

## **Relationship between Birth Order and Personality Trait (Extroversion)**

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### **Abstract**

This study was conducted to investigate the relationship between birth order and personality trait (extroversion). For this purpose, a sample of 160 participants (n=80 males and n= 80 females) was purposively selected using Non-Probability Sampling technique with the age ranged from 16-22 years. The sample was drawn from two co-educated institutions i.e., Becan House School (ALGC a-levels campus) and Government College, 2 all boys institutions i.e., Lahore Grammar School (a levels campus) and Aitchison College and 2 all girls institutions i.e., Lahore College for Women University and Lahore Grammar School (A-levels campus). The data were collected with the use of Eysenck's Personality Inventory. The Questionnaires were administered in English Language. There were no restrictions of religion, family set up, or socio-economic class. Data were evaluated by running Correlation and Two-way ANOVA on Statistical Package for Social Sciences version sixteen (SPSS 16). The findings revealed that Personality Traits (extraversion) were significantly correlated with birth order. It was also showed that there was gender difference in personality traits (extraversion) concluding last born girls as more extravert than males. Hence, there is also difference in the personality trait (extraversion) in first born and later born from different educational institution concluding last born individual from single gender institutions as more extravert. This study has its significance in the field of education as well as in clinical settings because it will help in making measurements accordingly.

Keywords. Personality, Birth Order, Extraversion, Education

### **Introduction**

Since everybody has a birth class, it isn't shocking that many individuals have fostered their own certain hypotheses with respect to birth order and character. Many have likely been presented to birth order hypothesis, of either deductively grounded or fanciful starting points. In spite of the fact that there are many variables that can credit to a child's character like destitution, family structure, reception, remarriage, mental or actual disadvantages and numerous others, most researchers would concur that youngsters do have their own exceptional character characteristics relying upon their introduction to the

world request when taken a gander at overall. Birth request has been viewed as one of the most noticeable provisions in such manner. Alfred Adler (1870–1937) was a pioneer in the investigation of birth request. His exploration proposed that the position a kid had by the request for birth altogether impacted the child's development and character. Birth request is characterized as you rank in your kin bunch, firstborn, center conceived, lastborn, lone kid, or twin. Birth request alludes to the mathematical spot of an individual in the request for births in their family (Ernst & Angst, 1983).

As per birth request hypothesis (1956) the firstborn kid is probably going to be more moderate, quick to please guardians and generally the supervisors of different children. Most space travelers and US Presidents were first-borns, and they are believed to be normal pioneer. While first-borns are regularly greater accomplishment arranged, emphatic, outgoing, coordinated and mindful, they can likewise be more envious, pushed and masochist than their later-conceived kin (Hartshorne, 2010). The center youngster is considered as the person who is best ready for life outside the family and is really the kid who gets the least demanding altercation. Some researchers suggest that middle children can feel overlooked and forgotten by parents more interested in the trophy first born and the indulged baby and they sometimes cop the full-brunt of a first-born's competitiveness and resentment (Jacobs, 2009). As middle born have to learn to get on with older and younger children, they often become good negotiators. Neal (2009) argues that middle children are more likely to make friends easily because they have learned to be diplomatic, assertive, flexible and empathetic to fit in better with their siblings.

The relationship changes when kids have diverse sexual orientation, this can make life somewhat simpler for the center youngster. Frequently the center kid will pick interests and practices that are diverse to their more seasoned kin. On the off chance that the primary conceived dominates at sport – the center youngster might be a scholastic successful person. A genuine, objective arranged first-conceived frequently prompts a casual, unique center kid (Ellis, 2007). Last yet not the least lastborn are for the most part viewed as the family "child" for the duration of their lives. In view of sustaining from numerous more seasoned relatives and the case of their kin, lastborn from enormous families will in general foster solid social and adapting abilities and may even have the option to arrive at certain achievements prior. Collectively, they have been viewed as the best socially and to have the most noteworthy confidence of all the birth positions (Adler, Ansbacher, & Ansbacher, 1956). Some lastborn foster confidence issues if more seasoned kin or guardians remove power from these lastborn with the goal that they can't simply decide or assume liability. Other lastborn take part in kin competition in light of the treacheries they think they experience since they are the most youthful. Another scholar, Frank Soloway (1996), suggested that birth request has solid and steady impacts on our character qualities. For example, he composed that the firstborns are more predominant, less open to novel thoughts, and more honest than later-conceived youngsters. Various scholars have

distinctive assessment; one of them had put the birth request in eleven appropriations (Toman, 1961). This makes birth request more confounded when estimating attributes and sorts of connections.

