

Birth Order Differences and Overall Adjustment among First Year Undergraduate Students in One Selected University

*By Peter JO Aloka**

The study examined the effect of birth order differences on adjustment among first year undergraduate students in one selected university in Kenya. A cross-sectional survey research design was adopted. The sample size comprised 213 first year students selected using both stratified and simple random sampling techniques. The adjustment questionnaire was used to collect data. The inferential statistics such as Analysis of Variance (ANOVA) and Tukey's post hoc tests were used to analyze data. The ANOVA results indicate a significant effect, [F (5, 207)=8.279, p=0.000], of order of birth of first year students on their level of overall adjustment. The Tukey's HSD Post Hoc test results indicate that 1st born students presented a significantly higher overall adjustment compared to the rest. The study recommends that staff at university counseling centers should develop specific orientation programmes to enhance the adjustment of first year students who occupy later orders of births in their families apart from first born students.

Keywords: birth order, overall adjustment, first year, undergraduate students, university

Introduction

Transition from secondary school to higher education institutions has been a challenge to students for decades. Arnett (2013) argues that the shift from secondary school education to the university corresponds with the developmental transition from adolescence to young adult stage. Thus, first year students struggle to adjust to the university environment on various aspects. Adjustment to university is defined as the ability to effectively adapt to the various challenges encountered in the new environment (Credé & Niehorster, 2012). Moreover, Julia and Veni (2012) define adjustment process as the way in which individuals try to cope with stress, conflict, tension, and meet their needs. Therefore, university students with good academic performance, psychological wellbeing and are involved in the university activities are perceived to have developed successful university adjustment (Julia & Veni, 2012). Thus, students are able to make adjustment by having sufficient academic performance, passing all subjects, and meeting graduation time, while those who do not adjust to college well are characterized with the contrast criteria; their achievement is not satisfactory, marginal, failure, as well as the tendency to drop out. Dyson and Renk (2006) and Bernier, Larose, and Whipple (2005) all reiterate that there are differences on how first year students

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adjust to the university as some fair on very well but other students are challenged and find it difficult to cope with the new demands of the university environment.

Student adjustment is modelled within the identity development as proposed by Chickering (1969). By focusing on identity development, Chickering identified seven vectors of development namely, developing autonomy achieving a sense of competence, developing a sense of purpose managing emotions, establishing one's own identity, interacting with others with increasing tolerance, and clarifying a personal and consistent set of beliefs. The shift from secondary school learning environment to the university has with it new experiences, changes and expectations and new responsibilities which require adjustment process among first year students (Buote, 2006). When first year students are admitted to university, they are expected to fit to the new demands that are presented by the university environment and also to maintain a harmonious relationship with the new environment and other students (Abdullah & Elias, 2009). There are four dimensions of adjustment to university including academic, social adjustment, personal emotion, and institutional aspects (Taylor & Pastor, 2007; Arnett, 2013). Academic adjustment refers to how well students cope with the demands of education, such as satisfaction with academic environment, academic effort and motivation to complete academic requirements (Salami, 2011). On the other hand, social adjustment includes student involvement in social activities, interaction with others and satisfaction with the various aspects of lecture experience (Salami, 2011). Moreover, personal-emotional adjustment involves students handling their emotions appropriately when responding to issues that they face while the institutional adjustment indicates students' satisfaction with their general experience in the university (Salami, 2011).

