

Research Paper

A Comparison of First-Born and Second-Born Siblings on Locus of Control, Conflict Resolution Style, and Adjustment

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ABSTRACT

Birth order is hypothesized to influence personality traits such as locus of control, conflict resolution style, and adjustment. This study aimed to compare first-born and second-born siblings on these constructs. A sample of 80 siblings (40 first-born, 40 second-born, aged 16–25 years) was selected through convenience and snowball sampling in Pune, India. Locus of control was measured using Rotter's Locus of Control Scale (1966), conflict resolution style with the Thomas-Kilmann Conflict Mode Instrument (1974), and adjustment (social and emotional) with the Global Adjustment Scale (Vohra, 1994). Data normality was assessed, revealing non-normal distribution, leading to the use of the Mann-Whitney U test. Results showed no significant differences between first-born and second-born siblings in locus of control (Powerful Others, Chance, Individual Control), conflict resolution styles (Competing, Compromising, Avoiding, Accommodating, Collaborating), or adjustment (Social, Emotional). These findings suggest that birth order may not be a significant determinant of these traits, possibly due to shared familial environments or individual differences. Implications for parenting and counseling are discussed, along with recommendations for future research.

Keywords: *Birth Order, Locus of Control, Conflict Resolution Style, Social Adjustment, Emotional Adjustment*

Birth order has long been considered a factor in shaping personality and behavior, with first-born siblings often viewed as responsible leaders and second-born siblings as adaptable and creative (Sulloway, 1996). This hypothesis stems from family dynamics, where first-borns typically receive greater parental attention and expectations, while second-borns navigate shared resources and sibling rivalry. Locus of control (LOC), defined as the extent to which individuals believe they control life events (Rotter, 1966), is thought to vary by birth order. First-borns may develop a more internal LOC due to leadership roles and parental reinforcement, whereas second-borns might exhibit external LOC, attributing outcomes to external factors like family dynamics or chance (Hoffman, 1991). Similarly, conflict resolution styles—categorized into Competing, Collaborating, Compromising, Avoiding, and Accommodating (Thomas & Kilmann, 1974)—may differ,

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with first-borns potentially favoring assertive styles (e.g., Competing) due to their dominant roles, and second-borns adopting flexible strategies (e.g., Accommodating or Compromising) to negotiate sibling interactions. Adjustment, encompassing social and emotional adaptation (Crow & Crow, 1956), may also reflect birth order influences, as first-borns face higher expectations and second-borns adapt to shared attention.

Empirical evidence on birth order effects, however, is mixed. Sulloway's (1996) evolutionary theory suggests that first-borns develop traits to secure parental investment, while second-borns differentiate through adaptability. Conversely, Harris (1998) argued that peer and social influences outweigh familial roles, shaping personality more than birth order. Large-scale studies, such as Rohrer et al. (2015), found minimal birth order effects on personality traits like conscientiousness or openness, questioning traditional assumptions. In contrast, Eckstein et al. (2010) reviewed 200 birth order studies and noted that first-borns often exhibit achievement-oriented traits, while second-borns show social adaptability, though effect sizes were small. These inconsistencies highlight the need for context-specific research, particularly in non-Western settings where cultural factors like collectivism and family structure may moderate birth order effects (Bhawuk, 2008).

In India, family dynamics are heavily influenced by collectivist values, joint family systems, and hierarchical roles, which may amplify or diminish birth order effects. For instance, first-borns may face intense pressure to uphold family honor, potentially fostering internal LOC and structured adjustment, while second-borns may develop flexible conflict resolution styles to maintain harmony in multi-generational households (Verma & Sharma, 2013). Yet, rapid urbanization and nuclear family trends in cities like Pune may homogenize sibling experiences, reducing birth order distinctions (Kumar, 2016). The lack of Indian studies on birth order and psychological traits underscores the need to explore these dynamics locally, as Western models may not fully apply due to cultural differences in parenting and socialization (Si & Lee, 2007).

