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SHADOW EDUCATION IN SRI LANKA DURING COVID-19: TRENDS, IMPACTS, AND ROLE IN RELATION TO MAINSTREAM EDUCATION

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Shadow Education in Sri Lanka during COVID-19: Trends, Impacts, and Role in Relation to Mainstream Education

ASHANI ABAYASEKARA, USHA PERERA, AND THISALI DE SILVA

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Abbreviations

AL	- Advanced Level
Bn	- Billion
COVID-19	- Coronavirus
HIES	- Household Income and Expenditure Survey
GCE	- General Certificate of Education
GDP	- Gross Domestic Product
LKR	- Sri Lankan Rupees
Mn	- Million
NTP	- National Tutoring Programme
OL	- Ordinary Level
Tn	- Trillion
UK	- United Kingdom
USA	- United States of America
USD	- United States Dollars

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Executive Summary

The coronavirus (COVID-19) pandemic has created the largest disruption to education systems in recent history, leading to unavoidable and substantial learning losses among students worldwide. While a growing literature has examined the impacts of extended school closures on multiple aspects of education, the focus has almost exclusively been on formal mainstream education, as opposed to "shadow education" - more commonly known as private supplementary tutoring.

Although private tutoring has been on the rise in many countries globally over the last few decades, including Sri Lanka, it has received minimal attention in terms of policy focus to date. Given its prime role as a facilitator of mainstream education, the direct impacts of COVID-19 on the industry as well as its role as an education provider during prolonged school closures, are likely to be substantial.

In this context, the main objectives of this study are to: (1) examine the trends and importance of in-person and online shadow education in Sri Lanka; (2) assess pandemic impacts on the demand, quality, accessibility, and affordability of online shadow education in relation to online mainstream education; (3) identify the benefits and drawbacks of in-person and online private tutoring; and (4) identify potential measures to improve the benefits of shadow education, while minimising its drawbacks.

The study was based on primary data collected from: (1) an online survey among a sample of 330 students in grades 10-13 preparing for the General Certificate of Education (GCE) of Ordinary Level (OL) and Advanced Level (AL) examinations, (2) a telephone survey among another sample of 39 students in grades 8-13 from rural locations who do not have regular access to the internet; and (3) key informant interviews (KIIs) conducted with 16 school teachers and tutors. Further, to gain an

understanding of trends in online tuition advertisements during COVID-19, secondary data on tuition advertisements posted in four selected advertising websites were analysed.

Online survey responses were evaluated using descriptive analysis based on several school level and household characteristics, while thematic analysis was used to analyse and interpret the interview findings.

The findings of the study suggest that most students attended tuition classes even prior to the pandemic, while the demand further expanded in the context of dysfunctional school classes due to the pandemic and teacher strikes. A strong association was observed between household income and the quality of online shadow education. Most students faced accessibility issues for online tuition classes during the pandemic, mainly due to poor connectivity, high data costs, lack of necessary devices, and affordability concerns amidst the loss of household income. Analysis of the tuition advertisements further indicated that the most affluent Western Province accounted for the largest share across all websites considered. However, accessibility to shadow education increased vis-à-vis mainstream education, owing to greater flexibility in scheduling online classes and the ability to join any class of choice regardless of location. Many respondents believed that the importance of shadow education relative to mainstream education has increased following COVID-19 school closures and that the industry's role in the country's education sector will further increase in the future.

Despite the importance of the tuition industry, several drawbacks were also identified including overloaded schedules, financial motives, attitudinal issues and overdependence on tuition. Moreover, despite the many criticisms levelled against school education, respondents

highlighted several important aspects of schools, including the importance of nurturing non-academic skills and protecting education equity by virtue of free education.

Based on the findings, the study proposes some potential policy recommendations for improving shadow education quality, accessibility, and equitability. To improve the industry's quality, obtaining comprehensive data, monitoring and regulating the industry, and investing in online pedagogical expertise are crucial. In terms of improving accessibility, providing devices and

networks for given locations, such as schools and tuition centres, in line with student needs and improving communication platforms between schools, parents, and students is essential. To address equity and affordability concerns, better collaboration between the government and the shadow education industry under a policy that encourages shadow education as a key facilitator to mainstream education can be considered. This could be implemented along with the provision of subsidies or tax deductions for lower-income students to attend tuition classes.

1. Introduction

The coronavirus (COVID-19) pandemic has created an enormous disruption to education systems in recent history, affecting close to 1.6 billion (Bn) students in over 180 countries (UNESCO, 2021). Despite commendable efforts by many countries to put in place alternative remote learning strategies and remedial measures, learning losses have been unavoidable and substantial. The UNESCO Institute for Statistics (UIS) estimates that by early November 2020, the world student population had lost between 41% and 68% of the in-person schooling they would have received under usual circumstances (UNESCO Institute for Statistics, 2021). Projected losses of school closures and the resulting disruptions are equivalent to United States Dollars (USD) 17 trillion (Tn) in lifetime earnings in present value, or approximately 14% of the current global gross domestic product (GDP) (UNICEF, 2021).

A growing literature has examined the impacts of extended school closures on multiple aspects of mainstream education, including the loss of instructional time delivered in a school setting, measures to continue student learning during school closures, teachers' preparedness to support digital learning, public financing of education, and school reopening and learning recovery strategies. However, the focus has almost exclusively been on formal mainstream education, as opposed to "shadow education" - more commonly known as private supplementary tutoring, referring to teaching or coaching that happens beyond the hours of formal schooling. The term shadow education derives from the fact that it mimics mainstream education, exists only because of mainstream education, and grows in

size and scope in line with similar growth in mainstream education (Bray & Lykins, 2012).¹ In addition to shadowing mainstream education, it has some informality and is challenging to regulate by nature.

The past few decades have seen rising importance in private tutoring in many countries worldwide, consisting of a wide variety of delivery modes extending across national and even continental borders. Although the scale and nature of shadow education can have far-reaching implications for academic achievement, socioeconomic inequalities, and even economic development, it has received minimal attention or policy focus to date, largely owing to its informal and unregulated nature. Given its prime role as a facilitator of mainstream education, the direct impacts of COVID-19 on the industry as well as its role as an education provider during prolonged school closures, are likely to be substantial.

Analysis indicates that despite an initial contraction in the private tutoring industry in light of nationwide lockdowns and physical distancing measures, there was an eventual surge in demand for online tutoring as the industry saw a rapid migration to virtual platforms, along with mainstream education (Fortune Business Insights, 2021a). Large online tutoring firms, especially in the developed world, are generally equipped with professional platforms that can help in sustaining students' interest. Concurrently, these firms also have their own training and research teams, rendering them more dynamic and flexible compared to schools (GlobeNewswire, 2020). Apart from online tutoring, a growing demand is evident for in-

¹ The terms shadow education, private tutoring, and tuition are used interchangeably in this paper.

person individual and small classes, given the difficulties in effective learning associated with virtual lessons provided in schools. Another development observed is the increasing uptake of online and social media platforms by tutors to advertise their classes.

While acknowledging the benefits of private tutoring in helping students keep up with learning in online education environments, scholars also point to high tuition fees charged in response to rising demand and the likely implications on education inequities, already intensified by school closures (Newberry, 2020). Another concern is a growing trend among retired or laid-off individuals to sign-up to become tutors in response to the demand, some of whom may not necessarily be qualified or have relevant teaching experience (Musaddique, 2020).

Preliminary observations and anecdotal evidence suggest that demand for private tutoring has surged in Sri Lanka too, following COVID-19 school closures, which were in place for close to 20 months since first shutting down in March 2020. Sri Lanka's widespread private tutoring market has high take-up rates across all socioeconomic groups and features as the single largest component of the household education budget (Department of Census and Statistics, 2017). Observations also indicate that modes of advertising tuition have changed from paper-based methods to online posting on websites as well as social media platforms.

To date, the unavailability of comprehensive data has hindered in-depth examination of the trends and impacts of private tutoring in Sri Lanka. The

current pandemic-driven boom in the industry presents an apt opportunity to study the sector in detail and examine its importance in the education system - both prior to the pandemic (referred to as in-person shadow education or tutoring) and during the pandemic (referred to as online shadow education or tutoring) - and its impacts on student learning during a period in which schools have been largely dysfunctional. In this context, the main objectives of this study are to: (1) examine the trends and importance of in-person and online shadow education in Sri Lanka; (2) assess pandemic impacts on the demand, quality, accessibility, and affordability of online shadow education in relation to online mainstream education; (3) identify the benefits and drawbacks of in-person and online private tutoring; and (4) identify potential measures to improve the benefits of shadow education, while minimising its drawbacks.

The rest of the paper is organised as follows. Section 2 provides an overview of pre-pandemic trends of the (in-person) global shadow education industry and approaches used to assess access, quality, and equity impacts of shadow education. Section 3 reviews the pandemic impacts and its trends on the online shadow education industry in selected countries and regions. Section 4 provides an overview of the in-person shadow education industry in Sri Lanka. The methods, data sources, and samples used for the study are described in Section 5, while the results are presented and discussed in Section 6. The final section concludes and offers potential recommendations for Sri Lankan education policymakers in capitalising on the benefits of the shadow education industry.

2. Global Shadow Education Industry: Pre-Pandemic Trends and Impacts

2.1 General Trends of In-Person Tutoring

The past few decades have seen considerable expansion in private supplementary tutoring in many parts of the world. A wide variety of private tutoring types exists. At one end of the spectrum is one-on-one tutoring, usually provided in the homes of either tutors or students. At the other extreme, students are crammed into large lecture theatres with microphones or video screens operating in overflowing rooms. Alternatively, students may receive tuition in small, medium-sized, or large groups. In addition to face-to-face instruction, tutoring can be provided by phone, television, and the internet, extending across national and continental borders. Online forms of tutoring have particularly increased in significance in recent years, receiving a further boost following the COVID-19 pandemic.

Private tutoring is supplied by a diverse range of sources, from family members, neighbours, and older students to classroom teachers, global organisations, and web-based firms. The private tutoring industry has emerged as a key employment provider partly due to low entry barriers (Bray & Lykins, 2012). The intensity of shadow education can vary across different dimensions, including seasons, the number of hours, grades at school, the nature of the school (public/private), location, gender, ethnicity, and subjects (Bray, 2009).

The main driver of demand for shadow education is the belief that greater investments in education will facilitate superior performance in major examinations and entrance to prestigious secondary schools and universities (Bray & Lykins, 2012). Moreover, it is viewed as a means of assisting slow learners or other disadvantaged

student groups to achieve the required learning standards. This particularly applies to developed country settings where high competition levels are not an influential factor to get into prestigious educational institutions, as in the developing world.

Data on private tutoring is unsystematic and fragmented in many countries, owing to its relative informality in nature and lack of official data collection mechanisms. The tuition industry's presence is most visible in East Asia, where tutoring mainly caters to high achievers. It has long been a central part of the education system and deeply engrained in the culture, largely due to Confucian traditions that value education and stress diligence (Bray, 2009). Decreasing family sizes and rising wealth which leaves families with more resources to spend on extra tutoring have also contributed towards its expansion; evidence for an inverse correlation between family size and private tutoring has been reported in many countries, including the Philippines, China, Japan, and Vietnam (Bray & Lykins, 2012).

In the Asian region, South Korea is estimated to spend most of its GDP on tuition, where about 75% of K-12 students - students from kindergarten to 12th grade - received tuition in 2019 (Piao & Hwang, 2021). In Japan, the figure is estimated to be as high as 90% (The Economist, 2021). China's shadow education industry has seen massive growth since the country embraced economic reforms in the 1990s. Many thriving private tuition schools have student enrolments of more than 2.5 million (Mn) in different cities, employing around 18,000 tutors in total (Foo, 2017). Tutoring has, in fact, become a norm, with school teachers themselves advising students to attend classes. Some top schools require students to cover part of the

curriculum before the term starts, suggesting that parents have to seek private tutors. The high costs of private tuition have even been identified as one reason Chinese parents have fewer children than expected (The Economist, 2021).

In South Asia too, tutoring has become an established part of daily life and has shown gradual penetration from an initial concentration in urban areas to many rural areas. In these countries, tutoring is driven by high social competition as well as teachers seeking to supplement low teacher salaries via tuition fees (Nath, 2008; Sujatha & Rani, 2011; Suraweera, 2011). In India, for example, shadow education is a multi-billion USD market and the third key contributor to household expenses (Jha, 2021).

Private tutoring in former Soviet countries and Eastern Europe was modest in scale until the early 1990s, after which it significantly expanded when the collapse of economies forced teachers to earn additional income to stay above the poverty line. Although the purchasing power of teachers' salaries has since increased in many of these countries, the culture of tutoring has remained ingrained. In Africa too, shadow education has become more visible, partly reflecting teacher awareness of revenue-generating opportunities in an education system with weak accountability and supervision (Bray & Lykins, 2012). In South Africa, for instance, the past six years have seen a significant increase in the share of grade 11 and 12 students obtaining private tuition, from around 4% to 30% (The Economist, 2021).

For several reasons, tutoring has remained relatively modest in scale in Western Europe, North America, Latin America and Australasia. One is the more focused reliance on shadow education for specific purposes. These include facing high-stake examinations and obtaining positions in renowned colleges and universities, as opposed to the broader reliance on tutoring as a remedial service for poor-quality school education in Southern countries, where it is

essentially a cultural norm (Jones, 2021; The Economist, 2021). The relatively high cost of private tutoring in Western countries is another reason. However, shadow education has considerably expanded in the past decade or so in these countries, as policymakers have emphasised competition between schools, and parents have seen the benefits of private tutoring. Some governments have promoted tutoring to help low achievers. In the United Kingdom (UK), the share of 11-16-year-old students who have received private tuition has increased from 18% in 2005 to 27% in 2019; in Germany, the recorded growth has been from 27% in the early 2000s to more than 40% by 2013 (The Economist, 2021). In Egypt, about one-third of children in the first years of school get extra lessons, rising to over four-fifths by the time they graduate from secondary school (Ibid).