Previous researchers have focused on several other factors that affect adjustment among first year students at university including, personality, home related factors, institution based factors and parental socio-economic status. In this study, the effects of birth order on the adjustment among first year students at university were examined. However, very scanty research has been done on birth order of students and adjustment at university. According to Lemay (2004), birth order is defined as individual's rank in their sibling constellation- first born, middle born, last born or only born or twins. Research indicates that children growing up as the only child typically are dominant, verbal, and a perfectionist. Moreover, the only children in families are typically not jealous because their position in the family has never been threatened. Other traits common among only children include preference for solitude, eagerness to please authority figures, withdrawn, observant, independent, eccentric (Konig, 1963; Ha & Tam, 2011). On the other hand, first-born children are ambitious, driven, meticulous, conscientious, and experience more jealousy and envy. Moreover, first born children have preference for law and order, are generally authoritative, academically successful than siblings, prideful, independent, protective, natural-born leader, cautious, conventional, domineering, overbearing, obedient and impatient (Forer & Still, 1976). However, middle-born children are more likely to possess negotiation and diplomatic skills, very resilient, supportive, unconventional, friendly, rebellious, passive and creative (Konig, 1963; Ha & Tam, 2011). The last born children are

always playful, spoiled, charming, good companions, pampered, lighthearted and indulgent. In certain instances, the last born children tend to be irresponsible, lack motivation, problematic and are popular among peers (Forer & Still, 1976).

Adler's Theory of Birth Order

This study was informed by the Alfred Adler's theory of birth order. This theory of birth order was developed in the 20th century and it argues that the order in which a child is born shapes their development. Alfred Adler was the first to publish a theoretical discussion of birth order effects in 1928 (Srivastava, 2011). According to Adler (1928), birth order leaves an indelible impression on the individual's style of life. Adler believed that the position of the child in the family introduces fairly definable problems which tend to call forth certain types of solution (Issacson, 2004). Adler (1928) argues that the situation into which children are born and the way they interpret it influences their character and hence adjustment to new environments. Adler also opined that though children have the same parents and grow up in nearly the same family setting, they do not have identical social environments (Srivastava, 2011). Adler categorized the order of siblings into five groups such as the first-born, the second child, the middle child, the youngest child and the only child. Each position has a different psychological characteristic (Adler & Brett, 2009).

According to Adler, birth order has lasting effects on one's personality and thus the way in one adjusts to new environments. Adler argues that birth order differences in personality are mostly due to siblings trying to compete for the attention of their parents by claiming certain niches or roles within the family (Adler, 1964). Therefore, within a family, individuals compare themselves to their siblings in order to decide what role they play. If first-borns are extremely intelligent and subsequent siblings believe that they would not be able to achieve that level of intelligence, they would find another role to play, such as the most sociable child or the most creative one, in order to earn their parents' attention. According to Rohrer, Egloff, and Schmukle (2015), firstborns, who are physically superior to their siblings at a young age, are more likely to show dominant behavior and therefore become less agreeable. Later-borns, searching for other ways to assert themselves, tend to rely on social support and become more sociable and thus more extraverted. This theory was relevant for the present study because it indicates how children of different birth orders have varied personalities and therefore levels of adjustments to new environments such as university.

Literature Review

Literature on birth order and adjustment exists in varied contexts with different results. Earlier research by William (1959) on birth order and adjustment indicated that the older in a family of two was significantly better adjusted than the younger in a family of two and also better adjusted than all other first born. The

middle child of a family of three proved to be better adjusted than all other children born in an intermediate position. The results imply that good adjustment is positively related to being born first, particularly in a family of two, with being born as the middle child in a family of three, and with being the last born in truly big families. Gallagher and Cowen (1977) showed that for emotional progression, there was a significant difference seen at Birth order level. In a study of 196 undergraduate students at Stanford University, Herrera, Zajonc, Wiczorkowska, and Cichomski (2003) found that people characterized firstborns as the most intelligent, obedient, stable, responsible, and the least emotional and only children were characterized as being the most disagreeable. Middle-borns are believed to be the most envious and the least bold and talkative and last-borns were characterized by being the most creative, emotional, extraverted, disobedient, irresponsible, and talkative. Similarly, Labay and Walco (2004) indicated that birth order of the child with is associated with less positive adjustment. Fergusson et al., (2006) reported that the intrafamily dynamics initiated by birth order may have a lasting effect on the individual in terms of later educational and achievement outcomes.