This study investigates whether first-born and second-born siblings differ significantly in locus of control, conflict resolution styles, and adjustment in an Indian context. It draws on Rotter's (1966) social learning theory, which posits that LOC reflects learned expectations about control, potentially shaped by birth order roles. The Thomas-Kilmann model (1974) provides a framework for conflict resolution, hypothesizing distinct styles based on sibling hierarchy. Adjustment is conceptualized through Crow and Crow's (1956) lens of social and emotional adaptation, expecting variations due to differing parental expectations. The objectives are to examine differences in LOC (Powerful Others, Chance, Individual Control), conflict resolution styles (Competing, Collaborating, Compromising, Avoiding, Accommodating), and social and emotional adjustment between first-born and second-born siblings. Hypotheses posit significant differences, expecting first-borns to show more internal LOC, assertive conflict styles, and structured adjustment, and second-borns to exhibit external LOC, flexible conflict styles, and adaptable adjustment.

METHODOLOGY

Sample

The sample comprised 80 siblings (40 first-born, 40 second-born; 40 males, 40 females) aged 16–25 years, recruited from Pune, India, using non-probability convenience and snowball sampling. Inclusion criteria included unemployed participants living with family. Exclusion criteria were participants with physical or mental disabilities or living away from

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family. Both groups were matched for age, gender, and number of siblings to control for confounding variables.

Instruments

Three standardized measures were used:

1. **Locus of Control Scale (Rotter, 1966):** A 29-item scale assessing internal vs. external control beliefs through paired statements, yielding subscales for Powerful Others, Chance, and Individual Control. Higher scores indicate external orientation.
2. **Thomas-Kilmann Conflict Mode Instrument (TKI, 1974):** A 30-item tool measuring five conflict resolution styles (Competing, Collaborating, Compromising, Avoiding, Accommodating) via paired statements. Higher scores reflect stronger style preferences.
3. **Global Adjustment Scale (GAS, Vohra, 1994):** A 120-item scale assessing emotional and social adjustment. Higher emotional scores indicate sensitivity; higher social scores suggest hostility. Reliability ranges from .65–.86.

Procedure

Participants were approached in Pune, provided informed consent, and assured of confidentiality. Paper-based questionnaires were administered offline, with clear instructions. Data collection occurred in controlled settings to ensure accurate responses. The process adhered to ethical guidelines, including voluntary participation and anonymity.

Data Analysis

Normality was assessed using mean, standard deviation, skewness, and kurtosis. Non-normal distribution led to the use of the Mann-Whitney U test for comparing first-born and second-born siblings on all variables, conducted via SPSS version 29.

RESULTS

Descriptive statistics (Table 1) indicated non-normal distributions for all variables, with skewness and kurtosis values outside normal ranges. The Mann-Whitney U test (Table 2) revealed no significant differences between first-born and second-born siblings across all variables ($p > .05$).

Table No. 1 Descriptive Statistics for Study Variables

Variable	Mean	SD	Skewness	SE Skewness	Kurtosis	SE Kurtosis
Powerful Other LOC	21.80	5.186	0.083	0.269	0.494	0.532
Chance Control LOC	23.45	4.570	-0.700	0.269	0.154	0.532
Individual Control LOC	24.86	4.212	0.026	0.269	0.898	0.532
Competing CR	5.64	2.367	-0.511	0.269	-0.461	0.532
Compromising CR	5.83	1.385	-0.176	0.269	-0.383	0.532
Avoiding CR	5.70	1.885	0.331	0.269	0.183	0.532
Accommodating CR	5.84	1.775	0.433	0.269	0.065	0.532
Collaborating CR	4.90	1.489	0.765	0.269	-0.009	0.532
Social Adjustment	19.25	4.030	0.538	0.269	0.143	0.532
Emotional Adjustment	20.19	5.248	-0.145	0.269	0.205	0.532

Note: LOC = Locus of Control; CR = Conflict Resolution; SD = Standard Deviation; SE = Standard Error.

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Table No. 2 Mann-Whitney U Test Results

Variable	Mann-Whitney U	p-value
Powerful Other LOC	764.50	.678
Chance Control LOC	763.00	.669
Individual Control LOC	700.50	.312
Competing CR	692.00	.272
Compromising CR	789.50	.865
Avoiding CR	678.50	.223
Accommodating CR	765.00	.682
Collaborating CR	789.50	.865
Social Adjustment	777.00	.766
Emotional Adjustment	750.50	.582

Note: $p > .05$ indicates no significant difference.