2.2 Potential Private Tutoring Impacts

2.2.1 Academic Achievement

The most obvious impact of shadow education is reflected in academic achievement. However, while the implicit assumption is that private tutoring contributes positively towards academic attainment, much depends both on the quality of tutoring and the ability and motivation of students (Bray & Lykins, 2012). Research in this area is hindered by factors such as a lack of comprehensive data on different types of private tutoring, the wide range of overlapping and often unobserved demographic and socioeconomic variables that influence learning outcomes. These factors lead to endogeneity concerns when treating private tuition as exogenous (De Silva, 2020).

A large part of the literature is thus concentrated in the East Asian region, where the most comprehensive data on tutoring is available. In South Korea, evidence points to positive but minor effects from investment in tutoring at the general education level (Sohn, 2010) and diminishing

marginal effects of tutoring on college entrance and positive effects on degree completion (De Silva, 2020). A longitudinal study conducted among a cohort of 7,000 randomly selected students in grade 7 assessed the roles of cram schooling, individual or group tutoring, mail-based correspondence courses, internet tutoring, and the government's Educational Broadcasting System (EBS) courses separately. According to the findings, only cram schooling had a significant positive effect on mathematics achievement, which the author attributed to most cram schools closely following the school curriculum and provision of practice examinations (Bray, 2014). In Vietnam, tutoring has significantly improved self-reported measures of academic ranking, with larger effects for lower secondary school students (Dang, 2007). Evidence of the impacts of tutoring on academic performance among primary students in Indonesia (Suryadarma et al., 2006) and high school students in the Jinan Province in China (Zhang, 2013) is modest, at best.

Across countries, the general view is that private tutoring does help. If learning improvements are insignificant, the solution is to try harder with existing tutors or to find better replacements (Bray & Lykins, 2012).

2.2.2 Broader Skills and Values

Shadow education involves the risk of reducing education to mere academic achievement. In contrast, education is a much broader concept, including physical, aesthetic, and social development through sports, music and arts, and relationships with members of society (Bray & Lykins, 2012). The emergence of private tutoring leaves little room for cultivating such aspects of education and may even deprive broader forms of personal and social development, as has been observed by many teachers in Hong Kong (Ibid). It can also lead to stress and mental health concerns among children who are constrained to a classroom for extended periods, leaving little room for leisure activities which are critical to their healthy development.

Corruption in the shadow education system is another area of concern. In certain instances, school teachers who provide private tutoring disclose examination questions in advance during tuition classes (Transparency International, 2011). Such practices can have a strong negative influence on young students who are exposed to dishonest and immoral behaviour at an early stage in life.

On a more positive note, private tutoring can be instrumental in developing a child's self-esteem and sense of achievement. Tutoring can be particularly important to slow learners who require additional support to keep up with their peers. Tutoring can also encourage desirable traits such as self-discipline. Japan's shadow education system, which emphasises diligence and learning, has contributed significantly towards the country's economic progress (Dierkes, 2011).

2.2.3 Economic and Social Inequalities

The effects of shadow education on socioeconomic inequalities appear to be mixed. On one hand, shadow education can maintain and intensify economic and social inequalities. More affluent households can secure and access private tutoring in greater quantity and quality compared to poorer households. On the other hand, shadow education can thus pose a threat to free public education systems which aim to ensure equal educational access to all students. At the extreme, situations have been observed where students tend to believe that supplementary tutoring is essential and could choose to drop out from mainstream schooling when their parents are unable to afford tuition, as has been observed in slum areas in Delhi (Chugh, 2011). In such circumstances, private tutoring hinders students from accessing free public education.

However, shadow education can also bridge education gaps among different socioeconomic student groups, a trend mostly observed in

developed country settings. Evidence points towards a significant positive impact of tutoring on the academic performance of lower-performing and black students in the United States (Kraft, 2015 cited in Kraft & Falken, 2021), and for students from low-income families in Italy (Carlana & La Ferrara, 2021 cited in Kraft & Falken, 2021).

2.2.4 Inefficiencies of the Education System

Seemingly, private tutoring is more efficient than mainstream schooling owing to the provision of specialised services to customers who value them most, operation in a marketplace, and employment of cost-effective teaching methods. However, several factors raise doubts about the efficient use of resources. First, as discussed above, there is no strong evidence that private tutoring always generates gains in learning while focusing on narrow domains of achievement. Second, inefficiencies can be generated if students pay more attention to fee-charging tutors than school teachers operating under the free education system. Moreover, students who spend long hours in tuition classes may have limited energy to pay full attention in school. Third, school teachers who tutor might exert more effort in their private tuition classes or deliberately limit the content taught during regular school hours to ensure demand for tuition classes. Lastly, the shadow education system can create inefficiencies by eliminating talent from the mainstream system. In Hong Kong, for example, some of the most famous tutors are former school teachers who have left the school system in favour of tutoring (Bray & Lykins, 2012).

2.3 Measuring Shadow Education Impacts

The potential impacts of private tutoring discussed above are challenging to measure accurately in practice, given data constraints. Some approaches used in different countries are described below.

2.3.1 Obtaining Data to Analyse Impacts

A necessary starting point is to evaluate the shadow education industry's size, intensity and nature. Bray (2021) points out that this should be done at a local level, given that the policies and solutions should be unique to each jurisdiction, considering the socio-economic status. In addition to data on the number of students receiving tutoring in particular subjects and grades, identifying the costs of tutoring and the nature of the services provided in terms of orientation and quality is important. At the government level, policymakers may formulate and implement regulations to monitor who can provide private tutoring, where, when, and how. The government will need partnerships to implement the regulations. These partnerships could be formulated with teacher unions, the business sector, and community groups (Ibid). One step in this regard would be to make a requirement to register the tutoring agencies, including individual tutors, to operate as registered enterprises. This requirement would assist in monitoring the scale, modes of operations of the tutors, and student enrolments (Ibid).

2.3.2 Assessing Access and Equity

Student access to shadow education and equity implications can be assessed through institutions or providers. In 2007, a government-sponsored scheme in England was initiated to provide one-to-one tutoring for low achievers in academics. This programme permitted schools to give extra money to classroom teachers who provided extra lessons or to employ tutors from private agencies (Bray, 2021). Schools and teachers could keep track of student access to tutoring through money spent. Further, they compared the academic performance of students who received and did not receive tuition and an overall cost-benefit analysis of the project (Brown et al., 2010).

In addressing equity concerns, some countries have sought to form partnerships with parties

such as churches, community groups, and other parties willing to provide free tutoring, especially for disadvantaged groups. For example, in Malta, both the Catholic Church and the Labour Party provide free tutoring (Sultana, 2011 cited in Bray, 2021). In Greece, volunteer groups provide support through "social frontistiria" to reduce any social gaps created through market forces (Bray, 2021). This mechanism of partnerships could be used to assess access to tutoring, especially for disadvantaged groups.

2.3.3 Assessing Quality

There appears to be no consistent or well-established methodology for measuring the quality apart from examining its impact on academic performance in countries where the required data is available. International surveys on education achievement, such as the PISA and TIMSS,² have also been used to measure the shadow economy and perform cross-country comparisons. However, concerns remain about data quality and comparability (Bray, 2014).

According to the final evaluations of the government-sponsored scheme in the United Kingdom (UK), amidst concerns about the quality of private tutors, school teachers stepped in to

provide tutoring, the effects of which could be directly monitored via student performance at schools (PricewaterhouseCoopers, 2008 cited in Bray, 2021). In Belgium, the company Educadomo has declared that their tutors are "instructional coaches" and their services are limited to students attached to a university or a higher educational establishment and specialise in a given academic field (Bray, 2021). In Eastern Europe, senior secondary students are mostly tutored by university lecturers and professors, who tend to focus more on knowledge and the content relative to pedagogy (Bray, 2021).

In the UK, tutoring advertisements posted on websites have also been used to assess the quality of tutors. According to a government-commissioned survey, a review of websites revealed that 93% of tutoring agencies mentioned the terms 'individualised' and 'flexible' regarding tutoring style, and only 7% offered specific programmes such as bespoke and programmed tutoring services. Most agencies who offered programmed tutoring and supplied specific materials and programmes to their agency are considered of better quality than those who do not specify such programmes (Tanner, et al., 2009).

² PISA, or the Programme for International Student Assessment is the OECD's Programme for International Student Assessment and measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. (OECD, n.d.) TIMSS (Trends in International Mathematics and Science Study) is an international assessment that monitors trends in student achievement in mathematics, science, and reading. Currently 70 countries participate in the assessments, which have been conducted at regular intervals since 1995.

3. Online Tutoring during COVID-19: Trends and Impacts

3.1 General Trends

In light of nationwide lockdowns and physical distancing measures, a preliminary analysis conducted in June 2020 estimated a decline of 18.4% in the in-person global private tutoring industry in 2020, relative to 2019 (Fortune Business Insights, 2021a). This rendered traditional face-to-face tutoring classes - especially mass classes catering to large numbers of students - largely dysfunctional. On the other hand, there has been a surge in demand for online forms of tutoring. The increase in demand for online tutoring has been prominent among students sitting for nationally qualifying examinations and among those who struggle with independent learning, including primary school students, which was a previously insignificant global market for tuition (Ibid). Indeed, the combined in-person and online global private tutoring market size is expected to reach USD 171.93 Bn by 2028, exhibiting a cumulative annual growth rate of 8.3% during the forecast period (Fortune Business Insights, 2021b).

The increasing uptake of shadow education in Western countries coincides with the prominent rise in education technology (EdTech) through multiple platforms, including language apps, virtual tutoring, video conferencing tools, and online learning software. Even prior to COVID-19, there was a fast-growing demand for EdTech, with global EdTech investments reaching USD 18.7 Bn in 2019, and the overall market for online education projected to reach USD 350 Bn by 2025 (Li & Lalani, 2020). COVID-19 has prompted a further surge in usage, with many EdTech companies offering free access to their services and experiencing unprecedented growth. For example, BYJU - a Bangalore-based highly-

valued educational technology and online tutoring firm established in 2011 - saw a 200% increase in the number of students using its products following the pandemic (Ibid). Indeed, while some believe that the unplanned and hurried shift to distance learning will result in a suboptimal user experience undermining sustained growth, others envisage the emergence of a new model of education, with e-learning becoming an integral component of education systems across the world (Abayasekara, 2020).

The online tutoring industry has benefitted from analytical applications that customise services through content designed to the requirements of learners based on individual students' interests, performance, and subject understanding. This trend of customising tutoring services with assessment features is anticipated to lead to considerable growth in the market (Grand View Research Inc., 2020). Further, on-demand tutoring provides learners with a real-time platform to study at their own pace and capacity. On-demand tutoring coupled with analytical applications provides information on students' learning progress. Live sessions with video conferencing for on-demand tutoring have a prominent presence in the growth of the market (Ibid).

Online modes of advertising tuition have also seen a significant take up during the pandemic. Tuition classes were heavily advertised in different forms, platforms, and techniques to market different grades and subjects. According to a United States of America (USA) study, for-profit colleges have spent about 40% of their revenue on tuition advertisements during the pandemic (Weissman, 2020). Content consumption habits have also increased, creating more opportunities for advertisers to reach

consumer audiences. According to the Taboola Blog, a self-branded internet discovery advertising platform headquartered in the USA, page views on publisher sites grew by 51% in May 2020 (Morreale, 2020). These increased views were from education consumers confined to their homes during lockdowns, who were observed to be absorbing the content and responding to advertiser messages. During this time, they also responded at different times and days compared to mostly weekends in pre-pandemic times (Ibid).

3.2 Pandemic Impacts

This section reviews available literature on the impacts of the COVID-19 pandemic on the private tutoring industry and online learning experiences in selected countries worldwide. Literature is limited on COVID-19 impacts on the private tutoring industry per se; most available information focuses on online education and tutoring provided by both schools and tutors. Trends and impacts are examined in terms of the growth of online tutoring during school closures, learning experiences, and access and equity implications.

3.2.1 Growth of Online Tutoring due to School Closures

The pandemic has contributed to an expansion in online forms of private tutoring through multiple avenues. The primary means through which the pandemic has affected the demand for private tutoring is via learning disruptions experienced due to school closures. Given the growing reliance on tuition to bridge learning gaps even when schools were fully functional, the increased need to do so during school closures is evident. According to McKinsey & Company, due to disrupted schooling, a primary aged pupil in America is five months behind in mathematics and four months in reading than they would usually be, with the situation being much worse in countries such as India, Bangladesh, and Mexico (The Economist, 2021).

According to Mathnasium, an American firm whose franchises oversee around 1,000 after-school learning centres in 12 countries, while new enrolments fell during the peak of the pandemic in 2020, they had recovered to above average levels by the summer of 2021, with further expected increases by the end of the year (The Economist, 2021). According to the nationally representative, 'Understanding America Study' which consists of 1,335 households, one in four parents demanded one-to-one or small group tutoring independently from school (Saavedra et al., 2020 cited in Kraft & Falken, 2021), including 21% from the lowest income families and 28% from the highest income families. In the UK, stakeholders observed wide reach and high adaptability for online tailored tutoring, which benefitted most learners (Marshall et al., 2021). The already high levels of demand for tutoring in the Asian region saw further impetus when COVID-19 struck. In Korea, many tutors switched from traditional offline tuition to a blend of online or off-line optional tutoring, which is expected to continue as the new norm (Piao & Hwang, 2021).

In developed countries like the UK and Australia, private tutors have received funding from the government to participate in educational "catch-up" schemes, which in turn has helped private providers expand. As mentioned previously, the pandemic has also encouraged the tutoring industry to invest more in online products, which students are increasingly becoming accustomed to. The growth of a variety of online educational services is also expected to increase tutoring availability and lower its costs (The Economist, 2021). Benefits, including the enabling of more efficient and effective teaching via chat groups, video meetings, and document sharing, and easier communication between teachers and students, have already been cited (Li & Lalani, 2020).

