



A study on Conscientiousness, Narcissism and Self-Esteem among First Born and Last-Born Siblings

Anoushka Malik, Bachelors in Psychology (Honors), DAV College, Panjab University,
Chandigarh, India

anoushkamalik@hotmail.com

ABSTRACT

Often in our society we come across statements like “firstborns are more responsible” or that “middleborns are often the ignored children.” Such statements usually pique the interest of individuals and are also a propagator of misinformation. While there might be slight differences in the bringing up of children, its impact on the personality of these individuals is not major. To further investigate on this research a study was conducted on a sample (n=60), between the age groups of 18-25 years, with 30 firstborn and 30 last born. The purpose was to study conscientiousness, narcissism and self-esteem among first born and last-born children. Standardized scales were used to measure these stated variables. The results found a significant positive correlation between Conscientiousness and Self-Esteem and a significant positive correlation between Narcissism and Self-Esteem. However, no statistically significant differences were observed in Self-esteem, Conscientiousness and Narcissism among Firstborn and Lastborn siblings. Due to the firstborn siblings usually taking up the role of substitute parents for the later born, it is often believed that the siblings, according to their placement in the family, possess different personality traits. However, evidence from the present study as well as the past studies suggests that birth order does not have a lasting impact on broad personality traits outside of the intellectual domain, and any variations might have to do with the genetics rather than the familial positioning of individuals.

KEYWORDS: *Conscientiousness, self-esteem, narcissism, first born, last born, birth order.*

INTRODUCTION

Alfred Adler (1870-1937), an Austrian Psychiatrist, was the one of the first theorists to suggest that birth order affects personality. According to his theory, one's position in the family greatly influence their style of life. For instance, the characteristics of a firstborn children includes traits such as perfectionist, reliable, conscientious, list maker, well-organized, achiever, self-sacrificing, people pleaser, believer in authority and rituals etc. and those of a last born include traits such as, outgoing charmer, affectionate, uncomplicated, a little absent minded. A typical characteristic of a last born is that he is more carefree and vivacious. He is a real 'people person' who is usually popular, despite his clowning (Graham,1914). Some other research reveals that firstborns are less extraverted than middle and last borns (Klein, 1984). On the other hand, a study by Sulloway (1999) revealed that Firstborns scored high on conscientiousness and later-borns scored high on agreeableness and openness to experience.

Self Esteem refers to a person's overall sense of self-worth or value. It is a measure of "how much a person values, approves of, appreciates, prizes, or likes himself or herself" (Adler & Stewart, 2004). Key elements of self-esteem are, self-confidence, feeling of security, identity, sense of belonging, and feeling of competence. *Conscientiousness*, a fundamental personality trait one of the big five. It is the tendency to be responsible, hardworking, goal oriented and organized. Conscientious people are good at self-regulation, impulse control and adhering to rules and norms. Conscientiousness is a predictor of health, well-being, and longevity. The multiple facets of conscientiousness according to the NEO Framework are- competence, order, dutifulness, achievement striving, self-discipline and deliberation. *Narcissism* is a personality disorder characterized by a pervasive pattern of grandiosity, lack of empathy, and a need for admiration. Behind this mask of extreme confidence, these people are not sure of their self-worth and are easily upset over the slightest criticism. Narcissistic Personality Disorder affects more males than females, and usually begins in teens or early adulthood.

Sibling Competition

As per Darwin's theory of natural selection, sibling rivalry is a key factor in personality development. This competition for parental favor maximizes inclusive fitness, where offsprings share half of their genes. Hamilton's (1964) theory suggests siblings will compete for scarce resources when benefits outweigh the costs, leading to sibling rivalry. Darwinian theory posits that sibling competition and parent-offspring conflict are flip sides of the same

coin, with parents by the virtue of being related to all their offsprings value equal parental investment. However, Freudian theory suggests these conflicts stem from a child's desire for sexual access to the opposite sex parent, while Darwinian theory argues that siblings compete to optimize parental investment and survive childhood. Freud's theory, however, suggests that siblings have no Darwinian incentive to harm a parent, but his theories have been criticized for misinterpreting nonsexual evidence.

