

# Implications of Birth Order on Personality and Social Behavior

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**Abstract** – During the adjustment phase, first-year college students experience behavioral and personality changes, which such changes may provide insight into how successfully the students will manage their first year of college. This prompted the researchers to conduct this research utilizing a descriptive comparative research design, to establish a basis and explanation for first-year college students' behaviors and personalities. The researchers selected three-hundred-four (304) first-year college students through a convenient or accidental sampling method. Based on the results of the study, it was revealed that birth order is partially a factor of personality and social behavior, specifically in parental attention personality and dominant social behaviors. It was found that there is a significant difference between the parental attention ( $F=7.579$ ;  $df=3$ ;  $p=.000$ ), and dominant behavior ( $F= 4.001$ ;  $df= 303$ ;  $p=.008$ ) of each birth order. This reveals that when it comes to parental attention, firstborns and middleborns receive more parental attention than only children. First-year college students who are firstborns are also more likely to exhibit dominant behaviors compared to only children. The researchers hope that this study will be used as a springboard for future research, aimed at the settlement of contradictory findings regarding personality, social behavior, and birth order. The researchers further recommend taking into consideration gender, age, socioeconomic status, parenting styles, and environment in studying personality and social behavior in relation to birth order.

**Keywords** – birth order, personality, social behaviors, deviant, conscientious, pampered, social interest, parental attention, self-centered, neurotic, competitive dominant, submissive, agreeableness, quarrelsome, adolescence, descriptive comparative research design

## I. INTRODUCTION

Individuals' distinctive characteristics involving the way they perceive and interact with the world begin to become increasingly apparent around the transitional phase of adolescence. As they are introduced to novel experiences, it highlights the pattern of their character traits, revealing their unique personalities and demonstrating their various ways of behaving in social contexts. These personalities and social behaviors are responsible for their individuality, which is claimed to have been molded by the order in which they were born, considering it is the initial

societal interaction they experience to gain acceptance and social approval. It is evident in local and international settings, with the aid of social media, the growing preconceptions and stereotypes about people's personalities and social behaviors in relation to their position and ordinal rank within the family. Some might have even realized how parents and others treat them differently solely depending on their position in the family order. In this regard, Filipino culture burdens firstborns with responsibilities because they are socially expected to serve as the family breadwinner. The middle child is observed to receive little attention because they are overwhelmed by the attention given to the youngest as the youngest serves as the mood maker in the family while only children are typically spoiled and pampered. More such treatments influence and distort the ability of individuals to develop their attitudes, qualities, defense or coping mechanisms, emotional regulation, perspectives, and social interaction skills, resulting in the formation of distinctive personalities and social behaviors that linger within a person for a long period.

The notion that the ordinal position of individuals within the family is a major predictor of human personalities was first introduced by Alfred Adler, an Australian medical doctor and psychotherapist, around the early 20th century (Cherry, 2024). The firstborn, middleborns, youngest borns, and only born in a family are the positions or orders classified by birth order (Joy & Mathew, 2019). In Adler's proposed theory, a person's development of personality, behavioral patterns, and cognitive ability is claimed to have been significantly affected by the order in which he or she was born (Chandola *et al*, 2016). The distinctive characteristics that remain consistent for extended periods involving patterns of mental, behavioral, and emotional functioning are what define personality (Holzman, 2024). Personality formation primarily occurs due to interactions occurring in social and family settings and the roles and relationships involved in these settings (Chandola, 2016). Scientists, psychologists, and researchers were interested in studying the implications of birth order considering personality development was believed to be driven by the concept that parents expect roles to their children centered on their birth order or familial position either consciously or unconsciously (BetterHelp Editorial Team, 2023). Several studies exploring the connection between personality and birth order also resulted in a proliferation of theories and studies examining how birth order impacts behavior. Most studies have revealed that firstborns, who are expected to exhibit leadership and set standards for their siblings, display personality traits such as superiority, authority, or entitlement over their siblings and rules. Middle-borns are often people-pleasers because they are deprived of parental involvement and receive little to no childcare. Most last-borns are charming and adorable which makes them seem and treated like babies resulting in attention-seeking personalities. Lastly, being the only child and having no other social interaction outside of their already adult parents or guardians, only children frequently exhibit adult maturity. These personalities seen for particular birth orders are consistent with the behaviors noted by Frank Jones Sulloway in relation to birth order and behavior. In his theory, he claimed that dominant behaviors and lower agreeableness are associated with firstborns and only children, middle-borns are outgoing and peaceful while last-borns are likewise outgoing and extraverted. Middle-borns are sociable and peaceful, which may cause them to become submissive (Eckstein, 2010), whereas lastborns' tendency to seek attention may cause them to become extraverted and prone to quarrels or

rebellion (Paulhus, 2014). Although some studies on birth order, personality, and behavior have yielded similar results, there is still a growing disparity in the findings regarding the predominant personality and behavior of firstborns, middleborns, lastborns, and only children.