COVID-19 has also spurred a rise in the supply of tutors through job losses and lifestyle changes. This was especially the case in poorer countries where school-related online learning was often

non-existent, prompting school teachers to rely on private tutoring to earn a living. In many poor countries, large shares of students attend cheap private schools, some of which fully closed down during the pandemic due to loss of student fees. In India, for example, where around half of the school students attend private schools, a recent survey indicates that over a quarter of them may have moved to government schools since the start of the pandemic (The Economist, 2021). In Pakistan too, the numbers attending private schools have fallen by over two-thirds (Ibid).

3.2.2 Online Education Initiatives and Experiences

Much of the available evidence on online learning experiences during the pandemic relates to school education, as opposed to education provided by private tutors. In some instances, governments and schools collaborated with private tutors to provide tutoring free-of-charge to students, some initiatives of which are discussed below.

The UK launched a National Tutoring Programme (NTP) among four main tutoring organisations in collaboration with schools, which conducted around 9,800 tuition sessions reaching 1,425 learners in 65 schools. According to a survey, a vast majority of learners benefitted from tuition, resulting in increased learning enjoyment, knowledge, and confidence (Marshall et al., 2021). Both tutors and students mentioned benefitting in terms of flexibility and the ability to rearrange a class at short notice. However, providers and tutors also drew attention to many challenges associated with online learning. These include low attendance for online tuition compared to in-person tutoring due to low motivation, reluctance on the part of students to disturb tutors when they did not understand a concept, and dislike of some students to switch on the cameras, which made it difficult for tutors to gauge students' engagement. Lack of digital literacy among some students, distractions caused by the notifications of other applications for smartphone users, access to equipment and reliable internet

connections were also identified as key issues (Ibid).

Class attendance was observed to be higher among primary school students, given that parents had more influence over younger children. To encourage participation and sustain attention, tutors experimented with various techniques such as tailoring the content to learners' needs, uploading PDFs beforehand to discuss during class, arranging games that could be played online to improve class engagement, and integrating stories into the session. On average, small tuition providers saw higher participation than larger tuition providers, given the ability to monitor better and provide attention to students in smaller classes.

The Korean Education Delivery Commune (EBS) - a government-led and funded platform together with private tutors which provides free digital tutoring courses and resources for students at the national level - launched a COVID-19 response group. The purpose was to provide home-based K-12 learning sources, with over 28,000 online education courses (Yon-hap News, 2020b cited in Piao & Hwang, 2021). This platform involved a collection of television, radio, news, and e-learning sources and played a significant role in the transition of students from school to home-based learning. However, the programme could not cater to the full demand for tutoring. Further, gaps were observed in terms of student evaluation, timeliness of feedback, updating curriculum content, and student-teacher interactions. This led students and parents to seek fee-based shadow education providers to pursue real-time tutoring and learning, placing particular value on real-time interaction between student and teacher and the timeliness of responses and feedback (Piao & Hwang, 2021).

The Italian Ministry of Education worked together with middle schools, where a list of needy students was collected from school principals, and tutors were allocated to them. Euro 70 Mn was invested in buying tablets that students could temporarily borrow and Euro 10 Mn to improve

internet connections and school online platforms, although all disadvantaged students were not catered due to bureaucratic delays (Carlana & La Ferrara, 2021). Online education was provided in the form of video-recorded lessons of 40-50 minutes, either in synchronous or asynchronous format (Carretero, et al., 2021). Synchronous sessions were conducted to stimulate discussions, have informal Q&A sessions, answer doubts, conduct collective revision, give feedback, give space to do group presentations and activities, and create a student community. Syllabi were also rescheduled by focusing on the core content and interdisciplinary themes. A survey conducted among middle school students found online tutoring to be an effective way to remedy knowledge gaps, improve academic outcomes in mathematics, English, and Italian, and psychological well-being, as well as develop socio-emotional skills during school closures (Carlana & La Ferrara, 2021). The effects were found to be most significant among students whose parents were relatively less educated, students whose mothers were engaged in blue-collar jobs, and students whose parents worked outside the home for long hours (Ibid).

In Botswana, online tutoring was provided for a sample of 8,319 students in grades three, five, and six, in 105 randomly assigned schools in partnership with NewGlobe, which operates a network of low-cost private schools (Schueler & Rodriguez- Segura, 2021). Tutoring sessions were followed by 15-20-minute phone calls to families to check on accountability, whether the students completed the SMS problems, answered the problems correctly, and completed the recommended interactive quizzes. Twelve weeks of phone calls provided evidence of improvement in maths performance, while text messages alone had no effect (Ibid).

3.2.3 Access and Equity Implications

The impacts of online tutoring on education access and equity are not clear-cut and depend

on a range of factors such as the nature of tutoring, its coverage, specific methods used, device availability etc., and are thus very context specific. In the US, studies have shown that tutoring can benefit students across different subjects and grades depending on the methods used and student accessibility (Nickow, Oreopoulos & Quan, 2020; Fryer, 2016 cited in Schueler & Rodriguez-Segura, 2021). According to the 'Understanding America Study', approximately 5% of families reported that they do not have devices to participate through online platforms, and approximately one in ten students have to share devices with other household members (Saavedra et al., 2021).

The NTP conducted in the UK attempted to address inequities in learning by matching the demand and supply of tutoring, where the supply of talented tutors could be aggregated in one geographic region and the demand for tutors could be from another region (Roschelle et al., 2020). However, some disadvantaged learners could not participate in classes although they were targeted, mainly due to the difficulties in contacting their parents/guardians to explain the programme and the lack of equipment and internet connectivity (Marshall et al., 2021).

In Italy, evidence showed that children from lower income groups have higher rates of attending online classes remotely, but the effects on student learning were less clear due to a lack of access to technology and unsatisfactory tutoring support from parents who have lesser confidence to help their children academically at home (Saavedra et al., 2021).

In April 2020, the Korean Ministry of Education issued a new policy guideline for online private tutoring to charge at least 30% less than in-person tutoring, intending to make it more accessible to all students during the pandemic (Park, 2020 cited in Piao & Hwang, 2021). However, from the supply side, tutors argued that online tutoring increased their workload and that a tuition fee reduction is impossible (Piao & Hwang, 2021).

4. Sri Lanka's Shadow Education Industry

4.1 General Trends

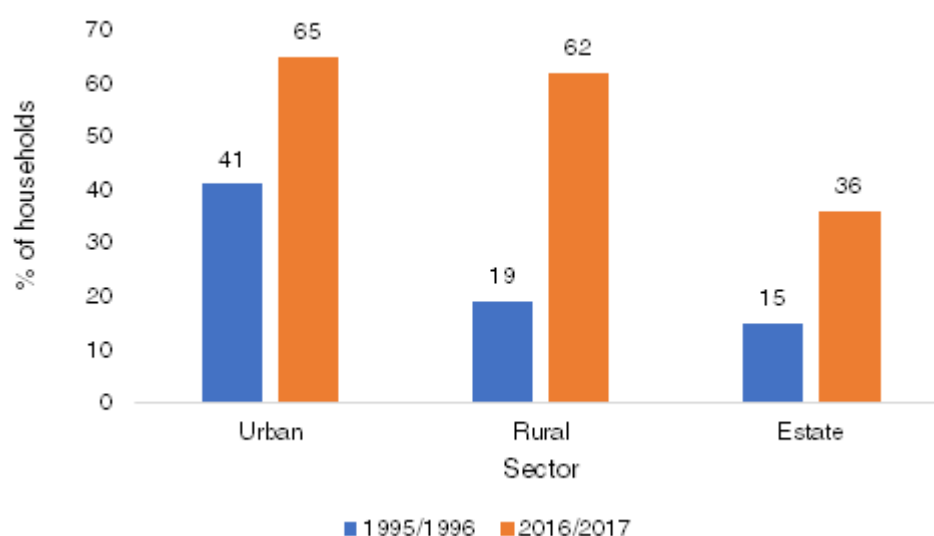
Sri Lanka has long traditions of private tutoring, and similar to many East Asian countries, it has become a widely accepted practice among society (Pallegedara, 2011). In fact, official documentation voicing concerns about private tutoring in Sri Lanka dates back to 1943; this was when a Special Committee on Education voiced concerns about examination-oriented 'coaching centres' that operated alongside schools, in which they felt the emphasis was on memorisation-based learning which undermined the general purposes of education (Bray & Lykins, 2012). Despite these warning signals, tuition centres and other forms of supplementary tutoring have expanded since that era and have now become deeply ingrained in the culture.

Expenditure on shadow education has risen significantly over time across households in Sri Lanka's urban, rural, and estate sectors. As seen in Figure 1, the rise has been particularly significant in the rural sector, where the share of total households spending on shadow education

has almost reached the share among urban sector households over the two time periods, at over 60%. According to Pallegedara (2011), this increasing expenditure on private tutoring has transformed it from a luxury good to a necessary good over time. Average monthly expenditure on tuition fees per household has increased from 2.5% in both 2009/2010 and 2012/2013 Household Income and Expenditure Survey (HIES) years to 2.7% in the 2016 HIES year (Hapuarachchi, n.d.). Tuition also accounts for the largest component of the household education budget, amounting to 43% in 2016 (Department of Census and Statistics, 2017).

Available data further suggest that while households in higher income brackets spend more on tuition in absolute terms, tuition expenses account for a higher share of total household income in households belonging to the lower income categories, suggestive of its relative and increasing importance among low-income groups (Figure 2). Higher tuition expenses among high-income households could also reflect higher

Figure 1: Share of Households with Positive Spending on Private Tutoring, by Sector and Year



Source: Pallegedara, 2011; Global Education Monitoring Report Team et al., 2022.

tuition fees paid for better quality tuition classes, as opposed to a higher number of classes attended. Both anecdotal evidence and results from this study (as discussed in Section 5) suggest that students in high-income households largely attend individual or small-group tutoring classes that provide for one-on-one teaching. These are relatively expensive compared to low- and middle-income students who mainly attend mass classes that can accommodate over 1,500 students. In large tuition centres, several classes listen to the same instructor at a given time using digital recording technology.

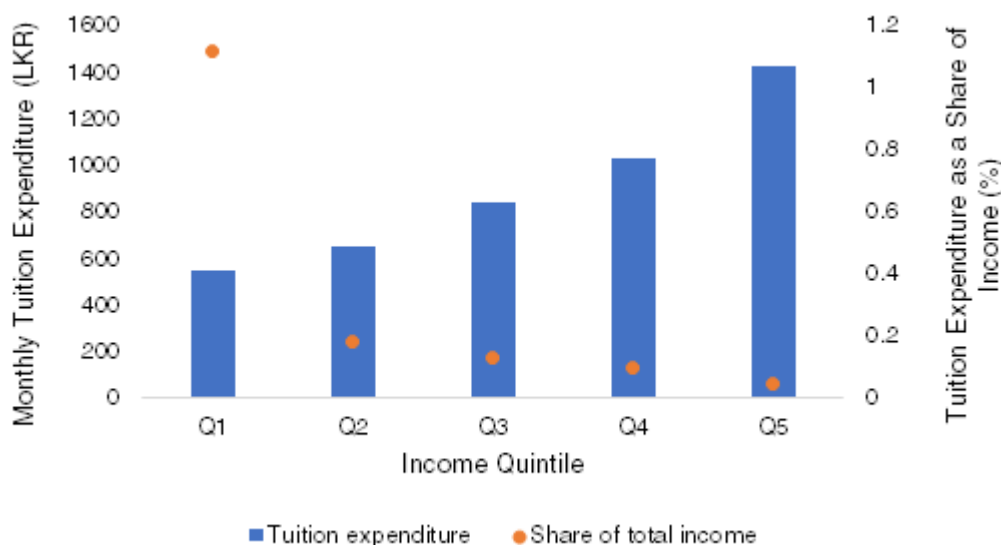
4.2 Drivers and Impacts of Shadow Education

The highly competitive nationally qualifying examinations of Sri Lanka's education system, namely the grade five scholarship examination and the general certificate of education (GCE) ordinary level (OL) and advanced level (AL) examinations, generate high demand for shadow education at these transition points. The main objective of the grade five scholarship exam is to

provide subsidies to economically disadvantaged talented students to pursue secondary education in better-quality schools and it is not a compulsory examination.

The OL includes six compulsory subjects- Mathematics, the first language (Sinhala or Tamil), Religion, Science, English, and History- and three optional clusters spanning a wide range of subjects. One cluster includes subjects such as Commerce, Geography, Civic Education, Entrepreneurship, and Languages. The second cluster includes aesthetic subjects such as Music, Dance, Art, Literary Texts, and Drama, while the third cluster is inclusive of subjects like Information and Communication Technology (ICT), Health and Physical Education, Arts and Crafts, Home Economics, Agriculture and Food Technology, Aquatic Bio Resources Technology, and Technological subjects. (Information, 2020) The AL is available in the Science, Commerce, Arts, and Technology streams- faced by students after successfully passing the OLs. All the students in each stream must complete three compulsory subjects from their respective

Figure 2: Average Monthly Tuition Expenditure and Share of Total Household Income, by Income Quintile, 2016/2017



Source: Author's analysis using data from the HIES 2016/2017

streams.³ Additionally, students have to pass a General English and a Common General paper to qualify for state university entrance. (Information, 2021).

It has been observed that more students attend private tuition for science-related subjects such as Mathematics, Physics, and Chemistry, which are considered more challenging, especially at the AL (De Silva, 1994 cited in Pallegedara, 2011).

