Family engagement in the home-based learning mode: an enlarging divide in education

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Abstract

Purpose – This paper aims to provide an overview of the development periods of home-based learning in Hong Kong during the COVID-19 pandemic, then discusses the differences in how the more affluent and well-educated middle-class parents and the economically and culturally disadvantaged working-class parents have dealt with the challenges of this new learning mode in their children's education.

Design/methodology/approach – This research mainly adopted the qualitative research method, and used data from multiple sources, including online and offline participant observations, informal interviews and second-hand official reports.

Findings – The preliminary findings suggest that due to the closure of the formal schooling system, the impact of unequal family resources – such as tangible economic investment and intangible cultural and social support – on students' academic performance has been exposed, thus reinforcing the pre-existing inequality between different social classes.

Research limitations/implications – The findings of this paper are primarily based on preliminary observations and informal interviews, and it needs more systematic studies, both qualitative and quantitative, are needed to provide further empirical evidence to demonstrate the impacts of digital, housing and knowledge divide between the middle- and working-class families on students' academic performance.

Originality/value – The paper presents new empirical data concerning the class mechanisms underlying home-based learning during the class suspension in Hong Kong. It shows that home-based learning in this challenging time has exposed the existing inequality in education.

Keywords Online home-learning, Educational inequality, Parental engagement

Paper type Research paper

Introduction

Hong Kong parents are famous for pushing their children to achieve better academic results. Treating childrearing and education as a family reflects the overall strength of the household, and parents' capability to mobilize family resources to improve their children's educational performance. However, the parental role in education has never been as important as during the COVID-19 pandemic. With the closure of all schools, distance learning or homeschooling via online platforms has become the only safe education mode. Simultaneously, an increasing number of Hong Kong parents feel that the childrearing competition has shifted to also include the online education arena. However, parents, as the

mediator between schools and their children, have found themselves drowning in the pressure of not being able to cope with the rapidly changing rules of this new competition. Such new rules include, but are not limited to, providing suitable equipment and accessories for online classes, searching and subscribing for supplementary online learning resources, and becoming more involved and assisting more in the teaching and learning process. This paper first provides an overview of the development of major evaluation standards in the distance learning mode, then discusses how parents from different social classes have strived for a better standing in this new competitive online education arena.

Major development stages in the distance learning mode
There were three main stages in the distance learning mode that were largely consistent with the development of the COVID-19 pandemic in Hong Kong. The first stage was from late January to late February 2020, when everyone in Hong Kong experienced the first effects of COVID-19. All schools in Hong Kong were forced to close, and no alternative classes were offered. This stage saw both parents and teachers attempting to figure out what had happened, and how to deal with it. Some parents started to search for online classes to substitute their children's lost learning hours at school, yet most expected the COVID-19 outbreak to become quickly controlled so that their children could go back to school as normal. Therefore, the online teaching and learning approach in this period was akin to simply killing time (until the COVID-19 outbreak became controlled) rather than being used as an actual learning method that could match the effectiveness of face-to-face learning.

The second stage was from early March to late May 2020. During this period, Hong Kong experienced the second wave of the COVID-19 outbreak, and the government announced that schools would not resume anytime soon. Most schools started to provide various distance learning resources for students. For example, some schools provided video teaching materials for students to self-study at home while others adopted online teaching platforms to enable live lessons. These home-based learning classes were typically designed for a short period, usually around 2–3 h per day, and most of the teaching and learning materials were quite simple and could be easily accomplished at home. Thus, distance learning started to play a more important role but was not yet at its height.

From the end of May to mid-July 2020, most schools resumed classes, although they had to limit school hours to a half-day instead of a full day to avoid students taking off their masks during the lunch break. However, the third and fourth waves of COVID-19 soon attacked Hong Kong again from mid-July and late November, respectively, and many schools announced that they would adopt a full-day online teaching schedule from the start of the new semester.

