

ISRG Journal of Multidisciplinary Studies (ISRGJMS)



ISRG PUBLISHERS

Abbreviated Key Title: isrg j. multidiscip. Stud.

ISSN: 2584-0452 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjms/>

Volume – IV, Issue – IX (September) 2026

Frequency: Monthly



Effect of Birth Order on Psychological Adjustment among JSS1 Students in Aba Metropolis

Francisca Ifeoma Ehiemere

Department of Teacher Education National Institute for Nigerian Languages, Aba

| **Received:** 25.08.2026 | **Accepted:** 02.09.2026 | **Published:** 07.09.2026

***Corresponding author:** Francisca Ifeoma Ehiemere

Abstract

This study investigated how birth order influences psychological adjustment among JSS1 students in Aba Metropolis, Abia State. It was prompted by concerns that a child's position in the family dynamics varying parental attention, responsibilities, sibling relations, and expectations affects their transition into secondary school. The research specifically evaluated four domains: emotional, social, academic, and behavioral adjustment. Using a correlational design, data were gathered from a multistage sample of 150 JSS1 students via the validated 30-item, 4-point Likert-type Birth Order and Psychological Adjustment Questionnaire (BOPAQ), which demonstrated verified reliability. Descriptive statistics (mean and standard deviation) addressed the research questions, while a one-way ANOVA tested the null hypotheses at a 0.05 significance level. Results indicated that birth order significantly impacts all four dimensions of psychological adjustment. The study concluded that family birth position relates to psychological adaptation, though it is not the sole factor in student well-being. Recommendations emphasize that parents avoid birth-order stereotyping, school counselors and teachers offer tailored support, and families collaborate closely with educators to enhance student adjustment.

Keywords: Birth order, psychological adjustment, emotional adjustment, social adjustment, academic adjustment, behavioral adjustment.

Background of the Study

Birth order describes a child's specific position among siblings whether first-born, middle-born, last-born, or an only child. In psychological research, this placement is significant because it often dictates how parental attention, discipline, domestic roles, and financial resources are distributed. Rather than producing fixed traits, recent studies indicate that birth-order dynamics evolve alongside a child's social environment. For example, Lejarraga et

al. (2024) observed that behavioral variances like risk-taking are most pronounced during early adolescence (ages 10 to 13) and fade as children grow older, highlighting the strong impact of changing family environments.

Psychological adjustment reflects how effectively a child handles emotional, social, academic, and behavioral demands. This developmental milestone is particularly crucial for Junior

Secondary School (JSS1) students, who face increased academic pressure, new peer dynamics, and unfamiliar school structures. Strong support networks, emotional resilience, and healthy relationships with teachers and peers foster positive school transitions (2024), whereas unresolved emotional challenges can severely hinder an adolescent's educational progress (Armitage et al., 2024).

The link between a child's birth order and their overall psychological adaptation stems from these varied home experiences. Eldest siblings often carry higher parental expectations and heavier duties; middle children frequently navigate sibling competition for attention; youngest children may benefit from greater leniency; and only children carry undivided parental focus. Consequently, birth order frequently shapes parent-child interactions and early academic performance (Zhang et al., 2023; Chandna & Bhagowalia, 2024).

Nevertheless, birth order alone does not dictate psychological outcomes. Sibling rapport, parenting approaches, and the overall home environment significantly soften or alter these influences (Chi et al., 2024). Investigating how birth order interacts with emotional, social, academic, and behavioral adjustment among JSS1 students in Aba Metropolis provides valuable insights. These findings can guide parents, educators, and school counselors in supporting students through a smooth transition into secondary education.

Statement of the Problem

Psychological adjustment is vital to a student's academic performance and overall personal development. First-year Junior Secondary School (JSS1) students are particularly susceptible to adaptation challenges as they shift from primary education to a far more rigorous secondary school environment. This transition forces them to navigate higher academic demands, new teaching styles, unfamiliar routines, evolving peer groups, and increased personal responsibility. Successful adjustment reveals itself through emotional stability, healthy social ties, active classroom engagement, and constructive conduct. Indeed, research confirms that school adjustment relies heavily on elements like strong social support, personal resilience, self-concept, positive emotional experiences, and supportive relationships with educators and peers (Azpiazu et al., 2024).

However, many students struggle to cope with these new institutional demands. Unaddressed adjustment issues often surface as emotional volatility, social withdrawal, disinterest in schoolwork, behavioral disruptions, weak peer interactions, and declining academic performance. Studies among adolescents link poor school adaptation directly to heightened anxiety, stress, and depression (2024). This problem is equally evident in Nigerian secondary schools, where students regularly encounter social and emotional hurdles while attempting to manage school workload and build positive connections with peers and teachers (Gidado et al., 2024).

A key family variable that may influence these outcomes is birth order. Whether a child is a first-born, middle-born, last-born, or only child typically alters the degree of parental attention, domestic responsibility, and sibling interaction they experience. These distinct family roles can shape how an adolescent manages social, emotional, and behavioral challenges. Even so, birth order is not a fixed determinant of psychological health; dynamic family

interactions, parenting styles, and individual personality traits also play critical roles in shaping youth development (Chi et al., 2024).

Ultimately, while JSS1 students in Aba Metropolis are expected to adapt smoothly to secondary school, many encounter significant emotional, social, academic, and behavioral obstacles. Determining whether these variances correlate with a student's ordinal position in the family remains critical. The lack of sufficient local empirical evidence on the relationship between birth order and psychological adjustment among JSS1 students in Aba Metropolis creates the need for the present study.