Other factors driving demand for private tutoring include:

- Large quality differences – in both physical and human resources – among public schools and the ensuing intense competition to enrol in popular public schools in urban settings
- Stiff competition to gain admission to limited places available in state universities, with less than 20% of A-Level-qualified students being able to obtain university admission (University Grants Commission, 2021)
- Low teacher salaries prompt teachers to provide tutoring to supplement their income (Dundar, et al., 2017)
- Overloaded education curriculums which at times cannot be covered sufficiently within school time (Business Times, 2011)

There are no established methods to assess trends, access, quality, or impacts of shadow education on educational and other outcomes in Sri Lanka, primarily owing to data unavailability. A study among a sample of 2,378 grade 10 students revealed perceptions of inadequacies in mainstream schooling as a significant driver of private tutoring (Suraweera, 2011); 53% of

students stated that they had not received sufficient exercises in school and that the full syllabus content had not been covered, while 50% indicated difficulty in understanding what was taught in school. A more recent study was conducted examining factors affecting the demand for private tutoring among a sample of 785 secondary school students and their parents in four districts in the Western and Southern Provinces of Sri Lanka. This study found that the demand for tutoring is positively influenced by socio-demographic and economic characteristics of the student and their respective households (Damayanthi, 2018). These include the academic achievement level, parent's level of education, household income and expenditure levels, parent's school satisfaction, parent-teacher relationship, and parent's level of involvement in their child's education. The results also indicated that the share of students receiving tutoring assistance was larger in rural areas compared to urban locations, while higher income households opted for more individualised classes. A study conducted in the Negombo Divisional Secretariat among 200 households also showed a positive association between the demand for shadow education, household income and parental education levels (Hapuarachchi, n.d.). The study observed that 89% of the surveyed students received private tuition, which accounted for around 13.5% of monthly income and 35% of total education expenditure.

One study examined the individual contribution of public schools and private tutoring classes to students' academic performance, using a random sample of 100 OL and 300 AL students who sat for the respective exams in 2017 in the Colombo District (Herath, 2019). Differentiating between the specific impact of schools and tuition classes on academic performance is complicated, given that

³ Physical science stream includes combined mathematics, physics, and chemistry or ICT. Biological science stream comprises of biology (botany and zoology), physics or agriculture science and chemistry. Business studies, business statistics, accounting & economics or information and communication technology are included in the commerce stream. Technology stream consists of engineering technology, bio-system technology, science for technology, and a category subject. Arts stream comprises of multiple subjects spanning economics, political science, geography, languages, history, and aesthetics.

student performance is only available as an added variable of both input forms. This issue was addressed by considering the time spent studying in school and the time spent at tuition classes as separate independent variables in a regression model, where the dependent variable was a student's performance at the OLs or ALs. Regression coefficients of time spent in private tuition classes were found to be positive and highly statistically significant, compared to corresponding insignificant coefficients for time spent studying in schools, indicating a substantial contribution of private tutoring on student performance at national examinations.

In contrast, a study focusing on private tutoring among grade five students found that, on average, five months of tutoring has no impact on grade five students' exam scores (Cole, 2017). This suggests that private tutoring might be more effective and helpful at higher levels of education, and the author calls for a rethinking of sending young children for tutoring, although more research on tutoring impacts is needed to arrive at a definite conclusion. Further, observed impacts varied only slightly with an advantage, suggesting that the effect of tutoring on educational stratification is likely minimal. Additionally, the fact that potential negatives of private tutoring can outweigh its positives has been emphasised in a study evaluating the effectiveness of Sri Lanka's grade five scholarship examination, where the impact of tutoring on examination performance, as perceived by parents, is minimal. Negative impacts include psychological stress, intense competition among children, and lack of time to

engage in play and other activities (Abayasekara, 2019).

Shadow-education-related concerns have also been raised about issues such as distorting the efforts of regular school teachers, lowering the demand for reforms, reducing student engagement at school, and heightening socioeconomic disparities in education outcomes (Dundar et al., 2017). In fact, teacher absenteeism is a main cause of concern within the national educational system, and parents have criticised teachers for not covering the syllabus or teaching properly during school hours but encouraging students to attend their private classes (Wettewa, 2015). Regarding its impact on broader skills and values, public concern in Sri Lanka has centred on disregarding spiritual domains. Subsequently, in 2010, the Sabaragamuwa Provincial Council prohibited private tutoring of children between the ages of 5 and 16 between 8:00 am and 2:00 pm on Sundays and the monthly *Poya* holidays (Daily Mirror, 2010). Another regulation aims to prohibit tuition classes in the week preceding nationally qualifying exams. However, this has become increasingly difficult to monitor and enforce, given the informal nature of classes.

While more research is needed to conclusively identify the net effect of tutoring on learning outcomes in Sri Lanka, some scholars maintain that a policy that encourages open competition in the tutoring market could be welfare-enhancing and that subsidising tutoring for poorer households could help raise their welfare gains (Wettewa, 2015; Wijesinghe, 2020)

5. Data, Sample, and Methods

This study is based on primary data obtained from three sources: (1) an online survey among a sample of 330 students in grades 10-13 who are preparing for the OL and AL examinations and for whom private tuition during this period of school closures is particularly important; (2) a telephone survey among another sample of 39 students in grades 8-13 from rural locations who do not have regular access to the internet (and hence not reachable via the online survey); and (3) key informant interviews (KIIs) conducted with 16 school teachers and tutors. Multiple sources were used to gain a comprehensive understanding of online shadow education from multiple perspectives and to triangulate and cross-check the information provided by different stakeholders.

The online survey collected information on a wide range of factors, including student demographic and socioeconomic characteristics, number and type of tuition classes attended pre-pandemic and during the pandemic, online learning experiences in both tuition and school classes, impacts on access to and quality of learning, the benefits and drawbacks of in-person and online tutoring, and the future expected role of the tutoring industry concerning mainstream education. The telephone interviews conducted with a group of less-privileged students also focused on the above aspects, with specific attention to challenges faced by students in accessing and effectively engaging in online education. The teacher interviews focused on online teaching experiences and the perceived role of tuition during the pandemic and beyond. The student and teacher samples were identified through a mix of purposive and snowball sampling techniques. All

information was collected between July-October 2021,⁴ during which schools were closed due to the third wave of the COVID-19 pandemic.⁵ The survey questionnaire and interview guides used are provided in the Appendix.

Online survey responses were analysed using a descriptive approach, examining trends by several school- and household-level characteristics. Thematic analysis was used to analyse and interpret the interview findings. As its name implies, thematic analysis involves organisation and analysis of textual data according to themes. The effectiveness of reducing large amounts of interview text to simple categories is a key advantage of this method (King, 2004). The data were first organised into a matrix to identify and code the different challenges and opportunities of online tuition and school education, where coding was used to capture the essence of an idea or a phenomenon (Tauqeer et al., 2019). Common sub-themes were organised and ranked by the number of participants that mentioned issues surrounding a given theme. The data were then reviewed for a second time using the 'constant comparative method' commonly used in Grounded Theory (Gale et al., 2013). This enabled systematic comparisons to be made across responses and identify patterns and experiences of learning and teaching in tuition and school classes for different student and teacher groups.

Further, to understand trends in tuition advertisements posted online during COVID-19, secondary data on tuition advertisements posted in four selected advertising websites were

⁴ While there was uncertainty surrounding the scheduled dates for the 2021 OL and AL examinations at the time the survey was conducted, the revised dates were subsequently announced as February-March 2022 for ALs and May-June 2022 for OLs.

⁵ The data collection period overlapped with a three-month long teacher strike in government schools. While online survey respondents were specifically asked to consider their experiences in the period prior to the strike, it is still likely that the strike could have changed the dynamics between school based online learning vs private tutoring. The demand for the latter, to some extent is observable in the telephone interview findings as well. The reader should therefore be mindful of this fact throughout the ensuing discussion.

analysed, namely Ikman.lk, TeacherOn.lk, SaleMe.lk, and My Tutor.lk. A programme was written to extract the adverts from the websites, convert them into text, and organise them into a database across several indicators. These include subjects, content, class type, geographical location, language, tutors' qualifications and experience, tuition fees charged, and the number of views received.

Table 13 in the Appendix presents summary statistics of the three student samples - the OL and AL online survey samples and the students interviewed via telephone. Some interesting and important trends can be identified across different samples. A majority of students who responded were females in all of the samples. While the online survey predominantly consisted of Sinhala medium students, over 50% of students responding to telephone interviews were Tamil. A large portion of students in the online survey sample attended government national schools - typically of superior quality among all government schools - whereas 64% of interviewed students attended government provincial schools. Over 50% of the online AL sample was from the Physical Science stream, while 50% of the telephone interviewed students were in OL grades. Another key difference is regarding location; over 60% of OL and AL students responding to the online survey were from the Colombo and Gampaha Districts in the Western Province, where internet penetration is the highest. In contrast, for telephone interviews, students were contacted from several districts that account for relatively large shares of rural populations, including Nuwaraeliya, Badulla, Jaffna, Monaragala, and Matale.

Parental education level also shows variation across the online and telephone samples - a sizeable share of both parents in the OL and AL online student samples have either completed ALs or have a degree/diploma and higher

qualifications. In contrast, the corresponding shares among the student telephone sample are much lower, with over 40% having completed only OLs. Parental employment among the samples is more uniform, with the largest shares of fathers employed in the private sector and mothers engaged as housewives. The three samples report similar statistics about household size, amounting to between four and five members. The numbers of earners and siblings average at around 1.7 and 1, respectively, in the two online survey samples. Expectedly, the average monthly income of student households from the telephone survey is significantly lower than those responding to the online survey, with close to 70% reporting income levels below Sri Lankan Rupees (LKR) 30,000, compared to a much more balanced distribution among the online samples. Most households across all three samples reported having experienced income loss during the pandemic, which for most households was between the range of LKR 5,000-10,000. Corresponding to household income, the average monthly expenditure on tuition classes shows a notable difference between the online and telephone-interviewed samples.

Table 14 in the Appendix summarises the statistics of the 16 teachers and tutors interviewed. The sample consists of teachers and tutors from various districts teaching various subjects across different grades. Two are full-time tutors and two are full-time school teachers, while the others are either school teachers or education administrators who are also involved in part-time tutoring. Given that many respondents function as school teachers and tutors, the discussion focuses on school and tutoring lessons collectively, highlighting differences where relevant. The term 'school teacher' refers to school teachers, 'tutor' refers to shadow education providers, while 'teacher' refers to both in general.

6. Results and Discussion

This section presents and discusses the study findings derived from the different data sources. The first four subsections elaborate on findings from the student and teacher surveys and interviews and are organised according to the research objectives of the study: in-person and online shadow education trends, effects of COVID-19 on the quality, accessibility, and affordability of online shadow education, benefits and drawbacks of in-person and online shadow education, and suggestions for improving the quality of shadow education. Given the interrelated nature between mainstream and shadow education, the impacts of the pandemic on online shadow education are discussed through a comparison between online education experiences in school and tuition classes. The last subsection discusses trends in online tuition advertisements.

6.1 Online and In-Person Shadow Education Trends

All 330 students responding to the online survey attended tuition classes during and before the pandemic, suggestive of its widespread uptake. During the pandemic, most surveyed AL students attended tuition classes for all three subjects required to be studied in their chosen field, while less than one-fifth of the sample also received tutoring for General English. Slightly over half of the sample indicated attending one class per subject, around one-fifth of the sample attended more than one class for selected subjects, while those who attended more than one for all subjects are insignificant. Among the OL sample too, the bulk of respondents attended one class for certain main subjects, including science, mathematics, the first language, and English (as a second language). Among both samples, the most attended class type is medium group classes comprising 11 to 50 students, while those who attend individual classes constitute the lowest share.

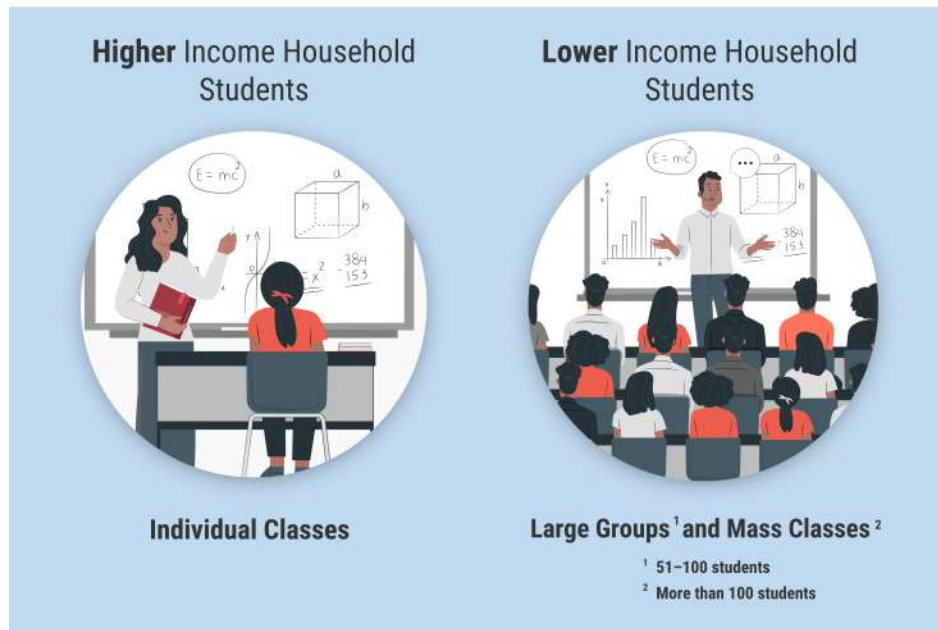
“A comparison of the overall sample between the pre-pandemic and current situation shows a general shift from smaller to larger classes.”

A comparison of the overall sample between the pre-pandemic and current situation shows a general shift from smaller to larger classes. It could be the case that smaller classes expanded in size when they moved to online platforms, since larger numbers can be accommodated in an online setting.

These trends are similar among the interviewed student sample from rural locations. All interviewed students mentioned that they attended tuition classes prior to the pandemic. Science, Mathematics, and English were the subjects that attracted the highest demand for private tutoring, while the average number of classes attended was around three. Medium group classes were the most common class type attended by students.

