

# Learners' birth order and their academic performance: An analysis

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## ABSTRACT

Biological birth is connected to the natural process of physically bringing forth life, and to what order the person was born into the family. Furthermore, it is related to the phenomena of mental and emotional life. Further, this may relate more meaningfully to the roles that siblings construct or are ascribed rather than to actual birth order. Adler emphasized that every person has a self-perceived place in the family. The purpose of this study is to determine if there is a relationship between birth order and academic performance of the respondents. This study used descriptive – quantitative method of research to analyze data. A total of 163 Grade 10 Junior High School students enrolled during the School Year 2018-2019 participated in the research study. The respondents were divided into four subgroups: a) first born; b) middle born; c) youngest or last born; and d) only child. Materials and instruments used to gather data on this research was the checklist-questionnaire - Psychological Birth Order Inventory (PBOI) developed by Stewart & Campbell, 1998; Stewart, 2012. The results in this study revealed that male and female respondents who perceived their birth order as Pleaser/Organizer (First Born), Neglected/Rejected (Middle Born), and Charmer/Initiator (Last born) are more likely to be academically motivated. Among the 1 birth order classifications, respondents who perceived themselves as only children are less likely to be academically motivated in school. Moreover, respondents who perceived that their Birth Order is Pleaser/Organizer and Neglected/Rejected are more likely to have higher academic performance.

**Key words:** Academic performance, birth order, quantitative study, Psychological birth order inventory

## 1. INTRODUCTION

Birth order pertains to the placement into which one is born – first born, middle child, last born, or only child. It also connotes an individual's role with which he/she most closely identifies, regardless of his/her biological position [1]. Children of a family behave differently although they were nurtured in the same environment

and share the same genetic pools from both of their parents [2]. Parents' attention, investment, and expectation vary across children. Therefore, as a result of their distinct birth order, every child experience different level of parental resources and investment, while these unique experiences will in turn shape their developmental course [3-5]. Though education is not the only road to success in the working

world, much effort is made to identify, evaluate, track and encourage the progress of students in schools. Parents care about their child's academic performance because they believe good academic result will provide more career choices and job security [6-7].

On top of behaviours, siblings differ in terms of driving motivation [8]. One individual learns for the sake of learning and do not require praise or rewards for their tasks [9]. On the other hand, an individual may be pressured by the outside world such as societal or family influences.

It is in this premise why is this study conducted. Primarily, this study sought answers the following problems such as (a) How may the birth order of the respondents be described? (b) How may the academic performance of the respondents for the Third quarter of S.Y.2018-2019 be described? (c) Is there significant relationship between Psychological Birth Order and Academic Performance?

## **2. MATERIALS AND METHODS**

### *2.1. Research design*

This study used descriptive quantitative method of research to analyze data. Total of 163 Grade 10 Junior High School students enrolled during the School Year 2018-2019 participated in the research study. The respondents were divided into four subgroups: a) first born; b) middle born; c) youngest or last born; and d) only child. The materials and instruments used to gather data on was the checklist-questionnaire - Psychological Birth Order Inventory (PBOI)

developed by Stewart & Campbell, 1998 [10]. This was obtained by determining motivation which among the four subscales represent the psychological birth order of Pleaser/Organizer (First), Neglected/Rejected (Middle), Charmer/Initiator (Youngest), and Scrutinized (Only).

### *2.2. Data collection*

Quantitative data were collected by creating a group variable by which to categorize biological birth order (1 = first born, 2 = middle born, 3 = last born, and 4= only child). Also, respondents were categorized into two (male=0 and female =1). For the PBOI answers, data were coded (1=Yes and 0=No). In analyzing the data gathered, the researcher used frequency, percentage, weighted mean and Pearson Correlation. The Pearson Correlation was used to compare the mean ranks of different student academic performance scores in each of the psychological birth order, to determine relationship between psychological birth order and academic motivation and to determine relationship between academic motivation and academic performance.

### *2.3. Data analysis*

The collected data was analyzed using Statistical Package for the Social Sciences (IBM SPSS Statistics Version 20) and level of significance was considered 0.05.