Family Dynamics

The review of personality differences aligns with a Darwinian framework, emphasizing adaptation through learning. Personality is shaped by various proximate causes, not biological competition. Firstborns are conscientious, parent-identified, and respectful of authority, while Later born's seek unoccupied family niches and cultivate latent talents through experimentation. Later born's are generally exploratory, unconventional and tolerant of risk.

Birth Order and Creativity

A study was conducted on a large sample of gifted and non-gifted children (N=234). Results found that only children had the highest divergent thinking test scores, followed by eldest, youngest and middleborn. Further, it was found that older children had a higher score than younger children (Runco & Bahleda, 1987). According to Robert McRae's division of the openness to experience facets into two groups namely, the intellects and the non-conformists, it has been postulated that first born's have a higher IQ than the later born's and therefore express their creativity most strongly via openness in intellect. By contrast, later born's are expected to express their creativity in ways that exemplify the nonconformist bent of their personalities. However, much of the existing research on birth order and creativity has met with shortcomings mainly due to two reasons. First, failure of investigators to distinguish significantly between different types of creativity. Second, inability of researchers to study creativity in real life terms.

Conscientiousness

According to McCrae and Costa (2003), Conscientiousness “is a highly examined dimension of personality, referring to the tendency to be organized, diligent, industrious, and achievement oriented.” According to Roberts et al. (2009), Conscientiousness is defined “as individual differences in the propensity to follow socially prescribed norms for impulse control, to be goal-directed, planful, able to delay gratification, and to follow norms and rules.”

A study was conducted on 6053 individuals between the age group of 8 and 95. The results showed that firstborns were judged to be more conscientious than their younger siblings, whereas laterborns were judged as being more agreeable and open to experience (Sulloway, 1999). According to Sulloway (1996), first born siblings are more conscientious than their later siblings because they are more likely to feel the need to please their mother and father. Firstborns are weary of risks as they crave parental approval, leading them to exhibit behaviour that correlates with their parents’ morals.

Self-Esteem

According to Rosenberg (1965), Self-Esteem is “one’s positive or negative attitude toward oneself and one’s evaluation of one’s own thoughts and feelings overall in relation to oneself.” According to Alesi et al., (2012), Self-Esteem is regarded “as a personal psychological characteristic relating to self-judgement based on one’s values about humans.” According to Schunk (1985), Self-Esteem implies “an awareness of one’s value system and one’s emotional evaluation of one’s self-worth.”

According to Adler’s (1964) birth order theory, first born siblings have the highest self-esteem, are committed and abide by the rules of a place unlike the later born siblings who tend to be less committed, fail to follow the rules and ethics of a place or career and are rebels. It was further found that the high self-esteem and high confidence in firstborns emanates from parents’ direction and the tutor effect to their younger siblings.

A study was conducted on a sample of 841 males and 944 females who were all undergraduate students. Measures such as the Rosenberg’s Self-Esteem Scale were used. The results showed that later born children tended to have lower self-esteem compared to firstborns who scored high in self-esteem. The lowest level of self-esteem was found in the middle-born children (Falbo, 1981).

Narcissism

According to Reber et al. (2009), Narcissism is “a sub-clinical personality disorder characterized by an exaggerated sense of self-importance, a tendency to overvalue one’s accomplishments, an exhibitionist needs for attention and admiration, and inappropriate emotional reactions to criticism.”

According to DSM-5 (APA 2013), Narcissism or narcissistic personality disorder is defined as “a pervasive pattern of grandiosity, need for admiration, and lack of empathy, with interpersonal entitlement, exploitative, arrogant, and envious”

A study was conducted on a random sample of 50 individuals. Two measures, the Millon Clinical Multiaxial Inventory and the Narcissistic Personality Inventory were administered on the subjects. The results found a positive association for first and only borns versus all later born groups with respect to having higher narcissism scores on the two inventories (Curtis & Cowell, 1993).