Survey responses also indicate that a relatively large share of students from higher income households attends individual classes which offer individual attention and are typically of higher quality. Most students from households earning over LKR 100,000 per month attend individual classes, compared to none from the lowest income group. The relative shares of students from lower income groups attending large groups (51-100 students) and mass classes (more than 100 students) are higher.

Household Income Affects Type of Tuition Class Attended



“Science, Mathematics, and English were the subjects that attracted the highest demand for private tutoring, while the average number of classes attended was around three. Medium group classes were the most common class type attended by students.”

6.2 COVID-19 Impacts on Online Shadow Education

6.2.1 Online Education Experiences in Tuition and School

Student Views

In comparing student learning experiences in school and tuition classes based on the online survey sample, the mode of delivery is similar in both settings, with most students learning via online platforms such as Zoom or Microsoft Teams. Social media platforms like WhatsApp and Viber were also widely used. There is more variation in terms of the learning materials used, where digital handouts are used more often in schools and hardcopies more often in tuition classes, while a larger share of schools does not use any teaching material. Regarding teaching methods, a larger share of students experienced learning environments where active student engagement is encouraged in tuition classes, with schools adopting a more passive approach to teaching.

Roughly equal shares of students stated that they experienced quality changes in learning experiences in school and tuition classes held during the pandemic. However, a clear difference is evident in terms of the direction of change: only about one-third of the surveyed students indicated improved learning experiences in school classes, compared to more than half of the students who reported a worsened experience. On the other hand, the bulk of students felt that learning experiences in online tuition classes had improved relative to pre-pandemic in-person classes.

Student perspectives of quality changes in learning across various dimensions in school and tuition classes were compared. As observed, the perceived largest shortcomings in school education are about learning progress, learning assessments, and instruction received from teachers. In both settings, a large share of students considered teaching methods and material to have improved, especially in tuition classes.

Following from above, half of the surveyed student sample rated tuition classes as being of better quality than school classes during the pandemic. In contrast, around one-fourth of the surveyed students stated that it depended on the specific class or subject. The share of students who ranked school classes superior to tuition was negligible.

Most students across different family income groups, schools and class types attended regarded tuition quality to be better than school, while a considerable proportion of students considered tuition quality to depend on the subject/class. These overall trends appear to be largely similar across income groups and the type of school and tuition classes attended.

More detailed information on online learning experiences was obtained from the student telephone interviews. Of the 24 students whose schools conducted online lessons, only about one-fifth experienced online classes conducted through platforms like Zoom or Microsoft Teams

using methods to encourage active engagement of students, while others learnt via social media platforms like WhatsApp or Viber. Tuition classes among the interviewed students were mainly conducted through Zoom or Microsoft Teams, while WhatsApp and Viber were also used to some extent, especially in sharing study material. Students mentioned that teachers taught using textbooks as well as notes prepared by themselves, while in some instances, printed material was posted by mail to student homes.

Online learning assessments were not periodically conducted in tuition classes, with only 6 out of the 21 respondents who attended tuition mentioning learning progress assessments. These were mostly informal methods, such as tutors posing questions at the end of class to assess their learning or distributing question papers, as illustrated in Table 1 below. Learning assessments in schools varied significantly by school and district, with more formal and systematic assessments conducted in larger (national) schools in more urban locations. Some schools sent questions, past papers, and online quizzes via WhatsApp, and graded and provided feedback to students after submission. Apart from this, some schools also took steps to distribute 'self-review books' compiled by the government, where difficult questions were discussed when the schools were re-opened. Experiments with conducting more formal assessments like term tests through Google forms were not very effective, given the challenges associated with accessing these platforms.

As demonstrated in Table 2, most students were generally satisfied with learning, study material, and individual attention received in tuition classes as opposed to schools, likely owing to smaller class sizes and greater flexibility. One student felt that attention given via online tuition classes was greater than that in the traditional face-to-face setting. Private tutoring also proved to be an indispensable learning mechanism for students whose schools did not conduct online teaching continuously and systematically.

Table 1: Online Learning Assessments in Shadow Education Vs. School Classes

Shadow Education Vs. School	Quotes	Source of Quote
Shadow education	<i>“Assessments are given in the form of questions prepared by the teacher, and the answers are discussed in class.”</i>	Group/mass scale class attending students in the Badulla District
School	<i>“There were no assessments. Only teaching was conducted.”</i>	A provincial school student in the Monaragala District
School	<i>“Assessments and papers were given when the school opened once, and students submitted them when the schools restarted.”</i>	A provincial school student in the Monaragala District
School	<i>“The term tests were done using Google forms. I had a problem accessing it due to a lack of a mobile device. Since the method wasn’t successful and most of the students couldn’t participate, it came to a halt. Therefore, the teachers resorted to sending papers in PDF format via WhatsApp”</i>	A provincial school student in the Colombo District

Source: Author's tabulation based on Student Interviews.

Table 2: Individual Attention Received in Tuition Classes

Quotes	Source of Quote
<i>“The attention we received was very good. Tutors talked to the students and inquired about their circumstances.”</i>	A student in the Matale District
<i>“I received good attention and the tutor teaches well. There are more disturbances with student noises when there are physical classes, but in online classes with fewer disturbances, there is more attention.”</i>	Mass scale class attending student in the Monaragala District
<i>“We have a greater ability to clear doubts compared to school lessons – we can ask questions several times and have time to ask anything regarding the subjects. Teaching is easy to understand compared with the number of students (in tuition classes, there are fewer students than in our school class). Many learning materials were also shared, including exam papers, model papers and past papers.”</i>	Group class attending students in the Nuwareliya District

Source: Author's tabulation based on Student Interviews.

“Specific challenges experienced by teachers are deterioration of quality of online education, difficulties in conducting practical classes online, limited interaction with and monitoring of students, difficulties in catering to students of different competency levels, poor digital literacy among teachers, overburdened class schedules, and measuring learning progress effectively.”

School teacher and tutor views

Teacher and tutor interviews largely correspond to student responses. Specific challenges experienced from a teaching perspective include deterioration of quality of online education due to technical and facilitation issues, difficulties in conducting practical components of subjects online, limited interaction with students, problems in monitoring students during class and giving them attention, difficulties in catering to students of different ability/competency levels with weaker students being left behind, poor digital literacy among teachers, overburdened class schedules, and issues in measuring learning progress effectively. Many of these challenges were common to both tutors and school teachers, as presented in Table 3.

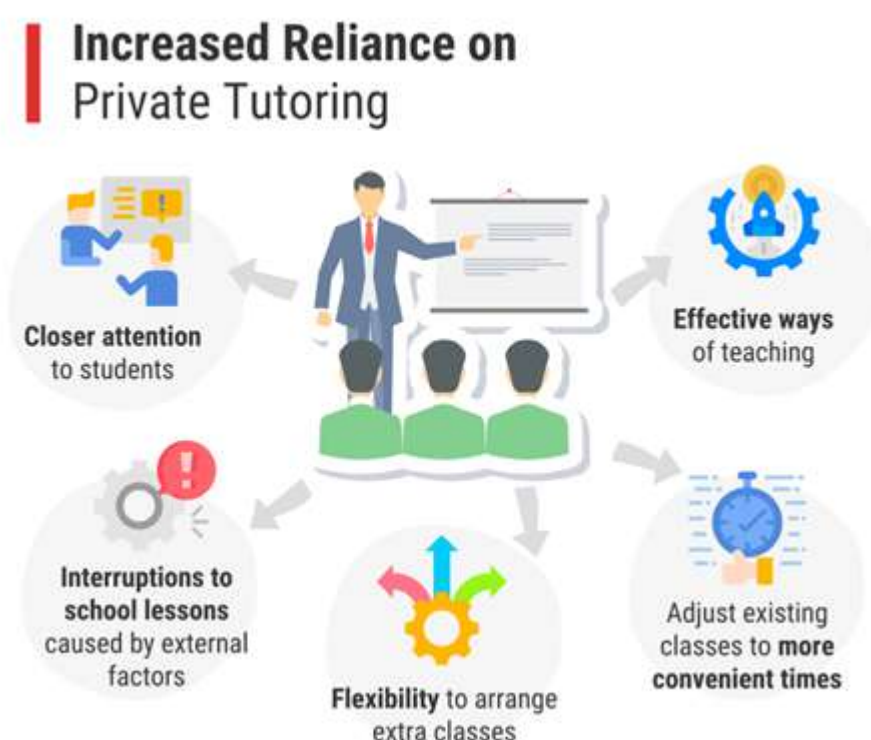


Table 3: Online Teaching Challenges Experienced by School Teachers and Tutors

Issues	Quotes	Source of Quote
Deterioration of quality of online education due to technical and facilitation issues	<i>"In my opinion, the quality of education when delivered online has deteriorated. There are a host of issues, including data, internet and technological issues. School online education in remote and rural areas, in particular, has been unsuccessful even though school teachers fund their own expenses and try to provide services. Online education has failed or doesn't exist at all in areas like Kamburupitiya, Hambantota and Lunugamwehera."</i>	A full-time tutor and owner of a tuition institute in the Matara District
Difficulties in monitoring the performance	<i>"One of the main problems is performance monitoring and measuring. Students are reluctant to respond, which makes it hard for teachers to decide on the content or level of advancement of the lessons."</i>	A school teacher and a small-scale tutor in the Kegalle District
Limited interaction with students	<i>"The relationship between the teachers and students cannot be replaced by any other mode. The teacher-student bond, body language and gestures, and emotional relationship cannot be replaced by online learning. Lessons should be repeated once schools start."</i>	A school teacher in the Jaffna District
Poor digital literacy among teachers	<i>"The senior teachers were late adapters to technology and faced many issues in online education. The ICT teachers assisted in conducting classes."</i>	A school teacher in the Jaffna District
Lack of capacity to conduct practical lessons	<i>"The major damage is to the Science and Math streams where practical and laboratory experience is essential. Some students haven't even seen some laboratory tools. Especially when it comes to mathematics, it's hard to transfer the tacit knowledge attached to different equations and sums. The students fail to grasp the knowledge due to the lack of physicality among the interactions with the teachers."</i>	A full-time tutor in the Matara District

Source: Author's tabulation based on Teacher and Tutor Interviews.

In general, student participation was observed to be higher in tuition classes. This was because tutors could give closer attention to students (in smaller classes), adopt more effective ways of teaching, and have the flexibility to arrange extra classes or adjust existing classes to more convenient times, as illustrated in Table 4. Interruptions to school lessons caused by external factors, such as the teacher strike launched in July 2021, were also cited as a reason for increased reliance on private tutoring. While many teachers noted that tuition could not replace school education, they acknowledged that it had played an important role in filling gaps and inefficiencies in school education during the pandemic.

6.2.2 Accessibility

The pandemic impacts access to online shadow education worked in diverse ways, leading to declines as well as increases in accessibility. While issues in connecting to online classes

made access more challenging, higher demand for tuition due to greater constraints in connecting to school-level online classes and increased avenues for participation by virtue of saved time and remote connectedness across geographical locations increased the accessibility of online tuition classes.

Constraints to access

A majority of the 330 students responding to the online survey indicated facing issues in accessing online tuition classes during the pandemic, of which a larger share consisted of students from lower-income households, those attending mass classes, and those using smartphones. Accessibility issues were considerably lower with increasing income levels, decreasing class size, and using better devices. The main accessibility issues cited among students include poor signals, high data costs and more serious challenges, such as lack of necessary devices, and affordability concerns in the context of loss of

Table 4: Higher Participation in Online Shadow Education Relative to Online School Classes

Reasons	Quotes	Sources of Quote
Individual attention, better teaching and the school teacher strike	<i>"Participation of students in tuition classes was fairly good and I saw higher participation in tuition compared to the school classes. In my opinion, this is because students prefer tuition classes due to close attention and better teaching. The teacher strike also increased students' inclination towards private tuition since there are minimum disruptions."</i>	A school teacher and a part-time tutor in the Kurunegala District
Syllabus coverage	<i>"My stance on private sector tuition is that it has the ability to grow during the pandemic. Schools are unable to cover the syllabus and the missed lessons. They only have a legal obligation to cover the syllabuses. On the contrary, tuition tends to do better where they cover all the lessons and allocate extra schedules for the missed lessons."</i>	A full-time tutor in the Matara District

Source: Author's tabulation based on Teacher and Tutor Interviews.

household income. Travel restrictions and increases in tuition fees were also some challenges cited by the students.

“The main accessibility issues cited among students include poor signals, high data costs and more serious challenges, such as lack of necessary devices, and affordability concerns in the context of loss of household income.”

Lack of suitable devices affected poorer students disproportionately, with the share of students using laptops or iPads - which typically provide for a better online learning experience -increasing

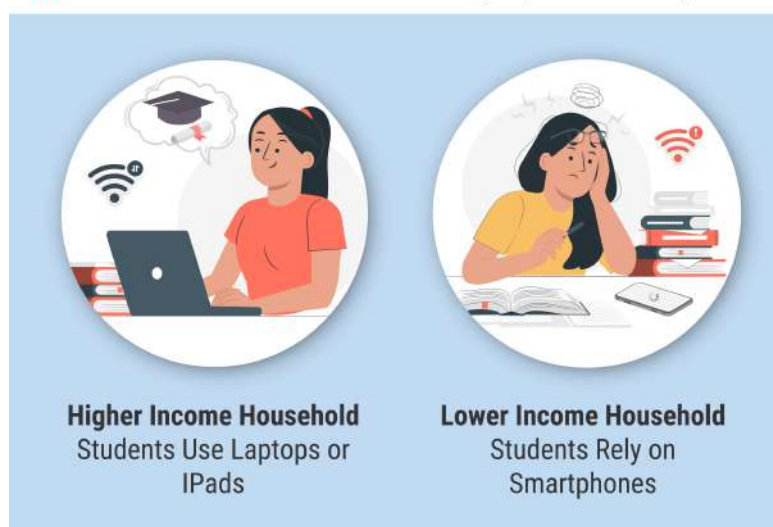
with household income level. Most students from the richest households use such devices, whereas most students from the lowest income group rely on smartphones.

