

School Homework and its Relationship with Student Academic Achievement in Malaysia

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Abstract—School homework has been synonymous with students' life in Chinese national type primary schools in Malaysia. Although many reports in the press claimed that students were burdened with too much of it, homework continues to be a common practice in national type schools that is believed to contribute to academic achievement. This study is conducted to identify the relationship between the burden of school homework and academic achievement among pupils in Chinese National Type Primary School in the state of Perak, Malaysia. A total of 284 students (142 from urban and 142 from rural) respectively were chosen as participants in this study. Variables of gender and location (urban/rural areas) has shown significant difference in student academic achievement. Female Chinese student from rural areas showed a higher mean score than males from urban area. Therefore, the Chinese language teachers should give appropriate and relevant homework to primary school students to achieve good academic performance.

Keywords—homework, academic achievement, Chinese National Type Primary Schools

I. INTRODUCTION

SCHOOL homework is an important part of the daily tasks of children who are studying. Homework is an issue that may create a strong controversy from time to time [1]. The impact of homework on students is an issue that is often subject to dispute and conflict in the educational arena [2] and a burning issue for the school as well [3].

II. STATEMENT OF PROBLEM

School homework has become an issue of research and media attention in jurisdictions all over the world. In the United Kingdom, the news media follow this issue closely and new research continues to be conducted [4]. In Australia, both governments and independent researchers have analyzed homework [5][6]. In the United States, researchers [7], governments [8], and advocates all pronounce upon the issue. In Canada, there has been substantial media attention over the past two years, and new research has been published [9][10]. Clearly, homework is an important issue both inside and outside of academia.

In Malaysia, academic achievement is an issue that is always emphasized by parents, educators, and students themselves. Homework has occupied most students' lives and in the primary, secondary or upper secondary education. Although many reports in the press claimed that the students were burdened with too much of it, homework continues to be a common practice in today's educational arena as evidenced homework contributes to increased the students' academic achievement [11].

Work-related study found that a variety of findings of homework on academic achievement. Some of the findings show there may be a positive effect of homework on student academic achievement [12][13][14], while other studies show a negative impact of homework on the students [15].

From the above discussion, conclusion may be made that there are two main findings of homework. First and foremost is that homework increases academic achievement; and without excessive homework, our students' test scores will continue to lag internationally. More on the first one shortly because that is the bulk of what the review covers. On the second point, the report points out that students in many countries, including Japan and Finland, are assigned less homework but still outperform U.S. students in international comparisons [16].

Therefore this study is aimed at examining the differences that exist between social background and academic achievement of students in Chinese national type primary schools. In addition, this study will investigate the relationship between time spent, number and frequency of homework, and interests of students with their academic achievement.

III. RESEARCH QUESTIONS

The study is aimed at answering the following research question:

Is there any significant difference in terms of social background and academic achievement of students in Chinese national type primary schools?

- gender and academic achievement in Chinese national type primary schools
- location and academic achievement in Chinese national type primary schools
- parents' education level and academic achievement of students in Chinese national type primary schools
- family income and academic achievement in Chinese national type primary schools

IV. RESEARCH DESIGN

This study is a survey research for survey research is one of the most popular methods in non-experimental research. Researchers limit the sampling in the North Kinta District and Mahjong District in Perak only accordance with the purposive sampling method because North Kinta district meet the characteristics of a city while Manjung District has enough number of rural National Type Chinese Schools to run the sampling process.

The researchers have conducted stratified random sampling procedures to determine the target respondents of students of at Level 2 (Year 4, 5, and 6).