In another study, Fergusson, Horwood, and Boden (2006) in New Zealand concluded that the intra-family dynamics initiated by birth order may have a lasting effect on the individual in terms of later educational and achievement outcomes. However, Borne and Mears (2009) study reported no significant sibling ordinal position effects on the children's behaviors. Wong et al., (2010) found small but significant effects indicating that older siblings had a greater influence over time on younger siblings' identity development than, particularly when the older sibling was of the same gender. Sambul (2011) study among undergraduate students from Rowan University showed that two subjects who were depressed were not first-borns, yet middle and last-born. Nissenbaum (2012) found that only-borns and middle-borns held the lowest scores for academic and social success. In another study, Hotz and Pantano (2013) reported that children's school performance and adjustment declines with birth order, as first born children have higher adjustment while the last born children have the least score in adjust adjustment attributed to decline in the toughness of their parents' disciplinary actions. Moreover, De Haan, Plug, and Rosero (2014) reported that there are positive and persistent birth order effects on achievement; that is, first-born children lag behind in educational achievement from infancy to adolescence, evidently due to mothers spending less quality time with first-borns, and breastfeeding them for a shorter period than later-born children.

In agreement, Rohrer, Egloff and Schmukle (2015) reported that firstborns scored slightly higher on intelligence and intellect, but we observed no differences in extraversion, emotional stability, agreeableness, conscientiousness, or imagination. Similarly, Priya and Raina (2016) indicated that male later born students had better social adjustment as compared to male first born students, but female first born students had better social adjustment as compared to female later born students. In addition, Preeti and Navin (2016) indicated that first-born children are more likely to display a perfectionistic self-presentation and from scheduled interviews, we understood that paternal influences were stronger when it came to decision-making and display of conscientiousness. Coşkun, Çikrikci, and Topkaya (2017)

study reported that the youngest siblings compete for the teacher's interest and are inclined to attract attention and remain unresponsive due to acceptance difference; the oldest siblings conceive attracting attention as a way of compensating for loss of family interest.

In Nigeria, Ekeh and Iyomaterere (2016) revealed that there is no significant influence of first and second born positions on students' social adjustment, and there is no significant influence of first and second born positions on students' social adjustment. Similarly, Moshoeshoe (2016) study indicated that there is a negative correlation between birth and educational attainment, and this is highest among first born children while it's the least among last born children. Moreover, Ramesh (2018) study found that there is no significance difference between first born, second born and third born students on home, social, emotional and health adjustment. In another study, Joy and Mathew (2018) showed that there is a significant difference between the emotional maturity and general well-being of adolescents belongs to different birth orders such as first born, last born and single child as well as there is a significant relationship between emotional maturity and general well-being of adolescents. Kanu and Gayatri (2018) reported that birth order does not seem to play its significant role on emotional adjustment of adolescents. Kieron (2018) study showed that later-born children in large families particularly benefit from educational expansion due to the longer average birth interval between the first and last child in large families, meaning that the supply of educational opportunities increased to a greater extent in the intervening period.

In another study, Easey et al., (2019) reported that higher birth order was associated with poor adjustment levels while first born children are well adjusted. Yehui and Zhiqiang (2019) found that the only child has significant higher educational outcomes comparing to a child who has siblings, the middle child has the lowest educational outcomes of a family while last born child has higher educational outcomes than their siblings. Esposito, Kumar, and Villaseñor (2020) study reported that birth order variables display negative and highly significant coefficients on adjustment. Kieron, Torkild, and Dalton (2021) suggest that parental birth order influences offspring educational outcomes through the parents own educational and socioeconomic attainment. The study further reported that having a later-born parent reduces educational attainment to a small extent, a second- or fifth-born mother reduces educational attainment. Hoang and Quang (2021) established that birth order has a significant, negative effect on child educational attainment, although that effect seems to vanish with the youngest sibling. Kaemra and Singh (2021) showed that there is no difference in adjustments of first born and second born. Cayubit et al., (2021) revealed that those who are psychologically firstborns tend to endorse the mastery-approach goal orientation while those who are psychologically youngest or lastborn endorses mastery avoidance. Similarly, Fukuya et al., (2021) reported that the resilience and adjustment was highest among last-borns, followed by first-borns, middle-borns, and only children. Another study by Alabbasi, Tadik, Acar, and Runco (2021) showed that first-borns had higher adjustment as demonstrated by divergent thinking than later-born children but no significant difference was found between only children and first-born children with siblings. In Kenya, Chege (2015)

concluded that there is a statistically significant relationship between procrastination and the respondents' birth position and that most of those who procrastinated were last borns' and a few middle borns'.