A majority of interviewed students also relied on smartphones or basic mobile phones for online education among the interviewed sample of students. Some provincial schools took steps to send printed learning material home or place it at a specific place to be collected by their parents. Students highlighted multiple issues faced in accessing online lessons, including high data costs, poor connectivity (signal coverage issues), and a lack of necessary devices. Signal coverage was an issue for students from many districts, including Badulla, Matale, Nuwaraeliya, Kurunegala, Polonnaruwa, Monaragala, Jaffna, and even Colombo.⁶

"I had to face many problems with regard to connectivity. There were instances where I couldn't join due to internet issues."

- A provincial school student in the Kurunegala District-

Lack of Suitable Devices Affects Poorer Students Disproportionately



⁶ The severity of the issue was also experienced by the researchers themselves, when the telephone interviews were disrupted on several occasions when signals were weak.

Increased demand due to dysfunctional school classes

Among factors contributing to in-person tuition attendance before COVID-19, problems associated with school lessons and poor teaching featured as important reasons, collectively accounting for the major proportion of student responses. This indicates the high reliance on tuition in higher grades to perform successfully. The other reasons include peer effects followed by the influence of tuition class advertisements.

However, close to half of the respondents in the online survey sample reported starting tuition classes during COVID-19, specifically owing to the pandemic's consequences. The three most common reasons include the absence of online lessons in schools, connectivity issues experienced in accessing school lessons, and

poor-quality online teaching methods adopted in schools. Importantly, nearly half of the students who mentioned having no school lessons were from the two lowest household income groups. Saved travel time by online learning at home was another common reason. Parents' request has also considerably influenced starting of tuition classes during the pandemic.

Among the interviewed sample, 14 of the 39 students mentioned not having any school-level classes during the pandemic. 11 out of these 14 students belonged to provincial schools, while the 14 were from the Monaragala, Badulla, and Nuwaraeliya districts, from households earning below LKR 30,000 per month. Further, a few students mentioned that face-to-face tuition classes were conducted when lockdowns were lifted, limited to small groups. This flexibility to

Reasons for Attending Tuition Classes

Before COVID-19

Problems related to school lessons



Poor teaching in schools



Peer effect



Influence of tuition class advertisements



During COVID-19

Absence of online lessons in schools



Connectivity issues in accessing school lessons



Poor-quality online teaching methods adopted in schools



Save travel time due to online learning



Parents' request



arrange smaller classes in line with health and safety measures was an advantage observed in tuition classes over school classes.

"The classes were conducted via Zoom for only one subject, i.e., Science. However, it was also conducted only for a month because both the teachers and students had difficulties in connecting due to connection errors and lack of equipment."

-A national school student in the Matale District-

"The tuition classes were productive. Since I didn't have any choice due to the school not operating remotely, I had to take the maximum utility out of the online tuition classes"

-Mass scale class attending student in the Polonnaruwa District-

Greater avenues for participation

Despite access challenges faced, a fair number of surveyed students indicated being able to participate in more tuition classes during the pandemic. Main avenues include the ability to attend online classes held in distant locations, increased time available by limited travel and school closures, and the introduction of free online classes during the pandemic. The ability to attend online classes held in distant locations is the most important reason across all income groups, while classes offered free-of-charge are another important factor for students in lower-income households.⁷

6.2.3 Affordability

As with accessibility, pandemic-induced online education affected tuition affordability in diverse ways. On one hand, additional costs associated with online learning, such as data and devices,

were not affordable to some students. Additionally, saved travel and operational costs induced some tutors to lower tuition fees or increase class duration, making classes more affordable to students.

Increased data and related costs

Suggestive of lower affordability among low-income groups, expenditure on tuition classes shows a clear rising trend with household income across both the OL and AL student samples, ranging between a monthly average of LKR 3,321 to LKR 17,700 for the OL sample and between LKR 6,984 to LKR 19,578 for the AL sample (Figure 3). Tuition expenditure among the interviewed sample stood at around LKR 3,000, reflective of the less-affluent backgrounds of these students. Here, 17 of the 39 respondents mentioned having stopped tuition classes during the pandemic for various reasons, including the inability to afford data costs for both school and tuition classes and loss of household income. Some students mentioned that tuition teachers also stopped classes as student participation was low.

"The tutor stopped conducting classes because students did not have the equipment to join the classes. Even students stopped joining the classes at the end".

-Mass scale class attending student in the Matale District-

"Tutors have stopped conducting the class due to the pandemic. Students did not have the equipment and had similar issues."

-Mass scale/group class attending student in the Monaragala District-

⁷ While some free online material was available even before the pandemic, they were rarely, if at all, used. The pandemic thus played a role in generating more awareness about online resources and making them more popular.

Figure 3: Monthly Tuition Expenditure by Monthly Household Income

Source: Author's illustration based on Online Survey.

Most OL and AL students spend over LKR 2,000 per month on data costs for both school and tuition classes. Expectedly, those who spend over LKR 2,000 are concentrated among the higher household income groups. For instance, a major proportion of students from households earning over LKR 200,000 a month spend more than LKR 2,000 on data costs, compared to only about one-third of the students in the lowest income group. A higher proportion of students who spend LKR 500 and below is concentrated in the lowest income group.

Lowered fees and increased class duration

Nearly half of the students surveyed online indicated that tuition fees charged for their classes changed after the pandemic hit. Interestingly, among these students, more than half of the students indicated a decline in tuition fees, with a majority in the LKR 500-1,000 range. The two top reasons cited for lowered fees are the move to online platforms, which involve lower

operating costs and the lowering of fees by tutors due to other pandemic-related effects, such as loss of household income. On the other hand, the average duration of tuition classes increased for 165 of the 330 students surveyed, primarily due to travel time saved and additional time required to cover material in an online learning environment.

Corresponding to these findings, all tutors interviewed mentioned either keeping tuition fees unchanged, making payment non-compulsory, or reducing charges and supporting less privileged students in light of the unprecedented challenges experienced during the pandemic. This trend applied across all respondents irrespective of changes in the costs they had to incur in providing online lessons. Also, corresponding to the online survey responses, most tutors mentioned increasing the duration of their tuition classes or arranging extra classes to accommodate the many challenges associated with remote teaching and learning (Table 5).

Table 5: Reasons for Changes in Tuition Fees and Class Duration

Reasons	Quotes	Source of Quotes
Class fees		
Reduction in administrative costs	<i>"I reduced the fees since transportation and overhead costs declined. I did not incur any additional costs."</i>	A full-time tutor of large and mass classes in the Colombo District
Assistance for less-privileged students	<i>"I offered free cards for students who can't afford tuition fees, especially for students in Moratuwa, Moratumulla, Soysapura, & Lunawa."</i>	A school teacher and a part-time tutor in the Colombo District
Affordability concerns	<i>"I was unsure whether it is fair by students to charge the same fee as in physical classes. The relative costs and the benefits were balanced, although my income was reduced. I let the parents decide on what to pay, and most parents paid the usual fee, since I usually do classes for students who can afford tuition and did not face any financial difficulties."</i>	A full-time tutor in the Matara District
Ethical concerns	<i>"In my opinion, it is not ethical to increase the cost of tuition in a situation where everybody is distressed. It goes against my principles."</i>	A teaching advisor to the Sri Jayawardanapura education zone and a part-time tutor in the Colombo District
Class duration		
To elaborate, clear doubts and cover missed lessons in an online context	<i>"I extended the time of my classes by 30 minutes for further explanations and to clear the doubts of students. An extra class each month was also arranged to cover missed lessons."</i>	A school teacher and a part-time tutor in the Colombo District
	<i>"In 2021, the classes went up to 3-4 hours, because lessons had to be elaborated more when compared to physical classes since it was difficult to recognise whether students grasped the knowledge."</i>	A full-time tutor and owner of a tuition institute in the Matara District

Source: Author's tabulation based on Teacher and Tutor Interviews.

6.3 Advantages and Disadvantages of Shadow Education

A majority of surveyed students believed that the importance of private tuition in education and learning has increased following COVID-19 school closures, while only a few students opined it had declined. Similarly, a majority believed that the industry's role in the country's education sector would further increase in the future.

Some explanations given by respondents in support of the perceived current and future role of in-person and online shadow education are summarised below. As seen, responses come from students from different locations as well as school types. In justifying their stance, students pointed to several benefits of in-person tuition in general (prevalent in pre-pandemic times), and

to an increase in its importance relative to school classes during the pandemic. A few students also identified some negative aspects of tuition and the importance of school education.

Advantages in general (in-person tutoring)

Considering the general advantages of tuition, some students believe that the tuition industry is a requirement, mainly for the AL Biological and Physical Science streams, in acquiring a strong understanding of theoretical foundations. In particular, students emphasised that education received from tuition classes is better regarding knowledge acquired, service provision, efficiency, commitment, and dedication of tutors (Table 6). The key role played by tuition in covering large syllabi at the ALs, which often does not happen in schools, was also highlighted. This is likely due to the flexibility of tutors to schedule classes for

Table 6: Advantages of Shadow Education in General

Advantages	Quotes	Source of Quotes
To acquire a better understanding of theoretical foundations	<i>"If tuition wasn't a thing, almost all of us won't be able to understand many things because Mathematics and Bio-Science streams are really difficult. If you don't understand the theory well, there is no future."</i>	Group class attending student in the Gampaha District
Commitment of tutors	<i>"The commitment of tuition masters reduces the need to self-study a lot. Two hours of class done for the whole week is quite enough. Even if the student is engaged in extra-curricular activities, tutors take a huge effort to make sure students get an "A" pass at the end. They don't care about the money also."</i>	Group class attending student in the Colombo District
Syllabus coverage	<i>"I prefer if the importance of tuition classes increases as it will benefit many students because not all the schools complete the syllabus right on time."</i>	Group class attending student in the Kandy District
	<i>"Especially in AL, only tuition classes complete the full syllabus."</i>	Group class attending student in the Gampaha District

Source: Author's tabulation based on Online Survey.

longer periods and on weekends or public holidays, which is not available to school teachers in a school setting. Another reason is that administrative issues in schools can take up considerable time for school teachers during school hours.

Advantages experienced during COVID-19

The importance of shadow education relative to mainstream education rose during the pandemic. This is owing to greater flexibility to adjust to online teaching in a tuition setting and the ease of resuming in-person teaching given smaller class sizes, better teaching methods adopted, and greater accessibility. Further, the reduction of tuition fees and the ability to connect to classes countrywide too contributed to the increase in the importance of shadow education, as shown in Table 7.

“A majority of students believed that the importance of private tuition in education has increased following COVID-19 school closures, and that the industry's role in the country's education sector would further increase in the future.”

Table 7: Advantages of Shadow Education Experienced during COVID-19

Advantages	Quotes	Source of Quotes
Quality of service provided	<i>"We have really good and hardworking tutors who use good methods and techniques to teach us, unlike school teachers."</i>	Group class attending student in the Gampaha District
Ability to resume face-to-face tuition classes	<i>"Schools will take much more time than small tuition classes to reopen fully, given the large numbers. The tuition industry thus plays an important role in resuming face-to-face education."</i>	Group class attending student in the Jaffna District
Greater flexibility	<i>"As many schools in remote areas are unable to carry out online lessons, students have the advantage of joining any class, anywhere within the island (which cannot be done in the case of schools). Considering the pandemic will last for a few more years, children will benefit immensely. Moreover, as some tutors have promised to continue online lessons even after normalcy is restored, those living far away will benefit."</i>	Group class attending student in the Colombo District
Financial relief	<i>"Some tutors provide more free cards than normal physical classes, so it provides a relief to students who have financial issues."</i>	Mass scale class attending student in the Colombo District

Source: Author's tabulation based on Online survey and Student Interviews.

Table 8: Issues Experienced in Online School Classes

Issues in Mainstream Education	Quotes	Source of Quotes
Lack of conduct of clear and regular classes	<i>"I think tuition classes are more important. Tuition classes are conducted clearly and regularly compared to schools."</i>	Group class attending student in the Gampaha District
School teacher strikes	<i>"Tuition classes become more important specially during periods like this, because even though schools refused teaching for some reasons, yet we have to continue studies."</i>	Group class attending student in the Colombo District
Lack of practical lessons	<i>"The school systems do not encourage students to be practical. They just provide the notes via any of the online methods. They must be practical and students should have the idea of the subject in his/her mind, not inside the books."</i>	Group class attending student in the Colombo District

Source: Author's tabulation based on Online Survey.

Issues experienced in online school classes

Moreover, as presented in Table 8, multiple issues experienced with school online classes also contributed to a relative rise in the perceived role of tuition. The main issues highlighted include poor teaching, disrupted classes, and the teacher strike, which completely halted school online lessons since July 2021 in many public schools across the country.

Drawbacks of in-person and online shadow education

Although the majority view highlighted the need to further promote the shadow education industry, several shortcomings were also mentioned. The main factors cited include overloaded schedules, financial motives, attitudinal issues, and overdependence on tuition (Table 9).

Comparing tutoring outcomes and impacts on mainstream education, students additionally pointed out that shadow education only focuses on academic achievement. In contrast, schools were important in nurturing non-academic skills and protecting equity by virtue of free education. One respondent noted that if schools were developed properly, the need for tuition would not be as crucial, as attending both school and tuition classes is burdensome from a student's perspective.

