



## An Investigative Study on the Relationship between Birth Order and Personality of Undergraduate Students in Peshawar, Kp

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**Abstract:** The study sought to examine the relationship of birth order (first born and last born) with the Personality of undergraduate students in Peshawar. In this quantitative study, a total of N=100 (50 first-born and 50 last-borns) participants were selected, and the sample universities were Iqra University, Hayatabad, Cecos University Peshawar, Imsciencs Peshawar, and QurtubaUniversity. A purposive sampling technique was used for data collection from the students with an age limit of 18-28 years at the above-mentioned educational institutes. The database allowed us to identify a significant relationship between them as data revealed p value=0.003 further rho= .293, which clearly states that birth order is related to Personality. Most importantly, it was consistently found that birth order was influenced by many personality factors, such as the firstborn being creative and motivated but also neurotic and introverted. In contrast, the last born were more open, adventurous, and extroverted but irresponsible and careless. Based on the statistical techniques and the consistent results across samples and analytical designs, it was concluded that birth order does have an enduring effect on Personality. Moreover, the result of the study also supported the hypotheses.

**Keywords:** Birth order, Personality, Last born, First-born, Undergraduate students

### 1. Introduction

This research study investigates the comparison between birth order and personality traits. The study will compare the personality traits of individuals based on their birth order position (i.e., firstborn, middle born, last born, and only born). The sample will consist of 320 participants, with 80 participants (40 males and 40 females) in each birth order group. Participants must complete a personality questionnaire that measures the Big Five personality traits (i.e., openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism). The study will use a quantitative research design, and data will be analyzed using descriptive statistics and analysis of variance (ANOVA). The findings of this study are expected to contribute to understanding the role of birth order in shaping personality development (Vaghchipawala, 2023).

Most findings on birth order theory focus on the research introduced by Alfred Adler, who hypothesized the relationship between the ordinal position of a child's birth and personality development. In the decades following Adler's publications on birth order relationships and personality development, more focused research has advanced in the four individual birth order categories: firstborn children, middle-born children, lastborn children, and only children (Katz, Lowe, & Mischenko, 2017).

Around the world, we have seen humans have their unique character traits. Everyone has specific ways of behaving, thinking, and showing emotions. Personality is how others expect people to act in the long term.

Personality traits are elements of one's behavior that symbolize Personality, such as generosity, outgoing, or impatience. However, some researchers suggest that apart from biologically predetermined maturation, the character of Personality is a non-convertible biological entity (McCrae & Costa 2003)

Many scholars have studied birth order using Alder's classification (elder, middle, younger, and lonely) based on distinct psychological and personal features. People generally share the same qualities across different groups, although researchers demonstrated that. Whereas personality traits, family and social relationships fluctuate according to birth order.

Birth order is outlined as a child's place among his siblings (Conley, 2004), and it is thought to be an aspect that impacts a child's role among his siblings in terms of treatment and care reflected in his activities. The birth order (oldest, middle, last, or lonely) will undoubtedly impact the child's behavior, Personality, and academic performance, depending on the difference in birth order and the difference between parents in raising and treating their children.

Alfred Adler, a psychiatrist (1870-1937), first proposed the theory of the birth order's effects on Personality. Our career, lifestyle, and how we deal with our life tasks depend on our Personality. First, born are more prone to the participation of parents, either maternal or paternal as there is no other child to divide attention (Herrera et al., 2003). Adler said that the eldest one was set aside and dethroned would not be able to recover from that. Birth orders have a compelling and consistent effect on our Personality. For example, researchers say that the elder or firstborn are more dominant and less open to ideas than later born.

It is also known that last born are more rebellious, open, and fun-loving, but they also face issues of being pampered and tend to develop inferiority feelings (Brink & Matlock, 1982). The differences in Personality among different birth orders in siblings are natural and reasonable to compute; that makes the birth order theory popular and appealing. In addition, many variations in the birth order may indicate that birth sequence plays a vital role in personality development. Every child in a family is treated differently, and it happens in the spur of the moment without people around them being aware of the responses they have given. A child's interaction with their parents significantly influences the development of a child's personality as it starts the relationship skills development. Parental conduct varies between the firstborn and the lastborn.

