



The correlation study of family relation on Academic Performance and Personality of Undergraduates

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Abstract: Family relation plays the significance role contribute to the children personality development and student's academic performance. The difference type of personality trait with the level of academic performance lead to career success and prosperity of life. The population of the research study consisted of 3,000 who are studying in the level of undergraduate at the university, and the sample size was 100 students from difference faculty and school. Among the sample size, there were 32 students were freshman, 25 were sophomore, 15 were junior, and 29 were senior. There were 31 male students, and 69 were female students. There were three main research instruments were employed include family relation, personality, and academic performance. The Cronbach's alpha of family relation, personality, and academic performance was 0.81, 0.80, and 0.85 respectively. The result of this study revealed that there was a significance correlation between family relation and academic performance and personal of undergraduates

IndexTerms - Family Relation, Academic Performance, Personality

I. INTRODUCTION

Nakao et al. (2000), the home environment has an influence on a student's personality attributes. Considine and Zappalà (2002) proved that the family who takes good care of their children impacted the student's academic performance. The children who were born and live with a good family who spent time, educate, motivate, inspire, and encourage them, are going to perform well in their academic journey. According to the initiative of the MoEYS from the slogan "Education For All" and "Education Starts from Home", it is noticeable that the home environment is an extremely important factor that might influence the children's academic performance and personality development by Kakkar (2016) and Mammadov et al. (2018). Therefore, this paper is to examine the correlation of family relation academic performance and personality of undergraduates.

H01: There is no significant correlation of family relations on student's academic performance.

H02: There is no significant correlation of family relations on student's personality.

II. RESEARCH METHODOLOGY

Research Design

This research study employed quantitative method because the aims of the study is to investigate the relationship variables, and testing the hypothesis. Correlational designs provide an opportunity for researcher to predict scores and explain the relationship among variables. In correlational research designs, investigators use the correlation statistical test to describe and measure the degree of association (or relationship) between two or more variables or sets of scores. In addition, the correlation design includes specific characteristics such as the displays of scores, associations between scores, and multiple variable analysis (Creswell, 2015). There are three main research instruments as describe in Table 1 below.

Table 1: Research Instrument

Instrument	Description	Number of items	Adopted
A	Family relations	24	Hudsen (1982)
B	Personality	41	Goldberg (1999)
C	Academic Performance	5	KYOSHABA (2009)

There are 24 items describe below in family relations questionnaire for instrument- B. The respondent choices demonstrate in five points scale such as all of time, a good part of time, some of time, a little of time, and none of the time. It was developed by Hudsen (1982); the cronbach's alpha was 0.82. In addition, there are five main types of personality such as openness, extraversion, conscientiousness, emotion stability, and agreeableness. There are totally 41 items as describe below. There are 7 items for openness, 9 items for extraversion, 10 items for conscientiousness, 8 items for emotional stability, and 7 items for agreeableness. This research instrument developed by Goldberg (1999) which had the cronbach's alpha 0.792. The last research instrument is

academic performance. It has five main items such as lesson tests, course work, midterm and final examination, core and compulsory course, and grade point average. This instrument developed by Kyoshiba (2009); it had the cronbach's alpha 0.778.

Data Collection

There are 30,000 undergraduates who are currently studying at private university. According to, Israel (1992) there are 95% confident level with margin of error 10% so this study determines 94 students as the sample of research study. Finally, the research study selected 100 undergraduates for data collection.

Table 2: Sample Size Determination

Year	Sample Size	Population Size	Confident Level	Margin of Error
Freshman	25			
Sophomore	25			
Junior	25	3,000	95%	10%
Senior	25			
Total	100			

Source: Israel, 1992

Data Analysis

The inferential statistic was used to analysis the primary data. In addition, Ganti (2020) explained the correlation coefficient is a statistical measure of the strength of the relationship between two continuous variables. The values of a Pearson correlation coefficient range between -1.0 and 1.0. A correlation of -1.0 shows a perfect negative correlation, while a correlation of 1.0 shows a perfect positive correlation. Cresswell (2015) stated a p-value is the probability (p) that a result could have been produced by chance if the null hypothesis were true. According to Lind, Marchal, and Wathen (2017) said comparing the p-value with the level of significance 0.05 (alpha), the null hypothesis can be rejected if p-value less than alpha (p-value $< \alpha$). However, null hypothesis cannot reject if the p-value $\geq \alpha$.

III. RESULTS AND DISCUSSION

Table 3: Mean and Standard Deviation for Each Items on Student Academic Performance

N	n	M	SD	Response Distribution (%)			
				Poor	Fair	Good	
1.	In lesson tests	100	2.26	0.52	4	66	30
2.	In course works	100	2.32	0.51	2	64	34
3.	In midterm and final examination	100	2.29	0.51	3	65	32
4.	In core and compulsory course	100	2.33	0.53	3	61	36
5.	In grade point average (GPA)	100	2.32	0.52	3	62	35

In table 3 revealed the mean and standard deviation of student academic performance. The total mean of academic performance of undergraduates was 2.30 and total standard deviation was 0.51.

Table 4: Mean and standard deviation for five main categories of personality

No	Type of Personality	Mean	Standard deviation
1.	Openness	3.59	0.95
2.	Extraversion	3.03	1.01
3.	Emotional stability	3.47	0.93
4.	Conscientiousness	3.16	1.03
5.	Agreeableness	3.09	0.86

In table 4 shown the mean score of openness was 3.59, extraversion was 3.03, emotional stability was 3.47, conscientiousness was 3.16, and agreeableness was 3.09.

