

Birth order and its relation to Achievement motive and Resilience

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Abstract

The concept of birth order was brought to light by Adlerian psychology as an important factor in individual differences in personality and other psychosocial traits. This study aimed to study the differences that exist in an individual's level of achievement, motivation, and resilience on the basis of birth order, divided into first-born and later-born. A sample of 80 individuals was stratified into 40 first-born and 40 later-born. To assess resilience, the Connor and Davidson Resilience Scale (2003) was used and to measure achievement motive, the Achievement Motivation Inventory by J.M. Muthee (2009) was used. The analyses showed no significant difference between the first born and later born in the levels of resilience and achievement motivation. Further results are discussed with implications.

Keywords: birth order, achievement motive, resilience, first born, last born

Introduction

For a long time, in history, birth order has been discussed as a crucial factor for individual differences. In a family context, birth order determines not only one's mere age but also one's level of authority, decision-making power, and access to resources (Tripathy, 2018). The influence of birth order on personality was first highlighted in the works of Alfred Adler, the father of individual psychology.

Adler believed that despite having the same parentage and the same family environment, siblings do not necessarily have the same social environment. This leads to individual differences among siblings. Although the links between birth order and personality remain ambiguous even after years of exploration, new insights were provided by the book "Born to Rebel" (Sallowey, 1997). He argued that birth order and the subsequent differential parental treatment result in individual differences among siblings. Consequently, even after 100 years, the words of Adler still reverberate in the research literature and demand continued exploration. It is reported that birth order studies have wide

implications for academic success and coping abilities in life. Though research in this area is widespread, its generalization and predictions remain limited. Many overlapping and inconsistent findings open doors for more investigation.

Birth order

According to Adler, the last born are empathetic, charming, and sociable. They are often the life of the party, doing better than other siblings in their social interactions (Blair, 2011; Leman, 2009). They can be manipulative and undisciplined if overpampered, and often struggle for power and competence (Leman, 2009). Lastborns are more disorganized and less motivated to achieve than other siblings (Booth & Kee, 2009; Blair, 2011). They turn out to be very high on the need for achievement and show better leadership skills and academic success (Leman, 2009). They are perfectionists, critical, and independent. Often seen mentoring the younger siblings, they also possess the qualities of a caregiver and parent (Leman, 2009; Whiteman, 2003). Middle-born children are found to face a lot of ambiguity regarding their role within a family. Owing to this, they struggle to find their place, resulting in more peer interaction than parental

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interaction (Blair, 2011; Leman, 2009). Finally, due to fewer socialization opportunities than in larger families, firstborn children are often cautious, secluded, and arrogant (Blair, 2011; Leman, 2009). Only children are also more self-sufficient and do not show the need for validation like the first born (Blair, 2011).

Resilience

Though many different conceptualizations of resilience exist, the most common definitions denote resilience as a trait. The level of one's resilience marks his or her ability to strive and recover in stressful and traumatic situations (Carver, 2010). Birth order has been investigated in line with coping capacities in the face of adversities. It stands out as one of the most crucial traits for well-being and recovering from trauma (Dyrbye et al., 2005). To sum up, three core concepts underlying resilience can be listed as: adversity; adaptation; positive coping; and self-efficacy (Fletcher & Sarkar, 2013; Luthar et al., 2000). Studies in the UK and US have found the prevalence of many mental health problems in later born people. They have a high risk of depression, anxiety, and suicidal tendencies (Gates et al., 1988). Many studies provide evidence that both genetics and the environment are equally responsible for one's level of resilience (Feder et al. 2009). Essa and Burnham (2019) studied the effects of birth order on personality through parent-child attachment. The foundation of positive traits like self-esteem and resilience are an outcome of the quality of early parent-child relationships. It is possible for individuals' perceived status in their families to have an impact on their capacity to be resilient. In a study to investigate the link between mental health problems, resilience, happiness and birth order, it was found that the last-born secured the highest resilience score, followed by first-borns, then middle-born, and finally only children (Fukuya et al., 2021). Similarly, in a cross-sectional study of a sample of 400 individuals, it was found that the first born performed better than the middle and later born for resilience (Malik, 2021). Another study from Turkey confirmed better psychological resilience scores for middle and last-born in a sample of 247 individuals (Erguner-Tekinalp & Terzi, 2014). Sharma and Srimathi (2014) also found higher levels of resilience for first-borns than for later-born.