Mothers are usually more affectionate with their later-born and more interactive with their first-born children. The children born later have lower self-esteem than the first born or only child. Mothers tend to be helping the firstborn more than the lastborn. Parents and siblings somehow place expectations on the children; therefore, each family has their roles according to responsibilities. Childhood is the exploration of a family niche that ultimately becomes the child's identity. (Wilson, 2002)

First-born traits: the firstborn are raised with a mixture of sentiment, trial and error. This causes parents to become immensely protective, attentive, rigid with rules, and overly obsessive about small things. Whereas the oldest one tends to reveal in the presence of their parents, who may define why firstborns act like also mini- adults sometimes. They are hard-working and want to excel at everything they do.

Last born traits: youngest children and more likely to be fun-loving and free-spirited due to their parent's free-hand attitude towards parenting. As a result the last born are more outgoing, manipulative and attention seekers.

### **1.1 Birth Order and its Relationship with Personality**

Eckstein (2000) acknowledged 151 quantitative studies showing the notable birth order traits. In every research, traits of first-high achievers are easily influenced by others, disciplined, and conform to parental values. Middle – sociable, relates more to elder and younger, intense feelings of not belonging. Last born - mostly pampered, high self-esteem and popular. We see these traits or characteristics before associating them with the Personality and birth order.

Damian, Shanahan, Trautwein & Roberts (2015). In their study, they questioned whether personality characteristics and intelligence pay for contextual disadvantage or not. This study investigated how birth order is linked with personality traits and intelligence to anticipate socio-economic outcomes in adulthood. The results exhibited that birth order effects on personality were comparatively less and were predominated by other factors such as intelligence and socio-economic status.

Rohrer, Egloff, & Schmukle's (2015) research was about interpreting the impacts of birth order on Personality. This study used large-scale data from three national panels to probe the relationship between Big Five personality traits and birth order. Except for the intellectual domain, the outcome showed no birth order effect on broad personality traits such as extraversion, emotional stability, openness, and agreeableness.

In 2016, Rodgers & Cleveland conducted a study on the association between Personality and birth order, data collected via self-reports and observer ratings; the study stated that the connection between birth order and Personality indicates less but persistent effects also that later born scoreless on neuroticism and conscientiousness as compared to firstborn.

### **1.2 First and Last-Born Characteristics**

Relationships are pillars of the family, even good or bad, primarily based on one's position on family. Our thoughts and perceptions may impact how we act around some relationships. Salmon (2011) reported that birth order had a notable control on friends and laid optimistic opinions about families in general. But middle born is not more helpful in need than first and last born for a family member.

In this research, Bjerkedal, Kristensen, Skjeret, Brevik, & Irgens (2007) analyzed the relationship between birth order and intelligence among Norwegian men. The results suggested a slight negative correlation between birth order and intelligence and also stated that firstborns have higher scores than later-borns.

Grose, & Lilienfeld, (2014). Effects of sibling configuration and birth order on altruism and empathy. The study findings suggested that birth order, especially first born, had a higher level of compassion and altruism than later birth. Parental expectations lead children to learn specific things in specific positions and are encouraged by their parents. The treatment of parents varies depending on the birth order prejudice. The parents assign each position in the family so that that specific position influences the conduct and guidance of each child. For example, the first child is supposed to be a role model from the outset, while the last born is pampered. This bias is the foundation for how the youngster perceives family experiences.

Nguyen, Sellbom, & Salekin (2017) reported that birth order and its relationship to personality traits within the family. This study investigated birth order effects on Personality, contemplating observer ratings and self-reports. The result showed that birth order effects were more prominent in observer ratings than self-reports, indicating that birth order might affect how others perceive individuals in social settings.

### **1.3 Problem Statement**

The study investigates the relationship between birth order and Personality of undergraduate students in Peshawar, KP. This study aims to examine how birth order affects Personality and the magnitude to which these effects persevere into adulthood. Additionally, the research seeks to investigate the factors that could interpret the mechanisms underlying these relationships, providing a detailed understanding of the multifaceted relationship between birth order and Personality.

### **1.4 Objectives**

The current research has the following objectives:

1. To identify the relationship between birth order and Personality
2. To analyze the factors affecting Personality due to birth order

### **1.5 Hypotheses**

The following hypotheses were formulated for the current study:

1. There is a significant relationship between birth order and Personality
2. Birth order (first and last born) affects Personality
3. Birth order does not affect Personality.