Table 5: Mean and Standard Deviation for Each Item Family Relation

N	Statement	n	M	SD	Response Distribution (%)				
					All of the Time	A good part of the time	Some of the time	A little of the time	None of the time
1.	The members of my family really care about each other.	100	3.99	0.99	40	28	23	9	0
2.	I think my family is terrific.	100	4.01	0.94	37	35	20	8	0
3.	My family gets on my nerves. *	100	3.88	0.80	2	3	18	59	18
4.	I really enjoy my family.	100	4.36	0.74	49	24	25	6	2
5.	I really can depend on my family.	100	4.00	1.05	43	24	25	6	2
6.	I really do not care to be around my family. *	100	3.78	1.27	9	7	19	27	38
7.	I wish I was not the part of this family. *	100	4.56	0.91	2	4	5	14	75
8.	I get along well with my family.	100	4.33	0.72	45	46	6	3	0
9.	Member of my family argue too much. *	100	4.20	0.79	1	1	14	45	39
10.	There is no sense of closeness in my family. *	100	3.95	1.04	2	8	21	31	38
11.	My family doesn't understand me. *	100	3.72	1.00	2	8	32	32	26
12.	I feel like a stranger in my family. *	100	4.17	1.11	6	3	10	30	51
13.	There is too much hatred in my family. *	100	4.73	0.48	0	0	2	23	75
14.	My family is well respected by others who know us.	100	3.90	0.97	26	51	14	5	4
15.	There seems a lot of friction in my family. *	100	4.26	0.79	0	4	10	42	44
16.	There is a lot of love in my family.	100	4.19	0.91	44	39	10	6	1
17.	Members of my family get along well together.	100	4.08	0.91	36	44	14	4	2
18.	Life in my family is generally unpleasent.	100	1.94	0.81	1	3	15	51	30
19.	My family is a great joy to me.	100	4.38	0.74	52	36	10	2	0
20.	I feel proud of my family.	100	4.46	0.89	65	22	9	2	2
21.	Other families seem to get along better than ours.	100	2.67	1.10	4	20	32	27	17
22.	My family is a real source of comfort to me.	100	4.37	0.87	58	25	14	2	1
23.	I feel left out of my family. *	100	3.55	1.18	8	8	30	29	25
24.	My family is an unhappy one. *	100	4.28	1.10	5	4	8	24	59

Noted: (*) Negative items were reversed coded.

In table 5 shown the result of student family relation. It revealed the mean, standard deviation, and the percentage of each items. The total mean of family relation of undergraduates was 3.99 and total standard deviation was 0.92. The result response to the part of research questions two reveal that the family relations of undergraduates at the university had good part of the time.

H01: There is no significant correlation of family relations on student academic performance.

Table 6: Correlation between family relation and student academic performance

Correlation Matrix		Family relations	Student academic performance
Family relations	Pearson Correlation	1	.378**
	Sig. (2-tailed)		.000
Student academic performance	N	100	100
	Pearson Correlation	.378**	1
	Sig. (2-tailed)	.000	
	N	100	100

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

The table 6 shown the correlation variables family relations and student academic performance. The Pearson Correlation Coefficient was $r = 0.378$ (37.8%), $p = 0.000$, and $N = 100$. The p -value of the correlation less than 0.01; it was statistically significance.

H02: There is no significant correlation of family relations on student personality.

Table 7: Correlation between family relations and student personality

Correlation Matrix		Family relations	Student personality
Family relations	Pearson Correlation	1	.362**
	Sig. (2-tailed)		.000
	N	100	100
Student personality	Pearson Correlation	.362**	1
	Sig. (2-tailed)	.000	
	N	100	100

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

The table 7 shown the correlation variables family relations and student personality. The Pearson Correlation Coefficient was $r = 0.362$ (36.2%), $p=0.000$, and $N=100$. The p-value of the correlation less than 0.01; it was statistically significance.

Discussion

Table 8: The thematic discussion

Family relation	Li et al. (2022)	Relationship significantly and positively affected the academic performance.
	Carmona et al. (2020)	Parent-child relationship can directly predict a student's academic performance.
	Obeldobel and Kerns, (2021)	Parent-child relationships directly affect the academic performance.
Family relation	Zhang et al. (2018)	Parent-child relationships were significantly correlated with personality traits.

Obeldobel and Kerns (2021) proved parent child relationships not only directly affect the academic performance but also an individual's positive emotions. Carmona et al. (2020) research has shown that the parent child relationship can directly predict a student's academic performance. Li et al. (2022) research results showed that the parent child relationship significantly and positively affected the academic performance of college students. These previous studies supported our finding that provided the correlation between family relation and academic performance. In addition, Zhang et al. (2018) proved that there was significance correlation between family relation and student's personality trait which support this research study.

In this study, there were several main findings. First, the level of student academic performance revealed the total mean was 2.30 and total standard deviation was 0.51. In addition, there were five type of personality which was measured by this study. There was openness, the descriptive statistic result shown the mean score 3.59 with the standard deviation 0.95. Second type of personality was extraversion, it had the mean score 3.03 with the standard deviation 1.01. Third type of personality was emotional stability, the result revealed the mean score 3.47 with the standard deviation 0.93. Fourth type of personality was conscientiousness, this study measured the level of means score was 3.16 with the standard deviation 1.03. Last but not least, the agreeable had the mean score 3.09 with the standard deviation 0.86. In short, most undergraduates were located in openness categories of personality as seen in the mean score 3.59 was the highest score. Last but not least, the mean score of family relation was 3.99 and total standard deviation was 0.92. The research proved that there was statistically significance between family relation on Academic Performance and Personality of Undergraduates.

The future studies should conduct in different context, using various educational theories, and employ other statistical tools. The future researchers could replicate their study on another setting or sample in order to verify the results with this present study. In addition, it is advised that larger samples be used in future research, and data should be gathered from a variety of universities, to increase the study's generalizability in Cambodia context.

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