignore symptoms, or act upon them through self-treatment or quasi-practitioners.

SUMMARY

A 10% sample of freshmen were followed through their four years in college, regarding illness behavior. It was found that oldest born, both male and female, visited the college health service consistently proportionately more often than youngest born although the differences obtained were not statistically significant. The interpretation offered is that the oldest born is more concerned about his health and responds through socially provided channels, while the youngest born is more likely to ignore symptoms or take independent action.

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