

High School Students' Parental Involvement and Academic Performance During the COVID-19 Movement Control Order

Noor Hassline Mohamed

Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia
ORCID: <https://orcid.org/0000-0002-7956-7637>, e-mail: hassline@ums.edu.my

Amoneeta Beckstein

Fort Lewis College, Durango, CO, USA
ORCID: <https://orcid.org/0000-0002-3702-0991>, e-mail: amoneeta@fortlewis.edu

Azizi Yahaya

Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia
ORCID: <https://orcid.org/0000-0002-9847-7901>, e-mail: azizi.yahaya@ums.edu.my

Balan Rathakrishnan

Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia
ORCID: <https://orcid.org/0000-0003-4136-4495>, e-mail: rbhalan@ums.edu.my

Mohd Dahlan A. Malek

Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia
ORCID: <https://orcid.org/0000-0003-2960-4134>, e-mail: dahlanam@ums.edu.my

Parents and children have been affected by the COVID-19 Movement Control Order (MCO). Parental involvement is often linked to children's academic performance. This study first examined the link between parental involvement and children's academic performance during the MCO. Next, it examined the differences in academic performance before and during the MCO. Malaysian secondary school students ($N=130$, 61,6% female) aged 16—17 ($M=16,42$, $SD=0,4967$) responded to questions about their parents' involvement from before and during the MCO and completed the Inventory of Parental Influence. Exam grades from before and after the MCO were also collected. The results revealed a low to moderate positive correlation ($r=0,291$, $p<0,05$) between parental involvement in three areas (discussions, home care, and communication) and academic performance. During the MCO, students' perception of parental involvement at home increased, $t(129)=5,82$, $p<0,05$). However, there was also a significant decrease in students' academic performance during the MCO when compared to before the MCO, $t(123)=2,058$, $p<0,05$. Implications and future research recommendations are suggested.

Keywords: academic achievement; academic performance; COVID-19; learning; Movement Control Order; parental involvement; secondary school students.

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Родительское участие и академическая успеваемость старшеклассников во время действия приказа о контроле за перемещением граждан в период COVID-19

