

Running Head: BIRTH ORDER

Birth Order and Its Connection to Personality,
Cognitive Development, and Achievement

name

Bowie State University

Abstract

Three research studies were analyzed to determine the link, if any, between birth order and certain characteristics of a person such as personality, cognitive development, and achievement. For the purpose of this analysis, achievement may be broadly defined as excelling professionally, academically, and/or financially. Due to the short scope of this analysis, inferences about cognitive development must be drawn from indicators such as symbolic play early in life and level of educational attainment. There is some correlation between birth order and the characteristics in question. However, it is also very likely that it is not birth order position alone that affects a person's development, but rather the circumstances surrounding each child's upbringing. These circumstances would include the quality of the parenting and home environment. It was found that the presence of birth order stereotypes may influence how prevalent those stereotypes are in reality.

Birth Order and Its Connection to Personality, Cognitive Development, and Achievement

Birth order refers to an individual's numerical position among his or her siblings such as first-born, middle-born, or last born. There are as many birth order positions as there are children within a family. For years in societies around the world people have attributed certain characteristics to people according to their birth order. For example, first-borns are often thought of as more serious, responsible, and driven. Last-borns tend to be considered the most outgoing, carefree, and creative. The possible existence of the "birth order effect" has been heavily debated by psychologists and researchers for decades. Alfred Adler is commonly thought of as one of the first psychologists to apply any importance to birth order research. Based on observations and research it has been suggested that individuals display differences in personality, cognitive development, and achievement as a result of birth order and how birth order is perceived by others.

Literature Review

Kantarevic and Mechoulam (2006) investigated the possible connection between birth order, educational attainment, and earnings. The researchers sought to discover whether or not there is a pattern of falling then rising achievement among siblings, meaning that first-borns and last-borns have an advantage over other siblings. For this study, the Panel Study of Income Dynamics (PSID) was analyzed for trends that may reveal underlying birth order effects on achievement. The PSID provided researchers the opportunity to track several different variables surrounding 31,000 families, including hourly pay or salary, family size, and years of education. The researchers found that first-borns typically complete more years of schooling than later-borns. Financial attainment

(earnings) followed a similar pattern. However, there was no evidence of any last-born advantage.

Assuming that the researchers are correct in their conclusion that a first-born advantage exists in the educational realm, it is not surprising that that advantage also affects earnings. In present day society, in most cases, education and earnings are directly related. One standout weakness of this study is lack of research on only children. It is impossible to create a complete evaluation of birth order theory without discussing all sides of the issue. It should also be noted that earnings information was only available for 36% of the original sample. That is a substantially smaller sample and therefore is less definitive.

Kowalski, Wyver, Masselos, and De Lacey (2004) investigated whether or not first-born children are more likely than later-born children to engage in high quality symbolic play. According to Piaget symbolic play is extremely significant in relation to cognitive development because it signals children's ability to form and use symbols and other mental images in their actions. Symbolic play also demonstrates some degree of initiative and creativity. The study methodology called for observing 24 children from working families, ages 17-31 months, playing in different situations, via videotapes recorded at day care centers in Sydney, Australia and surrounding areas. 14 of the 24 children were first-borns. By watching the videotapes, researchers were observing the different levels of pretend play that were present during three different playtime situations: same-age free play, mixed-aged free play with preschool-aged peers, and free play with a mixed-age dyad. Observing mixed-aged play with older children who were on average 52.8 months old was crucial to determining if the presence of an older child, such

as a sibling, might influence younger children's pretend play style and/ or frequency. The study results indicated that first-borns do "engage in symbolic play more frequently and at higher levels," especially in mixed-age groups. The researchers point to the idea that "parental involvement and interaction contribute substantially to very young children's play activity." It is suggested that first-time parents may have more time for and interest in pretend play.