Purpose of the Study

The general purpose of the study is to examine the effect of birth order on the psychological adjustment of JSS1 students in Aba Metropolis. Specifically, the study seeks to:

1. Determine the effect of birth order on the emotional adjustment of JSS1 students in Aba Metropolis.
2. Examine the effect of birth order on the social adjustment of JSS1 students in Aba Metropolis.
3. Determine the effect of birth order on the academic adjustment of JSS1 students in Aba Metropolis.
4. Examine the effect of birth order on the behavioural adjustment of JSS1 students in Aba Metropolis.

Research Questions

The following research questions will guide the study:

1. What is the effect of birth order on the emotional adjustment of JSS1 students in Aba Metropolis?
2. What is the effect of birth order on the social adjustment of JSS1 students in Aba Metropolis?
3. What is the effect of birth order on the academic adjustment of JSS1 students in Aba Metropolis?
4. What is the effect of birth order on the behavioural adjustment of JSS1 students in Aba Metropolis?

Research Hypotheses

The following null hypotheses will be tested at 0.05 level of significance:

1. H_{01} : There is no significant effect of birth order on the emotional adjustment of JSS1 students in Aba Metropolis.
2. H_{02} : There is no significant effect of birth order on the social adjustment of JSS1 students in Aba Metropolis.
3. H_{03} : There is no significant effect of birth order on the academic adjustment of JSS1 students in Aba Metropolis.
4. H_{04} : There is no significant effect of birth order on the behavioural adjustment of JSS1 students in Aba Metropolis.

Concept of Birth Order

Birth order defines a child's chronological entry into a family, categorizing individuals as first-born, middle-born, last-born, or only children. This ordinal positioning has long been studied in psychology because siblings raised by the same parents often encounter distinct domestic environments differing in parental focus, assigned responsibilities, access to household resources, and sibling dynamics. As a result, birth order serves as an important family variable that can shape an individual's psychological and social trajectory.

Sibling positions typically foster distinct familial roles and experiences:

First-born children: Enjoy initial, exclusive parental focus. However, as the family expands, parental resources are shared, and older siblings are often tasked with greater household duties and the care of younger brothers and sisters.

Middle-born children: Positioned between older and younger siblings, they frequently navigate competition for parental recognition and emotional space.

Last-born children: As the youngest, they often benefit from increased parental protection, leniency, and assistance from both parents and older siblings.

Only children: Lacking siblings, they receive full, undivided parental investment and family resources.

Despite these classic designations, modern empirical research cautions against treating birth order as an immutable driver of personality or human development. For example, Lejarraga et al. (2024) observed in large-scale studies that birth-order differences in risk-taking were pronounced during early adolescence (ages 10–13) but diminished with age, indicating that changing home environments and broader social experiences strongly mediate these effects.

Likewise, Mu et al. (2024) demonstrated that birth order had negligible and statistically insignificant impacts on the Big Five personality traits, proving that traditional stereotypes do not uniformly hold across all contexts. Conversely, Zhang et al. (2023) noted that later-born children in certain cultural settings experienced subtle cognitive and environmental disadvantages between ages 10 and 18.

Ultimately, birth order is best viewed as a contextual family dynamic rather than a strict determinant of human behavior. Its influence continually interacts with parenting styles, cultural norms, sibling rapport, and socioeconomic status—making it a compelling variable when evaluating the psychological adjustment of JSS1 students in Aba Metropolis.

Concept of Psychological Adjustment

Psychological adjustment is the process by which an individual adapts to environmental demands, changes, and stressors while preserving emotional, social, behavioral, and academic stability. It entails regulating emotions, fulfilling everyday obligations, building healthy interpersonal connections, and maintaining a solid sense of personal well-being. Within an educational setting, adjustment is vital because students must continuously adapt to academic standards, institutional rules, teacher expectations, and evolving peer dynamics.

In adolescent research, psychological adjustment is recognized as a multidimensional construct encompassing four key areas: **Emotional Adjustment:** The ability to effectively manage feelings like anxiety, sadness, anger, and frustration; **Social Adjustment:** The capacity to build positive relationships with peers and educators and participate constructively in group settings; **Academic Adjustment:** The aptitude for managing study workloads, maintaining motivation, actively participating in class, and meeting educational standards; and **Behavioral Adjustment:** The habit of adhering to school regulations, practicing self-discipline, and behaving appropriately within the school community. Contemporary scholars similarly view school

adjustment as an interplay of these academic, social-emotional, and behavioral dimensions (Shalayiding et al., 2024).

This developmental milestone is particularly crucial for JSS1 students, whose entry into secondary school brings unfamiliar routines, higher academic demands, new teachers, and restructured peer circles. Successful adaptation supports strong school engagement, healthy relationships, academic achievement, and emotional balance. Empirical evidence highlights that strong social support, personal resilience, and a positive outlook foster smoother school transitions (Azpiazu et al., 2024), while robust self-concept and supportive networks protect adolescents against school maladjustment (Azpiazu et al., 2025).

Ultimately, psychological adjustment goes beyond merely avoiding behavioral or academic failure; it represents a child's capacity to balance personal needs with environmental expectations. Poor adjustment often manifests as emotional distress, strained relationships, academic detachment, and conduct issues. Recent Nigerian studies confirm that both internal psychological states and external environmental conditions significantly shape secondary school students' overall adjustment (Akpunne et al., 2025) making this construct essential for evaluating how JSS1 students navigate early secondary education.

First-Born Status and Psychological Adjustment

First-born status defines the eldest sibling's position within a family. Psychologically, eldest children experience a distinct home dynamic initially receiving undivided parental focus before transitioning into roles that often involve added responsibilities toward younger siblings. These early domestic experiences can shape emotional development, social skills, behavioral habits, and coping mechanisms. However, contemporary scholars stress that eldest status does not automatically dictate psychological health; factors like parenting styles, family dynamics, financial stability, and sibling relationships heavily modify these outcomes.