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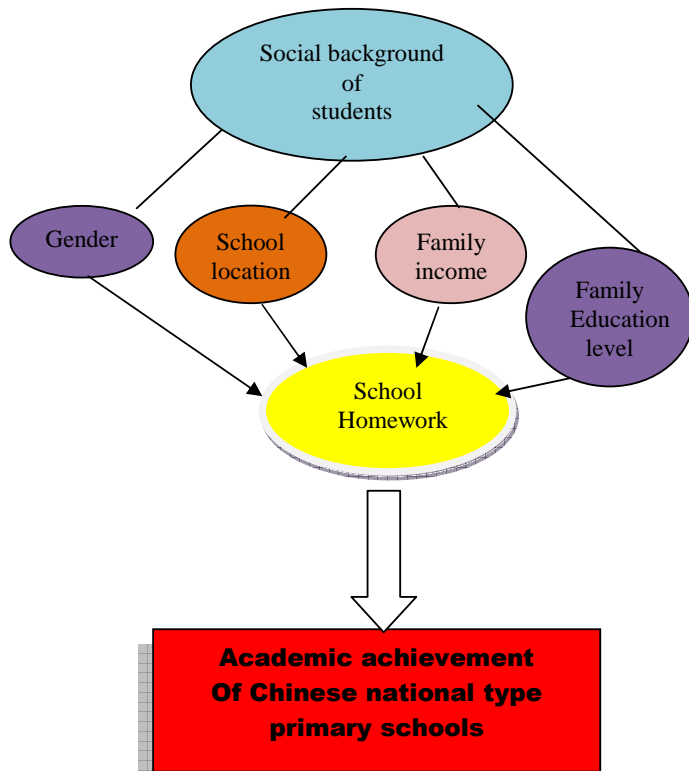


Fig. 1 Conceptual Framework of Study on Relationship of School Homework With Chinese National Type Primary Schools' Academic Achievement

Conceptual framework was built based on the study of Cooper (1989), titled "*Synthesis of Research on Homework: Grade level has a dramatic influence on homework's effectiveness.*" In the report of the study, Cooper has produced A Model of Factors Influencing the Effect of Homework.

Cooper (1989, 2001) has carried out literature review on 180 studies related to school homework. The results of the study, Cooper, H. (1989) found that on the whole, there was no significant relationship between gender and academic achievement among students. However, for clarity, in this study, researchers still investigate the relationship between gender and academic achievement in the Chinese National Type Primary Schools Perak, Malaysia.

The research instrument used in this study is survey questionnaire. To build the instruments of this study, "Model of factors affecting the impact of school work" created by Cooper and Taback (2005) was referred.

Student Survey questionnaire consists of two parts. Part A is the respondents' demographic particulars. Part B consists of three division in which first division containing 10 items of questions related to the interests of students on school work. Division two consists of 10 items related to the effectiveness of homework to their study. The third division contains 10 items of questions raised in relation to aid students in preparing their homework. This makes the set of questionnaire containing 30 questions in all. Cronbach alpha of the questionnaire was .884. This means that the set of

questionnaires has a relatively high level of consistency and is appropriate for collecting the necessary data in this study.

V. PROFILE OF RESPONDENTS

A total of 284 respondents among students who were studying at Level 2 were selected to answer the questionnaires. Respondents in this study consist of 162 female and 122 male. Respondents were distributed according to location of the schools (142 students from rural schools and 142 students from urban schools) and the year of their study (78 respondents Students of Year 4, 5 and 6 respectively). The mode of distribution of respondent parents' education level were at secondary schools, respectively were 199 (70.1%) for fathers and 210 (73.9%) for mothers.

Viewed in terms of family income distribution, a total of 140 (49.3%) of the respondents' family income was less than RM2, 000. A total of 107 (37.7%) the students came from families with income at in the range of RM 2001 - RM 4000, while a total of 36 (12.7%) students came from families with income levels of RM 4001 and above. In other words, nearly half of the student respondents in this study came from low income families.

A total of 76 (26.7%) respondents were given one to two pages Chinese homework every day and a total of 124 respondents (43.7%) have completed three to four pages of Chinese homework every day. Meanwhile around 60 respondents (21.1%) are given five to six pages of Chinese homework every day. This means three to four pages of homework was the most commonly given by Chinese teachers in this study.