As the discrepancies in the findings remain, questions concerning whether birth order predicts personality and behavior also surface. Despite the constant search for answers, the impacts of birth order on personality and behavior remain ambiguous with few studies claiming birth order has less of an impact than formerly believed (Damian & Roberts, 2015). In particular, there are notable differences between the studies' findings concerning the prevalent personalities and behavioral patterns of each birth order. In this regard, Adler's theory implies that neuroticism manifests in firstborns because they generally receive a greater amount of care from their parents before being dethroned (Hartmann & Gouarzi, 2019). Sulloway also supported this claim, with neuroticism along with other personality traits scoring higher among firstborns (Black *et al.*, 2017). In contrast to Adler and Sulloway's claims, lastborns appear to exhibit neuroticism as evidenced by their rates of mental health issues in a 2019 study by Easey *et al.* The current state of research in the field of birth order and personality is said to be inconclusive and controversial (Damian & Roberts, 2015), owing primarily to a lack of sufficiently large sample sizes to effectively test the impact of birth order on personality and behavior. Added to that, not much research has been completed on how birth order influences behavior and personality across Asian cultures, where a family's socioeconomic standing has a significant impact on how parents and other adults treat their children.

Adolescents find it challenging to adjust to the transitional nature of college life as they move from high school to pursuing higher education. First-year college students are in an adjustment period wherein they undergo behavioral and personality changes which such changes can be indicative of how well the students will handle their first year of college (Robles & Agcaoili, 2016). As the study's primary subject, the findings will also assist them in comprehending their strong and weak personality traits, which may be useful in determining the boundaries of their abilities that they may utilize to their benefit when interacting with others in social situations, particularly in the context of their careers. Personality and behavioral information serve as the basis for students' social, personal, and professional interests as well as their involvement in social interactions with individuals who share the same personality (Lunsbury, 2006). Besides, personality traits and behaviors have been linked to a general sense of belonging, notably for students who possess more agreeableness, extraversion, or less neuroticism (X, 2024). This can be beneficial, particularly for first-year college students going through the adjustment phase, as it helps them recognize who they need to be with and how they can fit in. Birth order concerning their personality traits and behavior could also influence how well they have developed academically. This prompted the researchers to conduct this research with the objective of establishing a basis and explanation for first-year college students' behaviors, thoughts, and emotions, especially when they are in social settings. The findings of this study are expected to settle the argument surrounding whether birth order impacts personality and behavior.

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### *Review of Related Literature and Studies*

#### *Birth Order Position, Personality, and Social Behavior*

One of the most prevalent aspects that affect a person's way of living is their ordinal position within their family. Since Alfred Adler introduced his theory in 1928, numerous researchers have found the effect of birth order position on different life aspects (Gerona et. al., 2023) including personality, identity, role formation (Van Volkom et. al., 2017), emotional maturity and general well-being (Joy & Mathew, 2018). A study from Brazil even found that birth order had a correlation towards being overweight, with only children having a higher risk of obesity than other birth order positions (Meller et. al., 2018). In terms of intelligence, firstborns had higher intellectual achievement than middleborns and lastborns (Rohrer et. al., 2015) and were less sociable, more conscientious and higher extraversion in terms of leadership (Damian & Roberts, 2015). Middleborns had varied and contradicting personalities (Gupta, 2017) while lastborns tend to become more outgoing, confident and open to new experiences (Saher et. al., 2022). These findings from different researchers provide proof that a person's birth position in their family affects their life in various ways.

Different factors, such as gender, experiences, socio-economic status, education, and other environmental exposures, affect a person's personality formation. The parent-sibling relationship also takes on a critical role in a person's identity and personality formation that may affect their social behaviors throughout their entire lifespan (Chandola & Tiwari, 2016). The behaviors and treatment people receive in their own homes affect the actions and decisions they make outside their homes. Latter-born children are likely to receive better treatment for their cognitive abilities and physical wellbeing, as their parents have already learned from their past experiences with the early born children and have also gained additional experiences as they mature (Lehmann et. al., 2016). However, the same study also concluded that parental attentive behavior could also decline as they receive more constraints on their time, resources, and finances. The different treatment that children receive from their parents could affect their viewpoint and the way they approach different circumstances in life. Guler and Hazer (2022) stated in their study that children who were emotionally and physically neglected are at higher risk of developing social anxiety. They also concluded that firstborns had a more intense level of anxiety than other birth orders.