From late August onward, most schools have used normal school timetables to organize their online classes, which usually last from 8 a.m. to 3 p.m. Online lessons have been adopted as the main teaching technique and are coupled with various apps to facilitate homework submission and revision. Like it or not, distance teaching and learning has become the major mode of schooling. Both schools and parents have started to accept that online learning may last much longer than expected, and it is highly likely that even after the COVID-19 pandemic, it will remain a part of the normal teaching method. Therefore, parents must be ready for this new mode of learning.

Family engagement in educational performance
Family background has been prominent in models of educational attainment and academic performance for many years (Teachman, 1987; Lareau, 1987; Stevenson and Baker, 1992). In America, Europe and Asia, it has been widely confirmed, with strong empirical support, that a family's socioeconomic status, as well as parents' cultural knowledge significantly

contributes to shaping their children's educational achievement. Numerous studies have shown clear, class-related patterns in the family's engagement in education, such as parents' participation in educational activities and enrollment of their children in activities (Lareau, 2011; Roksa and Kinsley, 2019). Empirical studies have found that parents' cultural resources have proven to be a crucial factor in determining their children's academic performance, especially during non-schooling periods, such as summer holidays (Downey et al., 2004).

Although situations vary among different societies (Park and Lim, 2020), it is generally recognized that while education reduces social inequality by providing fair competition that is based on students' merit and allows disadvantaged, talented students to enjoy high-quality education, it is also a mechanism of social reproduction by legitimizing the middle-class's economic and cultural advantages in students' educational success (Boliver, 2017).

In Hong Kong, the two-sided nature of education seems to have reached a fragile balance. On one hand, a small but relatively stable proportion of the affluent middle-class emerged with the rearrangement of Hong Kong's economic structure in the late 1960s and early 1970s. As most of the middle-class moved up the social hierarchy through education, credentials became more important, and education became the main, formalized channel for upward mobility (Lui, 2003). Therefore, to replicate their own success in their children, middle-class parents in Hong Kong are leading the competition in education while parents from the intermediate and working classes are closely following behind. On the other hand, although it is characterized by huge income inequalities, Hong Kong has one of the most equitable and highest-performing education systems worldwide (Lee and Manzon, 2014), and most Hong Kong students can attain high-level skills and knowledge that depend on their ability and drive rather than their socioeconomic background. With policies promoting equity of education, economically-disadvantaged students benefit from greater access to educational resources in such educational systems (Lei et al., 2020). Therefore, even when parents from all social classes constantly feel pressured by the education competition (Lui, 2017), there is, in fact, little extra advantage added to affluent students' educational performance (Lei et al., 2020).

However, the outbreak of COVID-19 in Hong Kong may have disrupted this barely maintained balance. With schools, private tutoring centers, and public study areas being closed, and the implementation of "Suspending classes without suspending learning" from the Hong Kong Special Administrative Region (HKSAR) Education Bureau, home-based learning through various online platforms or apps has become the main education channel. In this new, competitive arena of education, the previous norms no longer apply, and new standards are developing expeditiously. Thus, it is not only parents' economic and cultural capital that influences students' educational performance but also their techno-capital plays a role that cannot be neglected.

Like Bourdieu's theory of cultural capital, techno-capital is the accumulation of digital access, skills and opportunities that can empower people's working and personal lives. Previous research has shown that both digital access and digital use patterns differ across adolescents' socioeconomic backgrounds (Bonfadelli, 2002; Livingstone, 2007; Clark et al., 2005). The economic and cultural capital of middle-class parents can be easily transformed into techno-capital as not only does their economic capital allow more flexibility in digital access but also their higher status and higher education usually means that they are experienced and sophisticated users of digital technology. Thus, they tend to have a more positive attitude toward computer and internet use, and presume, to a higher extent, that their children need digital competency to achieve future educational success (Clark et al., 2005; Livingstone, 2007). Their resource-rich bonding social capital helps to overcome the digital divide in access, general use and online communication (Chen, 2013). It is not

surprising, then, that middle-class families' higher level of techno-capital puts them in a superior position in the online educational competition.