More than half of respondents ($n = 157$ or 55.3%) stated that they were provided an average of three different types of homework by Chinese teachers each day. A total of 48 (16.9%) respondents were given more than four types of Chinese homework daily. This means three to four types of homework in Chinese subjects has created a culture of the frequency of homework given by Chinese national type primary schools teachers.

In terms of time spent to complete the homework, a total of 53.2% ($N = 151$) students used average time of 61 minutes to 120 minutes per day to do their Chinese homework. While 36.9% ($N = 105$) respondents used less than 60 minutes per day in Chinese homework. In other words, majority of students (87.4%) spent between below 60 minutes to 120 minutes to complete homework each day.

VI. FINDINGS

A. Tables

TABLE I
ANALYSIS OF T-TEST BETWEEN ACADEMIC ACHIEVEMENTS WITH GENDER OF STUDENTS

| Gender | Mean | SD | <i>t</i> | df | <i>p</i> |
|-----------------------|-------|-------|----------|--------|----------|
| Female ($n=162$) | 70.82 | 15.74 | 3.49 | 311.12 | .001 |
| Male ($n=122$) | 64.09 | 20.90 | | | |

Table I shows academic achievement of Chinese female student respondents (mean 70.82, SD 15.74) is higher than the academic achievement of Chinese male students (mean 64.89, SD 20.90). In addition, *t*-test also showed that there was significant difference in the academic performance of Chinese respondents between male students and female students with *t* value = 3.49, *p* = .001. Thus, it can be concluded that the female students scored higher than male students in the Chinese national type primary schools as a whole.

TABLE II
ANALYSIS OF T-TEST BETWEEN ACADEMIC ACHIEVEMENTS WITH LOCATION OF SCHOOLS

| Location | Mean | SD | <i>t</i> | df | <i>p</i> |
|--------------------|-------|-------|----------|----|----------|
| Urban (n = 142) | 65.31 | 18.75 | 2.66 | 38 | .008 |
| Rural (n = 142) | 70.30 | 17.98 | | | |

Table II shows on *t*-test showed significant results (*t* value = 2.66, *p* = .008) in which there are significant differences between respondents of urban schools with respondents of rural students in academic achievement in Chinese national type primary schools. Students from rural area recorded higher mean (Mean 70.30, SD 17.98) than students from urban schools (Mean 65.31, SD 18.75) in the Chinese national type primary schools. In other words, rural students scored better than urban students in this study.

TABLE III
ANALYSIS OF ONE WAY ANOVA COMPARING ACADEMIC ACHIEVEMENT OF STUDENTS ACCORDING TO THEIR FATHERS' EDUCATION LEVEL

| Variable | Variation | Sum of square | df | Mean Square | F | Sig. |
|----------------------|----------------|---------------|-----|-------------|-----|------|
| Academic achievement | Between groups | 468.40 | 3 | 156.13 | .45 | .72 |
| | Within groups | 130820.80 | 280 | 344.26 | | |
| | Total | 131289.20 | 283 | | | |

TABLE IV
ANALYSIS OF ONE WAY ANOVA COMPARING ACADEMIC ACHIEVEMENT OF STUDENTS ACCORDING TO THEIR MOTHERS' EDUCATION LEVEL

| Variables | Variation | Sum of Square | df | Mean Square | F | Sig. |
|----------------------|----------------|---------------|-----|-------------|------|------|
| Academic achievement | Between groups | 1679.87 | 3 | 559.96 | 1.64 | .18 |
| | Within groups | 129609.30 | 280 | 341.08 | | |
| | Total | 131289.20 | 283 | | | |

The ANOVA test in Table III and IV show there is no significant differences (father $F(3, 280) = .45$, $p = .715$; mother $F(3, 280) = 1.64$, $p = .183$) indicates that there were no significant differences in mean score of academic achievement among student according to the level of parental education. This also means that the academic achievement of students in Chinese national type primary schools was not influenced by their parents' education level.