### **1.6 Significance of the Study**

People worldwide say firstborns are more organized, perfectionists, and motivated, whereas the lastborns are rebellious, open, and fun. Also, first-born and last-born birth order influences their compatibility in relationships and how they treat others. So, this study is significant in examining whether birth order affects Personality. So it effects it will help parents to amend how they raise their children, and also people to understand more about individuals around them and why they act in such a way. It will also give information on what behaviors are affected due to birth order and give individuals awareness about their Personality. It is to set on the seal that they recognize the variance of Personality within family and siblings and to develop themselves. Interactions with others are often based on everyone's perspectives or beliefs about the people in the world. The birth order mainly affects these perspectives because the family delivers the child with their first perception of the world (Croacke & Olson

1977). If talking in a psychologist or social worker context, an improved indulgence of a client's condition as a child, the problems related to birth order, and the association between family makeup or one's Personality are crucial to respectable social work practice. As welfare workers or clinicians in practice, there is an extensive requirement to recognize several facets of clients' surroundings and other aspects. To enhance and authorize a client, welfare workers/clinicians must acquire a comprehensive knowledge of the background and environment in which the client was raised. The birth order of an individual radically affects the beliefs and character a client owns, and particular attention must be shown to how their birth order may be involved in making up their Personality. On the other hand, this research will help and provide guidelines for adolescents to adjust and understand how birth order affects certain personality factors and their relationships. They will be able to know how to adapt and accept the difference.

### **1.7 Limitations of the Study**

This study has limitations, which can also pave the way for further research.

1. The size of the participant population was only restricted to 100 individuals, which is a minimal study population.
2. The age range for this study is 18-28, which is also a limitation because as per some studies, birth order affects more in adolescence.
3. The age difference between siblings also plays a vital role in personality development, which was not considered in this study.

## **2. Methodology**

The study's design is quantitative and descriptive because it is based on numerical data to measure and analyze to determine the effect of birth order on Personality and how they are related.

### **2.1 Operational Definitions**

#### **2.1.1 Birth Order**

Birth order is defined as a specific and assessable way of classifying individuals based on their position or birth order within a family. Birth order commonly denotes whether an individual is the firstborn, middle child, youngest child, or only child.

#### **2.1.2 Personality**

A typical long-term and reasonably stable form of thoughts, emotions, and behaviors that are constant and characteristic of an individual, affecting their relations with the environment and people.

### **2.2 Population and samples**

#### **2.2.1 Population**

The selected population was the firstborn and last-born, aged 18 to 28, in Peshawar, KP. All the private universities offering undergraduate studies were the population of this study. There are approximately a total of seven prominent private universities in Peshawar city.

#### **2.2.2 Sample**

In this quantitative study, a total of N=100 (50 first born and 50 last born) participants were selected, and the cluster sampling technique was used for sample universities, which were Iqra University Peshawar, Cecos University Peshawar, Insciences Peshawar, and Qurtuba University Peshawar. Then, purposive sampling was used for data collection from the students with the age limit of 18-28 years at the above-mentioned educational institutes.

### **2.3 Research Instrument**

To collect data, a questionnaire was used as a research tool. The researcher constructs the questionnaire. A structured questionnaire is prepared to get exact and accurate responses. It consists of closed-ended questions; respondents were asked to encircle the suitable answers according to their Personality.

### **2.4 Description of Questionnaire**

The questionnaire has two parts. The first part consists of demographic information (name, age, gender, birth order

(i.e., first or last). The second part of the questionnaire consists of 20 questions; every question has five options, i.e., strongly agree, agree, neutral, strongly disagree, and disagree.

### 2.5 Data Collection

The researcher gathered data through personal visits to the listed universities. In this method, the researcher got firsthand information about the effect of birth order (first and last born) on Personality.

### 2.6 Data Analysis

Using questionnaires, all of the data gathered from the Universities was assembled, analyzed, and interpreted. The statistical analysis of the current was carried out with the IBM 25 Version of SPSS such as frequency distribution, correlation, and linear regression.

## 3. Results & Discussion

This section focuses on the statistical interpretation and analysis of participant data.

This includes detailed explanations and pertinent tables for each section the current study aimed to identify the effect of birth order on Personality.

### Hypothesis 1

In the present study significant relationship was found from the selected data collected through self-report questionnaires from a specific population—the first stated hypothesis to examine the relationship between birth order and Personality. After using statistical methods, the outcome was significant and p-value of .003, which shows a relationship between birth order and Personality. An individual personality growth is also related to birth order other than genes and environments. According to Alder's birth order theory, children raised in the same home might have varied experiences. He further stated that one's birth order and number of siblings significantly impacted one's aptitude and Personality.