In the Kenyan context, there is reported low adjustment among first year students at public universities. In a recent study, Osoro, Nyamwange, and Obuba (2020), reported that, the first year students in public universities in Kenya face several adjustment issues including low academic achievement, increased suicidal cases, unplanned pregnancies, students killing each, drug abuse all of which lead to drop out when not addressed in a timely manner. From literature review, very scanty information was available on differences in adjustment on the basis of birth order. Moreover, the reviewed studies did not focus on the combined aspects of adjustment, while the present study had combined aspects of adjustment together. In addition, the results from the existing literature on birth order have largely varied results and a confirmation of the same was necessary and this warranted the present research. Therefore, the present study sought to examine effect of birth order differences on adjustment among first year undergraduate students in one selected university in Kenya.

The Present Study

The present study examined effect of birth order differences on adjustment among first year undergraduate students in one selected university in Kenya.

Research Hypotheses

The following null hypothesis was tested:

H₀₁: There is no significant effect of birth order differences on adjustment among first year undergraduate students in one selected university

Methods

Research Design

A cross-sectional survey research design was adopted for this study. In cross-sectional survey, a researcher collects information from a sample drawn from a population, and the data collection takes place at one point of time. This design enabled the researcher to observe two or more variables at the point in time and was useful for describing a relationship between two or more variables (Breakwell, Hammond, & Fife-Schaw, 1995). Therefore, the design was appropriate in assessing the relationship between birth order and adjustment among first year university students.

Research Participants

The study participants comprised 120 (56.3%) females and 93 (43.7%) males who were first year students at one university in western Kenya. From a population of 2130 freshmen, the final sample size of 213 first year students was obtained using the 10% criteria according to the recommendation by Krejcie and Morgan (1970). Their ages ranged from 17 to 30 years, with a mean age of 19.5 years (SD=1.5). The birth order of the respondents was distributed between 1st and 7th inclusive, with the highest proportion of them being first-borns as reflected by 56 translating to 26.3% of the surveyed students. This was followed by sixth-borns at 54 (25.4%) and the respondents in the second born position were 41 (19.2%) of the participants, while the rest of the respondents were distributed among third (12.7%), fourth (11.3%) and fifth (5.2%) born in their families. The students were drawn from various faculties within the university. In the selection of the first year students, both stratified and simple random sampling techniques were used.

Research Tools

The adjustment questionnaire was used to collect data from first year university students. The first section of the adjustment had information on birth order of the respondents captured with options of first born, second born, last born, only child and middle born child. The adjustment questionnaire measured the academic, social, emotional and psychological aspects. The academic adjustment sub-scale contained 10 items and it sought the students' opinions on academic adjustment at the university. Some of the items in the academic adjustment sub-scale include; "I feel confident and relaxed while in lectures", and "Thinking about the grade I may get in a course interferes with my classwork". The social adjustment sub-scale had 10 items and it gathered relevant information regarding the level of social adjustment among first year students. Some of the items in the social adjustment sub-scale include; "Being ignored, or being socially awkward at school, would reduce my sense of self-worth", and "My self-esteem is affected by my status as a first year".