TABLE V
ANALYSIS OF ONE WAY ANOVA COMPARING ACADEMIC ACHIEVEMENT OF STUDENTS ACCORDING TO FAMILY INCOME

| Variables | Variatio | Sum of | df | Mean | F | Sig. |
|-----------|----------|--------|----|------|---|------|
|-----------|----------|--------|----|------|---|------|

| Academic achievement | n | Square | | Square | | .43 | .65 |
|----------------------|----------------|------------|-----|--------|--|-----|-----|
| | Between groups | 295.42 | 2 | 147.71 | | | |
| | Within groups | 130993.75 | 281 | 343.82 | | | |
| | Total | 131289.165 | 283 | | | | |

Based on Table V, one-way ANOVA tests showed there were no significant differences between and among groups of students' academic achievement and family income with $F(2, 281) = .43$, $p = .65$.

This indicates that there is no significant difference in academic achievement among students in Chinese national type primary schools with their family income.

VII. DISCUSSION

The findings of this study show that significant differences existed between the female and male students in terms of academic achievement in which female students acquire higher academic achievement than male students. In other words, these findings show that female students are higher than the male respondents in terms of cognitive ability. This result is contrary to the findings of Taback (2005) [17] that there is no significant difference between gender and academic achievement. This is probably because the local culture and environment is very different from the situation in the United States. In Malaysia, homework is more concerned with the exercises in the form of knowledge and understanding, and lack of creative questions. Such exercises are rote and more popular among female students. Taback (2005) revealed that family socioeconomic status factors greatly influence student academic achievement. Students who come from families of higher socio-economic backgrounds will acquire higher academic achievement compared with students who come from a lower socioeconomic family background. Similarly, the findings of the study by Abdullah Mohd Noor (2005) [18] show that the differences level of academic achievement can be classified according to the socioeconomic background of each student. Nevertheless, the researchers found no significant differences in academic achievement in Chinese National type primary schools among respondents according to the level of family income. Thus, these findings differ from findings of studies conducted by Taback (2005) and Abdullah Mohd Noor (2005). The results of this study also showed respondents of rural students to acquire higher academic achievement compared to respondents from urban schools. This situation is beyond expectations; those staying in the urban areas that are equipped with all the proper sources of knowledge are expected to acquire higher academic achievement, but the findings show the opposite. Students' academic achievement in this study was based on the average total marks obtained by the students in all subjects at the end of 2011. Due to the examination papers given to students in this study were not standardized, the difficulty level of question papers used by the different schools were different. Probably also the difficulty level of the examination paper of rural students was lower than that of the urban school respondents. Thus, respondents of rural students scored higher compared to respondents of urban schools. Despite the increase in academic

achievement among students with the educational level of respondents' parents in this study, the increase was not significant. Thus it can be concluded that there are no significant differences in academic achievement among students according to the level of parental education. Therefore, the Chinese language teachers should give appropriate and relevant homework to primary school students to achieve good academic performance, according to the gender and location of the school factors.

VIII. CONCLUSION

Homework assigned by teachers in Chinese National-Type Primary Schools in Malaysia and its correlation with the students' academic achievement has always been a hot issue of debate. The results of this study clearly show that gender and location of schools (urban/ rural areas) showed significant differences in academic achievement of students from Chinese National-Type Primary schools that female students in rural areas obtain better academic results than male students in urban area. Therefore, Chinese National-Type Primary Schools teachers need to identify the factors in assigning the homework appropriate, relevant, and take advantage of students in achieving academic excellence. Thus, homework will be part of a fun and enjoyable time in their school life, and not a burden to the students in the teaching and learning process.

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- ii. Loh Sau Cheong, Ow Siew Hock, Chew Fong Peng, Zahari Ishak, Lee Siew gim. "Use of Visual Auditory Simulation Tasks in Promoting On-Task Behaviour of Children with Special Needs". *The Educational Review*, Vol 23 No. 1: 373-380, 2011.
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