Нур Хасслийн Мохаммед

Малазийский университет Сабаха, Кота-Кинабалу, Сабах, Малайзия

ORCID: <https://orcid.org/0000-0002-7956-7637>, e-mail: hassline@ums.edu.my

Амонета Бекштейн

Колледж Форт-Льюис, Дуранго, Колорадо, США

ORCID: <https://orcid.org/0000-0002-3702-0991>, e-mail: amoneeta@fortlewis.edu

Азизи Яхайя

Малазийский университет Сабаха, Кота-Кинабалу, Сабах, Малайзия

ORCID: <https://orcid.org/0000-0002-9847-7901>, e-mail: azizi.yahaya@ums.edu.my

Балан Ратхакришнан

Малазийский университет Сабаха, Кота-Кинабалу, Сабах, Малайзия

ORCID: <https://orcid.org/0000-0003-4136-4495>, e-mail: rbhalan@ums.edu.my

Мохд Дахлан А. Малек

Малазийский университет Сабаха, Кота-Кинабалу, Сабах, Малайзия

ORCID: <https://orcid.org/0000-0003-2960-4134>, e-mail: dahlanam@ums.edu.my

На родителей и детей школьного возраста повлиял приказ о контроле за передвижением граждан (МСО), введенный в связи с пандемией COVID-19. Родительское участие часто связано с успеваемостью и достижениями детей. Первой целью этого исследования было исследование связи между родительским участием и успеваемостью детей в школе во время действия МСО. Вторая цель заключалась в том, чтобы изучить различия в академической успеваемости до и после МСО. В рамках исследования учащиеся средних школ ($N=130$, 61,6% женского пола) в возрасте 16—17 лет ($M=16,42$, $SD=0,4967$) отвечали на вопросы о родительском участии до и во время действия МСО и заполняли перечень родительского влияния. Также были собраны оценки студентов за экзамены до и после МСО. Результаты выявили низкую или умеренную положительную корреляцию ($r=0,291$, $p<0,05$) между родительским участием в трех областях (дискуссии, домашний уход и общение) и успеваемостью. Во время действия МСО восприятие учащимися родительского участия дома возросло ($t(129)=5,82$, $p<0,05$). Исследование, однако, также выявило значительную разницу в успеваемости студентов по сравнению с результатами после МСО, что указывает на общее снижение результатов экзаменов по пяти предметам по сравнению с результатами до МСО. Предлагаются выводы и рекомендации для дальнейших исследований.

Ключевые слова: академические достижения; академическая успеваемость; COVID-19; обучение; приказ о контроле за передвижением граждан; родительское участие; учащиеся средней школы.

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Introduction

Malaysia's Movement Control Order (MCO) has had a significant impact on society, particularly on working parents and school-aged children [1; 2; 3; 4]. This is because the employment and education sectors were prohibited from meeting face-to-face and were instead required to work and study from home. The difficulties encountered by students who must familiarize themselves with the online learning environment at home will likely have an impact on their academic achievement. Parental involvement is frequently linked to children's academic performance and achievement [5; 6; 7]. Particularly, parents' expectations seem to have the strongest relationship with achievement. However, this relationship varies for different groups and not all kinds of involvement translates into achievement. Meanwhile, society is aware that when parents and their children are not permitted to work or attend school, the role of parents is critical in holding their children accountable. The family is an important factor in influencing a child's life since children rely on their parents to meet their needs [8]. A conducive home learning environment, favorable support, and parental involvement are critical for children's academic achievement outcomes [5; 6; 7]. Given this, parents' inability to provide adequate support and engagement in their children's learning during the MCO might be a major factor contributing to poorer academic outcomes for children. As a result, children may perceive online learning at home as a burden, discouraging them from learning diligently.

Many secondary school students were not accustomed to online learning at home. However, it became a new norm that emerged unexpectedly and abruptly due to the circumstance of the pandemic. The home learning environment can influence student learning performance and,

consequently, students may experience added academic pressure. According to Abdul Aziz et al. [9], some of the factors that contributed to students experiencing academic pressure at home during the MCO were: difficulty focusing on learning and having time management issues due to the change in regularly structured schedules previously provided by schools. This may be further exacerbated by home-based environmental disruption such as when students are required to take on additional responsibilities such as assisting their parents with household chores.

Children's motivation to learn is greatly influenced by their home learning environment, particularly parental involvement and support. According to Seng et al. [10], the impact of parental involvement on children's academics should be emphasized to support their academic achievement. Parental involvement can be divided into two categories: 1) involvement in communication with children and 2) interest in assisting children with homework [10]. Both types of parental involvement tend to significantly contribute to academic achievement. Kasi et al.'s [11] study provides further support that parental responsibilities and roles influence children's academic achievement, particularly in online learning.

As a result, some students have found it difficult to adjust to the "new normal," as they have faced the difficulties of being forced to learn at home, sometimes without their parents' attention, support, and motivation. According to Novianti and Garzia [4], students struggle to understand assignments and learning materials provided without teacher guidance. Furthermore, their study discovered that during the COVID-19 pandemic, while most parents were involved in their children's academic learning, some parents faced challenges as they were not prepared to