## **3. RESULTS AND DISCUSSIONS**

### *3.1. Birth order of the respondents*

The data above shows that majority of respondents were female. From the self-report of actual birth order, First born children had the highest percentage of 38% which consist of 47.9% female and 24.6% male; middle born has second highest with 31.3% which consist of 29.8% female and 33.3% male; third on the list was the last born with 16.6% which consist of 10.6% female and 24.6% male; and Only child had 14.1% which consist of 11.7% female and 17.4% male.

In 2003, the largest proportion of births was in the first birth order with 429,583 (25.7%) followed by the second and third birth orders with a count of 317,401 (19.0%), and 217,362(13.0%), respectively.

### 3.2. Respondents' academic performance

Satisfactory (36.23% or 25 male and 44.68% or 67 female); 33.74% of the respondents garnered 90-100 or Outstanding (27.54% or 19 male and 38.30% or 36 female) and 25.15% received 80-84 or Satisfactory (36.23% or 25 male and

**Table 1. Birth Order**

Birth Order	Male		Female		Total	
	f	%	f	%	f	%
First Born	17	24.6	45	47.9	62	38.0
Middle Born	23	33.3	28	29.8	51	31.3
Last Born	17	24.6	10	10.6	27	16.6
Only child	12	17.4	11	11.7	23	14.1
Total	69	100.0	94	100.0	163	100.0

**Table 2. Academic performance - third quarter periodic rating**

Grade	Male		Female		Total		Verbal Description
	f	%	f	%	f	%	
90 - 100	19	27.54	36	38.30	55	33.74	Outstanding
85 - 89	25	36.23	42	44.68	67	41.10	Very Satisfactory
80 - 84	25	36.23	16	17.02	41	25.15	Satisfactory
75 - 79	0	0.00	0	0.00	0	0.00	Fairly Satisfactory
below 75	0	0.00	0	0.00	0	0.00	Did not Meet Expectation
Total	69	100	94	100	163	100	
Mean	86.85		88.22		87.54		Very Satisfactory

**Table 3. Relationship between psychological birth order and academic performance**

Psychological Birth Order	Periodic Rating for the third quarter of S.Y.2018-2019		
		Male	Female
Pleaser/Organizer	r	.458**	.324**
	p-value	.000	.001
Neglected/Rejected	r	-.297*	-.173
	p-value	.014	.095
Charmer/Initiator	r	-.216	-0.044
	p-value	.077	0.673
Scrutinized	r	-.110	.045
	p-value	.372	.665

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

17.02% or 16 female). The over-all mean that reflect the respondents' performance show a mean of 87.54% or Very Satisfactory (88.22% from female respondents was obtained and 86.85% was from the over-all mean of male respondents).

Studies have shown that there is also a gender difference in school engagement than boys [11-12]. In this study, the relations between school engagement and reading comprehension were examined for participants from two public secondary schools in the Philippines. Boys showed a more maladaptive profile in terms of academic motivation, engagement and achievement [11].

### *3.3. Relationship between Respondents' Birth Order and Academic Performance*

The table above shows that male respondents, who perceived that their Psychological Birth Order is Pleaser/Organizer, obtained a correlation of .458, which indicates moderate correlation; female respondents who perceived to be Pleaser/Organizer obtained a correlation of .324 which indicates little correlation to their academic performance with a p-value of .000. Also, male respondents who perceived that their Psychological Birth Order is Neglected/Rejected, obtained a correlation of -.297 which indicates little correlation to academic performance. Thus, it reveals that respondents who perceived themselves as Pleaser/Organizer and male respondents who perceived themselves as the Neglected/Rejected are more likely to have higher academic performance [13].

## **4. CONCLUSION**

Based on the results of the study, the following conclusions were drawn:

1. Psychological Birth Order Inventory Scale should be seen as a valuable tool and should be made available to teachers and guidance counselors via training workshops.
2. Appropriate identification of student needs and individual characteristics leads to positive social change in both the education arena and the home.
3. It is essential to understand how motivation to achieve academically works and how to motivate students in school.

## **5. ACKNOWLEDGEMENT**

NA

## **6. CONFLICT OF INTEREST**

NA

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