The primary weakness of this study is the extremely small size of and lack of diversity in the sample group. Data on 24 children who are from essentially the same area is not enough to make any accurate generalizations about children. It would be useful to conduct another study in which children are observed at home with their families, or some other equally natural environment, since the parents have been implicated as being at least partially responsible for the development of their children. It is also uncertain whether or not a child's interaction with an older child can be equated to how a child would interact with his/her own sibling. The sibling relationship is unique and therefore difficult to replicate. In the future a longitudinal study should be completed in order to determine if the apparent firstborn advantage continues throughout life.

Pine (2005) explored the connection between vocabulary development and birth order. This study involved monitoring the vocabulary of 9 first-born, middle class English children as well as their second-born siblings. Each child's mother maintained a diary of her child's vocabulary development. In some cases, the researcher also visited the home and recorded the children's speech. Pine found that although first-borns reach the 50-word milestone earlier than second-borns, second-borns reach the 100-word milestone at approximately the same age as first-borns. While there is no significant

difference in the percentage of common nouns, second-borns did have a higher percentage of personal pronouns and “frozen phrases” within their first 50 and 100 words. Pine concluded that later-born children may exhibit some differences in their vocabulary style but ultimately the quality and range of the vocabulary is not affected by birth order.

It is unfortunate that Pine was unable to periodically record all of the children at home so that he could be sure of the context/situation connected with the speech. Telephone conversations, especially with young children, can lack relevant information and there is no way to know if the child is being coached. There is also no way to be 100% certain that the mothers did not exaggerate their children’s vocabulary. It does stand to reason that later-born children develop their vocabulary differently because they are not only interacting with the parents but also the older sibling(s). Later-born children are exposed to a different style of speech, more advanced than their own but less advanced than their parents, which helps shape their communication abilities.

Discussion

Summary and Conclusions

The common thread present in all of the research is the importance of parents to their children’s development. Parents are a child’s first source of social interaction and that interaction plays a large role in development. Therefore, if parents approach parenthood with lack of interest or stereotypical expectations then their children may be negatively affected. With that said, even though the majority of the studies examined here did detect some correlation between birth order, personality, cognitive development, and/or achievement, that correlation seems to be fairly slight. In fact, personality,

cognitive development, and achievement may have a stronger relationship than any one of them has to birth order. The issue might not be birth order alone, but the circumstances that arise as a result of being in a particular ordinal position.

Applications

Birth order research can be used for parenting, education, and career advisement. This information is useful for parents because it reinforces the value of parent-child interactions. Although birth order alone may have some slight effect on a child's development, parents can alter that for the better by making a conscious effort to care for each child as equally as possible. For some time now, educators and psychologists have known that different people have different learning styles i.e. visual learners, auditory learners, and kinesthetic learners. Birth order research may allow educators to further tailor the learning environment to best fit the personality, and therefore learning style, of each student. The relationship between birth order and occupation could potentially be very helpful when people make career decisions. While birth order can't guarantee that every firstborn would be better as a lawyer than a musician, according to the research discussed here, birth order may be able to give some insight into what careers would be the easiest fit.

Proposed Research Question

The next logical step to be pursued in research would be to investigate alterations in parenting behavior according to the number of children in the family as well as the number of years between each child's birth. It is often noted that parents are more strict in their parenting of the first child, and then they become more permissive with each child that is born into the family. In addition, older parents tend to be more permissive

than younger ones. As such, number of children in the family as well as spacing between children should have an impact on the way that the children are treated. These differential parenting behaviors might produce variable results in the children.

References

- Kantarevic, J. & Mechoulam, S. (2006). Birth order, educational attainment, and earnings: An investigation using the PSID. *Journal of Human Resources*, 41(4), 336-351.
- Kowalski, H., Wyver, S., Masselos, G., & De Lacey, P. (2004). Toddlers emerging symbolic play: A first-born advantage? *Early Child Development and Care*, 174(4), 389-400.
- Pine, J. (2005). Variation in vocabulary development as a function of birth order. *Child Development*, 66(1), 272-281.