Achievement Motive

The way a person approaches a task and exhibits a skill can both be affected by achievement motivation. Achievement motivation has wide applications in educational psychology. McClelland (1961) believed that some children have an edge over other children in terms of early socialization that makes them adept at some cognitive and emotional functions. The goal of achievement-oriented activities is to succeed with excellence in relation to competitors or a standard of reference (McClelland, 1961). He suggested that achievement motivation consists of three elements: competition for excellence, emotional attachment to the goal, and evaluation by some reference group (McInerney, 2004; Maehr, 2008). An individual is motivated to succeed when he is aware that he is accountable for the outcomes, when he thinks he has the explicit knowledge to carry out the task, and when some risk is involved. Achievement-oriented people have better performance in competitive environments, an internal locus of control, and a preference for long-term goals (McInerney, 2004). People with low achievement orientation generally play safe and avoid risks.

Adlerian psychology on birth order observes that the first born are higher achievers academically than the later born (Adler, 1964). Similarly, they turn out to be more conforming with a high need for affiliation and approval than the latter (Adler, 1964). Though research in this area is widespread, its generalization and predictions remain limited. According to a number of studies, one's birth position is more closely related to achievement motivation than to intelligence (Vandergriff & Rust, 1985). Firstborns, as opposed to later-born, attribute success or failure to internal factors and often undervalue the role of external factors in their success (Phillips & Phillips 1994). Birth order seems to affect goal preferences as well. Firstborns have consistently shown a preference for mastery goals, while second-born have shown a preference for performance goals (Carette, Anseel & van Yperen, 2011). A strong relationship is observed between the first and middle born with competitiveness (Falbo, 1981). Fergusson et al. (2006) also reported that the later born were more unlikely to aspire to educational qualifications than the first born. Travis and Kohli (1995) also suggest that birth order can influence self-esteem and cognitive achievement.

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Objectives: To find out the differences in first born and later born in their achievement motive and resilience

Hypotheses

1 There exists a significant difference between the first born and later born in the level of resilience.

2 There exists a significant difference between the first born and later born in the level of achievement motive.

Method

Sample: Purposive sampling was used. Participants were contacted to complete online surveys. A total of 80 individuals participated in this study. Among them, 40 were first born and 40 were later born. 70 had a normal birth and 28 had a caesarian birth. The age of participants ranged from 20 to 30 years.

Measuring Tools: The following two standardized measuring scales were used-

Connor and Davidson Resilience Scale (2003)- The Connor and Davidson Resilience Scale (2003) is centred on the operational definition of resilience, which defines it as the ability to “thrive in the face of adversity” (Connor & Davidson, 2003). Based on 25 items, scores are evaluated on a 4-point Likert scale. One can score in the range of 0-100 on the scale, where higher scores indicate better resilience. The scale has well established

convergent validity with significantly positive correlations with the measure of hardiness and a significantly negative correlation with the Perceived Stress Scale. It also has good predictive validity (Connor and Davidson, 2003).

Achievement Motive Inventory: The inventory was developed and validated by J.M. Muthee and Immanuel Thomas, University of Kerela (Muthee & Thomas, 2009). The inventory has a total of 32 items, with 18 items being positively worded and 14 being negatively worded. The responses are marked on a 5-point Likert scale. Negative coding is specified for negatively worded items as 1, 2, 3, and 4,5. High scores on the scale imply higher achievement motivation and low scores imply low achievement motivation. The Cranach’s alpha is computed as 0.749. Validity is established by the researcher in the process of developing and standardizing the test.

Results

Analysis was conducted using SPSS 16. A T-test was carried out to understand the difference between first-born and later-born on resilience and achievement motivation. Means and standard deviation values were computed. Normality, homogeneity of variance, and skewness were checked in order to satisfy the criteria for conducting a t-test.