Similar views were expressed by school teachers and tutors. A majority of respondents believed that while the importance of tutoring rose during the pandemic, it can never replace school education in the long run. This is true, especially given the key role of schools in fostering holistic education of students, moving beyond the sole focus on academics to nurturing and developing other

essential competencies such as soft skills. School education was also viewed as key in facilitating inclusive education, given the many inequities associated with accessing remote education methods. Some respondents also

pointed out that at the end of the day, the ultimate objective of tuition was profit-making, compared to schools where student learning outcomes were the end objective. These views are presented in Table 10.

Table 9: Drawbacks of In-person and Online Shadow Education

Drawbacks	Quotes	Source of Quotes
Overloaded schedules in online context	<i>"Please be a little human towards students regarding class times. Tutors should have proper scheduled times like physical classes without stressing the students all the time."</i>	Group/mass scale class attending student in the Kalutara District
	<i>"Due to online methods, we don't have much time, even to self-study."</i>	Individual/group/mass scale class attending student in the Colombo District
Increase in tuition fee charged	<i>"Although some tutors act responsibly, some do not. They have attempted to increase tuition fees even during the pandemic."</i>	Group/mass scale class attending student in the Ampara District
Undue influence on attitudes of students	<i>"Tuition plays an important role on students' attitudes and notions which is not good in certain occasions where students seem to be influenced by the lecturer's opinions rather than having their own opinion, mostly about social affairs."</i>	Individual/group class attending student in the Colombo District
Overdependence on tuition	<i>"The overreliance on tuition has created a generation of students who cannot learn anything on their own, but always seek others' help."</i>	Individual/group class attending student in the Kandy District

Source: Author's tabulation based on Online Survey.

Table 10: Importance of School Education

Reasons	Quotes	Source of Quotes
Affordability of the service provided	<i>"I think that we should be satisfied with the effort of government teachers as they do not charge us for their data, which costs more than ours."</i>	A national school/ group/ mass scale class attending student in the Colombo District
	<i>"In my opinion, tuition education cannot replace school education due to several factors, including affordability of the students. School education is a common ground for everyone to receive education. But the situation can change when it comes to O/L and A/L classes."</i>	A school teacher and a part-time tutor in the Kurunegala District
Fostering holistic education	<i>"School is important due to the extra-curricular activities provided for personality development."</i>	A national school student in the Colombo District
	<i>"I do not think any tuition system can replace school education. School is a mix of academic, leadership and extra-curricular activities. Hence, tuition will never overtake school education."</i>	A school teacher in the Jaffna District
Overburdened lifestyle with shadow education	<i>"If the government can improve school education and stop tuition classes, that is the best thing as the workload gained from school and tuition classes are unbearable for students and it places a huge pressure on students."</i>	A provincial school student in the Matara District

Source: Author's tabulation based on Online Survey, Student, Teacher and Tutor Interviews.

6.4 Suggestions for Improving the Quality of Online Shadow Education

Given the recent experiences and the likely prevalence of online and hybrid learning systems in the foreseeable future, most suggestions in response to improving the quality of shadow education centred around online education. As discussed, many students were considerably satisfied with the online tutoring experience they received compared to school lessons. However, some students felt the tuition fees needed to be more sensitive to student circumstances during the pandemic. At the same time, some recommended that tutors adopt novel methods to cater to different class sizes, accommodating

the changes in the platform and the context. Devising better strategies to communicate with students and tutoring effectively during the scheduled time limit were also highlighted as necessary, as illustrated in Table 11.

As a whole, the most commonly cited recommendation by students and teachers was for the government to take committed measures that would enable all students and teachers countrywide to actively participate in online education delivery. Providing necessary devices, internet connectivity and awareness generation campaigns for parents are important in this regard, as summarised in Table 12. The need to adopt syllabi to suit an online context and introducing novel and effective online teaching methods

Table 11: Suggestions for Improving the Quality of Online Shadow Education

Suggestions	Quotes	Source of Quotes
More sensitivity concerning tuition fee	<i>"Tutors should conduct classes and charge the fees considering the financial situation of the students."</i>	Group class attending student in the Matale District
Adopt novel teaching methods	<i>"The large-scale classes conduct the lessons coherently, but not small-scale classes. New methods should be introduced."</i>	Group class attending student in the Kurunegala District
More individual attention and better communication	<i>"Tutors could give more attention to students during online classes. Make it a two-way communication process."</i>	Group class attending student in the Matara District
Delivery of lessons effectively	<i>"The tutor should teach for the planned time limit and not purposely waste time because the students pay for the class."</i>	Group class attending student in the Colombo District

Source: Author's tabulations based on Online Survey and Student Interviews.

Table 12: Suggestions for the Stakeholders to Improve Online Education

Suggestions	Quotes	Source of Quotes
Address connectivity issues	<i>"In Bibilegama, Dialog and Mobitel coverages do not work. The only functioning service provider accessible is SLT, but the SLT bills are expensive. Most of the villagers are farmers and they are unable to afford these costs. Necessary equipment should be given to both teachers and students. Data should be provided."</i>	A national school/ group/mass scale class attending student in the Badulla District
Monitoring and evaluation of performance	<i>"Schools and tutors should conduct oral presentations and short descriptions of work and experiments to measure performance, which also facilitates soft skills development. Use innovative methods in teaching to inculcate enthusiasm."</i>	A school teacher in the Jaffna District
Adaptation of the syllabi to online contexts	<i>"Adapt the syllabi to suit the online education to maintain the standards of technology and delivering methods."</i>	A full-time tutor of large and mass classes in the Colombo District
Financial assistance	<i>"With the collaboration of the government and parents, this mode can do wonders. We need funds from the government, financial institutions, and the private sector."</i>	A teaching advisor to the Sri Jayawardanapura education zone and a part-time tutor in the Colombo District

Source: Author's tabulation based on Student, Teacher and Tutor Interviews.

through research and experimentation to stimulate student participation and engagement, which could also contribute towards soft skills development, was emphasised. Respondents acknowledged that this is not a task that the government can do on its own and called for collaborations with the non-state sector, parents, teachers and other well-wishers. Attitudinal changes in school teachers, tutors, parents, and students were also important.

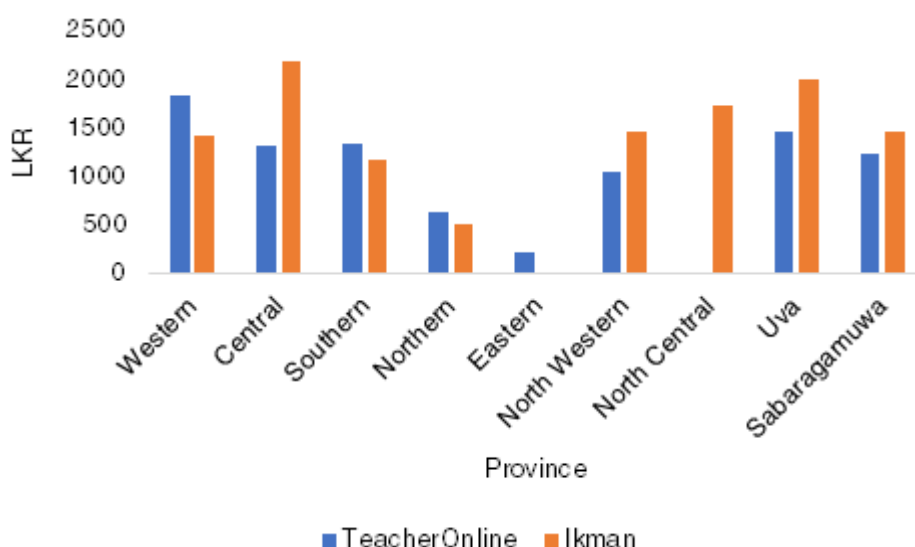
6.5 Trends in Online Tuition Advertisements

Table 15 in the Appendix presents summary statistics on tuition advertisements - according to availability - of the four websites from which tuition advertisement data were extracted. Advertisements posted in the Western Province account for the majority share across all websites. In terms of subjects and streams, science and mathematics subjects at the AL and OL comprise a relatively large share of total advertisements. Subjects in the AL Commerce stream are also frequently posted online. Most classes advertised are those conducted in Sinhala; the negligible number of Tamil classes posted online is likely due to the relative scarcity of advertisements posted online by Tamil medium

tutors. Most tutors advertising their classes online are either professional degree holders, diploma holders, or graduates. The average years of tutoring experience - data available on only one website - is 4.5 years, while online teaching experience alone is around 1.6 years.

Expectedly, a majority of classes posted online are those that are also conducted via online methods, although home visits are also prevalent to a lesser extent (mainly in respect of advertisements posted in 2019 and early 2020, prior to the pandemic). The average fees charged for tuition classes varies across the different websites. *TeacherOn* has specified rates for different durations, ranging from an hourly rate of LKR 1,652 to a monthly rate of LKR 7,074, on average. The monthly rate corresponds to the reported tuition expenditure of AL students from relatively lower-income households in the online survey. The average hourly rate specified in *Ikman.lk* is close to that of *TeacherOn*, while the monthly rate on the *SaleMe* website is considerably lower than that posted on *TeacherOn*. However, the *SaleMe* data is less precise, given the low number of observations and relatively large standard errors. Despite the low number of advertisements, the *SaleMe* website has

Figure 4: Average Hourly Tuition Fees by Province



Source: Author's analysis using extracted data from the *TeacherOn* and *Ikman* websites.

attracted a considerably larger number of average views compared to Ikman.lk.

What follows is an analysis of trends across advertisements posted on different websites based on data availability and comparability. As shown in Figure 4, hourly tuition rates posted on the *TeacherOn* website are the highest in the Western Province, whereas the Central and Uva provinces show higher rates on the *Ikman* website. Conversely, tuition fees charged are lowest in the Northern and Eastern provinces.

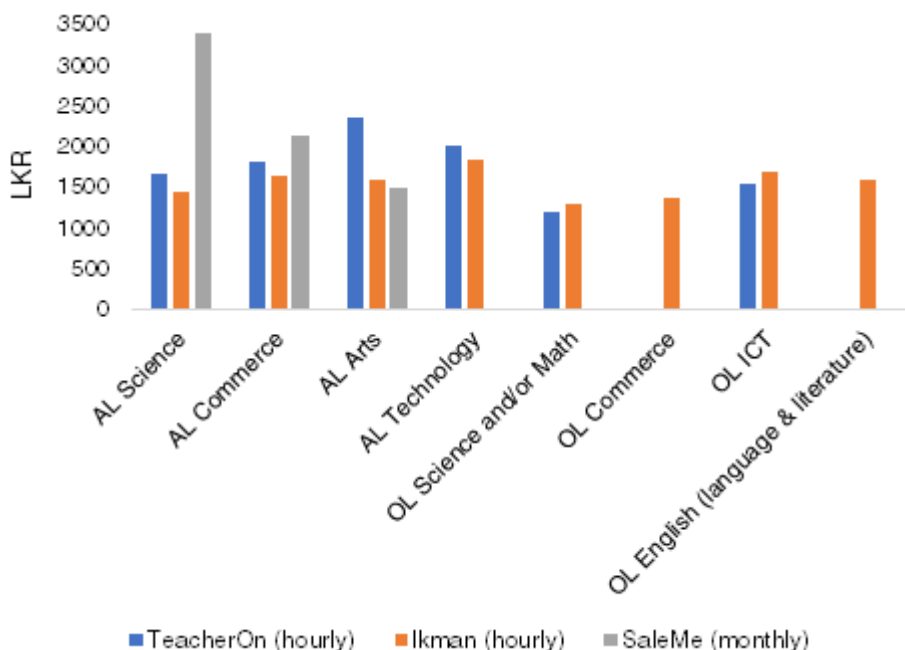
Figure 5 displays the average fees charged by subject stream and grade. The rates posted in *SaleMe* are higher, given that these are monthly rates and are available only for AL classes, compared to hourly rates for the other two websites for both OL and AL grades. The monthly *SaleMe* rates are also significantly higher for classes in the AL Science stream than other streams. However, hourly rates posted on the other websites indicate higher rates for other AL streams than the Science stream. Expectedly, OL rates are lower than AL rates on average across both the *TeacherOn* and *Ikman* websites.

Trends of tutor qualifications are fairly similar across the different subject streams. According to *TeacherOn* and *MyTutor* websites, a relatively large share of tutors are professionals or degree or diploma holders, while graduates also account for a significant share. Those with postgraduate qualifications are relatively low. Most professionals or diploma holders are concentrated in the AL technology stream.

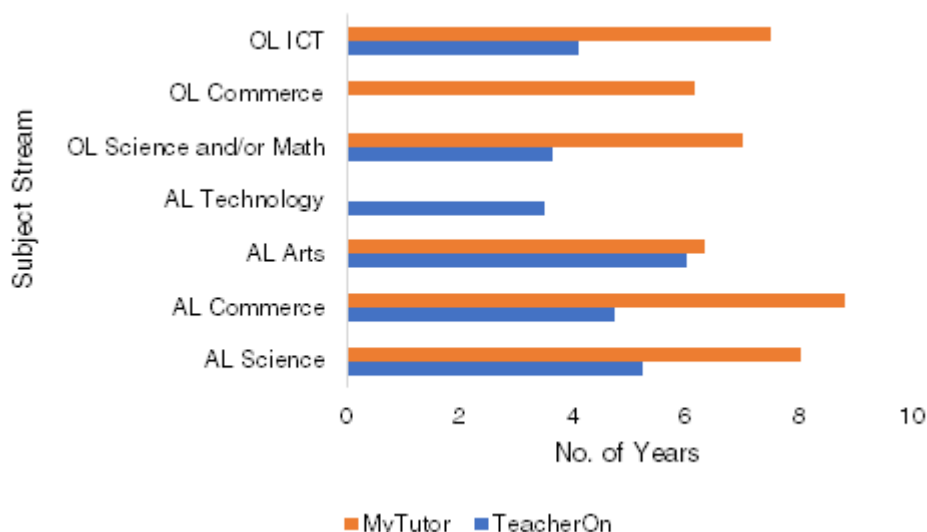
The total years of experience across subject streams vary (Figure 6). Tutors teaching AL subjects are generally more experienced than their OL teaching counterparts. Overall, tutors posting advertisements on the *MyTutor* website are more experienced than those advertising on *TeacherOn*.