#### *Personality and Social Behavior as a Result of Birth Order*

The transition to or entry into college is one of the hardest periods for undergraduate students because they are in the adjustment phase wherein, they undergo behavioral and personality changes which such changes can be indicative of how well they will handle their first year of college (Robles & Agcaoili, 2016). The alterations in their behaviors and personalities can be attributed to the differences in the manner in which each birth order is perceived and treated by their family and their environment. Due to the way they are treated based on their birth order, first-year college students may develop distinct personalities and behavioral patterns. In line with the research of Damian and Roberts (2015), which attempted to settle the controversy surrounding the connection between birth order and personality, earlier studies have yielded inconclusive results about the nature of the relationship and differences between the firstborns, middleborns, lastborns, and only borns' perceived personalities. In the same study, it is stated

that combining previous research will offer conclusive evidence that personality and birth order have little to no associations. A study by Gupta (2017) about the birth order and personality of 60 college students in India provides findings in favor of this. The study's findings show that there is a partially significant difference in students' personalities based on their birth order, suggesting that each birth order somewhat develops distinctive personality traits. It was also discovered that firstborns performed higher on the neuroticism dimension, but there were no apparent distinctions in other personality dimensions among birth orders. Additionally, a study conducted in Pakistan revealed a strong association between personality traits and birth order, particularly in the extraversion dimension (Saher 2022). However, it contradicts the findings of Rohrer et. al (2015) because they observed no apparent impacts of birth order on extraversion as well as emotional stability, agreeableness, conscientiousness, or imagination.

Contrary to the above-mentioned studies, further relevant research has been conducted that has proven that birth order has no effect on personality, social behavior, or the perceived dominant behaviors and personal traits between each birth order. According to a study by Boccio and Beaver (2019) on the influence of birth order on the personality traits of American siblings, there fails to be sufficient evidence of a strong correlation between birth order and personality—more especially, the extraverted, neurotic, agreeable, conscientious, and open personality traits. This runs in opposition to Saher's (2022) findings, which as mentioned previously, showed a strong correlation between the personality trait of extraversion and birth order. However, in terms of how birth order affects the development of extraversion, agreeableness, and conscientiousness personality traits, Boccio and Beaver's (2019) study produced somewhat similar findings to those of Rohrer et al. (2015). On the basis of Volkom's (2017) study, which looked at personality traits, sibling relationships, and birth order in emerging adults, birth order has no apparent effect on how everyone perceives their own personality. This result validates K's (2019) study, which found no significant differences in the overall personality between people with different birth orders. Moreover, the investigation on how birth order affects behavior and academic performance was unable to explain the relationship between birth order and behavior, leading one to conclude that different behaviors are unaffected by birth order (Long, 2019). These studies emphasize the inconsistent results of earlier research, thereby the link and differences between personality and behavior concerning birth order remain ambiguous.

*The Birth Order Theory.* Having siblings is the best thing that you could ever have, they say. However, in some ways, folks will say that they prefer having no siblings at all. Alfred Adler came up with this theory in the 20th century, this approach was gained from all the knowledge he had during his study throughout his lifetime. The birth order, as claimed by Adler, had a predictable influence in every child's personality, this approach says that a child's birth has an impact on shaping their development and behavior. Adler has its own elucidation about the firstborn, second-born, youngest child, and the only child in the family. According to this approach the oldest child or the firstborn are the ones that have all the parents's attention, the ones that are seen as the strongest siblings among them all. The older child is expected to be reliable and a good role model to others. The second born are treated as the shadow of the older child, they are considered as the calmest and most patient siblings compared to the others.



Middle children are way more pressured because of their older siblings. Based on Adler’s study, they are the siblings that have the capability to be rebellious and competitive. The youngest child is regarded as the favorite child of the parents. They are constantly trying their best to prove themselves to other people because they have a strong state of inferiority. According to Adler’s approach, there are two types of youngest children. The first one is the most outstanding type, they intentionally do their very best to excel in everything to be better at being most capable as a family member. On the other hand, the younger ones are more unfortunate unlike the other ones, they lack in self-confidence and because of that, they do not excel a lot. They are children that are deceptive and avoidant to other family members. And lastly, the only child. They are the center of the parents' attention, and only children are considered as unfortunate members of the family. Based on the theory, Adler stated that only children are way more comfortable with adult people, they are more likely mature in certain things, and they are always seeking other people’s support since they do not have an only have their parents beside them. They moreover come to believe that the world is a hostile spot because of their parent’s reliable watchfulness.

*The Family Niche Theory.* This approach was developed by Frank Sulloway in 1996 (Rohrer et. al, 2015). Based on this study, firstborns are the ones that have the capability to have a responsibility to be under the control of everything like their parents. The firstborns are gaining a lot of attention from their parents, unlike the laterborns. First children are expected to be responsible children and to be role models to the other children. They maintain to have the almost same interests as their parents in order for them to fulfill parental expectations. However, the laterborns are coordinated to be the rebellious members of the family since they are less identified and not getting enough of support from their parents. According to Sulloway, the most developmental circumstance of the laterborns is to put a lot of effort into finding an appraisal family niche that is not previously done by the older one. The research explored the differences among firstborns and laterborns on two major aspects of personality, in Sulloway’s quarrel, the personality of children is impacted by particular niches siblings embrace in the journey for admittance to parental assets. The firstborns and laterborns have their own way of proving themselves to their parents. Since both children are competitive enough to perform their roles, it leads to influence their personal development and their way to show their own uniqueness.