facilitate their children's academic learning. This is also supported by the findings of Garbe et al. [12] who discuss the experience and difficulty of parents managing their children's learning activities during the COVID-19 pandemic. Among the difficulties experienced by parents, according to the study's findings, were a lack of personal responsibility, low motivation for the importance of children's learning, and lack of access to basic facilities to support their children's learning. Anderson [13] claims that the COVID-19 pandemic's impact on the education sector has increased the likelihood of students failing to learn. This is due to a lack of parental support for online learning's success. According to Brown et al. [14], factors contributing to the lack of parental involvement in children's learning during the pandemic include loss of employment, stress, mental fatigue, difficulty managing a child's educational matters, an imprudent division of work, and having to work from home. Hence, it is important to investigate the relationship between parental involvement and academic performance among secondary school students during the COVID-19 pandemic. It was hypothesized that there would be a significant relationship between parental involvement and student academic performance during the Movement Control Order (MCO). The current study also looked at how students' academic performance differed from before and after the MCO. It was hypothesized that there would be a significant difference between student academic performance from before and during the MCO, with achievement predicted to be lower during the MCO than before.

Materials and Methods

Data Collection

The study was approved by Universiti Malaysia Sabah (UMS): Jawatankuasa Etika Penyelidikan Perubatan UMS (UMS Medical Research Ethics Committee) [Authorization number JKEtika 4/20 (4)]. The researchers obtained formal written permission from the schools involved to conduct the study. Individual students were provided with an informed consent letter which indicated that submission of the survey indicated consent. The data was gathered from April 2020 until June 2020 using

an online survey method. Additionally, student exam grades from prior to the MCO (before April 2020) were also collected after the fact to be used for comparison.

Research Instruments

Parental Involvement. A researcher created scale was first administered to measure students' self-report of their perception of parental involvement before and after the MCO. This was a simple two item scale asking participants to answer the following two questions.

1. What was the level of your parents' involvement in your life BEFORE the COVID-19 Movement Control Order?

2. What is the level of your parents' involvement in your life CURRENTLY DURING the COVID-19 Movement Control Order?

Participants answered on a 5-point Likert-like scale (1=very low, 2=low, 3=moderate, 4=high, 5=very high).

The Inventory of Parental Influence.

The Inventory of Parental Influence [15] is a five-factor scale that assesses children's perceptions of parent-child interactions regarding school-related issues. Pressure from parents, intellectual development pressure, psychological support, monitoring, and time management are among the factors that contribute to intellectual development outside of the classroom that this scale measures. This tool is divided into three parts: parent-child discussions, home care, and parent-child communication. There are nine items for home discussion, eight items for home care, and thirteen items for communication. Each item is scored on a Likert-like scale rating of 1 (strongly disagree), 2 (disagree), 3 (moderate), 4 (agree), and 5 (strongly agree). A sample item is "My (mother/father) is never pleased with my marks." Cronbach Alpha, which is used to evaluate reliability, is 0.70, indicating respectable reliability. Parental involvement at home in the three aspects is measured based on the children's perspectives.

Student Learning Performance. Student learning performance in this study refers to research participants' exam performance. The examination scores for the five core subjects

taken by students (namely Malaysian language, English, Mathematics, Science, and History) were used to evaluate student academic performance. The examination scores for these five subjects were compared from before the MCO (before April 2020) and during the MCO (April 2020 to June 2020).

Participants

The participants were secondary school students from the Kota Belud District aged 16 to 17 years old. There were 180 responses, with 130 students agreeing to participate in the study. Participants' gender distribution [mean (M)=1.637, standard deviation (SD)=0.4828] included a total of 50 (38.4%) males and 80 (61.6%) females. In terms of participants' ages, 75 (57.7%) were 16 years old and 55 (42.3%) were 17 years old (M=16.42, SD=0.4967). As for race, 80 (61%) participants self-identified as Bumiputera participants, 45 (35%) as Chinese, and 5 (4%) as South Indian.

Results

Parental involvement before and during the Movement Control Order (MCO)

Table 1 shows the percentage of how students responded to the questions about parental involvement. A paired samples *t*-test was run to compare the differences in children's perception of their parents' involvement from before the MCO and during the MCO. It indicates that there was a statistically significant increase in perceived parental involvement at home during the MCO. On average, students perceived their parents' involvement as less (M=3.42, SD=1.11) before the MCO than during the MCO (M=3.63,

SD=1.07). This mean difference, .21, 95% CI [-.28, -.14] was statistically significant, *t*(129)=5.82, *p*<.05).

