

The Relationship between Mothers' Educational Levels and their Children's Academic Performance

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ABSTRACT

Children spend a large period of their lives close to their mothers gaining knowledge, learning many skills, and emulating them. Therefore, the objective of this research is to identify the relationship between mothers' educational levels and their children's academic performance. To achieve this objective, a quantitative research method (correlation design) was applied to explore the relationship and a SPSS program was used to analyze the data. The data was collected from 50 random mothers in the Kingdom of Bahrain that have at least one child in the primary stage of school. An electronic questionnaire was used to describe the studying atmosphere at home and to determine the nature of the relationship between the study variables. The relationship was analyzed using Spearman's rank correlation coefficient (Spearman's rho). The results revealed that there is no relationship between a mother's educational levels and their children's performance.

Keywords: Mothers' educational levels; Student performance; Academic achievement; Educated mothers

INTRODUCTION

Since the creation of mankind, parents have served as educators! They were the only source of information for their young child, and they were the transmitters of the culture and knowledge generation after generation (Saadeh et al., 1996). Many researchers (e.g., Gooding, 2001; Rawls, 2013) agree on the importance of the role of family, especially the parents, and their great impact on the upbringing of children. Parents consider that they have the first and main role in the process of early socialization. The clear imprint it leaves on the personality of the children and their cognitive development appear in the form of practices and responses to different situations in school life (Awan & Kauser, 2015; Li & Qiu, 2018). As the children continue to grow, the formal education in school starts to take a part into the child's educational life (Eshach & Fried, 2005). The major responsibility for education in schools rests on the teachers, as they are one of the sources of knowledge and are the main planners and engines of the educational process (Ibrahim et al., 2013). The primary concern of every teacher is improving student academic achievement and to accomplish this aim, teachers believe that they have to work as a team with the students' parents, especially their mothers (Cankar et al., 2012; Symeou, 2006). When there is teamwork and collaboration between schools and parents, wonderful academic development can be achieved by the students. Hijazi and Naqui (2006) identified three variables impacting students' academic performance: environmental, psychological, and socioeconomic factors. The parents' educational level is an important aspect of the socioeconomic factor. Therefore, it is very important to investigate the relationship between parents' education level, especially mothers, and their children's academic achievement.

Research problem

The research problem is to investigate the relationship between mothers' educational levels and the students' academic performance in the primary stage.

Research question

The main research question of this study is, "What is the relationship between mothers' education and their children's academic performance in the primary stage?"

The significance of the study

1. At the community level: There is a widespread belief in Bahraini society that the marriage of an individual to a woman with a high level of education guarantees him the success of his children in the future at high rates as well (with a high GPA). The results of the current study may raise awareness about this topic and support whether this is a true belief to hold.
2. At the parent's level (especially mothers): Parents might know that they should follow up during their child's

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learning process, giving them attention, and motivating them to learn because everything in the parents' life may affect the children.

3. At the researchers' level: This research could raise the curiosity to do more research on other factors that affect student's GPA.

LITERATURE REVIEW

First Axis: A positive relationship between mothers' educational level and the child's academic achievement

Many studies (e.g., Azhar et al., 2014; Erdogdu & Erdogdu, 2015; Kaya, 2013; Khan et al., 2015; Rafiq et al., 2013) have indicated a relationship between the educational level of the parents and the educational achievement of their children. Kaya (2013) studied the relationship between the attitudes toward science of 500 Turkish elementary students and their fathers' and mothers' education levels. The findings confirmed that the students whose parents graduated from elementary school had more negative attitudes toward science than the students whose parents graduated university. Similarly, Erdogdu and Erdogdu (2015) investigated the PISA 2012 dataset of 4848 students in Turkey and found that there was a positive correlation between students' academic performance and their parents' educational levels. Furthermore, Azhar et al. (2014) tested the factors affecting the students' achievements. The independent variables for their study were socio-economic status and parental education level, and the dependent variable was academic achievement. Their findings found a noteworthy positive relationship between parental education level and their children's GPAs.

In addition, there are other studies (e.g., Carneiro et al., 2012; Faize & Dahar, 2011) that confirm the positive relationship of the mothers' educational level specifically and their children's achievement. Faize and Dahar (2011) claimed that high school students in Pakistan have difficulty in science. Therefore, the researchers tried to study the effect of mothers' education level on their children's performance. The sample of their study was 1233 students from 30 schools located in Islamabad. Researchers concluded that students whose mothers are educated have higher grades in science tests than students whose mothers are illiterate. Similarly, Carneiro et al. (2012) identified the effect of mothers' educational level on students' learning outcomes, including cognitive development of students, and their health and behavioral problems in school. The findings of their study confirmed that the education of mothers has a strong influence on the academic performance of their children in the subjects of mathematics and reading at the age of 7–8, and this effect decreases when the children are at the age of 12–14. Their results also indicated that the mothers' education reduces on reduces grade repetition of their children.