Clearly birth request is connected with character. As per Romeo (1994) a kid's situation in the family significantly decides their character qualities. Travis and Kohli (1995) support the birth request hypothesis by referencing that scholarly predetermination is impacted by the kin circumstance into which one is conceived. Beck, Burnet and Vosper (2005) directed an investigation that dissected the distinctions in character of 76 sets of kin in secondary school, they appraised themselves on character uncovering explanations and tracked down that more youthful kin were more outgoing, excusing, wistful and open to new encounters, while first-borns would in general be more stickler.

In the current period attributes like extraversion and self-preoccupation are getting a focal situation in the investigation of human character. Albeit for the most part individuals assume that ecological factors explicitly family framework shape individual character quality. As expectedly it is recognized that in flourishing spaces of our general public's folks will in general be more chivalrous over their first youngster and his normal exercises that evidently leans the kid towards self-preoccupation (Adler, 1927). Besides, the separation is among the guardians with regards to the disposition of having a female or male child. In many cases especially individuals in our Pakistani Society, guardians are more fearful of their girl's disposition in contrast with their children and separation of the parent's mentality towards their male and female youngster start precisely from their introduction to the world and this biasness in demeanor consequently convince person's character characteristic.

So fundamental reason for this exploration is to look at whether Alfred Adler's hypothesis (1927), relating birth request point of view i.e., later conceived kid weakness to extraversion applies essentially to our Pakistani society. This examination will be a work to contribute in uncovering the way that birth request assumes a considerable part in the singular's advancement of character trait (extrovert). To research the distinction in presence of character quality (extraversion) in first conceived and later brought into the world in quite a while. Just as to survey the distinction in presence of character attribute (extraversion) in first conceived and later brought into the world in quite a while from various establishments.

### **Method**

This section illustrated the information regarding sample, instruments that were used in this study, procedure and statistical analysis respectively.

### **Research Design**

Cross sectional-correlational research design was used as a research aim to find

out the relationship between studied variables.

### **Sample**

In the present study, sample of 160 students including, 80 first born and 80 last born were drawn with the help of purposive sampling technique. Both boys and girls were recruited with the age ranged between 16 – 22 years. Among which 40 boys were first born and 40 boys were last born and similarly 40 girls were last born and 40 girls were first born. Participants was selected from two co educated institutions i.e. Becan House School (ALGC a-levels campus) and Government College, two all-boys institutions i.e. Lahore Grammar School (a levels campus) and Aitchison College and two all-girls institutions i.e. Lahore College and Lahore Grammer School (a-levels campus).

### **Measurement Tools**

#### **Eysenck's Personality Inventory (EPI)**

EPI is a standardized psychometric test developed by H. J., Eysenck (1963) used to access personality traits. The scale consisted of three factors (extraversion, introversion and neuroticism), in which a person is asked about a list of traits and characteristics. It is a 57-item measure designed to assess the personality dimensions of Extroversion (E) and Neuroticism (N). The EPI also includes a Lie scale (L). The scoring of the Lie scale is marked out of 9. It assesses the extent at which a respondent is socially desirable. The 'E score' is marked out of 24 to determine the Extraversion level. The 'N score' is marked out of 24 and measures neuroticism. After each of question, column for answer Yes or No is available. Time required to fill questionnaire is 10 minutes. This scale included a demographic questionnaire, which obtained the relevant information about the participant (see Appendix D). The questionnaire is generally used for its high reliability (0.95) and validity (0.87).

### **Procedure**

The study was conducted to access relationship between birth order and personality traits (extroversion) through EPI (Eysenck's Personality Inventory). Eysenck Personality Inventory (EPI) was administered on a sample of 160 students, age ranged from 16 to 22 years. For this purpose, different organizations and various institutions were approached in Lahore. After, getting an informed consent from participant and detailed required demographic information, participants were provided with EPI (Eysenck's Personality Inventory). Instructions and debriefing were also provided to the respondents.