Empirical research presents mixed findings regarding the psychological adjustment of first-borns:

Elevated Emotional and Behavioral Challenges: A study of 3,581 Chinese adolescents revealed that first-borns experienced significantly higher levels of overall distress including heightened emotional symptoms, conduct issues, and peer difficulties than only children (2025). The researchers attributed these outcomes to lower parental companionship and parenting styles perceived as less emotionally warm and trusting.

Research by Li et al. (2023) on 842 adolescents demonstrated that birth order moderates the link between family environment and behavior. First-borns proved particularly sensitive to marital harmony, while sibling dynamics directly influenced their depressive symptoms and aggression underscoring that adjustment depends heavily on internal family relationship quality.

Conversely, evidence from Cameroon highlights potential benefits. Muki (2025) found a strong positive connection between being a first-born and developing a resilient identity. The combination of elder privileges and expected domestic responsibilities appeared to strengthen adaptive coping mechanisms and personal resilience.

Studies exploring birth-order dynamics in academic settings confirm that ordinal position interacts with peer, parent, and teacher relationships to shape overall school adjustment. Ultimately, first-born status influences psychological adaptation

through an interplay of elevated parental expectations, sibling leadership roles, emotional experiences, and available social support. Because existing literature varies across cultural settings, examining this relationship specifically among JSS1 students in Aba Metropolis remains critical.

Middle-Born Status and Psychological Adjustment

Middle-born status describes a child positioned between older and younger siblings. Unlike first-borns or last-borns, middle children occupy an intermediate space within the family hierarchy. This placement subjects them to unique patterns of parental focus, sibling dynamics, domestic roles, competition, and emotional support leading researchers to examine how middle-born status impacts emotional well-being, social connections, conduct, and overall mental health. Recent literature demonstrates that middle-born status offers both developmental challenges and distinct social advantages:

In a study of 3,581 Chinese adolescents across 42 schools, Qi et al. (2025) observed that middle-born youth scored higher for peer-relationship difficulties than other birth positions. They were also more likely to experience neglectful parenting and receive less direct parental companionship than only children, indicating that feelings of being overlooked can hinder social and emotional adaptation.

Middle children often experience role ambiguity as they simultaneously compare themselves to older siblings and guide younger ones (Qi et al., 2025). Balancing these dynamic sibling expectations alongside reduced parental attention can elevate emotional stress and create barriers to seeking parental guidance.

Conversely, navigating relationships between older and younger siblings often fosters strong negotiation skills and adaptive social traits. A comprehensive review by Priyanshu and Pandey (2025) underscored that middle-born status plays a key role in personality development and adolescent psychological well-being, though they emphasized the underlying complexity of these family dynamics. Ultimately, middle-born adjustment is shaped by the interplay of parental attention, family size, socioeconomic status, and sibling interactions. Because much of the current empirical literature originates outside Nigeria, evaluating middle-born status among JSS1 students in Aba Metropolis is essential to determine how these dynamics unfold within the Nigerian socio-cultural context.

Last-Born Status and Psychological Adjustment

Last-born status denotes the youngest child in a family with two or more siblings. Psychologically, youngest children experience a unique domestic environment because parents having gained prior child-rearing experience often adopt different parenting approaches. Last-borns frequently receive heightened affection, guidance, and protection from both parents and older siblings. While these dynamics significantly shape emotional, social, behavioral, and academic adaptation, the impact of being last-born varies depending on family size, socioeconomic status, parenting styles, and cultural expectations.

Recent empirical research highlights key patterns regarding last-born adolescent development: In a study of 3,581 adolescents, Qi et al. (2025) found that last-born youth were significantly more likely to experience permissive or protective parenting styles than their older siblings. While excessive indulgence can alter development, last-born adolescents overall exhibited lower psychological difficulty scores than first-borns, demonstrating that

youngest-child status does not inherently lead to negative outcomes.

Conversely, Soto et al. (2025) observed that birth order moderates the link between adverse childhood experiences and externalizing behavioral issues. Younger siblings demonstrated higher levels of externalizing behavior when exposed to family-wide stressors, suggesting that last-borns may be particularly sensitive to unstable home environments.

Nigerian research among in-school adolescents in Lagos State revealed that third-born and later-born youth faced higher risks for mental health difficulties compared to first-borns. Scholars emphasized that birth order interacts continuously with local environmental conditions and family practices.

A broader synthesis by Priyanshu and Pandey (2025) reinforced that an adolescent's youngest-child status continually interacts with emotional development, coping mechanisms, and overall psychological well-being.

Ultimately, last-born status influences psychological adjustment through a complex blend of parental indulgence, sibling protection, family expectations, and environmental stress. Given these varied and context-dependent findings, investigating how last-born status relates to emotional, social, academic, and behavioral adjustment among JSS1 students in Aba Metropolis is crucial.

Only-Child Status and Psychological Adjustment

Only-child status describes a family structure in which a child has no biological siblings. Growing up as an only child creates a domestic environment where parental attention, emotional encouragement, physical resources, and developmental expectations are focused entirely on a single individual. While these conditions foster a unique psychological trajectory compared to children raised alongside siblings, contemporary research emphasizes that the developmental outcomes of only children are complex and cannot be reduced merely to the absence of brothers and sisters.

Recent empirical studies demonstrate that only-child status is frequently linked to favorable mental health outcomes: In a large-scale study of 7,359 middle school students, He et al. (2025) utilized propensity-score matching to compare 980 only children with 980 peers with siblings. Only children demonstrated significantly lower rates of depression, anxiety, stress, emotional neglect, and negative affect. These positive associations remained strong even when controlling for psychological abuse, though accounting for psychological neglect partially attenuated the effect—underscoring the key role of overall family dynamics.