Student academic performance before and during the MCO

The exam grades for five core subjects (Malaysian language, English, Mathematics, Science, and History) taken before and during the MCO were used to determine the students' level of academic performance. There were four grade levels: A, B, C, and D. These letter grades were recoded in SPSS as follows: A=1, B=2, C=3, D=4. The study's findings revealed an average drop in all core subject grades during the MCO (see Table 2).

Relationship between parental involvement and academic performance during the MCO

To investigate the relationship between parental involvement and academic performance, Pearson's correlational analysis was used. Parental involvement consisting of three components—parent-child discussion, home care, and parent-child communication—were analyzed. Table 3 displays the Pearson correlation analysis results used to determine the relationship between home conversations, care, and communication and students' academic performance during the MCO implementation. The findings revealed a statistically significant relationship between parent-child discussion (*r*=0.312, *p*<0.05), home care (*r*=0.243, *p*<0.05), and parent-child communication (*r*=0.288, *p*<0.05) and student academic performance during the MCO.

Table 1

Parental Involvement from before and during the MCO (N=130)

Level	Before MCO		During MCO	
	Frequency	Percentage	Frequency	Percentage
1. Very low	10	7.7	5	3.84
2. Low	12	9.2	17	13
3. Moderate	42	32.3	26	20.0
4. High	45	34.6	55	42.30
5. Very high	21	16.2	27	20.76
Total	130	100	130	100

Table 2

Students' Exam Grades from before and during the MCO (N=130)

Subject	Before MCO		During MCO	
	Frequency	Percentage	Frequency	Percentage
1. Malaysian language	A: 27 B: 42 C: 30 D: 31	20.76 32.30 23.07 23.84	A: 20 B: 39 C: 37 D: 34	15.38 30.0 28.46 26.15
2. English	A: 15 B: 31 C: 46 D: 38	11.5 23.8 35.3 29.2	A: 10 B: 25 C: 48 D: 47	7.69 19.23 36.92 36.15
3. Mathematics	A: 25 B: 45 C: 40 D: 20	19.2 34.5 30.76 15.38	A: 19 B: 40 C: 46 D: 25	14.6 30.76 35.38 19.23
4. Science	A: 20 B: 30 C: 44 D: 36	15.38 23.07 33.86 27.69	A: 18 B: 25 C: 50 D: 37	13.8 42.30 38.46 28.46
5. History	A: 31 B: 23 C: 44 D: 42	23.8 17.69 33.86 32.30	A: 25 B: 20 C: 39 D: 46	19.2 15.38 30.0 35.38
Total	130	100	130	100

Table 3

Correlations of Parental Involvement and Academic Performance (N=130)

	Academic Performance
Parent-child discussion	.312*
Home care	.243*
Parent-child communication	.288*
Overall Involvement	.291*

Note: * $p < .05$ (2-Tailed).

The findings revealed a statistically significant low to moderate positive relationship ($r=0.291$, $p < 0.05$) between parental involvement in all three aspects (parent-child discussion, home care, and parent-child communication) and the current academic performance during MCO. This helped to explain why students with a high level of parental involvement during the MCO performed better academically than those with lower parental involvement. As a result, hypothesis 1 (H¹) was accepted, indicating that there was a significant relationship between pa-

rental involvement and student academic performance during the MCO.

Differences in student academic performance before and during the MCO

According to the findings, there was a difference in students' academic performance before and during the MCO. Overall, the results of the five core subjects differed significantly from before and during the MCO, $t(123)=2.058$, $p < 0.05$. In the five subjects (Malaysian language, English, Mathematics, Science, and History), the number of participants who received higher grades from before the MCO decreased and the number participants to received lower grades increased (refer to Table 2) during the MCO. As a result, hypothesis 2 (H²) was accepted, in which, there was a significant difference between academic performance before as compared to during the MCO.