DISCUSSION

The study found no significant differences between first-born and second-born siblings in locus of control, conflict resolution styles, or adjustment, rejecting all hypotheses. These results align with contemporary research questioning the influence of birth order on personality traits (Harris, 1998; Rohrer et al., 2015; Ernst & Angst, 1983). The absence of differences in locus of control contradicts Sulloway's (1996) evolutionary theory, which posits that first-borns develop internal control due to leadership roles, while second-borns lean toward external control. This lack of differentiation may stem from shared familial environments, where parents in collectivist Indian households emphasize similar values (e.g., duty, harmony) across siblings, homogenizing control beliefs (Bhawuk, 2008). Peer influences, as highlighted by Harris (1998), may further outweigh birth order effects, especially in urban settings like Pune, where socialization extends beyond the family.

Similarly, the lack of differences in conflict resolution styles challenges assumptions that first-borns favor assertive styles (e.g., Competing) and second-borns adopt flexible ones (e.g., Accommodating) (Eckstein et al., 2010). This finding supports Ernst and Angst's (1983) conclusion that birth order effects on interpersonal behavior are inconsistent. In Indian families, cultural emphasis on interdependence may encourage all siblings to prioritize collaborative or compromising styles to maintain family cohesion, diminishing birth order distinctions (Verma & Sharma, 2013). The non-significant results for adjustment align with Rohrer et al. (2015), suggesting that first-borns and second-borns face comparable parental expectations and developmental challenges, particularly in the 16–25 age range, where identity formation is influenced more by individual experiences than sibling hierarchy.

Theoretically, these findings support social learning theory (Rotter, 1966), which emphasizes learned expectations over fixed roles. Siblings in similar environments may develop comparable LOC, conflict resolution strategies, and adjustment patterns through shared modeling and reinforcement. Family systems theory (Bowen, 1978) further explains these results, as sibling dynamics in Indian households often involve balanced parental investment, reducing differentiation. Culturally, the collectivist nature of Indian society, coupled with urban nuclear family trends, may minimize traditional birth order roles, as siblings share resources and responsibilities equally (Kumar, 2016).

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Limitations include the small sample size ($N = 80$), which may limit statistical power to detect subtle differences, and the narrow age range (16–25), which excludes older adults where birth order effects might manifest differently. Convenience and snowball sampling may introduce bias, as participants from Pune share similar socio-cultural contexts, potentially reducing variability. The reliance on Western instruments (e.g., Rotter's LOC Scale, TKI) may overlook cultural nuances, as these tools were not validated for Indian populations. Future research should employ larger, randomized samples across diverse Indian regions to enhance generalizability. Longitudinal designs could explore how birth order effects evolve over time, while qualitative approaches might uncover subjective experiences of sibling roles. Incorporating variables like parenting styles, family size, or socio-economic status could provide deeper insights into moderating factors.

Practically, these findings suggest that parents, educators, and counselors need not tailor strategies based on birth order. Uniform interventions can foster internal locus of control through autonomy-supportive parenting, encourage constructive conflict resolution via communication training, and promote adaptive adjustment through emotional regulation programs. In Indian contexts, family-based interventions, such as workshops on sibling cooperation, could strengthen relationships and mitigate rivalry, aligning with collectivist values. Schools and colleges could integrate conflict resolution modules into curricula, emphasizing collaborative skills for all students, regardless of birth order. Counselors should focus on individual differences, such as personality traits or life experiences, rather than assuming birth order shapes psychological outcomes.

The null findings also highlight the need to re-evaluate birth order theories in modern contexts. Urbanization, changing family structures, and increased peer influence may render traditional birth order stereotypes less relevant. Researchers should explore whether cultural shifts, such as India's transition from joint to nuclear families, further diminish birth order effects, particularly in metropolitan areas. Comparative studies across cultures could clarify whether collectivism uniquely moderates these dynamics, contributing to global psychological literature on family influences.

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Conflict of Interest

The authors declare no conflict of interests.

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