The emotional adjustment sub-scale had 10 items and was used to measure the feelings and emotions of first year students about their confidence level, how people rate them, their looks, and sense of humor among other factors. Some of the items in the emotional adjustment sub-scale include; "My eyes get wet on seeing the difficulties of others", and "I feel very much frightened even in minor frightful places". Finally, the psychological adjustment sub-scale had 10 items and it measured the level of psychological adjustment of first year students. Some of which were; "I feel very jittery when taking an important test", and "Even when I am well prepared for reporting to school, I feel very anxious". Each of the sub-scales of Adjustment had a 5-point Likert response scale such as; *Strongly Agree* (5), *Agree* (4), *Neutral* (3), *Disagree* (2) and *Strongly Disagree* (1). The reliability of adjustment questionnaire was ascertained by internal consistency method, and an alpha of .736 was reported which confirm that the questionnaire had an acceptable reliability standard. The internal validity of the adjustment

questionnaire was ensured by Kaiser-Meyer-Okin (KMO) indices and results indicate that all measures of the questionnaire have KMO values above 0.5 implying adequate validity.

Procedure

Permission to conduct the study was sought from the Academic Registrar of the selected public university in western Kenya. The appointment was made to collect data from the first year students at the selected university. The students were sampled from various faculties and assembled at the assembly hall; then the aim of the study explained to them after which those who agreed to participate in the study were issued with consent forms. After signing consent forms, they were issued with questionnaires to complete after which the researcher collected the questionnaires back. The questionnaires were presented to first year students from various faculties in different orders to nullify a systematic order effect. The students took about 30 minutes to complete the questionnaires, thereafter they were debriefed.

Data Analysis

The quantitative data from questionnaires was analyzed using both descriptive and inferential statistics. The inferential statistics such as Analysis of Variance (ANOVA) and Tukey's honestly significant difference post hoc tests were used to examine the differences in adjustment on the bases of birth order of the first year students. The use of ANOVA was appropriate because there was one independent (birth order) variable with six levels (groups) and one dependent continuous variable (Overall Adjustment). Scores on the overall adjustment scale was ranging from 0.50 to 2.87 with high scores indicating higher levels of adjustment. The level of significance (p)-value was set at 0.05 level. The level of significance (p)-value was set at 0.05 level.

Results

Birth Order Differences and Overall Adjustment

The study sought to investigate the birth order differences on overall adjustment among first year university students. This was done by use of a One-way between-groups analysis of variance (ANOVA). Birth order variable was a recoded variable by grouping the order of birth into six levels namely: Group 1: 1st born up to Group 6: 6th born. Scores on the overall adjustment scale was ranging from 0.50 to 2.87 with high scores indicating higher levels of overall adjustment. The results of descriptive statistics are presented in Table 1.

Table 1. Descriptive Results on Overall Adjustment

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
1st Born	61	2.0426	0.43922	0.05624	1.9301	2.1551	1.09	2.87
2nd Born	41	1.6433	0.37684	0.05885	1.5244	1.7623	1.10	2.59
3rd Born	29	1.7246	0.39668	0.07366	1.5737	1.8755	1.09	2.38
4th Born	22	1.5767	0.35047	0.07472	1.4213	1.7321	0.93	2.12
5th Born	11	1.7484	0.29354	0.08851	1.5512	1.9456	1.09	2.18
6th Born	49	1.7020	0.36217	0.05174	1.5980	1.8060	0.96	2.44
Total	213	1.7808	0.42157	0.02889	1.7238	1.8377	0.93	2.87

From the results of the descriptive statistics in table 1, it is evident that the students who were 1st born had the highest mean overall adjustment level ($n=61$, $M=2.04$, $SD=0.44$), while the 4th born had the least overall adjustment rating ($n=22$, $M=1.58$, $SD=0.35$). The rest ranged in between from a mean of 1.64 to 1.74.

One-way ANOVA was used to establish whether there are significant differences in the overall adjustment mean scores among first year university students across the six groups of birth order. The ANOVA results are summarized as shown in the SPSS output in Table 2.

