



# BIRTH ORDER AND PERSONALITY: TESTING ASSUMPTIONS WITH INDEPENDENT SIBLINGS' REPORTS

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## INTRODUCTION

Assumptions about the effects of birth order on personality abound in popular culture, self-help books, and the scholarly literature. In one popular book, *Born to Rebel*, Frank Sulloway<sup>1</sup> proposed that firstborn children have much to gain from following the status quo and hence should be conscientious and rule-bound; laterborn children, in their unconscious inclination to obtain others' investment by distinguishing themselves, should be more agreeable and unconventional (open/intellectually curious). In within-family comparisons in which one adult reports on his/her personality and compares it directly with that of his/her siblings, firstborns do tend to be judged as "achievers" and laterborns as "rebels"<sup>2,3</sup>. However, meta-analytic reviews have suggested that birth order effects on personality do not exist<sup>4,5</sup>; they certainly do not reveal themselves when comparing children of varying birth orders who come from different families.<sup>6</sup>

Judith Rich Harris<sup>7,8</sup> has proposed that, if birth order does affect individuals' behavior, it does so only within the family context. According to Harris, tactics that may be effective at home for a child of a given birth order are not necessarily going to be effective for that child in other contexts. In fact, in one study that compared teacher reports of two siblings from the same family with parent reports of those two siblings, effects of birth order in the home context did not show up in reports of the children's behavior at school. For Harris, adult personality is a composite of inherent genetic propensities operating and adapting to experiences across a wide-range of contexts (the family of rearing being just one).

We know of no study that has directly tested Harris' theory by assessing two adult siblings who were raised in the same home, and comparing their personalities as a function of their birth order. We designed the current study with that specific objective, with the prediction (in accord with Harris' theory) that adult siblings' independent self-reports would *not* differ as a function of birth order.

## METHOD

The original sample included 22 male and 70 female undergraduates who were recruited for a study of "similarities and differences in siblings' personalities." They participated in small group sessions, and completed two personality inventories (the Big Five Inventory (BFI) and an abbreviated version of the Multidimensional Personality Questionnaire) via paper and pencil questionnaires; here we provide the results from the BFI. Participants' mean age was 21.10.

Upon completion of their questionnaires, participants provided the name and contact information of a sibling with whom they had been raised. We requested the sibling be within four years of their own age, but allowed for exceptions as necessary. Most siblings (83%) were within four years of the original participant's age; siblings' mean age was 22.23. Via email, we contacted siblings and invited them to complete an online version of the questionnaire about themselves. A total of 78 siblings (85% response rate) provided complete personality data.

The original participants also provided the same and contact information of a close same-sex friend who could serve as a "peer informant" about the original participant. Via email, we contacted friends and asked them to complete the personality inventories, but not about themselves. Instead, they provided an evaluation of the original participant's personality. A total of 79 peers (86% response rate) responded and provided complete personality data on the original participant who had nominated them.

The sibling and peer data validated the integrity of our sample in three ways (see table at right). First, as shown in the first three columns of the table, the mean scores for self, sibling, and peer reports were similar, as were the variances in each distribution of scores. In addition, internal reliability coefficients were high. Second, as would be expected from family members, self and sibling responses were moderately correlated for three of the big five personality factors. As shown in the penultimate column, siblings demonstrated familial similarity in personality. Third, peers' reports about the original participants were congruent with the original participants' self reports. As shown in the final column of the table, our peers validated what the original participants reported about themselves.

## RESULTS

Figure 1. Siblings' Self-Reported Personality as a Function of Birth Order

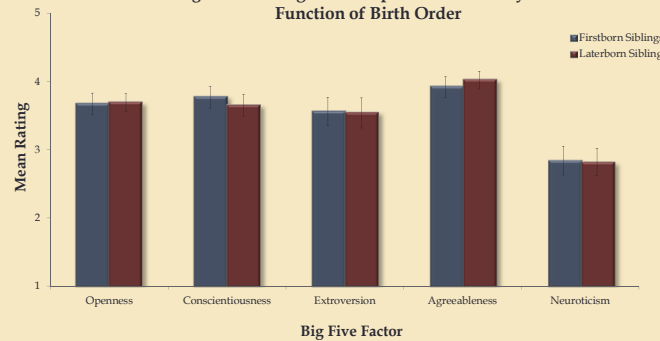


Figure 1 displays the results of within-family sibling comparisons (78 pairs). As we expected, among these sibling pairs, firstborns did not perceive themselves as any more achievement oriented (Conscientious) than laterborns perceived themselves to be; likewise, laterborns did not report any higher levels of Openness or Agreeableness than firstborns did (all paired-samples *t*-test *p*s > .05).