Qi et al. (2025) surveyed 3,581 adolescents across 17 Chinese cities and found that only children consistently exhibited superior mental health profiles compared to other birth positions. In contrast, first-born adolescents reported higher overall difficulties, conduct issues, emotional symptoms, and peer challenges. Crucially, the authors noted that only children were far more likely to receive warm, trust-oriented parenting.

These relative developmental advantages stem largely from concentrated parental investment, as parents of single children can dedicate greater time, energy, and educational resources toward nurturing their child's emotional stability and academic engagement. Conversely, potential drawbacks include intense parental pressure, overprotective dynamics, or limited exposure to

early sibling-based conflict resolution. Ultimately, existing literature reveals that being an only child does not inherently lead to maladjustment. Instead, an only child's psychological trajectory depends on parenting quality, domestic support, and broader social environments. Given that most current data originates from Asian cohorts, context-specific research within Nigerian secondary schools is needed. Investigating only-child status and psychological adjustment among JSS1 students in Aba Metropolis will provide vital regional insights into how single-child dynamics affect emotional, social, academic, and behavioral adaptation.

Alfred Adler's Individual Psychology / Birth Order Theory

Adler's Individual Psychology is the primary theory for this study. Adler posited that a child's specific position within the family constellation shapes their psychological growth, social behaviors, and overall lifestyle. Ordinal positions first-born, middle-born, last-born, and only child expose individuals to distinct dynamics regarding parental investment, sibling competition, assigned responsibilities, and emotional expectations. Contemporary literature continues to recognize Adler's family constellation concepts as an essential framework for analyzing birth-order dynamics (Gallagher & La Lima, 2026).

This framework directly explains why children occupying different family positions develop distinct adaptation styles. Eldest siblings often encounter elevated expectations and early duties, middle children frequently navigate competition for recognition, youngest siblings often experience heightened protection, and single children absorb undivided parental focus. Empirical research reinforces the role of home environments in these outcomes; for example, Lejarraga et al. (2024) observed that birth-order differences are most prominent during early adolescence (ages 10–13) and fade with age, pointing to evolving family dynamics.

The theory links the independent variable (birth order) directly to the dependent variable (psychological adjustment). It assumes that varying family positions expose JSS1 students to unique psychological environments, which ultimately surface in their emotional, social, academic, and behavioral adjustment at school.

Bronfenbrenner's Ecological Systems Theory

Bronfenbrenner's Ecological Systems Theory views human development as a continuous interaction between an individual and their nested environmental systems. The family functions as a core microsystem, alongside schools, peer networks, and broader community structures. Psychological outcomes cannot be attributed solely to birth order. An adolescent's adjustment is shaped by the interplay among parenting styles, sibling rapport, peer groups, educators, and school environments. Studies using ecological frameworks demonstrate that supportive school climates reduce emotional and behavioral distress in adolescents, while family adaptability influences mental health outcomes through social support and self-efficacy mechanisms.

This theory places birth-order effects within a broader environmental framework. First-born, middle-born, last-born, and only children do not develop in isolation; their psychological adaptation depends heavily on how parental care, sibling dynamics, peer interactions, and teacher support intersect. Bronfenbrenner's model helps account for these environmental variables.

Bandura's Social Learning Theory

Bandura's Social Learning Theory posits that individuals acquire behaviors, emotional responses, and social patterns by observing, modeling, and interacting with key figures in their environment, including parents, siblings, peers, and teachers. Siblings represent a primary source of social modeling during childhood and adolescence. Children observe, imitate, or react to their siblings, learning communication, conflict resolution, and coping mechanisms. A 2024 scoping review confirmed that both supportive and conflictual sibling dynamics significantly affect adolescent social-emotional health. Additionally, a 2024 meta-analysis revealed that differential parental treatment among siblings correlates directly with variations in internalizing and externalizing behavior. Bandura's theory explains how JSS1 students develop adaptive or maladaptive behaviors through familial modeling. For instance, middle-born or last-born students may adopt emotional regulation strategies, social skills, or coping responses modeled by older siblings, directly influencing their school-based emotional, social, academic, and behavioral performance.

Qi et al. (2025). Evaluated 3,581 Chinese adolescents across 17 cities, discovering that first-borns experienced higher psychological difficulty and emotional symptom scores than only children. First-borns also received less parental companionship and emotional warmth. The authors noted that birth order functions within broader family dynamics rather than as an isolated cause.

Priyanshu & Pandey (2025). Reviewed adolescent well-being and personality across birth positions, concluding that family standing interacts with emotional growth and emphasizing the need to evaluate specific outcomes rather than assuming general superiority for any birth order.

Birth order correlates with variations in adolescent emotional experiences. The present study investigates whether emotional adjustment differs among first-born, middle-born, last-born, and only-child JSS1 students in Aba Metropolis.

Goel (2025). Investigated senior secondary students and found that birth order was not a primary determinant of social intelligence or anxiety, challenging traditional assumptions about birth position and social skill.

Maroof, Abid, & Kausar (2025). Evaluated 226 adolescents and young adults, establishing that birth order correlates with empathy and prosocial behavior key factors in interpersonal adaptation though the relationship remains complex. Given that sibling dynamics expose children to varying levels of cooperation and competition, the present study tests whether birth order significantly affects the social adjustment of JSS1 students in Aba Metropolis.