*Conceptual Framework*

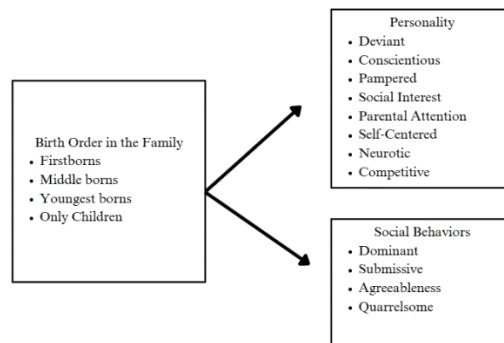


Figure 1 represents that birth order is a factor to personality traits and social behavior. The researchers considered firstborns, middle borns, youngest borns, and only children in studying

the differences in the perceived personality and social behaviors of the participants, including how they evaluate the traits and behaviors they possess and how they align their personality and social behavior under the expectations and treatment set among them.

### *Research Questions*

This study seeks to ascertain the implications of birth order on personality and social behavior by comparing the personalities and social behaviors of firstborns, middle-borns, lastborns, and only children first-year college students at National University- Baliwag for the Academic Year 2023–2024.

Specifically, it aims to answer the following questions:

1. What personalities are dominant for firstborns, middleborns, youngest borns, and only children?
  - 1.1. Deviant
  - 1.2. Conscientious
  - 1.3. Pampered
  - 1.4. Social Interest
  - 1.5. Parental Attention
  - 1.6. Self-Centered
  - 1.7. Neurotic
  - 1.8. Competitive
2. What social behaviors are dominant for firstborns, middleborns, youngest borns, and only children?
  - 2.1. Dominant
  - 2.2. Submissive
  - 2.3. Agreeableness
  - 2.4. Quarrelsome
3. Is there a significant difference in the personality and social behaviors of firstborns, middleborns, youngest borns, and only children?
4. What implications can be drawn from the results of the study?

### *Hypothesis*

This study was guided by the following hypothesis:

Birth order is not a factor in the personalities of firstborns, middleborns, lastborns, and only children of first-year college students.

Birth order is not a factor in the social behaviors of firstborns, middleborns, lastborns, and only children of first-year college students.

### *Significance of the Study*

The speculation of this study would make a significant commitment to the examination on the implications of birth order on personality and social behavior to the accompanying first year college students, their parents, and the future researchers. This study will serve as a guide to the first-year students to be aware of the influence of birth order in their social behavior and as well as in their personality aspect. This study can further be a basis for them to identify how their birth order affects their personality and how they socialize with other individuals. The research can also help the parents in knowing why their children behave and act differently than what they

expected; it can be a way to give them wider knowledge about how the birth order influences their children's personality and social behavior. For future researchers, this exploration could provide a narrative result according to the implications of birth order on their personality and social behavior to the new researchers. This study will guide them to improve the scope of their study.

## II. METHODS

### *Research Design*

The researchers used a quantitative with a descriptive comparative research approach to examine the implications of birth order on the personality and social behavior of first-year college students at National University-Baliwag. Descriptive comparative research aims to determine the similarities and differences between different groups in their natural setting without any type of manipulation (Iranifard, 2022). This type of research design aimed to explore the similarities and differences in the personality and social behavior of the students according to their birth order. To achieve the objective of the study, comparative research was used as it can provide how the variables can cause implications to each other which enables the researchers to determine the implications without any interference.

### *Respondents and Sampling*

The respondents of the study were calculated using Raosoft Calculator with a 5% margin of error and 95% confidence level. Out of the total population of one-thousand three-hundred one (1301), only three-hundred four (304) students were selected. Using a method called convenience or accidental sampling, the respondents were chosen based on their proximity to the researchers (Nikolopoulou, 2022). The researchers decided to use this method as it enabled them to easily access available first-year college students at the time when they were collecting data. In this approach, selecting respondents based only on convenience allowed the researchers to select respondents instantly and eliminated the need to consider conflicting schedules between programs. The selected respondents were asked to complete a survey about their personality and social behaviors to assess the impact of their birth order by comparing their dominant personality and social behaviors. The study did not involve incorporating senior high school students and college students in their second to fourth-year level as respondents because first-year college students often undergo significant academic transitions (Barbayannis, 2022) wherein they experience behavioral and personality changes, which such changes can be indicative of how well they will handle their first year of college (Robles & Agcaoili, 2016). Due to their proximity to the researchers, the study's coverage is also restricted to first-year college students at the National University of Baliwag.