The data were collected from Kinnaird College for Women (KC), Lahore

Grammer School (Girls campus), Began House School (ALGC a-levels campus), Government College, Lahore Grammar School (a levels campus) and Aitchison College. Participants completed the whole questionnaire in approximately 15- 20 minutes.

All the respondents were ensured that the confidentiality of the data would be maintained. Moreover, participants were informed about the purpose of study and their right to leave it at any moment. After receiving the questionnaires from the participant, scoring was completed. Since this research just measures Extraversion level, therefore just 'E Score' of the information was determined. To check E score, all the responses in the survey were checked completely and 'E' was set by the side of any answers which match those given in the E Score Table.

### Statistical Analysis

Data were analysed using SPSS (Statistical Package for Social Sciences) version 17. Two-Way ANOVA and correlation analysis was performed to assess the quantitative information regarding the hypothesis.

### Results

The purpose of the present study was to investigate the relationship between birth order and personality traits (extroversion). Two Way ANOVA and Correlation was obtained by running the data on Statistical Package for Social Sciences version seventeen (SPSS 17).

Hypothesis 1: There is a significant relationship between birth order and extraversion between both genders.

Table 1: Pearson correlation analysis between birth order and extraversion

	N	Gender	Birth Order	Educational Background
Extraversion	160	-.02*	.76**	-.08*

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Pearson product moment correlation was used to discover the relationship between birth order and extraversion. The Hypothesis was accepted. A significant relationship was found between extraversion and birth order. Findings highlighted that there is a strong positive correlation between extraversion and birth order ( $r = .768$ ,  $p < 0.01$ ) whereas weak negative correlation was observed between gender and extraversion ( $r = -0.02$ ,  $p < .01$ ) and educational background ( $r = -0.08$ ,  $p < 0.01$ ).

Hypothesis 2: There is gender difference in personality trait (extraversion) with

respect to the first born and last born. To investigate this hypothesis two-way ANOVA was used, the results are shown below.

Table 2: Two Way ANOVA Analysis of extraversion among first and last born male and females

Source		N	M	SD
Gender	Female	80	13.468	4.565
	First born	40	10.025	2.9998
	Last born	40	17.25	2.539
	Male	80	13.638	4.0313
	First born	40	10.500	2.5381
	Last born	40	16.4625	2.9166

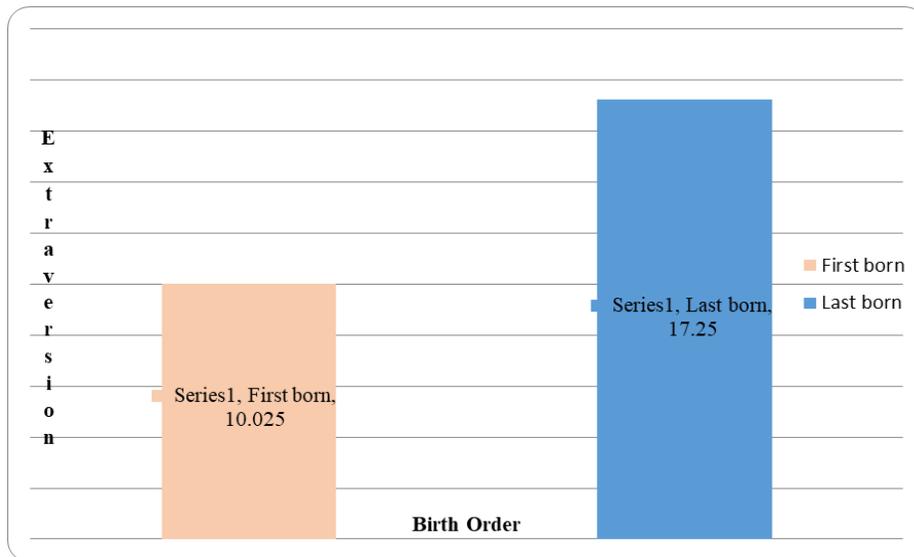


Figure 2: Difference in personality trait (extraversion) between first- and last-born women

The above graph indicates that last born women are more extravert when compared to first born women.