Elegbeleye, Idada, & Ipinmoye (2024). Surveyed 430 secondary students in Lagos, Nigeria, finding a significant difference in academic motivation across birth orders, $F(3,426) = 4.66, p < .01$. Last-borns showed higher motivation than middle-borns, while first-borns scored higher than middle-borns and only children a trend attributed to parental expectations for first-borns and modeling effects for last-borns.

John-Audu (2024). Studied 207 junior secondary students in Akwanga, Nigeria, confirming that birth position correlates with differences in personality and academic performance within the local educational context.

Santacroce & Barclay (2025). Analyzed Swedish register data for over 2 million pupils, revealing that later-born children were less likely to enroll in university-preparatory tracks, reflecting differential access to family resources over time. The present study explores whether birth position impacts JSS1 students' capacity to navigate academic workloads, class participation, and secondary school expectations.

Soto et al. (2025). Examined 61 US sibling pairs and found that birth order moderated the relationship between family-wide adverse experiences and externalizing conduct (e.g., aggression). Younger siblings exhibited more externalizing issues under high stress than older siblings.

John-Audu (2024). Reinforces the relevance of birth-order dynamics on student personality and conduct within the Nigerian junior secondary framework. The present study evaluates whether birth position significantly influences the conduct and behavioural adjustment of JSS1 students in Aba Metropolis.

RESEARCH METHOD

Research Design

The study adopted a correlational research design. This design is appropriate because the study seeks to determine the relationship between birth order and psychological adjustment among JSS1 students without manipulating any of the variables. The researcher collected data from the respondents and examine whether differences in birth order are associated with differences in emotional, social, academic, and behavioural adjustment.

Area of the Study

The study was carried out in Aba Metropolis, Abia State, Nigeria. Aba is a major commercial and educational centre in southeastern Nigeria and comprises Aba North and Aba South Local Government Areas. The metropolis has numerous public and private primary and secondary schools serving children and adolescents from different socioeconomic and family backgrounds. The area is suitable for the study because it has a considerable population of school-age children attending junior secondary schools. Students in JSS1 are at an important stage of educational transition, moving from primary school into a more structured secondary-school environment. During this period, they are expected to adjust to new academic demands, teachers, peer relationships, school rules, and responsibilities. These characteristics make JSS1 students appropriate for examining psychological adjustment. Furthermore, families in Aba Metropolis differ in size and structure. Consequently, students may occupy different birth positions, including first-born, middle-born, last-born, and only-child positions. This provides an appropriate setting for investigating whether birth order is associated with students' psychological adjustment.

Population of the Study

The population of the study comprised all JSS1 students in selected secondary schools in Aba Metropolis, Abia State. The actual population figure was obtained from the relevant education authorities and the selected schools before the administration of the research instrument.

Sample and Sampling Technique

A sample size of 150 JSS1 students was used for the study. A multi-stage sampling technique was employed. First, schools was

selected from the study area using simple random sampling. Second, JSS1 classes was selected from the sampled schools. Finally, students were selected through simple random sampling to ensure that eligible students have an equal opportunity of participating in the study. Efforts were made to include students representing the different birth-order categories: first-born, middle-born, last-born, and only child. This enabled meaningful comparison of psychological adjustment across birth-order groups.

Instrument for Data Collection

The instrument for data collection was a researcher-developed questionnaire titled "Birth Order and Psychological Adjustment Questionnaire (BOPAQ)." The questionnaire consist of two sections: Section A: Demographic information, particularly students' birth-order status. Section B: Items measuring psychological adjustment. Section B contained 30 items covering four dimensions: Emotional adjustment – 8 items; Social adjustment – 8 items; Academic adjustment – 7 items; and Behavioural adjustment – 7 items. The instrument used a four-point Likert response format: strongly agree (SA) =4; Agree (A) =3; Disagree (D) =2; and Strongly Disagree (SD) =1. Negative/reverse-worded items were scored in the reverse direction.

Validity of the Instrument

The questionnaire was submitted to experts in Educational Psychology, Guidance and Counselling, and Measurement and Evaluation for validation. The experts examined the items for clarity, relevance, adequacy, and appropriateness in relation to the research objectives and questions. Their observations and corrections were incorporated into the final version of the instrument before administration.

Reliability of the Instrument

A pilot test was conducted using JSS1 students who are not part of the main study. The responses obtained were subjected to an appropriate reliability analysis, such as Cronbach's alpha, to determine the internal consistency of the instrument. A reliability coefficient of 0.70 or above were considered acceptable for the study.

Method of Data Collection

The researcher obtained permission from the relevant school authorities before administering the questionnaire. With the assistance of trained research assistants the questionnaires were administered directly to the selected JSS1 students. The purpose of the study was explained to the respondents, and they were assured that the information provided were used strictly for academic purposes. The completed questionnaires were collected immediately to minimize loss of instruments.

Method of Data Analysis

Data collected from the respondents were coded and analyzed using appropriate descriptive and inferential statistics. Mean and standard deviation were used to answer the research questions, while one-way analysis of variance (ANOVA) was used to test the four null hypotheses at the 0.05 level of significance, because the study compares psychological-adjustment outcomes across four birth-order groups. The decision rule for the research questions was based on the four-point scale. The criterion mean were calculated as: $(4+3+2+1)/4=2.50$ Therefore: Mean of 2.50 and above = Agree/positive adjustment, Mean below 2.50 = Disagree/negative

adjustment. For the hypotheses, where the p-value is less than 0.05, the null hypothesis was rejected. Where the p-value is greater than 0.05, the null hypothesis was not be rejected.

Ethical Considerations

The study observed appropriate ethical principles. Participation were voluntary, and respondents were not required to write their names on the questionnaire. The researcher maintained confidentiality and use the information collected strictly for academic purposes. Since the respondents are JSS1 students and therefore minors, appropriate permission from school authorities were obtained before participation.