Second Axis: No relationship between mothers' educational level and their children's achievement

Amuda and Ali (2016) examined the extent to which parental education was considered as a predictor of the academic achievement of 13,529 university students in Nigeria. The researchers emphasized that there is not enough evidence to prove that the academic achievement of university students is influenced by the educational level of their parents. A similar study done by AL-Maitah (2007), aimed to know the effect of a parent's educational level and living standards on childrens' motivation to learn and attitude toward school. The finding showed that there was no effect of the educational level of the parents on the students' learning motivation and attitudes toward the school, which suggests that there is no effect of parents' education level on their children's academic achievement.

Despite an extensive body of articles in Western countries and some other countries on the relationship between the parents' educational level and their children's academic performance, there is considerably less research in the Middle East countries and especially the Arab Gulf countries that studies this relationship. Therefore, there is a real need to investigate the relationship between the parents' educational levels, especially mothers, and the academic achievement of their children in the Arabic Gulf countries.

METHODOLOGY

To achieve the current study objectives, the researchers employed the quantitative research method (correlational designs). Correlational research designs help to measure the statistical relationship between variables of interest in people's lives (Fitzgerald et al., 2004). Also, Obeidat et al. (2020) indicated that the correlational approach is to collect data about a particular phenomenon, study the relationship between its variables as they are in reality, and then analyze them to reach the final result of the study. Therefore, the researchers of the current study adopted this approach to test the relationship between students' academic achievements such as GPA and their mothers' educational levels.

Participants

The research participant invitation letters were sent randomly to mothers who have at least a child in primary stage. From four schools in Manama, the Kingdom of Bahrain, only 50 mothers accepted to participate in this study and complete the survey. Moreover, for the mothers who were illiterate, we asked people who are close to them to read the online survey questions to them and share their answers with us.

Instrument

The research instrument was an online survey (using Google forms) made by the researchers to collect data.

The instrument was prepared using the Arabic language, so that the participants could understand the questions better.

The online survey contained 4 main questions:

1. What is the educational level of the mother?
2. What is your child's GPA?
3. Who helps the child study at home?
4. How much time does the student spend learning with his/her mother?

Why this method to collect the data?

This procedure helps to obtain valid and accurate data to study the relationship between the two variables (the level of mothers' education, and the educational attainment of their children), so this method is appropriate method to reach the goal. Previous research states that the influence of mothers' education on their children's academic performance is relevant, therefore the researchers of this study assumed that there is a direct relationship between both variables. Therefore, measuring the correlation coefficients to find the strength and direction of the relationship is one of the objectives of this study.

Data Analysis Strategy

Frequencies and percentages were used to describe the data of this study. Also, The Spearman's rank correlation coefficient (Spearman's rho) was used to report the strength of the relationship between the two variables (mothers' educational levels and their children's academic achievements). The value of Spearman's ρ ranges from -1 to $+1$. The value of Spearman's rho is interpreted as following: Spearman's rho = $+1$ means the relationship between variables is a strong positive relation, Spearman's rho = -1 means the relationship between variables is a strong negative relation, and Spearman's rho = 0 means that there is no relationship.

Research variables

The independent variable of the current study was the mothers' educational levels, and the dependent variable was students' academic achievements (GPA).

Ethics

All the participants in this study are volunteers, and their names and information were anonymous for more increase preserve privacy. In the instructions to the online survey, we specified that participants should answer all the questions credibility, as their true answers will represent the results about this topic. We included the objectives of the research so that they could understand the goals for the outcomes of this information. Moreover, participants had the right to retain a copy of the results or at the very least know what the research's final outcome was.

RESULTS

The main aim of this study was to investigate the relationship between elementary students' academic achievement and their mothers' educational levels in the Kingdom of Bahrain. This section contains two parts; descriptive statistics and the relationship between mothers' educational level and their children's academic achievements.

Description of the Sample

Table 1 indicates the information regarding the mothers' educational levels in this study. Most of the mothers hold a secondary school (42%) diploma, followed by university (34%), middle (14%), primary (6%), and only two mothers were illiterate.

Table 2 provides information about students' GPA according to their mothers' statements. Forty percent (40%) of the students had a GPA between 80 and 89, 38% had a 90 to above, 12% were between 70 and 79, 8% were between 60 and 69, and 2% had a GPA below 60.

Table 3 displays who assisted the students in studying. The majority of the helpers were their mothers, 76%, followed by no one (16%), private tutor (4%), and the minority of helpers were fathers (2%) and others (2%). This finding confirms the influence of the role of mothers on their children's achievements. The majority of mothers are the ones who bear the responsibility of educating their children.

Table 4 describes how much time students spent studying with their mothers. Most primary students (42%) in Bahrain spent between 1 to 2 hours with their mothers in studying, and the minority of them (20%) spent more than 2 hours studying with their mothers. While the rest of the students (38%) spent less than one hour studying with their mothers.