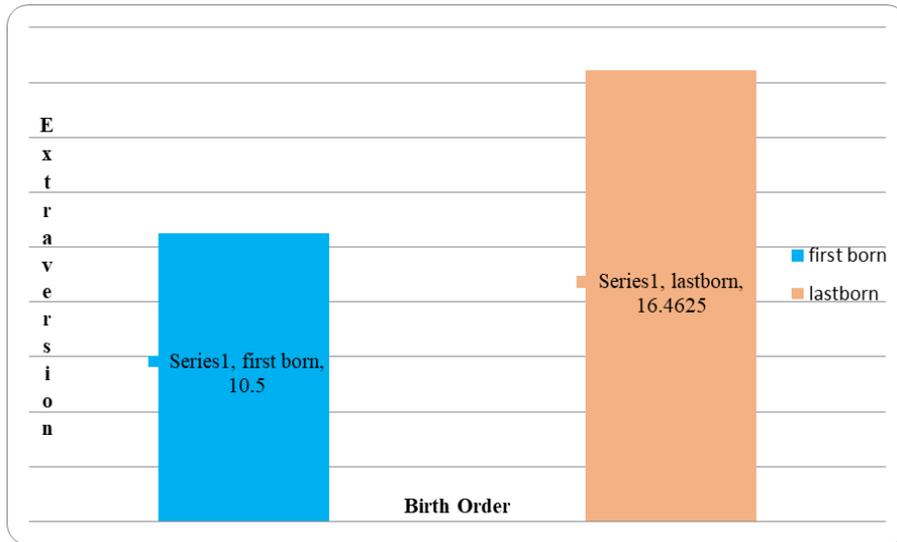


Figure 3: Difference in personality trait (extraversion) with respect to the first- and last-born men

This graph indicates that the last born men obtained high score on extraversion when compared to firstborn men.



Figure 4: Gender difference in personality trait (Extraversion)

This graph indicates that the men obtained high score on extraversion when compared to women.

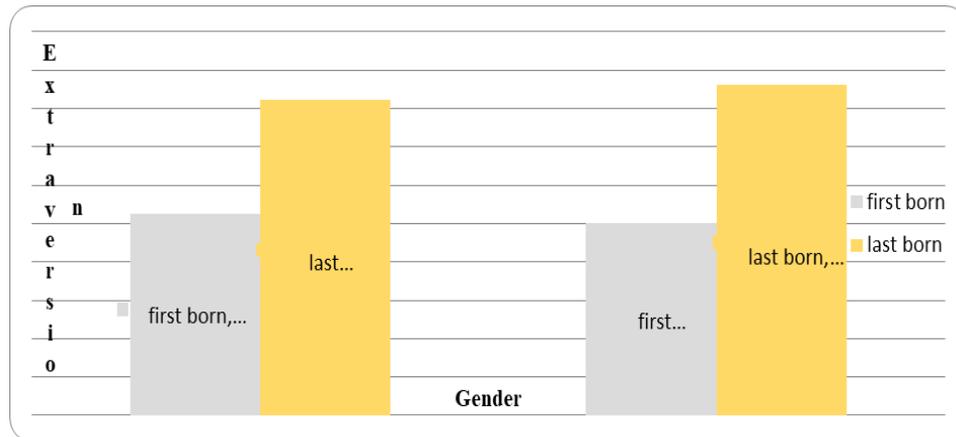


Figure 5: Gender difference in personality trait (extraversion) with respect to first born and last born

Figure 5 indicates that there is a gender difference in personality trait (extraversion) with men first born obtained high score on extraversion than women firstborn. Similarly, it also indicates that there is gender difference in extraversion with respect to men last born and women last born with women last born obtained high score on extraversion than men lastborn.

Table 3: Two-way ANOVA

Source	df	SS	MS	F	P
Gender	1	1.225	1.225	0.161	0.688
Birth Order	1	1729.25	1729.25	227.89	0.000
Gen-der*Birth Order	1	16.900	16.900	2.226	0.138
Error	156	1184.25			
Total	159	2931.600			

Two-way between subjects' ANOVA was employed to investigate the gender difference in personality trait (extraversion) with respect to first born and later born. Two-way ANOVA results revealed,  $F(1,156) = 16.900$ ,  $p \leq 0.138$ , indicating that there is a gender difference in birth order.

Hypothesis 3: There is a difference in the personality trait (extraversion) with respect to the first born and later born studying in different educational institutions.