Table 1: To examine the relationship between birth order and Personality

| Variable    | N   | R    | P    |
|-------------|-----|------|------|
| Birth order | 100 | .293 | .003 |
| Personality | 100 | .293 | .003 |

According to the above table, a Pearson correlation was performed. Results indicate that correlation is statistically significant at 0.01 level, which is positive and statistically substantial  $r=.293$ ,  $p<.001$ ). So, the hypothesis was approved. This reveals that birth order has a significant relationship with Personality.

### Hypothesis 2

The second hypothesis assumed that birth order (first and last born) affects Personality. The self-report questionnaire assessed the participants and analyzed data using statistical techniques supporting the hypothesis. The results were significant as  $p\text{-value}>0.01$ , meaning undergraduate birth orders as first and last born affect Personality. It stated that firstborns are more organized, sympathetic, and motivated, whereas lastborns are open, fun-loving, and often rebellious.

Table 2: The birth order (first and last born) affects Personality

| Hypothesis | Regression weight         | Beta coefficient | $r^2$ | F     | P-value |
|------------|---------------------------|------------------|-------|-------|---------|
| H2         | Birth order & Personality | .293             | .086  | 9.230 | .003    |

### 3.1 Linear Regression Analysis for birth order and Personality among university students

The hypothesis tests if birth order (first and last) affects the Personality. The table shows that birth order affects the

Personality ( $b=.293$ ,  $p<.001$ ). This result indicates that Personality is affected by birth order. It shows that the order in which an individual is born, either first, middle, or last, plays a role in shaping an individual's Personality. Additionally, the  $r^2=.086$  regardless of that, the table clarifies 8.6% of the disparity in Personality.

### Hypothesis 3

The third hypothesis stated that birth order does not affect Personality. As mentioned above, statistical tests accepted two hypotheses, and the results were significant, which means the null hypothesis is rejected because the results show the impact of birth order on Personality and a significant relationship between them.

### 3.2 Findings

Humans all across the world have their distinct personality qualities. Everyone has unique methods of behaving, thinking, and expressing emotions. Personality states how others expect somebody to act in the long run. Personality characteristics are aspects of one's behaviour that represent one's Personality, such as generosity, outgoingness, or intolerance. Some experts argue that, aside from naturally fixed maturity, Personality is a non-convertible biological phenomenon. However, birth order is defined as a specific and assessable way of classifying individuals based on their position or birth order within a family. It is also an important feature that impacts a child's role among his siblings regarding behaviour and attention, as evidenced in his actions. The birth order (oldest, middle, last, or lonely) will undoubtedly affect an individual's behaviour, Personality, and educational success, depending on the variance in birth order and the different ways parents while raising their children. The result led to the following findings, which are summed up in the form of the table:

- First born are more rebellious but responsible, whereas last born are careless and fun-loving.
- Firstborns are more likely to be neurotic and selfless, but lastborn holds inflexible Personalities.
- Firstborns are more hardworking and socially powerful than later born, but less amiable and open to new experiences.
- Firstborns, often larger, use more substantial physical power and intimidation, whereas later-borns use abilities like grumbling, humour, and social intelligence.
- It also shows that environment and parenting styles also affect how first-born and last-born personalities build.

### 4. Conclusion

After analyzing the collected data, the conclusion was interpreted carefully. The purpose of the present study was to determine the relationship between birth order and an individual's Personality; it concludes that there is a relationship between birth order and Personality to some extent.

The research results show that birth order scores correlate with scores on a measure measuring personality traits. Due to their birth order, first born Personality was different than those of last born, which shows that birth order affects the Personality.

### 4.1 Recommendations

Following are the recommendations based on the study findings:

1. There may be other factors that can affect an individual's Personality, like the community and parenting styles, which were not considered in this study.
2. The drawback of the present research is that the same family members weren't taken to show birth order variances because the main participants were brothers and sisters of age (35-45 years) or younger (4-10 years). In these circumstances, gathered information can be vague and ambiguous, leading to inappropriate results.
3. Furthermore, while the sample size was adequate for the present research, it's impossible to extrapolate the results to other cities in Pakistan because Sindhi, Balochi, and Pashtun have separate festivals, dialects, traditions, and socioeconomic challenges.

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