During the home-learning period of the COVID-19 pandemic, the impact of the digital divide on students' educational performance has attracted much attention. Preliminary research on emergency distance learning modes has shown that school closures can expose and even enlarge the existing inequalities connected to different socioeconomic situations, as students from low socioeconomic backgrounds cannot access educational technologies and the internet via schools and other public resources. This can produce a significant loss in educational achievement, particularly for disadvantaged students (Ferri *et al.*, 2020; Eyles *et al.*, 2020; Andrew *et al.*, 2020). In addition to technological challenges, scholars have also found that challenges related to teachers and students' lack of interactivity and motivation, as well as teachers and parents' social support for students, can be crucial for students' educational performance in the home-learning period (Ferri *et al.*, 2020).

Reports in Hong Kong have also shown a similar trend (Lau and Lee, 2020), but most have focused on the challenges faced by lower-class families. The current study's observations of middle-class parents' discussions found that they were also challenged in various ways. Therefore, in the following sections, this study explores the new challenges faced by parents and children from lower-class and middle-class backgrounds, including tangible challenges, such as providing adequate electronic resources and a physical study area at home, and intangible challenges, such as parents' engagement and supervision in online learning, experience with digital devices and the internet, and other forms of social support. It then examines how parents are coping with the new changes to claim a better standing in the competitive online education arena.

This study mainly focuses on children in primary education (ages 6–12). On one hand, they are at the stage of building basic learning skills, on the other hand, they are still quite young and depend heavily on formal education via the school system. Accordingly, primary students have been more influenced by school closures during the COVID-19 pandemic than secondary students. The qualitative method of observation was used to analyze online discussion groups of mainly middle-class parents of primary students, and informal interviews were conducted from 18 April to 18 December 2020. Supplementary materials from secondary reports were also used for analysis.

Results
Digital divide: access to digital devices and the internet
Before the new semester started in August 2020, most schools had issued instructions for resuming a more intensive online learning timetable alongside the following three fundamental requirements of online access, a quiet place to study and adult assistance if needed to ensure the quality of online learning.

However, these requirements were not easy to achieve, especially for low-income families. The Society of Community Organization, a non-profit organization, reported in 2020 that in a survey of 400 low-income families in Hong Kong, 75.3% reported that their children experienced learning difficulties after school were closed.

From the current study's observations and interviews, the initial challenges were that low-income students found themselves falling behind due to their lack of updated computer devices and internet support. Many disadvantaged students could only depend on outdated or low-end smartphones to take online classes, which made it very difficult to finish the teaching activities and tasks set by teachers. Although the HKSAR Government has provided subsidies for low-income families to purchase devices needed for online learning, and there are also computers or other devices available from schools or other charity organizations, such policies cannot completely fulfill students' online learning needs.

Further, when there was more than one child in the family, electronic device deficiency became a greater barrier to online classes. For example, if there was more than one child taking online classes simultaneously, each child needed to be equipped with a device. With the insufficient number of devices available in low-income families, students had to use cell phones and cellular data to attend online classes, and the overall quality of online classes on such devices was greatly affected.

Parents and students from more affluent families were also anxious about whether their electronic devices and internet services were compatible with the requirements of online teaching. However, instead of worrying about gaining access to the necessities of online learning, their concerns were more focused on maximizing the quality of online learning while protecting the physical needs of their children. The online observations confirmed that parents were eager to snap up anything that could improve the quality of the online classes. Li et al. (2020) found that most Apple stores in Hong Kong had a supply shortage of the newest iPad Pro model that had the largest screen. A similar situation occurred for Wi-Fi routers intended for family use. Meanwhile, the interviews revealed that it was also a considerable financial burden for middle-class parents to equip their children with the newest, largest and fastest devices, especially when they needed to provide at least one device for each child. However, many middle-class parents still decided to make purchases for the following reasons:

- To increase the Wi-Fi speed and avoid distractions related to lagging Wi-Fi, such as missing conversations, homework submission failure or getting bumped out of the online classroom. Thus, it was better to equip their children with the newest Wi-Fi router and the newest receiving devices to improve the Wi-Fi reception. The parents hoped that the new equipment could help their children to stay focused in the online classes for a longer period.