Table 2. ANOVA Results on Differences on Overall Adjustment on the Basis of Birth Order

Overall Adjustment					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.279	5	1.256	8.279	0.000
Within Groups	31.398	207	0.152		
Total	37.677	212			

The ANOVA results in Table 2 indicate a significant effect, [$F(5, 207)=8.279$, $p=0.000$], of order of birth of respondents on their level of overall adjustment. This indicates that there were significant differences on the overall adjustment on the basis of birth orders of first year students at university. Therefore, since the ANOVA results were significant, post-hoc tests was used to ascertain and test where differences in overall adjustment lie on the various categories of birth orders. The results of Tukey's Honestly Significant Difference (HSD) post-hoc test are presented in Table 3.

The results of Tukey's HSD Post Hoc test presented in Table 3 revealed a statistically significant difference between the overall adjustment of the 1st born respondents ($M=2.07$, $SD=0.48$) and the overall adjustment of other order of births. However, a significant difference was not established among other order of birth. This suggests that only 1st born respondents presented a significantly higher overall adjustment compared to the rest. Given that a statistical significance difference was established, the effect size was calculated using eta squared. The resulting eta squared value is 0.17, which according Cohen (1988) and Brydges, (2019) would be considered a large effect size. Therefore, the null hypothesis that; *there is no significant effect of birth order differences on adjustment among first year undergraduate students in one selected university*, was rejected. It was

concluded that order of birth affects overall adjustment of first year university students, with 1st born students tend to adjust more/faster than their younger siblings. Order of birth accounts for 17% ($\eta^2=0.17$) of the variability in overall adjustment among the first year university students.

Table 3. Tukey HSD Post Hoc Test Results on Differences on Overall Adjustment on the Basis of Birth Order

(I) Order of Birth	(J) Order of Birth	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1st Born	2nd Born	0.39926*	0.07865	0.000	0.1730	0.6255
	3rd Born	0.31800*	0.08785	0.005	0.0653	0.5707
	4th Born	0.46587*	0.09686	0.000	0.1873	0.7445
	5th Born	0.29421	0.12758	0.196	-0.0728	0.6612
	6th Born	0.34059*	0.07471	0.000	0.1257	0.5555
2nd Born	1st Born	-0.39926*	0.07865	0.000	-0.6255	-0.1730
	3rd Born	-0.08126	0.09450	0.955	-0.3531	0.1906
	4th Born	0.06661	0.10293	0.987	-0.2295	0.3627
	5th Born	-0.10505	0.13225	0.968	-0.4855	0.2754
	6th Born	-0.05867	0.08243	0.980	-0.2958	0.1785
3rd Born	1st Born	-0.31800*	0.08785	0.005	-0.5707	-0.0653
	2nd Born	0.08126	0.09450	0.955	-0.1906	0.3531
	4th Born	0.14787	0.11011	0.761	-0.1689	0.4646
	5th Born	-0.02379	0.13791	1.000	-0.4205	0.3729
	6th Born	0.02259	0.09125	1.000	-0.2399	0.2851
4th Born	1st Born	-0.46587*	0.09686	0.000	-0.7445	-0.1873
	2nd Born	-0.06661	0.10293	0.987	-0.3627	0.2295
	3rd Born	-0.14787	0.11011	0.761	-0.4646	0.1689
	5th Born	-0.17166	0.14382	0.840	-0.5854	0.2420
	6th Born	-0.12529	0.09995	0.810	-0.4128	0.1622
5th Born	1st Born	-0.29421	0.12758	0.196	-0.6612	0.0728
	2nd Born	0.10505	0.13225	0.968	-0.2754	0.4855
	3rd Born	0.02379	0.13791	1.000	-0.3729	0.4205
	4th Born	0.17166	0.14382	0.840	-0.2420	0.5854
	6th Born	0.04638	0.12994	0.999	-0.3274	0.4202
6th Born	1st Born	-0.34059*	0.07471	0.000	-0.5555	-0.1257
	2nd Born	0.05867	0.08243	0.980	-0.1785	0.2958
	3rd Born	-0.02259	0.09125	1.000	-0.2851	0.2399
	4th Born	0.12529	0.09995	0.810	-0.1622	0.4128
	5th Born	-0.04638	0.12994	0.999	-0.4202	0.3274

*. The mean difference is significant at the 0.05 level.