Table 1
Showing Mean, S.D and t-test for the study variables (n=80)

S.No	Variables	First born (n=40)		Later born (n=40)		t-test	p
		MEAN	S.D.	MEAN	S.D.		
1.	Resilience	110.35	15.702	115.43	17.702	1.38	0.170
2.	Achievement motive	69.73	23.83	72.10	12.719	0.56	0.580

Table 1 shows descriptive statistics and t-ratios for the variables. The Levene’s test for equality of variance was assessed and was more than the value of 0.05 for resilience but not for achievement motive. The t test analysis showed the t-ratio for resilience as 1.386 and for achievement motive as 0.556. Results revealed an insignificant difference in the scores for first born (M = 110.35, S.D = 15.702) and later born (M = 115.43,

S.D = 17.702) on resilience; $t(78) = 1.38, p = 0.170$. Similarly, insignificant differences were found between first-born (M = 69.73, S.D = 23.83) and later-born (M = 72.10, S.D = 12.719) on achievement motive; $t(78) = 0.56, p = 0.580$.

Therefore, we conclude the rejection of our two hypotheses, i.e., there exists no difference between

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the first born and later born in the levels of resilience and achievement motive.

Discussion

Alfred Adler's (1928) individual psychology, along with positive psychology, underlines the theoretical framework of this study. The study was aimed at studying the differences that exist in subjects' levels of achievement motivation and resilience based on their birth position (first born and later born). Birth order status has long been speculated as an important factor for individual differences in personality characteristics (Damian & Roberts, 2015). The analyses showed that there is no significant difference between the first born and later born in the level of resilience and in the level of achievement motivation. Several studies conclude with similar findings, indicating birth order as an insignificant factor in personality differences (Rohrer, Egloff & Schmukle, 2015). It is contested that other factors, like immediate family setting, quality parenting, and sibling relations, have a greater impact on the cognitive, social, and emotional development of a child (Downey, 2001). Researchers also argue that the influence of birth order on personality is not very consistent (Hartmann, 2019). Robust statistical tools, large sample sizes, and transnational data have confirmed such findings. The effect of birth order differs within different family settings. Burnham (2018), for instance, studied the effects of birth order on personality through parent-child attachment. The foundation of positive traits like self-esteem and resilience is an outcome of the quality of early parent-child relationships rather than just mere birth position (Essa & Burnham, 2019).

Sulloway (1997) argues that every child, on the basis of his birth position, occupies a niche within the family, and later works to achieve a distinctive identity. McClelland (1961) also suggests that "independence training" given by parents is integral to developing the need for achievement and positive traits like resilience and self-efficacy. Independence training refers to small tasks of autonomy that children may be allowed to carry out on their own, early in life, for example, like making friends of their

choice and evaluating their performance through their own set ideals (Cropley, 2015). Kelly and Liles (2013) also support the study's finding by insisting that all birth positions are endowed with both strengths and weaknesses. No one birth position is better than the other in the case of dealing with traumatic events. Other factors like self-concept, perceived support, and family status are more significantly correlated with resilience than birth order.

Research findings by Tripathy (2018) further support these findings. He investigated the effects of birth orders on achievement motivation among 90 adolescents and confirmed no major difference between the first and the second born. He further argued that the number of siblings has the most important outcome on academic success. The influence of the sex composition of siblings has also been found to impact educational outcomes, especially for women (Butcher & Case, 1994). Similarly, for resilience, research literature fails to establish any serious relationship with birth order. Small sample size is one of the most common reasons reported and so could be the reason for the lack of significant differences in this study as well. Interestingly, in an ambitious study of almost 10,000 individuals, no effect of birth order was discovered on narrower traits like life satisfaction, risk-taking, impulsivity, etc. (Rohrer, Egloff & Schmukle, 2015).

From the study's results, it can be implied that other factors like parenting style, parent-child attachment, and interaction with siblings also play a crucial role in developing traits like resilience and achievement motivation.

Limitations

The small sample size of the study limits the generalizations and validity of the findings. Secondly, it is believed that categorization of birth order into first born, middle born, and last born would have been more insightful. It is recommended that the sex composition of siblings and gender differences be explored along with birth order. At the same time, distinguishing between children with siblings and only-children can also help draw upon interesting findings.

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