Discussion

Parents play an important role in their children's success, especially in academics. Chil-

dren's academic success is dependent not only on how they learn in the classroom but also on their relationship with home-based environments such as parents' attention and their ability to help children carry out homework activities, especially during this highly challenging COVID-19 pandemic era [16]. As a result, during the MCO, parental involvement appeared to indirectly influence their children's academic performance. The findings revealed a statistically significant relationship between parental involvement in three aspects of home life (namely parent-child discussions; home care; and parent-child communication) when it came to academic performance among secondary school students during the implementation of the MCO. The findings are consistent with those of Gosman et al. [17] who discovered a positive relationship between home-based involvement in high school students in the form of communication, learning provision, and a supportive environment and their academic performance. While the results of the current study were statistically significant, the relationship was rather weak: parental involvement influenced less than 9% of the variation in academic performance. Therefore, caution must be taken when interpreting these results as other factors may have been involved. Parental involvement in adolescents' learning activities at home may be related to parents having more spare time at home to be involved in their children's learning during the MCO, but there may be other factors such as parental stress and more that might affect their involvement that were not addressed in this study. Parents' positive attitudes toward participating in their children's academic performance, according to Hassan et al. [18], were an important predictor of children's future learning success. In line with Hassan's [18] study, the current study's findings of a significant relationship between parental involvement and academic performance contribute to the evidence that parental involvement might contribute to improving their children's academic performance during the MCO and in future similar situations.

Furthermore, the findings showed a statistically significant decrease in student academic performance during the MCO as compared to

before. The difference indicated that the COVID-19 pandemic has likely influenced the performance of five core subject grades, with an overall average decrease in participants' exam scores. Again, while statistically significant, this relationship was also rather weak. Furthermore, since correlation does not mean causation, naturally there may have been many other factors influencing these results that were not controlled for nor measured in this study. However, these findings indicating a difference in academic performance during the pandemic are also consistent with the study conducted by Amin and Nasri [19] who examined students' perception of online learning during the COVID-19 pandemic. Despite parental involvement with their children during the MCO, some other factors, such as student interaction with teachers and limited peer involvement, technical issues, uncomfortable home learning environments, a lack of discipline in following online learning, and social isolation can all contribute to less effective online learning [19]. This unexpected COVID-19 pandemic has resulted in changes that have occurred without providing teachers, students, and parents with adequate time to prepare to learn the most effectively under these less than ideal circumstances. The disparity in academic performance for students from before and during the MCO can likely be attributed to the previously described deficiency factors.

Limitations, Implications, and Future Research Recommendations

Based on this study's findings, there are several applicable implications. Parental involvement in their children's learning at home should be encouraged and emphasized as it can likely contribute to greater academic performance. Despite parental involvement increasing during the MCO and still generally being positively associated with academic performance, high school students' academic performance in this study generally decreased during the MCO. Therefore, parental involvement should be increased during the COVID-19 pandemic (and any other similar situations) to influence the academic success of students who participate in online learning in order to combat the negative

effects of the pandemic. This study seems to indicate that parent-child discussions, home care, and parent-child communication should all be specifically emphasized as these areas appear to be important contributors to achievement.

Additional studies—including quantitative and qualitative longitudinal ones—involving many primary and secondary school students are suggested by the researchers. When it came to measuring parental involvement before and during the MCO, this study relied on the children's self-report of their self-perception of their parents' involvement from before and during. Self-report is not always reliable, especially if it relies on memory from a previous time. Furthermore, asking students to first report their perception of parental involvement before the MCO and then immediately asking them the same question but for during the MCO may have unduly influenced their responses. It would have been more ideal if parental involvement somehow could have been measured prior to the MCO. Future research should also include parents so that their involvement in children's academic achievement can be assessed through their perspectives and compared to their children's perspectives. Furthermore, although this study contributes to achievement literature by studying a rarely studied sample, given the limited scope of the data collected from a small area in Malaysia, it is highly recommended that this study be replicated and expanded in larger and more diverse samples in order to increase the generalizability. Despite academic performance being associated with parental involvement and parental involvement increasing during the pandemic