Figure 2, displaying between-family comparisons of the peer reports, provides convergent evidence of the lack of an association between birth order and personality. Friends of the 26 first-born individuals and friends of 53 later-born individuals did not differ systematically in how they perceived those individuals (all independent-samples *t*-test *p*s > .05).

Figure 2. Peer Reports of Original Participants' Personality as a Function of Participants' Birth Order

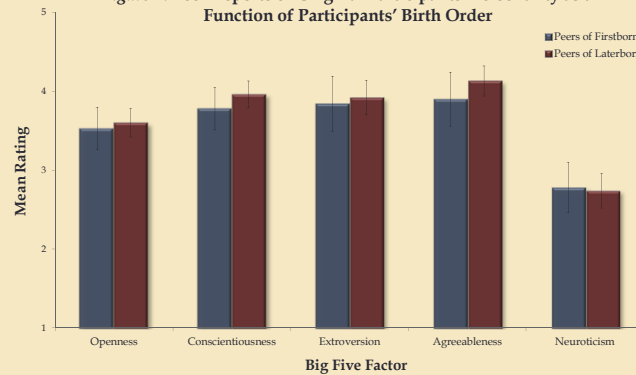


Table 1. Sample Descriptive Statistics and Sample Validation

	Original Participants' Self-report (n=92) M (SD)	Siblings' Self-report (n=78) M (SD)	Peer Reports of Original Participants (n=79) M (SD)	Familial Similarity (n=78 pairs) <i>r</i> <sub>self-sib</sub>	Self-Peer Congruence (n=79 pairs) <i>r</i> <sub>self-peer</sub>
Openness	3.66 (0.57)	3.62 (0.60)	3.60 (0.64)	<i>r</i> = .25* ( <i>p</i> = .030)	<i>r</i> = .50*** ( <i>p</i> < .001)
Conscientiousness	3.75 (0.58)	3.70 (0.67)	3.91 (0.66)	<i>r</i> = .28* ( <i>p</i> = .012)	<i>r</i> = .42*** ( <i>p</i> < .001)
Extroversion	3.66 (0.75)	3.27 (0.88)	3.91 (0.81)	<i>r</i> = .04 ( <i>p</i> = .762)	<i>r</i> = .60*** ( <i>p</i> < .001)
Agreeableness	3.98 (0.58)	3.90 (0.54)	4.06 (0.76)	<i>r</i> = .07 ( <i>p</i> = .555)	<i>r</i> = .28* ( <i>p</i> = .013)
Neuroticism	2.87 (0.73)	2.86 (0.80)	2.76 (0.82)	<i>r</i> = .28* ( <i>p</i> = .015)	<i>r</i> = .42*** ( <i>p</i> < .001)

Note. Internal reliabilities for original participants' self-reports ranged from .77 to .87; siblings' self-reports from .66 to .89; and peer reports of original participants from .81 to .89. As expected, siblings were moderately similar in personality and peers' reports of the original participants' personality were congruent with original participants' reports of their own personality.

## DISCUSSION

Notions about the influence of birth order are so prominent in popular culture that most people are not even aware of the scientific debate surrounding them. Harris<sup>7,8</sup> hypothesized that any influence of birth order is limited to within the family context; other researchers who implicate birth order as more important have proposed that its effects will show up in comparisons of siblings reared in the same family. For example, Healey and Ellis<sup>9</sup> argued that within-family comparisons are essential. However, they did not get reports from two siblings; rather, they asked single individuals to compare themselves with their siblings. Our study is unique because we obtained personality data from both a firstborn and a laterborn in each family; we also obtained data from a close friend of each participant to validate our first set of analyses comparing the siblings.

Our findings suggest that, when two siblings of differing birth order report on their personality, birth order does not explain any of the variance in personality. If Harris' theory holds, one person who *would* be expected to see differences between siblings (as a function of birth order) is a parent of the two siblings. Parents, especially mothers, tend to have extensive exposure to their children in the family context but far less exposure to their children in school/peer contexts and when the children become adults and move away from home. Our plan for the upcoming months is to ask parents of the siblings in our sample to complete a personality profile on each child. We expect parents' perceptions of their children's personality to covary with their children's birth order.

## REFERENCES

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