Interrelation

Self-esteem and Conscientiousness

A study was conducted on a large heterogenous sample of individuals who ranged in age from 9 to 90. The results found out that high self-esteem individuals were emotionally stable, extraverted and conscientious, and somewhat agreeable and open to experience (Robins et al., 2001).

Self Esteem and Narcissism

According to a study by Brummelman et al. (2018) narcissists have an exaggerated, or excessive self-esteem. It is argued that narcissism and self-esteem are rooted in distinct core beliefs- beliefs about the nature of the self, the others and of the relationship between the self and others.

A study was conducted on a sample of 98 kids with mean age of 11.9 (SD= 1.68 years). The results found that certain aspects of narcissism were particularly predictive of maladaptive characteristics and outcomes such as low self-esteem, callous-unemotional (CU) traits and conduct problems. It was also found that children with relatively high levels of narcissism and

low self-esteem showed the highest rates of conduct problem symptoms (Barry, Frick & Killian, 2003).

Narcissism and Conscientiousness

A study was conducted on a sample of (N=437), where the mean age was 23 years. The results showed that there was a moderate positive correlation between industriousness, an aspect of conscientiousness and grandiose narcissism. Industriousness reflects a high need for achievement and ability to pursue non-immediate goals. These traits might be valued by narcissists because of their agentic features and the fact that they allow them to reach high social status (Zajenkowski & Szymaniak, 2021).

According to Furnham (2017) two studies were conducted on British working adults between the age groups of 23-65 years. It was found that bold, sub-clinical narcissists were or claimed to be conscientious. It was further found that bold narcissists over-reported their conscientiousness because they genuinely believed that they are hard working.

Methodology

Purpose

The purpose is to study conscientiousness, narcissism and self-esteem among first born and last-born children.

Hypothesis

- ***Hypothesis 1:*** There will be a significant correlation between Self-esteem and conscientiousness.
- ***Hypothesis 2:*** There will be a significant correlation between Self-esteem and Narcissism.
- ***Hypothesis 3:*** There will be significant difference between birth order categories and conscientiousness & narcissism. It is hypothesized that Firstborns will score higher on conscientiousness and narcissism than Lastborn.

Method

Sample

A total sample of N= 60 (30 firstborns, 30 last borns) in the age group of 18-25 years was collected from the city of Chandigarh.

Measures

- ***Conscientiousness Scale***: as taken from the NEO- Five Factor Inventory, originally developed by Costa and McCrae (2012), is a 12-item scale that measures the conscientiousness of individuals. Respondents were asked to rate each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).
- ***Rosenberg Self-Esteem Scale***: as developed by Rosenberg (1979) is a 10-item scale that measures the self-esteem of an individual. Respondents were asked to rate each item on a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree).
- ***Narcissistic Personality Inventory (NPI-16)***: items are originally drawn from Raskin and Terry's (1988) 40 item measure. The scale has 16 items and measures narcissism in an individual. The respondent was asked to choose one of two statements that was most relevant for him/her.

Procedure

The participants were informed about the purpose of the research and the questionnaires were filled through Google Forms. Standardized psychological tests were administered to the participants. Each participant was thanked for their time and cooperation.

ANALYSIS OF DATA**RESULTS****Table 1***Descriptives*

	Self-Esteem	Conscientiousness	Narcissism
N	60	60	60
Mean	28.9	31.6	0.350
Standard deviation	5.31	6.26	0.192

Table 2*Correlation Matrix*

	Self-Esteem	Conscientiousness	Narcissism
Self-Esteem	—		
Conscientiousness	0.473***	—	
Narcissism	0.311*	0.028	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2: The results found out that there is a significant positive correlation between Conscientiousness and Self-Esteem ($r = 0.473$, $p < .001$). The results also found a significant positive correlation between Narcissism and Self-Esteem ($r = 0.311$, $p < .05$). However, no significant correlation was found between Narcissism and Conscientiousness.