induced MCO, performance still decreased. Therefore, future studies need to examine which factors contributed to this decrease (e.g., see Amin & Nasri [19] for possible factors). Lastly, Fan and Chen [6] suggested that using GPA rather than specific subjects tends to show a stronger relationship between parental involvement and academic achievement. Therefore, given the limitation of the current study of using specific subjects due to collecting data over a short period, it is recommended that future researchers use GPA instead.

Conclusion

In conclusion, the goal of this study was to determine the relationship between parental involvement in three aspects—namely parent-child discussions; home care; and parent-child communication—and student academic performance during the MCO. Parental involvement was observed solely from the children's point of view. Consistent with previous research, academic performance continued to be positively associated during the pandemic induced MCO. However, despite parental involvement increasing during the MCO, achievement actually decreased some indicating that there were likely other factors that were not studied that affected achievement during this time period. The findings highlighted the importance of parental involvement in children's home learning. The findings of this study can benefit parents and the community in better understanding and supporting the needs of online learning for adolescents during the COVID-19 pandemic and future pandemics or situations that might require an MCO.

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Information about the authors

Noor Hassline Mohamed, PhD, Assistant Professor, Faculty of Psychology and Education, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia, ORCID: <https://orcid.org/0000-0002-7956-7637>, e-mail: hassline@ums.edu.my

Amoneeta Beckstein, PhD, Assistant Professor, Psychology Department, Fort Lewis College, Durango, CO, USA, ORCID: <https://orcid.org/0000-0002-3702-0991>, e-mail: amoneeta@fortlewis.edu

Azizi Yahaya, PhD, Associate Professor, Faculty of Psychology and Education, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia, ORCID: <https://orcid.org/0000-0002-9847-7901>, e-mail: azizi.yahaya@ums.edu.my

Balan Rathakrishnan, PhD, Assistant Professor, Faculty of Psychology and Education, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia, ORCID: <https://orcid.org/0000-0003-4136-4495>, e-mail: rbhalan@ums.edu.my

Mohd Dahlan A. Malek, PhD, Research Fellow, Faculty of Psychology and Education, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia, ORCID: <https://orcid.org/0000-0003-2960-4134>, e-mail: dahlanam@ums.edu.my

Информация об авторах

Нур Хаслайн Мохаммед, доктор философии, доцент факультета психологии и образования Малазийского университета Сабаха, Кота-Кинабалу, Сабах, Малайзия, ORCID: <https://orcid.org/0000-0002-7956-7637>, e-mail: hassline@ums.edu.my

Амонета Бекштейн, доктор философии, доцент кафедры психологии колледжа Форт-Льюис, Дуранго, Колорадо, США, ORCID: <https://orcid.org/0000-0002-3702-0991>, e-mail: amoneeta@fortlewis.edu

Азизи Яхайя, доктор философии, доцент факультета психологии и образования Малазийского университета Сабаха, Кота-Кинабалу, Сабах, Малайзия, ORCID: <https://orcid.org/0000-0002-9847-7901>, e-mail: azizi.yahaya@ums.edu.my

Балан Ратхакришнан, доктор философии, доцент факультета психологии и образования Малазийского университета Сабаха, Кота-Кинабалу, Сабах, Малайзия, ORCID: <https://orcid.org/0000-0003-4136-4495>, e-mail: rbhalan@ums.edu.my

Мохд Дахлан А. Малек, доктор философии, научный сотрудник факультета психологии и образования Малазийского университета Сабаха, Кота-Кинабалу, Сабах, Малайзия, ORCID: <https://orcid.org/0000-0003-2960-4134>, e-mail: dahlanam@ums.edu.my

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