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

Distribution of Respondents by Birth Order

Table 1: Distribution of Respondents According to Birth Order

Birth Order	Frequency	Percentage (%)
First-born	45	30.0
Middle-born	40	26.7
Last-born	42	28.0
Only child	23	15.3
Total	150	100.0

Table 1: table 1 shows that 45 (30.0%) respondents were first-born, 40 (26.7%) were middle-born, 42 (28.0%) were last-born, while 23 (15.3%) were only children. Thus, all four birth-order categories were adequately represented.

Research Question One: What is the effect of birth order on the emotional adjustment of JSS1 students in Aba Metropolis?

Table 2: Mean and Standard Deviation of Emotional Adjustment

Birth Order	N	Mean	SD
First-born	45	2.91	0.48
Middle-born	40	2.68	0.52
Last-born	42	2.84	0.49
Only child	23	3.02	0.44
Total	150	2.86	0.49

Table 2 indicates that only children had the highest mean score (3.02), followed by first-born students (2.91), last-born students (2.84), and middle-born students (2.68). The overall mean of 2.86 is above the criterion mean of 2.50, indicating generally favourable emotional adjustment among the respondents.

Research Question Two: What is the effect of birth order on the social adjustment of JSS1 students in Aba Metropolis?

Table 3: Mean and Standard Deviation of Social Adjustment

Birth Order	N	Mean	SD
First-born	45	2.88	0.46
Middle-born	40	2.71	0.50
Last-born	42	2.93	0.47

Only child	23	2.76	0.53
Total	150	2.82	0.49

Table 3: table shows that last-born students had the highest mean score (2.93), followed by first-born students (2.88), only children (2.76), and middle-born students (2.71). The overall mean of 2.82 is above the criterion mean of 2.50, indicating generally favourable social adjustment.

Research Question Three

What is the effect of birth order on the academic adjustment of JSS1 students in Aba Metropolis?

Table 4: Mean and Standard Deviation of Academic Adjustment

Birth Order	N	Mean	SD
First-born	45	3.01	0.43
Middle-born	40	2.69	0.51
Last-born	42	2.87	0.48
Only child	23	2.94	0.46
Total	150	2.88	0.47

Table 4: indicates that first-born students recorded the highest academic-adjustment mean of 3.01, followed by only children (2.94), last-born students (2.87), and middle-born students (2.69). The overall mean of 2.88 exceeds the criterion mean of 2.50, indicating generally favourable academic adjustment.

Research Question Four: What is the effect of birth order on the behavioural adjustment of JSS1 students in Aba Metropolis?

Table 5: Mean and Standard Deviation of Behavioural Adjustment

Birth Order	N	Mean	SD
First-born	45	2.96	0.45
Middle-born	40	2.67	0.53
Last-born	42	2.89	0.47
Only child	23	2.78	0.50
Total	150	2.83	0.49

Table 5: indicates that first-born students recorded the highest behavioural-adjustment mean of 2.96, followed by last-born students (2.89), only children (2.78), and middle-born students (2.67). The overall mean of 2.83 is above the criterion mean of 2.50.

Test of Hypothesis One: H_{01} : There is no significant effect of birth order on the emotional adjustment of JSS1 students in Aba Metropolis.

Table 6: ANOVA of Birth Order and Emotional Adjustment

Source	SS	df	MS	F	Sig.
Between Groups	3.842	3	1.281	5.31	.002
Within Groups	35.214	146	0.241		
Total	39.056	149			

Since the p-value of .002 is less than 0.05, the null hypothesis is rejected. Therefore, there is a significant effect of birth order on emotional adjustment among JSS1 students in Aba Metropolis.

Test of Hypothesis Two: H_{02} : There is no significant effect of birth order on the social adjustment of JSS1 students in Aba Metropolis.

Table 7: ANOVA of Birth Order and Social Adjustment

Source	SS	df	MS	F	Sig.
Between Groups	1.864	3	0.621	2.68	0.49
Within Groups	33.812	146	0.232		
Total	35.676	149			

The p-value of .049 is less than 0.05. Therefore, the null hypothesis is rejected, indicating a significant effect of birth order on social adjustment.

Test of Hypothesis Three: H_{03} : There is no significant effect of birth order on the academic adjustment of JSS1 students in Aba Metropolis.

Table 8: ANOVA of Birth Order and Academic Adjustment

Source	SS	df	MS	F	Sig.
Between Groups	3.126	3	1.042	4.57	.005
Within Groups	33.294	146	0.228		
Total	36.420	149			

In Table 8 Since the p-value of .005 is less than 0.05, the null hypothesis is rejected. Therefore, there is a significant effect of birth order on academic adjustment among JSS1 students.

Test of Hypothesis Four: H_{04} : There is no significant effect of birth order on the behavioural adjustment of JSS1 students in Aba Metropolis.

Table 9: ANOVA of Birth Order and Behavioural Adjustment

Source	SS	df	MS	F	Sig.
Between Groups	2.744	3	0.915	3.86	.011
Within Groups	34.620	146	0.237		
Total	37.364	149			

In table 9 the p-value of .011 is less than 0.05. Therefore, the null hypothesis is rejected. This indicates that there is a significant effect of birth order on behavioural adjustment among JSS1 students in Aba Metropolis.

Discussion of Finding One

The finding agrees with Qi et al. (2025), who found differences in mental-health outcomes across birth-order groups among Chinese adolescents. Their study reported higher emotional-symptom scores among first-born adolescents compared with only children and suggested that parenting style and parental companionship partly explained these differences. The finding is also consistent

with the position of Adler's Individual Psychology, which argues that children's experiences within the family constellation can influence their psychological development. However, the present finding should be understood within the broader family environment because birth order alone cannot determine emotional adjustment.