### *Instrumentation*

#### *Adler Birth Order Scale*

The research instrument used in Birth Order and Personality Traits was modified from Subha Malik and Hina Sultan (2023) with the study entitled "Development of Adler Birth Order Scale" which was aimed to assess Alfred Adler's birth order theory and its relation to different



personality traits. The scale contained 39 items and was divided into eight (8) core traits; deviant, conscientious, pampered, social interest, parental attention, self-centered, neurotic, and competitive. Each core trait contained different numbers of items; deviant consisted of 8 items, conscientious, pampered, and self-centered were all composed of 6 items, social interest and neurotic both had 5 items and parental attention and competitive consisted of 4 items; with a total of 44 items. The scale was developed with an overall high reliability and an appropriate reliability range for the different subscales. The reliability of the scale was measured through Cronbach's alpha. The overall Cronbach's alpha of the scale was .90, which indicates high consistency of the scale. All the eight subscales resulted in the following: .87 for Deviant, .81 for Conscientious, .74 for Pampered, .69 for Social Interest, .61 for Parental Attention, .69 for Self-centered, .66 for Neurotic and .74 for Competitive. The aforementioned numbers show high psychometric properties with reliability and consistency that make the scale suitable for research and clinical practices (Malik & Sultan, 2023)

#### *Social Behavior Inventory*

The instrument used to measure Social Behavior was modified from a study entitled: "Measuring Interpersonal Behavior Intensively: Social Behavior Inventory Manual" by D.S Moskowitz (2021). It was designed to measure the dominant, submissive, agreeable, and quarrelsome behaviors of a person. The subscale contained a different number of items: The Dominant Behavior Scale and Submissive Behavior Scale included 11 items each while the Agreeable Behavior Scale and Quarrelsome Behavior Scale both included 12 items each; the scale contained a total of 46 items. The reliability and validity of the scale was measured using Cronbach's alpha. The four dimensions on the scale had a high internal consistency with coefficients ranging from .77 to .88. The stability of the scale was also assessed through Cronbach's alpha results that occurred overtime; with a range from .71 to .84 among all the dimensions. Several samples found high internal consistency and moderate to high stability on the scale. This makes it suitable for usage in measuring the different dimensions of social behavior. (Moskowitz, 2021).

#### *Data Gathering Procedure*

The researchers provided a letter containing the request to conduct the study and the consent for the participation of the respondents. They asked available first-year students on campus about their willingness to participate in the survey. Subsequently, the researchers headed to the classrooms and requested permission from the current professors to allow the distribution and completion of the survey. After the students' professors had given their permission to distribute the survey, the researchers handed out the survey and provided a detailed explanation of the study's objectives and purpose. The researchers gave the respondents ten (10) to fifteen (15) minutes to complete the survey. The completed surveys were then gathered, and the researchers verified whether the required number of responses for firstborns, middleborns, lastborns, and only children had been acquired.

In order to collect reliable data for their study, the researchers modified the instruments' scale by eliminating the "neutral" option. The researchers also asked for language editing validation from their Research professor for proofreading to ensure the formality, consistency, clarity, reliability, and relevance of the incorporated statements and data in the survey. They also

asked for face validation to guarantee that the survey questionnaires appear appropriate and relevant to the purpose of the study.

*Ethical Considerations*

In this study, the researchers followed the Data Privacy Act of 2012 formally known as the Republic Act No. 10173. This act seeks to promote innovation and growth while securing individuals' fundamental rights to privacy and communication, as well as following the State's associated duty to guarantee the safety and confidentiality of personal information in government and private-sector data and communication systems.

Prior to distributing the questionnaire that the researchers will prepare, the researchers will address the respondents' rights to full disclosure, the nature of the study, ensure participants have the opportunity to decline participation, and the researchers' liabilities. The priority of the researchers is the right to fair treatment and the right to privacy of the participants. The principle of the right to fair treatment is intended to regard their own convictions, culture, and ways of life. The right to privacy will be regarded on the grounds that the researchers will consider their responses privately during the gathering of the information from the survey conducted.

*Data Analysis*

The scores of personality and social behavior were tabulated in Statistical Package for the Social Sciences (SPSS), a statistical spreadsheet software. Descriptive statistics were applied first in analyzing the collected data, including frequency, percentage distribution, mean, and standard deviation. The Mean and Standard Deviation was utilized to describe the personality and social behavior in relation to their birth order among first-year college students. To effectively interpret the gathered information, they were analyzed using inferential statistics, which determines the difference between the personality and social behaviors of each birth order. One-way Analysis of Variance was used to determine if the personality traits and social behavior changes according to the level of the birth order.

**III. RESULTS AND DISCUSSION**

In this study, 76 respondents from each of the birth order; Firstborn, Secondborn, Lastborn, and Only Child, were included in a data set for quantitative analysis. The results aimed to assess and compare the differences between the personalities and social behavior of each birth order and to determine any statistically significant differences experienced by these birth orders. One-Way ANOVA was implemented individually on personality and birth order to find the significance level and a post-hoc analysis was conducted to provide specific differences between the different birth order position and the different personalities and social behaviors.