Table 3*Independent Samples T-Test*

		Statistic	df	p
Self-Esteem	Student's t	-1.371	58.0	0.176
Conscientiousness	Student's t	-0.327	58.0	0.744
Narcissism	Student's t	0.669	58.0	0.506

Note. $H_a \mu_{\text{First Born}} \neq \mu_{\text{Last Born}}$

Table 4*Group Descriptives*

	Group	N	Mean	Median	SD	SE
Self-Esteem	First Born	30	28.000	28.500	4.864	0.8880
	Last Born	30	29.867	30.000	5.655	1.0325
Conscientiousness	First Born	30	31.367	31.000	5.530	1.0097
	Last Born	30	31.900	33.000	6.999	1.2779
Narcissism	First Born	30	0.367	0.375	0.173	0.0315
	Last Born	30	0.333	0.313	0.211	0.0385

Table 3: No significant difference was found between First born and Last born sibling with regard to Self-esteem, Conscientiousness and Narcissism.

DISCUSSION OF RESULTS

Based on correlation statistical analysis, the results depicted that there is a significant positive correlation between Conscientiousness and Self-Esteem ($r = 0.473$, $p < .001$), hence the first hypothesis that there will be a significant correlation between conscientiousness and self-

esteem is accepted. The results also found a significant positive correlation between Narcissism and Self-Esteem ($r = 0.311, p < .05$). Hence, the second hypothesis that there will be a significant correlation between Self-esteem and Narcissism is also accepted. However, no significant correlation was found between Narcissism and Conscientiousness. This result is supported by the result of a study conducted by Singh et al. (2019) on a sample of ($n=515$) Malaysian university student in which the results found a significant positive correlation between Conscientiousness and self-esteem ($r = .11, p < .05$).

Alternatively, independent T-test was also used to study the differences among Firstborns and Lastborns. No statistically significant differences were observed in self-esteem, conscientiousness and narcissism among Firstborn and Lastborn siblings, thus resulting in the rejection of our third hypothesis that there will be significant difference between birth order categories and conscientiousness & narcissism and that Firstborns will score higher on conscientiousness and narcissism than Last borns.

The results on the present study are consistent with the results of a past study conducted by Rohrer et al. (2015), where a large sample from United States ($n=5240$), Great Britain ($n=4489$) and Germany ($n=10,457$) was studied. The results showed very little to no effects of birth order on personality. Further, it was concluded that birth order does not have a lasting impact on broad personality traits outside of the intellectual domain.

In a study conducted by Johnson (2014), a sample ($n=200$) between the age group of 18-40 was taken to investigate birth order and its effects on personality, self-esteem and life satisfaction. The results of this study found no significant differences between birth order and personality. Further it was also found that there was no significant that there was no significant difference between birth order and self-esteem either.

CONCLUSION

The purpose of this research was to study self-esteem, conscientiousness, and narcissism among first borns and last borns. A sample of 60 individuals was taken between the age range of 18-25 years, among which 30 were firstborns and 30 were last borns. Standardized scales were used to measure Self-esteem, Conscientiousness, Narcissism.

The results found that there was a significant positive correlation between conscientiousness and self-esteem and between narcissism and self-esteem, implying a

significant relation between these variables. However no significant difference was found between the birth order categories and self-esteem & conscientiousness. Thus, our first and second hypothesis was accepted while the third hypothesis was rejected. With respect to the findings of this research paper we may conclude that there is no apparent or significant impact of birth order on personality traits. While the family niches do certainly influence the personality of the individuals, it is also important to note that in the modern day and age, the technological facilities and provisions, make a great impact on the rearing of children. Thus, it is not unexpected that the results of the modern studies are in contrast with the studies of the past.

From the ROLs it is apparent that the studies in the 20th century vary from the studies in the 21st century. It is also quite apparent from the results that individuals who are conscientious and dutiful are also almost always high on self-esteem, and these aspects are not bound to change based on the birth order. It is suggested that parent's must not discriminate between the firstborn children and the later born children simply based on age and birth order. All children need equal amounts of love, respect, and care from their parents. Parents also must not burden one child with extra responsibilities while depriving the other of them. The findings of the present study can be useful to researchers working on similar topics. The data in the present study has been divided simply based on birth order and not gender. Perhaps a comparative study based on the divisions of both birth order and sex might provide a deeper insight into the topic.

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