- Most schools resumed normal timetables from August 2020, meaning that students must attend almost 6 h of online classes each day. Consequently, the parents worried about eye health. As larger devices have bigger screens with better clarity and are usually equipped with various eye-protection functions, such as blue light filters, the parents hoped that these features could help reduce digital eye strain.

Paradoxically, from the online discussion groups, as well as the interview data, many of the middle-class parents were aware that there was not enough evidence to support whether the use of extra equipment and accessories could really improve their children's length of concentration, as students could be equally distracted by the new functions of electronic equipment. In fact, there were many parents who complained that their children were watching YouTube or playing video games during online classes. They also doubted the effectiveness of the blue light filter or blue light blocking eyewear. Hidden underneath this effectiveness argument was the overwhelming guilt and anxiety of the middle-class parents in not being able to match their peers in the new competitive arena of online learning, which made them feel less of a parent and as though they had failed their children. Therefore, purchasing these new devices provided them with a sense of safety and assurance in the educational competition.

Like it or not, the parents from all social classes found themselves being dragged into a competition over digital devices. In this competition, the economic capital possessed by the middle-class families provided a huge advantage in guaranteeing the quality of their children's online learning while the working-class families struggled to meet the basic requirements of online learning due to their lack of financial resources.

Housing divide: the home as a suitable place for online learning
Hong Kong has a reputation for its high property prices and poor affordable housing conditions for low-income families. Thus, the availability of a quiet place that has few distractions and

interruptions for distance learning is a luxury even for many middle-class families, but especially for families with more than one child, and for those on the lowest incomes.

Interviews with students from a working-class background found that many of them had to participate in online classes and finish their homework in the living room because they did not have a personal room or a study at home. Using the dining table as a place to study was not unusual, as there was not enough space for a desk. For most students, studying in an environment that contained other family members was a source of the disturbance. Usually, these distractions can be solved by going to study in quieter places, such as libraries, study spots at schools or public coffee houses. However, such options were no longer practical during the COVID-19 pandemic, as most of these public places were either closed or strictly restricted to prevent the spread of the virus. A survey confirmed that more than 70% of students claimed to have encountered difficulties from being distracted when studying in a non-designated area, such as a classroom while 50% claimed to have met with interruptions from family members (Lau and Lee, 2020).

Relatively speaking, the students from more affluent families enjoyed a better study environment. They usually had a designated study area, such as a personal bedroom or at least a personal desk, to minimize interruptions from other family members. However, some middle-class students also participated in online learning in the living room or on the dining table, not because they were left with no other choices, but because of better Wi-Fi reception or more space.

Social divide: cultural capital, techno-capital and social capital
Regarding the indicators of cultural capital, parents' time and financial investment in education-related activities appeared to be the most influential in maintaining students' education activities during the school closure period. During the home-schooling period, parents were expected to be full-time teaching assistants for their children, and their major tasks were to explain and illustrate course materials with further details and examples, check and provide feedback for coursework, and send homework back to teachers on a daily basis.

Many of the middle-class parents worked from home during the school closure period, so they had more time to engage in students' home-based learning. They immediately established daily routines that resembled normal school schedules to maintain good discipline during the home-based learning period and maintained the balance between studying, physical exercise and relaxation so that students could remain emotionally healthy with less stress. They also paid close attention to school notices and kept up with teachers' instructions to help their children to complete learning tasks. Since their cultural knowledge had accumulated over the years, their learning skills made them more confident in explaining and illustrating course-related materials to their primary-age children. In addition to the major subjects in the formal school system, the middle-class parents also navigated different online sources for extra-curricular activities, such as private tutoring. Most of these private tutoring services did not have a curriculum to follow, and the middle-class parents had to depend on their own cultural knowledge to select the most suitable curricula. All these activities were crucial to enhance the quality of home-based learning and required parents to continuously invest their time and energy.