Table 1. *Mean and Total Mean of Birth order and Personality*

	Firstborn		Middle born		Lastborn		Only Child	
<i>Deviant</i>	1.57	SDA	1.39	SDA	1.48	SDA	1.34	SDA
<i>Conscientious</i>	2.92	A	2.93	A	2.98	A	2.80	A
<i>Pampered</i>	2.30	DA	2.33	DA	2.40	DA	2.49	DA
<i>Social Interest</i>	2.93	A	2.84	A	3.01	A	2.87	A
<i>Parental Attention</i>	2.68	A	2.63	A	2.49	DA	2.27	DA

<b>Self-centered</b>	2.31	DA	2.31	DA	2.36	DA	2.26	DA
<b>Neurotic</b>	2.70	A	2.75	A	2.59	A	2.63	A
<b>Competitive</b>	2.54	A	2.54	A	2.51	A	2.32	DA

Legends.	Rating Scale	Description
3.25 - 4.00		Strongly Agree (SA)
2.50 - 3.24		Agree (A)
1.75 - 2.49		Disagree (DA)
1.00 - 1.74		Strongly Disagree (SDA)

Table 1 shows the results of the descriptive statistics conducted on the data gathered such as mean. Among all the factors of personality, social interest had the highest value ( $M=2.91$ ;  $SD=0.51$ ) where the youngest borns showed the highest level of social interest ( $M=3.01$ ;  $SD=0.48$ ) and Middleborns with the least level ( $M=2.84$ ;  $SD=0.58$ ). Deviant had the lowest total mean ( $M=1.44$ ,  $SD=0.51$ ), with the firstborns showing the highest level ( $M=1.54$ ,  $SD=0.59$ ) and youngest borns showing the lowest ( $M=1.44$ ;  $SD=0.04$ ).

Table 2. One-Way Analysis of Variance of Birth Order and Personalities

Groups	Sum of Squares	Mean Square	F	Sig (2-tailed)	Interpretation	Decision
<b>Deviant</b>	81.249	.600	2.267	.081	Not Significant	Retain the Null Hypothesis
<b>Conscientious</b>	87.078	.491	1.719	.163	Not Significant	Retain the Null Hypothesis
<b>Pampered</b>	103.732	.575	1.691	.169	Not Significant	Retain the Null Hypothesis
<b>Social Interest</b>	80.427	.416	1.57	.195	Not Significant	Retain the Null Hypothesis
<b>Parental Attention</b>	<b>108.900</b>	<b>2.557</b>	<b>7.579</b>	<b>.000</b>	<b>Highly Significant</b>	<b>Reject the Null Hypothesis</b>
<b>Self-centered</b>	38.374	.124	.978	.403	Not Significant	Retain the Null Hypothesis
<b>Neurotic</b>	147.28	.285	.790	.500	Not Significant	Retain the Null Hypothesis
<b>Competitive</b>	102.21	.826	2.48	.061	Not Significant	Retain the Null Hypothesis

Note: The mean difference is significant at the 0.05 level

Table 2 shows that there is no significant difference among all the categories except the respondents' result in the parental attention category in between groups, which is the case is validated by the probability value yielded .000 ( $F=7.579$ ;  $df=3$ ;  $p<.05$ ). This implies that the participants' birth order has significant differences based on their response in the parental category. On the other side, as stated above, there are no existing significant differences among

the rest of the categories which are identified as the deviant, conscientious, pampered, social interest, and at last, self-centered. This verifies that the birth order among these four categories has no extant significant differences.

A post hoc analysis was conducted to determine the specific differences. The results show that only children ( $M= 2.27$ ;  $SD=0.53$ ) had a highly statistically significant level of difference in parental attention with firstborns ( $M=2.69$ ;  $SD=0.73$ ) and middleborns ( $M=2.63$  ;  $SD=0.49$ ). This is proven by their yielded probability value ( $p=.000$ ) and ( $p=0.001$ ) consecutively, which is lower than the standard significance level. However, the comparison in parental attention between firstborns and the remaining birth order is deemed insignificant. This means that firstborns and lastborns receive more parental attention than only children but the parental attention between only children and youngest children had no significant difference. Birth order in terms of being deviant, conscientious, pampered, social interest, self-centered, and competitive was also compared and the results show that they are all not significantly different ( $p>0.05$ ). This implies that birth order does not make a difference in the different factors of personality with an exception on parental attention.