Discussion

The study examined effect of birth order differences on adjustment among first year undergraduate students in one selected university. The study findings reported that order of birth affects overall adjustment of first year university students, with 1st born students tend to adjust in better ways than their younger siblings. This finding agrees with William (1959) that indicated that good adjustment is positively related to being born first, particularly in a family of two, with being born as the middle child in a family of three, and with being the last born in truly big families. In agreement, Hotz and Pantano (2013) reported that

first born children have higher adjustment while the last born children have the least score in adjust adjustment attributed to decline in the toughness of their parents' disciplinary actions. In addition, Preeti and Navin (2016) indicated that first-born children are more likely to display a perfectionistic self-presentation and from scheduled interviews, we understood that paternal influences were stronger when it came to decision-making and display of conscientiousness. Similarly, Joy and Mathew (2018) indicated that there is a significant difference between the emotional maturity and general well-being of adolescents belongs to different birth orders such as first born. In agreement, Easey et al., (2019) reported that higher birth order was associated with poor adjustment levels while first born children are well adjusted. Another study by Esposito et al., (2020) reported that birth order variables display negative and highly significant coefficients on adjustment. Similarly, Hoang and Quang (2021) established that birth order has a significant, negative effect on child educational attainment, although that effect seems to vanish with the youngest sibling. Finally, Alabbasi, Tadik, Acar, and Runco (2021) also agreed that first-borns had higher adjustment as demonstrated by divergent thinking than later-born children but no significant difference was found between only children and first-born children with siblings. This finding also agrees with Adler (1964) theoretical argument that birth order differences affect adjustment levels of students due to siblings trying to compete for the attention of their parents by claiming certain niches or roles within the family.

However, the findings of the present study are contrary to that of Borne and Mears (2009) which reported no significant sibling ordinal position effects on the children's behaviors. In addition, Ekeh and Iyomaterere (2016) revealed that there is no significant influence of first and second born positions on students' social adjustment, and there is no significant influence of first and second born positions on students' social adjustment. Similarly, Kanu and Gayatri (2018) reported that birth order does not seem to play its significant role on emotional adjustment of adolescents. Moreover, Ramesh (2018) found that there is no significance difference between first born, second born and third born students on home, social, emotional and health adjustment. In addition, Kaemra and Singh (2021) showed that there is no difference in adjustments of first borns and second borns. Similarly, Fukuya et al., (2021) reported that the resilience and adjustment was highest among last-borns, followed by first-borns, middle-borns, and only children. The differences in the results of the present study and these reviewed studies could be attributed to varying contexts and research participants.

Conclusions

The study concludes that order of birth affects overall adjustment of first year university students, with 1st born students tend to adjust in the academic, social, emotional and psychological aspects than other students occupying other ordinal positions in their families; their younger siblings. The study also concludes that second born first year students struggled in all aspects of adjustments at university. Therefore, order of birth explained a significant variability in overall adjustment

among the first year university students. The study concludes that birth order of an individual plays an important role in their lives as it affects their internal energy on how they adjust to the new environments such as the university. The first born students are more internally equipped with cognitive, behavioral, psychological and emotional strategies of adjusting to new environments and challenges.

Implications

The results of the study have implications to university students, department of counselling at universities, parents and university administration. This study recommends that the staff at university counseling centers should develop support services for new students in the institutions to help them adjust appropriately on transiting to higher education. Moreover, counseling staff at universities should be trained on cognitive behavioural therapies to enhance the adjustment of new students at the institutions. Universities should develop appropriate student services to improve orientations for new students in the institutions. Further research should be done on institutional based factors affecting adjustment of first year students in public universities.

Limitations

This study has one limitation in that it only focused on birth order among other possible psychological factors which could affect adjustment among first year students at university. Future studies could focus on other psychological factors influencing adjustment among first year students.

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