Comparatively, working-class parents were more vulnerable because of their limited time and energy to engage in their children's educational activities. Their demanding workloads and long working hours did not change much during the COVID-19 pandemic; therefore, it was highly unlikely for them to participate closely in their children's classwork. Thus, the children had little support from their parents in adapting to the new learning mode. During the normal schooling period, students can obtain guidance and cultural support from teachers and

teaching assistants. However, during the home-based learning period, most teachers' workloads increased tremendously and they were not able to provide adequate support and supervision to students. Most of the external support from the government, as well as from various charity organizations focused on economic resources, and the intangible cultural support that these families desperately needed was usually neglected. As a result, the students from low-income families had to depend on themselves, which inevitably reinforced the pre-existing inequalities between the middle- and working-class families.

In addition to parental engagement, parents' techno-capital and social capital contributed significantly to students' performance in home-based learning. Both the middle-class and working-class parents felt greatly challenged by the overwhelming new APPs and information technology (IT) services that facilitated online learning at the beginning of the school closure period, and they believed that their IT knowledge was not good enough to help their children at home. Previous studies have argued that middle-class parents can deal with these challenges easily due to their accumulated techno-capital from their jobs, but the current study's observations found that their intermediate office information and communication technology (ICT) knowledge and skills were of little use in adapting to the online learning mode. Fortunately, with personal relations to IT-related personnel via their work or education experiences, it would not be too difficult for middle-class parents to find someone who had adequate techno-capital to solve a problem. The observations of the online discussion groups showed that most of the middle-class parents depended heavily on their social network to determine the most operable way to set up IT equipment and networks for their children.

Comparatively, the working-class parents had more disadvantages. Not only did they lack ICT literacy and skills but also they found it difficult to seek guidance and support from their own network resources. As a result, the social divide between middle-class and working-class families has transformed into a home-learning gap between the students from these socioeconomic backgrounds.

Discussion and conclusion

This paper provides an overview of the development periods of home-based learning in Hong Kong during the COVID-19 pandemic, then discusses the differences in how the more affluent and well-educated middle-class parents and the economically and culturally disadvantaged working-class parents have dealt with the challenges of this new learning mode in their children's education. The preliminary findings suggested that due to the closure of the formal schooling system, the home became the main learning place for students, and parents became the mediators of teaching. As a result, the impact of the social classes' unequal family resources – such as tangible economic investment and intangible cultural, technological and social support – on students' academic performance has been magnified during the home-based learning mode. In this new, competitive mode, students from middle-class families are believed to have more power and effectiveness in being able to face challenges due to their parents' economic and cultural resources. Working-class students are challenged by more obstacles due to their lack of economic and cultural support from their parents. If distance learning is going to become more common, regardless of whether it becomes the main teaching mode or becomes subordinate to physical/face-to-face teaching, the digital, housing and social divide between middle- and working-class families will inevitably reinforce the pre-existing inequalities of education opportunities, and working-class students will be more likely to be left behind. Therefore, the current financial subsidies from the Hong Kong Government and various charity organizations are not sufficient in covering the increased expenses due to the change in the learning mode, and

more resources should be in place to provide cultural and social support to working class families in addition to economic support.

The findings of this paper are primarily based on preliminary observations and informal interviews; however, they still suggest several directions for further investigation. First, more systematic qualitative and quantitative studies are needed to provide further empirical evidence to demonstrate the impact of the digital, housing and knowledge divide between middle- and working-class families on students' academic performance. Second, in addition to the binary comparison between middle- and working-class families, we should also pay attention to how the intermediate class responds to the new challenges of home-learning, as they are usually forgotten by both scholars, as well as policymakers. Third, the impact of the digital, housing and knowledge divide on students' long-term academic performance should be more closely examined using students from various age groups, as younger students are more influenced by parents' learning habits and close supervision while older students depend heavily on parental guidance for educational opportunities. Last, both parental responsibility and the relationship between parents and schools have changed radically during the school closure period; therefore, they are worth further investigation.

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