Table 4: Educational background of subjects

Source		N	M	SD
Educational Background	Single	80	13.8250	4.575
	First Born	40	10.2250	2.7220
	Last Born	40	17.6250	2.628
	Co educated	80	13.1750	3.9866
	First Born	40	10.3000	2.8483
	Last Born	40	16.0500	2.66939

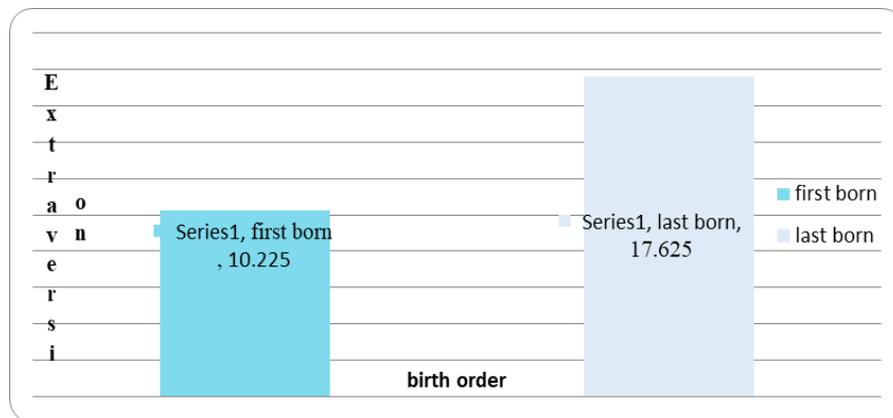


Figure 6: Difference in personality trait (extraversion) between first and last born studying in single institutions

The above graph indicates that there is a difference in extraversion with respect to the first born and lastborn participants studying in single (only boys and only girls) institution. Participants who were last born obtained high score comparatively to the first born.

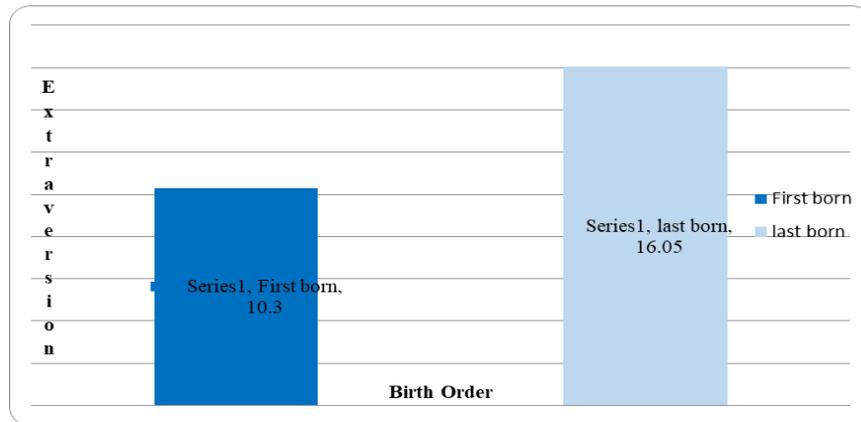


Figure 7: Difference in personality trait (Extraversion) between first and last born studying in co-educated institution

The above graph indicates that there is a difference in extraversion with respect to the first born and lastborn participants studying in co educated institution. Participants who were last born obtained high score comparatively to first born.

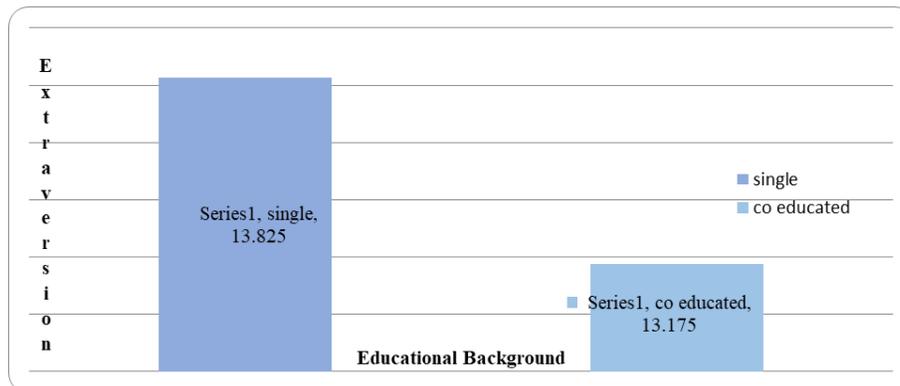


Figure 8: Difference in the personality trait (Extraversion) from different educational background

The above graph indicates that there is a difference in extraversion with respect to the participants studying in different institution. Participants who were studying in the single (all boys and all girls) institution obtained high score comparatively to co educated institutions.