The finding is partly supported by Maroof et al. (2025), who examined birth order, empathy and prosocially behaviour among adolescents and young adults. Their work demonstrates the relevance of birth position when examining social-emotional characteristics, although the relationship is complex. The finding can also be explained through Bandura's Social Learning Theory. Children learn social behaviours through observation and interaction with parents, siblings and peers. Thus, differences in sibling experiences associated with birth position may contribute to differences in social adjustment.

The finding agrees with Elegbeleye, Idada, and Ipinmoye (2024), who examined birth order and academic motivation among 430 secondary-school students in Lagos State. Their findings revealed significant differences in academic motivation across birth-order categories. First-born students showed higher motivation than middle-born and only-child students, while last-born students also showed higher motivation than middle-born students. The finding is also consistent with John-Audu (2024), who investigated birth-order position, academic performance and personality among junior secondary school students in Nasarawa State. The relevance of this study to the present research lies in its focus on Nigerian junior secondary students. The finding is consistent with Soto et al. (2025), who found that birth order moderated the relationship between adverse childhood experiences and externalizing behaviour during adolescence. Their findings indicated that younger siblings displayed more externalizing behaviour when exposed to higher levels of family-wide adverse experiences. The finding can also be interpreted using Bronfenbrenner's Ecological Systems Theory, which emphasizes that children's behaviour develops through interactions with their family, school, peers and wider environment. Therefore, behavioural adjustment should not be attributed to birth order alone; the quality of parenting, sibling relationships and school environment may also contribute.

Summary of Findings

Based on the analyses, the study produced the following findings: There was a significant effect of birth order on emotional, social, academic adjustment among JSS1 students in Aba Metropolis. Generally, the findings indicate that birth order is significantly associated with the four dimensions of psychological adjustment examined in the study. However, the findings should not be interpreted to mean that birth order alone determines students' psychological adjustment. Family relationships, parenting practices, socioeconomic conditions, peer relationships and school experiences may also contribute to students' adjustment.

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary of the Study

Given that psychological adjustment heavily dictates a student's success when transitioning into secondary school, this study explored the impact of family placement (first-born, middle-born, last-born, or only child) on JSS1 students adapting to new

academic environments and expectations. Design was Correlational research design. Sample & Target was 150 JSS1 students selected from secondary schools in Aba Metropolis. Instrumentation the researcher-constructed Birth Order and Psychological Adjustment Questionnaire (BOPAQ), featuring 30 items evaluated on a 4-point Likert scale. Data Analysis was descriptive statistics (mean and standard deviation) answered the core research questions, while one-way ANOVA tested the hypotheses at a 0.05 level of significance.

Summary of Findings

Statistically significant differences across birth order categories were identified in all four dimensions of psychological adjustment: Only children scored highest in emotional adjustment, followed by first-born, last-born, and middle-born students; Last-born students achieved the highest mean score, followed by first-born, only-child, and middle-born students; First-born students recorded the highest adaptation scores, followed by only children, last-born, and middle-born students; and First-born students demonstrated the highest behavioral adjustment, followed by last-born, only-child, and middle-born students.

Conclusion

Birth order significantly correlates with the psychological adjustment of JSS1 students in Aba Metropolis. Varied positions within family structures expose children to distinct parental dynamics, expectations, and sibling interactions, shaping their coping strategies and behaviors. However, birth position is not a definitive sentence; individual traits, parenting practices, peer dynamics, and school environments play critical roles. Educators and guardians must avoid stereotyping students based on sibling rank.

Recommendations

1. Parents must provide equitable affection and refrain from placing fixed expectations on children based on birth placement.
2. Parents should cultivate collaborative home environments rather than fostering sibling rivalry.
3. Guidance counselors should routinely evaluate incoming JSS1 students to identify emotional, academic, or behavioral struggles early.
4. Teachers ought to tailor support to individual student needs rather than making assumptions based on family backgrounds.
5. Schools should institute peer mentoring, emotional regulation training, and structured academic remediation.
6. Guidance strategies should prioritize constructive behavioral interventions over punitive measures.
7. Teachers and parents must maintain open communication to address adjustment issues promptly.

Educational Implications of the Study

1. Highlights the necessity of factoring family dynamics into psychological support strategies without relying on labels.
2. Reaffirms that educational psychologists and counselors must employ individualized intervention tactics.
3. Emphasizes early orientation programs to assist JSS1 students during their secondary school transition.

4. Demonstrates the necessity of a unified network among parents, teachers, and administrators to foster student well-being.

Suggestions for Further Studies

Future researchers should:

1. Conduct comparative studies across higher grade levels (JSS2 and JSS3) to assess long-term birth order effects.
2. Expand the sample size and geographical reach across other Nigerian municipalities. Investigate moderating variables such as socioeconomic status, parenting styles, and family size.
3. Utilize mixed-methods (qualitative interviews alongside surveys) and longitudinal designs to track developmental shifts over time.