Table 3. Mean and Total Mean of Birth order and Social Behavior

	Firstborn		Middleborn		Lastborn		Only Child	
<b>Dominant</b>	2.91	A	2.83	A	2.76	A	2.69	A
<b>Agreeable</b>	3.07	A	3.07	A	3.10	A	2.96	A
<b>Submissive</b>	2.94	A	2.82	A	2.82	A	2.72	A
<b>Quarrelsome</b>	2.27	SA	2.22	DA	2.18	DA	2.29	DA

Legends.	Rating Scale	Description
3.25 - 4.00		Strongly Agree (SA)
2.50 - 3.24		Agree (A)
1.75 - 2.49		Disagree (DA)
1.00 - 1.74		Strongly Disagree (SDA)

Table 3 shows the descriptive statistics on the data gathered from the mean scores and standard deviation of the respondents' responses regarding social behavior. The field of Agreeable has the highest mean among all the categories ( $M=3.05$ ;  $df=.49013$ ) where the first borns are the highest ( $M=3.07$ ;  $df=.56257$ ) and only child being the lowest ( $M=2.96$ ;  $df=.36950$ ). While in the section quarrelsome category has the least mean among them all ( $M=2.24$ ;  $df=.46960$ ) that only child is the highest ( $M=2.29$ ;  $df=.48772$ ) and younger born as the lowest ( $M=2.18$ ;  $df=.49297$ ).

Table 4. *One-Way Analysis of Variance of Birth Order and Social Behavior*

<i>Groups</i>	<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig (2-tailed)</i>	<i>Interpretation</i>	<i>Decision</i>
<i>Dominant</i>	51.942	.666	4.00	.008	<i>Significant</i>	<i>Reject the Null Hypothesis</i>
<i>Agreeable</i>	64.629	.262	1.23	.298	<i>Not Significant</i>	<i>Retain the Null Hypothesis</i>
<i>Submissive</i>	72.788	.196	.815	.486	<i>Not Significant</i>	<i>Retain the Null Hypothesis</i>
<i>Quarrelsome</i>	66.819	.173	.873	.404	<i>Not Significant</i>	<i>Retain the Null Hypothesis</i>

*Note:* The mean difference is significant at the 0.05 level

Table 4 shows that the observed little apparent difference among the means of the four groups is tested in its significance through the implementation of One-Way ANOVA. Results show that there is an existing significant difference only among the mean dominant behavior scores. This claim is substantiated by the probability value yielded which is .008 ( $F= 4.00$ ;  $df= 303$ ;  $p<.05$ ). This implicates that the birth order of the participants has led them to have significant differences in their dominant behavior scores. In other words, it can be claimed based on the results that birth order is a factor in the participants' dominant behavior. However, it also has been confirmed by these results that among the group of participants based on their birth order, there are no existing significant differences in terms of agreeable, submissive, and quarrelsome behavior. This is proven by the yielded probability values of agreeable, submissive, and quarrelsome, which are higher than the standard level significance. This confirms that birth order is not a significant factor in the agreeable, submissive, quarrelsome social behavior of the participants.

To ascertain which among the groups are different from one another significantly, post hoc analysis was conducted. The results convey that firstborns ( $M= 2.91$ ) have significantly higher dominant behaviors compared to those only children ( $M= 2.69$ ). This is proven by their comparison's probability value ( $p=.006$ ). On the other hand, the analysis of dominant behavior in the remaining birth orders, excluding firstborns and only children, is deemed insignificant ( $p>0.05$ ). This suggests that the rates of dominant behaviors are statistically similar for all other birth orders, with the exception of firstborns and only children. Birth order in terms of agreeable, submissive, and quarrelsome behaviors are also compared, which shows they are not significantly different. This implies that being a firstborn, middleborn, lastborn, and only child is no different in terms of agreeable, submissive, and quarrelsome behaviors.

Each birth order position had an equal number of 76 respondents each, giving a total of 304. The descriptive statistics showed that among all the birth orders, firstborns got the highest level of being neurotic, deviant and had the highest parental attention, firstborns were also the least pampered. Middleborns were the most competitive and had the least social interest. Youngest borns had the highest social interest and were the most conscientious and self-centered. In contrast with the firstborns, youngest borns had the least level of neuroticism and deviance.



Only children were the most pampered among all the birth orders and were the least conscientious, competitive, self-centered and had the least parental attention. However, among all these factors, only parental attention was deemed significant.

The results shows that only in the parental category has a significant difference among all the birth orders. Which means that the respondents' response has a difference in terms in the parental means. However, the rest of all categories shows that there is no exiting significance among them all. This means that the participants do not have any differences with their experiences in the field of deviant, conscientious, pampered, self-centered, neurotic, and in terms of being competitive. The post hoc analysis showed that the level of parental attention that only children receives compared to firstborns and middleborns are significantly different. However, the results found no significant difference in the amount of parental attention that only children and youngest borns receive. The results also revealed that birth order position does not affect a person's deviancy, conscientiousness, pampered, social interest, self-centeredness, neuroticism and competitiveness. This can be supported by the results of an existing study from Damian and Roberts (2015) where they concluded that birth order only had a very small association with personality and that birth order is not an important consideration in knowing someone's personalities.