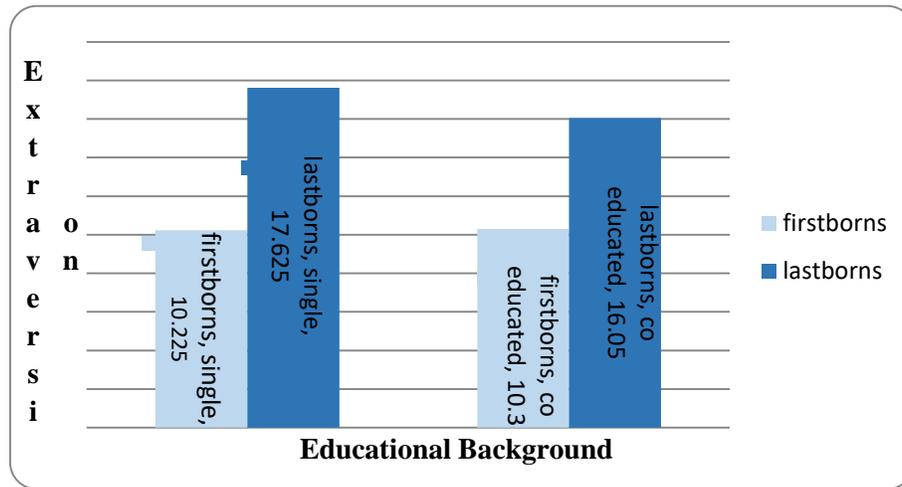


Figure 9: Difference in the personality trait (Extraversion) in first born and later born from different educational institutions

There is difference in personality trait (extraversion) with first born students studying in co-educated institutions obtained high scores than the students who studying in single (all girls and all boys) institutions. Similarly it also indicates difference in personality trait (extraversion) with last born students studying in single (all girls and all boys) institutions obtained high scores than the student studying in co educated institutions.

Table 5: Two-way ANOVA

Source	df	SS	MS	F	<i>p</i>
Educational background	1	22.500	22.50	3.045	0.83
Birth order	1	1729.22	1729.22	234.034	0.000
	1	27.225	27.225	3.685	0.57
Educational background* Birth order					
Error	156	1152.6	6 7.389		
	159	32308.00			

Two-way between subjects' ANOVA was used to find out the difference in the personality trait (extraversion) with respect to the first born and later born studying in different educational institutions. Two-way ANOVA results revealed a difference in extraversion different educational setups with the value,  $F(1,156) = 27.225$ ,  $p \leq 0.57$ , which indicates an educational background difference in birth personality trait extraversion on.

### **Discussion**

Birth order plays a fundamental role in the personality trait of a person. The familial environment is a child's first group experience, and the child's involvement in their family has an impact on the development of their individual personality traits. The present study is conducted to determine the relationship between birth order and personality trait (Extraversion). Basically, the purpose is to highlight importance of order in which a person is born into their family as a substantial role in the individual's development of personality with the help of Eysenck's Personality Inventory. It was hypothesized that personality trait (extraversion) is strongly correlated with birth order. The findings confirmed the hypothesis and indicated strong correlation between birth order and extraversion.

Birth order researches have different findings ranging from character development being determined by family status to having little or no influence on personality. The present study indicated strong correlation between birth order and extraversion and supported Alfred Adler's (1927) viewpoint that birth order influenced the development of different personality traits. He proposed that a person's birth order made a strong impact on person and influenced their lifestyle preferences in terms of how they interact with others.

Leman's (2000) research on birth order personality traits confirmed Adler's results and revealed a significant association between birth order and personality trait (extraversion), hence also supporting the present research results. According to Leman (2000), the last born children tend to be goal-oriented, tenacious, loving, and attention-seeking, whereas the eldest or first born children are diligent, well-organized, serious, believer in authority, reliable, perfectionists, and self-reliant. According to Leman (2000), last-born children are appealing, persistent, compassionate and attention-seeking, whereas first-born children are conscientious, confident, well-organized, sober, goal-oriented, trustworthy, hardworking, and self-reliant.