Table 1: Frequencies and percentages of participants' Level of Education

Mothers' education levels	N	%
University	17	34
Secondary	21	42
Middle	7	14
Primary	3	6
Illiterate	2	4
Total	50	100

Table 2: Frequencies and percentages of students' GPA

Students' GPA	N	%
90 and above	19	38
80 – 89	20	40
70 – 79	6	12
60 – 69	4	8
Below 60	1	2
Total	50	100

Table 3: Assistant for students in study

<i>The helper</i>	<i>N</i>	<i>%</i>
No one	8	16
Mother	38	76
Father	1	2
Private tutor	2	4
Others	1	2
Total	50	100

Table 4: Frequencies and percentages of studying time with mother

<i>Time of study with mother</i>	<i>N</i>	<i>%</i>
Less than 1 hour	19	38
1 to 2 hours	21	42
More than 2 hours	10	20
Total	50	100

Table 5: Correlation coefficient (Spearman's rho)

<i>Correlations</i>	<i>Rho</i>	<i>Sig. (2-tailed)</i>	<i>N</i>
The correlations between mothers' education levels and students' academic achievement	0.049	0.726	50

Note. The *p* value: significant at the $p < 0.05$ level.

The relationship between mothers' educational level and their children's academic achievements

Table 5 contains the results of Spearman's rho for testing the relationship between mothers' educational level and the students' academic achievements. The last column shows the sample number of this study, which was 50 participants. Also, Table 5 shows that the results of the test of Spearman correlation (0.049) are not statistically significant. Because the *p*-value (0.726) is greater than 0.05, the researchers concluded that there is no relationship between the level of mothers' education and their children's academic achievements (GPA).

DISCUSSION

The main question of this study was: What is the relationship between mothers' education and their children's academic performance in the primary stage? All participants in this study were Bahraini mothers who had at least one child in the primary stage. The results of Spearman's rho showed that there is no relationship between mothers' educational level and the students' performance (GPAs). This finding is supported by similar studies conducted by Amuda and Ali (2016), and AL-Maitah (2007). These studies showed that there was no relationship between mothers' educational level and their children's achievement. However, the results of this study were opposed by many previous studies such as Azhar et al. (2014) which concluded that there is a relationship between

parental education and student GPA. Carneiro et al. (2012) also stated that mothers' education increases their children's performance in both mathematics and reading. This finding about the relationship between a mother's educational level and the students' performance can be explained by time spent studying. The results of the current study indicated that 76% of mothers are the ones who take care of their children's education and spend time making sure they obtain better grades; however, the time mothers spent educating their children was not sufficient for constructive learning to take place. The results confirmed that 80% of mothers spent just two hours or less studying their children. By our point of view, Students in primary stage need more than two hours of studying with their mothers because they need more time to practice and connect what they learned in school with their daily lives.

On the other hand, although 76% of mothers have at least a high school diploma, mothers with a high level of education did not spend a lot of time teaching their children. The reason could be that these mothers may have a job, which will impact the time they spend with their children at home. Furthermore, their GPA could be affected if the students were not motivated to learn through time spent studying with their mothers and thus did not have some of the skills needed to pass their courses. Therefore, even though a great responsibility falls upon mothers to support and assist their children in their academic development, mothers who work or cannot help their children study for other reasons need support from the father, a tutor, after school programs, or etc.

CONCLUSION

In this study, the relationship between mothers' educational levels and the students' academic achievement was studied. This study also examined the amount of time that students spent with their mothers studying at home. The findings of this study demonstrated that there is no relationship between mothers' educational level and their children's academic achievement in school.

It was noteworthy that the results indicated that mothers were the ones who cared about their children's education at home, however, there was not a proven relationship between the mothers' educational level and their children's performance. A plausible explanation for the findings might be that those mothers did not spend enough time studying with their children; therefore, spending more time with their children especially at this age may be the best motivation for the students to enjoy their education and obtain a higher GPA.

Children's educational performance cannot be judged according to their mothers' educational levels because there are other factors that may have strong effects on this relationship, such as the children's abilities to learn, their motivation, their confidence, and their anxiety when learning. In other words, other factors that may impact this relationship should be

evaluated in future research. Furthermore, to determine other factors that affect the students' GPA, the researchers of this study suggest studying the other variables, such as student absence and teachers' strategies in teaching.

Furthermore, In the Bahrain culture, there is a common perception that if men hope to have successful children at school in future (having a high GPA), they should marry a woman with a high level of education. Therefore, the results of the current study emphasizes that this belief is not necessarily true. Sharing the results of this study with the citizens may help them to focus on the right idea that if parents seek to have successful children with a high GPA in school, parents should continuously follow the learning process of their children and pay more attention and motivate them to learn. Moreover, the result of this study supports and increases the confidence of mothers with a low educational level, as it is illogical and unethical to judge them only by the GPAs of their children.

LIMITATION

The number of sample size ($n = 50$) is one a limitation of this study; nevertheless, research with a small number of participants is significance in many analyzes, such as meta-analysis (Kulik & Kulik, 1989).

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