In social behavior, the descriptive statistics showed that the first-born children have the highest mean of being dominant and submissive among all the birth order, while being the second lowest in agreeable category. Second born children being the second dominant after firstborn children, having the second to the highest in being dominant, agreeable, and submissive. Younger children being the highest in agreeable and lowest in quarrelsome. Lastly, the only child got the highest mean in quarrelsome and lowest in dominant, agreeable, and submissive field. The results of the study imply that there is an existing significant difference only among the participants' dominant behavior which means participants exhibit different rates of dominant behavior based on their birth order. It also showed that participants experience similar rates of agreeable, submissive, and quarrelsome social behaviors despite being firstborn, middleborn, youngest born, and only child. This result can be supported by an existing study from Rohrer et. al (2015). It was stated in their study that birth order has no apparent impact on agreeableness together with extraversion, emotional stability, conscientiousness, or imagination.

The post hoc analysis yielded that firstborns are expected to exhibit dominant behaviors compared to only children. It also showed that in terms of agreeable, submissive, and quarrelsome behaviors, there are no apparent differences between each birth order. This means the rates of social behaviors, with the exception of dominant behavior, are statistically similar for all birth orders. It is in line with Frank Jones Sulloway's theory, claiming that dominant behaviors are associated with firstborns and only children. However, it rejects Sulloway's theory as well, as the analysis illustrates that only children behave less dominant compared to other birth orders.

The hypothesis assumed that birth order is not a factor in the personalities and social behavior of firstborns, middleborns, youngest borns, and only children of first-year college students. From the results gathered, the null hypothesis will be partially rejected. Ooi and Madrina (2019) concluded in their study that birth order is only partially related to someone's

personality. Their results revealed that out of the sixteen (16) personality types, as classified by Myers-Briggs as MBTI (Myers-Briggs Type Indicator), only sensing and intuition resulted in a significant relationship with birth order. They indicated that the development of personality is related, not only to birth order, but also to other socio-cultural, psychosocial and environmental factors. It can be implied that birth order is a factor of personality and social behavior, but it is not significant enough to cause drastic changes and differences to a person. The findings recognize that birth order causes partial implications on the personality and the different social behaviors of first-year students. It further provides significant data where their birth order position is proven to be partially associated with their personality and how they behave socially.

This study employed various scale instruments with high psychometric properties to examine the differences between the perceived personalities and social behaviors in relation to birth order, yielding substantial results that may be beneficial to parents in understanding why their children behave and act differently than what they expected. This entails understanding to what extent how the treatment they give their children influences them. The results additionally aid in clarifying the contradictory, ambiguous previous results by offering a baseline for future researchers. However, due to the limited time allocated for completing this study, a relatively small sample size was selected, which is insufficient to make generalizations for the whole population of first-year college students. In this regard, gender considerations were not taken into account when comparing personalities and social behaviors of first-year college students hence, no significant differences were discovered. There was no investigation conducted on the potential influences of age-related treatment based on students' birth order, suggesting that the question of whether each birth order is treated differently as they progress through college years was not explored. Furthermore, the degree to which environmental factors impact personality and social behavior development was not examined, a phenomenon that prior research has linked to personality and behavioral patterns. The question of whether parental styles influence the development of personality and social behaviors of each birth order was additionally not addressed.

## CONCLUSION

The result of the study revealed that birth order is not a factor of personality with the exception of the parental attention dimension. Being a firstborn, middleborn, youngest born, or only child does not affect one's tendency toward deviance, conscientiousness, pampered, social interest, self-centeredness, neuroticism, and competitiveness. On the other hand, there are only significant distinctions in the dominant behavior between birth orders, while all birth orders have statistically similar rates of agreeable, submissive, and quarrelsome social behaviors. Birth order is somewhat a factor in the development of the student's personalities and social behaviors; of the eight personalities, only parental attention produced significant differences among birth orders, and of the four social behaviors, only dominant behavior showed differences among birth orders. When it comes to parental attention, firstborns and middleborns receive more parental attention than only children. First-year college students who are firstborns are also more likely to exhibit dominant behaviors compared to only children.

### Recommendations

This study adds value to settling the controversy surrounding the implications of birth order on personality and social behavior. The researchers hope that this study will be used as a springboard for future research, aimed at the settlement of contradictory findings regarding personality, social behavior, and birth order. To gather significant results, the researchers recommend carrying out the study with an adequate number of samples in the future. The researchers encourage further exploration of how students' environment as well as the pressure they experience from their parents due to their birth affects their personality and social behavior development. Research on how students' socioeconomic status affects their development of personality and social behavior is also essential. It is also necessary to investigate whether males and females experience significantly different rates of personality and social behavior development. Subsequently, when examining the differences between personality and social behavior, consider the five-factor model of personality or Big Five Personality Traits to further identify and gather significant results concerning the differences between personality and behavior of the students. Lastly, studies that will examine whether personality and social behavior development differ with age and college level must also be established to further strengthen and test the measurable effect of birth order on personality and social behaviors.

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