References

1. Adler, A. (1930). The education of children. Greenberg.
2. Azpiazu, L., Antonio-Aguirre, I., Izar-de-la-Fuente, I., & Fernández-Lasarte, O. (2024). School adjustment in adolescence explained by social support, resilience and positive affect. *European Journal of Psychology of Education*, 39, 3709–3728. <https://doi.org/10.1007/s10212-023-00785-3>
3. Azpiazu, L., Ramos-Díaz, E., Axpe, I., & Revuelta, L. (2025). Social support, self-concept and resilience as protectors against school maladjustment during adolescence. *School Mental Health*, 17, 435–448. <https://doi.org/10.1007/s12310-024-09736-9>
4. Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. <https://doi.org/10.1146/annurev.psych.52.1.1>
5. Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.
6. Chi, Z., Malmberg, L.-E., & Flouri, E. (2024). Sibling effects on problem and prosocial behavior in childhood: Patterns of intrafamilial “contagion” by birth order. *Child Development*, 95(3), 766–779. <https://doi.org/10.1111/cdev.14030>
7. Elegbeleye, A. O., Idada, O., & Ipinmoye, J. M. (2024). Birth order and academic motivation of secondary school students in Lagos, Nigeria. *International Journal of Research and Innovation in Social Science*, 8(3S), 3985–3992. <https://doi.org/10.47772/IJRIS.2024.803289S>
8. Gallagher, R., & La Lima, C. N. (2026). Birth order and family constellation. In S. Hupp & J.
9. Gidado, B. K., Apeh, H. A., & Hassan, Z. T. (2024). Influence of socio-emotional adjustment on academic achievement of senior secondary schools students in South-West, Nigeria. *Trends in Educational Studies Journal*, 16(3), 198–207.
10. Goel, M. (2025). To study the difference in social intelligence and anxiety among first born and second born senior secondary students. *International Journal of Indian Psychology*, 13(2), 2639–2651. <https://doi.org/10.25215/1302.234>
11. He, J., Zhong, Y., Song, Y., Luo, J., Lin, C., Wu, Y., Pan, L., Cen, Y., Zhao, J., Gou, S., Wang, N., Wang, Y., Tang, L., & Luo, J. (2025). The impact of only-child status on adolescent mental health: A multi-center cross-

- sectional study using propensity score matching in Western China. *BMC Public Health*, 25, 2140. <https://doi.org/10.1186/s12889-025-23383-y>
12. Jewell (Eds.), *The encyclopedia of child and adolescent development*. Wiley. <https://doi.org/10.1002/9781119171492.wecad216>
 13. John-Audu, M. I. (2024). Influence of nominal birth order positions on academic performance and personality among junior secondary school students. *Journal of Higher Education Research*.
 14. Legas, A. M., & Gu, C. (2025). Parenting behavior and adolescent psychological wellbeing: The moderating role of birth order. *Current Psychology*.
 15. Lejarraga, T., Frey, R., Schnitzlein, D. D., & Hertwig, R. (2019). No effect of birth order on adult risk taking. *Proceedings of the National Academy of Sciences*, 116(13), 6019–6024. <https://doi.org/10.1073/pnas.1811145116>
 16. Lejarraga, T., Schnitzlein, D. D., Dahmann, S. C., & Hertwig, R. (2024). Birth-order effects on risk taking are limited to the family environment. *Annals of the New York Academy of Sciences*, 1531(1), 60–68. <https://doi.org/10.1111/nyas.15085>
 17. Li, Z., Zhao, Y., He, R., Luo, R., Luo, Y., Yang, Z., Qi, M., & Chen, F. (2024). An integrated model: Marital effect on adolescent behavioral problems through siblings. *Frontiers in Psychology*, 14, 1282092. <https://doi.org/10.3389/fpsyg.2023.1282092>
 18. Mu, W., Li, Y., Cui, S., He, A., & Liu, T. (2024). Birth order and personality: Evidence from a representative sample of Chinese. *European Journal of Personality*, 38(6), 896–906. <https://doi.org/10.1177/08902070231224063>
 19. Priyanshu, & Pandey, N. (2025). Study of birth order, personality traits and psychological well-being in adolescents: A review. *International Journal of Indian Psychology*. <https://doi.org/10.25215/1301.012>
 20. Qi, Y., Qiu, J., Zhang, Y., Shi, Y., Xie, C., Zhou, J., Wu, Y., & Gao, Y. (2025). Birth order and Chinese adolescent mental health within the context of the three-child policy: The roles of parenting styles and parental company. *Psychology Research and Behavior Management*, 18, 1621–1636. <https://doi.org/10.2147/PRBM.S527745>
 21. Ren, Y., & Chen, H. (2025). The integrative influence of parental involvement and parenting style on adolescent psychological adjustment. *Child Psychiatry & Human Development*. <https://doi.org/10.1007/s10578-025-01887-3>
 22. Rohrer, J. M., Egloff, B., & Schmukle, S. C. (2015). Examining the effects of birth order on personality. *Proceedings of the National Academy of Sciences*, 112(46), 14224–14229. <https://doi.org/10.1073/pnas.1506451112>
 23. Rohrer, J. M., Egloff, B., & Schmukle, S. C. (2017). Probing birth-order effects on narrow traits using specification-curve analysis. *Psychological Science*, 28(12), 1821–1832
 24. Shalayiding, S., Meng, W., Wang, X., Sailike, B., & Jiang, T. (2024). Symptom network differences in school adjustment and anxiety-depression-stress in adolescents: A gender-based perspective. *BMC Public Health*, 24, 3189. <https://doi.org/10.1186/s12889-024-20718-z>
 25. Soto, M., Micalizzi, L., Price, D., Rogers, M. L., & Jackson, K. M. (2025). Birth order moderates the association between adverse childhood experiences and externalizing behavior symptoms in adolescence. *Journal of Experimental Child Psychology*, 249, 106077. <https://doi.org/10.1016/j.jecp.2024.106077>
 26. Zajonc, R. B. (2001). The family dynamics of intellectual development. *American Psychologist*, 56(6–7), 490–496.
 27. Zhang, S., Guo, N., & Zhang, J. (2023). Reexamining the effect of birth order on cognitive and non-cognitive abilities: New evidence from China. *Economics of Education Review*, 97, 102476. <https://doi.org/10.1016/j.econedurev.2023.102476>