Hypothesis and the results of the study are also supported by Beck and Vosper (2005). The study was conducted to see whether there is a relationship between birth order and extraversion. They analyzed the personality differences of 76 pairs of high school siblings, who rate themselves on personality-revealing statements. Results revealed that younger siblings were more confident, outgoing, compassionate, emotional, and open to new experiences, whereas first-borns tended to be more self-critical and judgmental

concluding that there is an association between birth order and personality attribute (extraversion).

Results of the current research are also supported by Sargent et al. (1997). Their investigation was conducted on undergraduate and graduate students who were required to complete extraversion and birth-order questionnaires of 2-item extraversion scale from the NEO Five-Factor Inventory. The sample comprised of 47 first-borns (20 males and 27 female) and 49 later conceived (25 males and 24 female) with a scope of 18–52 years ( $M = 21$ ,  $SD = 4.45$ ). Individuals were asked to complete extraversion and birth-order questionnaires from the NEO Five-Factor Inventory's 2-item extraversion measure. Results concluded that birth order does have relationship with individual personality trait (extraversion).

Because personality is the investigation of individual differences, it allows us to gain a deeper understanding of how our patriarchal male society forms and promotes differences in women's and men's viewpoints. Gender norms are usually influenced by socio-cultural factors in the sense that women and men are expected to perform various roles in society and are socialized to act differently. This study also indicates that there is significant gender difference in personality trait (extraversion) among first and last born. It is believed generally that women are more extrovert as compared to men as stated by Feingold's (1994) and Schmitt in 2008, but this study extended this and link this trait and gender differences with birth order to investigate the differences in extroversion based on gender and also considering the birth order as well. The results of the current study revealed that there are differences in extroversion with related to birth order and gender.

Klein's (2007) study, who examined the relationship between birth order and introversion-extraversion, supports the findings of the current study. The results of a two-way analysis of variance revealed that firstborn child was more introverted than middle-born and last-born child, which is congruent with the findings of the current study. Gender difference was also found out highlighting women score higher on openness to experience, extroversion and conscientiousness than did men.

The last hypothesis of the present study aimed to investigate the differences in the personality trait (extraversion) in first born and last born from different educational institutions were also highlighted concluding last born girls from single gender institutions as more extravert. In a coeducation setting, some girls are more introvert as their individuality gets suppressed due to cultural taboos and labels imposed on them by the male population. Girls find themselves feeling more conscious of the fact that males surround them in every place whether it is class rooms, cafeteria or buses. However, in all girl's school one does not focus on what the masses might say about their appearance as they are comfortable in merging with their own gender.

As males are expected to act in a certain way that only the society and culture defines, the introversion factor is much more in a coeducational institution as compared in

all boy's school. One very obvious reason is, in these schools, divisions and levels of hierarchy are automatically established by the males in order to impose their over bearing character onto others, making the less expressive among feel inferior. Furthermore, as girls find themselves being more conscious around males, same is the case with males. Hence, it can be concluded that males and females in a single school setting are more extrovert because being around their own gender widens their horizons and it is observed that girls are considered to be more talkative comparatively to men even mass media bombardment have deeply influence personalities specifically of girls and boys. But we should keep cultural differences in mind and the brought up of girls and boys in Pakistani culture is different from that of USA and Europe.

### **Conclusion**

Birth order has a significant impact on an individual's personality development, eliminating the effect of cultural effects. The aim of this study was to investigate the association between birth order and personality characteristics (introversion/extroversion) in Pakistan. Despite the fact that this study yielded significant information, each researcher encounters different challenges while conducting the study. Therefore, strengths and limitations of the present study are to be acknowledged. As the present study is comprised of one hundred sixty participants (N=160) which is very small size, we cannot generalize the results of the study. Limited numbers of educational institutions were approached to collect the data which were representative of specific socioeconomic background. Therefore, to make it generalizable we need to add institutions belonging to all socioeconomic background. The present study was confined to educated population only. Age range of 16-22 was selected but it was found that it was not sufficient. Besides, English language was utilized as a method for directions, as the measurement inventory was accessible just in English. Subsequently, it highlights the need to interpret and adjust in Urdu to get accuracy in norm.

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