The *Ikman* website has information on advertisements posted over the past three years. Data shows the gradual shift from physical to online modes during the pandemic. For instance, home visits were predominant in 2019 and its prevalence deteriorated in 2020, with a further decline in 2021. The prevalence of institutes by 2021 was negligible. The incidence of online classes has grown from 2020 to 2021.

Figure 5: Average Tuition Fees by Subject Stream



Source: Author's analysis using extracted data from the *TeacherOn*, *Ikman*, and *SaleMe* websites.

Figure 6: Tutor Experience by Subject Stream

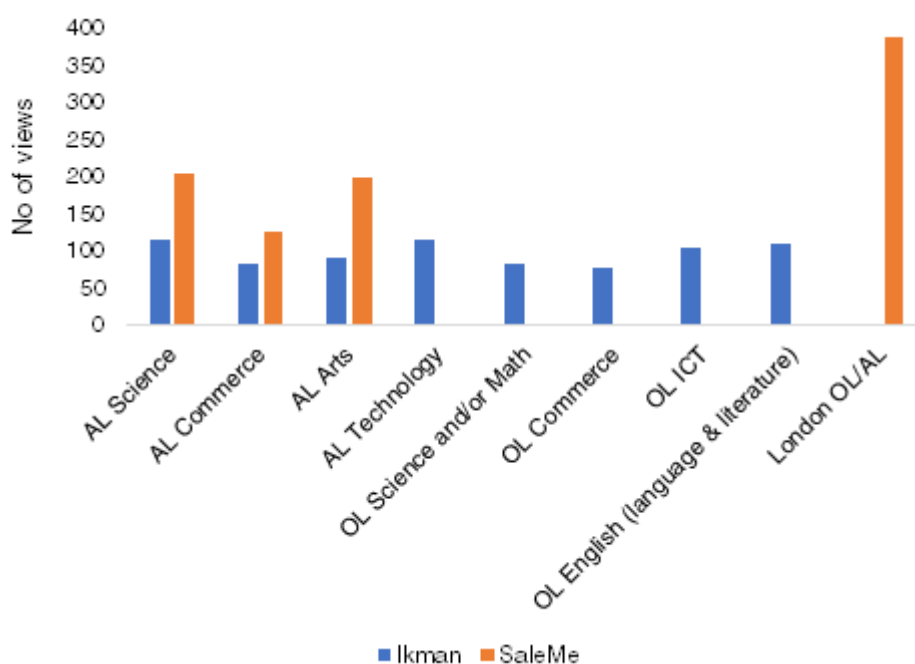
Source: Author's analysis using extracted data from the *TeacherOn* and *MyTutor* websites.

Additionally, the data suggest that online advertisements are posted mainly by tutors who provide tuition at an individual level instead of tutors affiliated with tuition institutes.

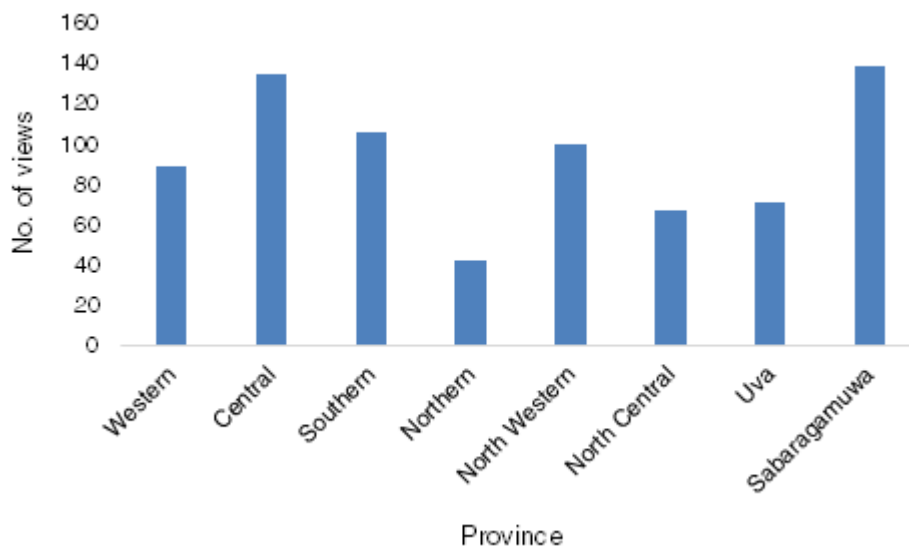
The average number of views appears to be the highest for OL and AL tutors of the London syllabus (Figure 7). Among tutors of the local syllabus, AL science subjects attract the highest

number of views across both the *Ikman* and *SaleMe* websites.

Lastly, although the Western Province posted a large bulk of advertisements across all websites, statistics from the *Ikman* website indicate that the average number of views are higher in several other provinces, including the Sabaragamuwa, Central, Southern, and Northwestern provinces (Figure 8).

Figure 7: Average Number of Views by Subject Stream

Source: Author's analysis using extracted data from the *Ikman.lk* and *SaleMe* websites.

Figure 8: Average Views by Province

Source: Author's analysis using extracted data from the *Ikman.lk* website.

7. Conclusions and Policy Recommendations

7.1 Conclusions

This study examined the role of and impacts on online shadow education in Sri Lanka during COVID-19-induced school closures against school-based online education provided during the same period. Data were obtained from several sources, including an online survey of OL and AL students, telephone interviews conducted with a sample of students in rural locations; KIIs were conducted with a sample of teachers and tutors, and online tuition advertisements extracted from four websites. Findings from the survey and interviews point to similar trends and conclusions from the student, school teacher, and tutor perspectives are summarised below. Overall, the pandemic has exposed several longstanding deficiencies in Sri Lanka's mainstream education system and has led to an increasing reliance on private tutoring to bridge these gaps. The possible impacts of the teacher strike in government schools in increasing the demand for (online) shadow education during the pandemic are worth noting.

Most students attend tuition classes, for at least one class per subject at the ALs and selected subjects at the OLs and lower grades, including Science, Mathematics, the first language, and English as a second language. Inadequate school lessons and poor teaching methods in schools are key reasons for relying on tuition pre-pandemic and during COVID-19 school closures. The pandemic saw a shift from smaller to larger online classes, given constraints in meeting physically and the ability to accommodate larger student numbers via online methods.

A strong association is observed between household income and the quality of online shadow education, in terms of the type of tuition classes attended, tuition expenditure, and

“Overall, the pandemic has exposed several longstanding deficiencies in Sri Lanka's mainstream education system and has led to an increasing reliance on private tutoring to bridge these gaps.”

devices, platforms, and methods used for online education. Individual tuition classes and higher fee-charging classes - arguably of better quality - are used mainly by students from high-income households; similarly, the share of students using laptops or iPads for online classes - which typically provide a better online learning experience - increases with household income level.

The pandemic had varying impacts on online shadow education in terms of quality, accessibility, and affordability in relation to mainstream education. Overall online learning experiences were considered superior in tuition classes, particularly regarding teaching methods used and individual attention received via better student-teacher interaction in smaller classes. Accessing online tuition classes was a notable issue for students from low-income households and in rural locations, due to lack of devices and signal issues, resulting in cancelling tuition classes in some instances due to poor student participation. Despite such constraints,

accessibility to shadow education also increased vis-à-vis mainstream education. This is owing to greater flexibility in tuition classes, enabling adaptability to connectivity problems and organising smaller classes in line with health and safety measures. The ability to join online classes held in different locations also improved access during the pandemic. While the affordability of online shadow education was negatively affected by data and device costs, this was offset to some extent by the reduction in tuition fees or the offering of free classes by certain tutors. Most students also experienced an increase in the typical duration of classes by around 30 minutes to an hour, primarily due to travel time saved and additional time required to cover material in an online learning environment.

Teacher interviews confirmed a notable decline in student participation in both school and tuition online classes during the pandemic, with the extent of decline being larger in school classes. From the teacher perspective, there were difficulties in effectively communicating with students and maintaining their interest, conducting practical components of subjects like science and mathematics online, monitoring students during class, and catering to those of different ability/competency levels. Poor digital literacy among teachers, overburdened class schedules for students, and difficulties in effectively measuring learning progress are other contributory factors.

A majority of surveyed students, school teachers, and tutors believed that the importance of shadow education relative to mainstream education has increased following COVID-19 school closures, and that the industry's role in the country's education sector will further increase in the future. This was owing to the benefits of in-person tuition, in general, prevalent in pre-pandemic times (knowledge acquired, service provision, efficiency, syllabus coverage, and dedication of tutors), as well as to an increase in its importance

relative to school classes during the pandemic (greater flexibility to adjust to online teaching and to resume in-person teaching, better teaching methods adopted, and greater accessibility). Periodic disruptions to online school classes and the complete halt caused by the teacher strike since July 2021 were key factors that contributed to the rising importance of online shadow education.

Notwithstanding the many benefits of tuition, several disadvantages were highlighted too, with some respondents noting that tuition can never replace school education. Shortcomings of shadow education identified include overloaded schedules, financial motives, attitudinal issues, and overdependence on tuition. Moreover, despite the many criticisms levelled against school education, respondents highlighted several important aspects of schools, including the importance of nurturing non-academic skills and fostering the students' holistic education, and protecting education equity by virtue of free education.

The most commonly cited recommendation in improving the quality of online shadow education was for the government to take committed measures to enable students and teachers countrywide to actively participate in online education, by providing necessary devices and internet connectivity and conducting awareness programmes for parents. The need to adopt syllabi to suit an online context and introducing novel and effective online teaching methods through research and experimentation to stimulate student participation and engagement were also emphasised.

Analysis of tuition advertisements posted online indicates that the Western Province accounts for the majority share across all websites, although the average number of views is higher in several other provinces, including the Sabaragamuwa, Central, Southern, and North Western provinces. In terms of subjects and

streams, Science and Mathematics subjects in AL and OL grades comprise a relatively large share of total advertisements and attract the highest number of views. Most tutors advertising their classes online are either professional degree holders, diploma holders, or graduates across all subject streams. The average fees charged for tuition classes are highest in the Western, Central and Uva Provinces and lowest in the Northern and Eastern Provinces. Tutors teaching AL subjects are generally more experienced than their OL teaching counterparts.

7.2 Policy Recommendations

The above findings highlight many advantages of shadow education in relation to mainstream education, both prior to and during the pandemic, as well as disadvantages and areas for improvement. The results also suggest that the role of both in-person and online shadow education will likely increase in importance in the future. Many scholars argue that rather than position themselves as competitors, government policymakers should work closely/together with the shadow education industry and the broader school community to contribute to the betterment of the education system as a whole (Wei & Guan, 2021; Hu et al., 2015). Similar collaborations were also observed in many countries during the pandemic, where governments, schools, and private tutors joined forces to provide students with online education.

Based on the study findings, the following discussion proposes some potential policy recommendations to education policymakers in improving the quality, accessibility, and equitability of shadow education in general.

7.2.1 Improving Quality

Obtaining comprehensive data

A key starting point is to collect nationally representative comprehensive data on the scale, scope, and intensity of private tutoring, which can

facilitate the undertaking of robust research into the drivers and impacts of shadow education. Data collection can be done at minimal cost by modifying existing surveys such as the HIES and Labour Force Survey to include specific questions on the production, consumption, and effectiveness of private tutoring. For example, in Sri Lanka, data on production can be obtained by having the option of 'private tutor' as a category under the main occupation in the Labour Force Survey (Institute of Policy Studies of Sri Lanka, 2017). A category for private tutoring expenditure already exists under the HIES, which provides a measure of consumption. This can be expanded to include further information, such as the type and intensity of tutoring and the level at which it is consumed (Ibid).

As done in some countries, schools can also take the initiative in collecting information on private tutoring of their students. The collected information will help measure shadow education's impacts on academic achievement and help schools understand what subjects and which grades need more attention in terms of improving the quality of education provided in schools.

Data collection can also be motivated and facilitated by participating in international learning assessments such as the PISA and TIMMS, which is also vital for credible benchmarking of learning outcomes against other countries. Although Sri Lanka's 2018 budget proposals allocated LKR 25 Mn for participating in PISA, it did not take place.

Monitoring and regulating the industry

Improving the quality of tutoring also calls for better regulation of the industry, which is largely lacking in many countries despite heavy regulations for mainstream education. In the Thai context, Wei & Guan (2021) argue that even though an establishment is registered as a private business, the government should still have the right to intervene and oversee the teaching management regarding education. In Sri Lanka, the only existing

laws prohibit private tutoring for children on Sundays, Poya days, and a week ahead of nationally qualifying examinations. The National Education Commission proposed several other measures to monitor and regulate private tutoring in Sri Lanka in 2017, including setting up an authority within the Ministry of Education to provide for the regulation, registration, and inspection of premises and facilities used for private tuition groups of 20 or more, the licensing of individuals engaged as private tutors, and specifying penalties for violating legal provisions (Jayasekera, 2017). However, these have so far not moved beyond the suggestion phase. Regulations are also important for school teachers who provide private tutoring, particularly in ensuring that tutoring does not negatively affect the quality of teaching at school. Moreover, it is vital to implement standardised evaluation and measurements for all shadow education service providers.

Investing in online pedagogical expertise

Improving the quality of online and hybrid tutoring is critical in the new normal. The pandemic has demonstrated the need for effective teachers who can facilitate and support learning instead of merely delivering content (Saavedra J. , 2021). As discussed, students experienced many challenges in online education regarding comprehending the material, clearing doubts, and measuring learning progress.

Developing the pedagogical expertise required for online teaching is equally important for both tutors and school teachers since many school teachers also function as private tutors. Given that teacher training in Sri Lanka currently has minimal provisions for distance teaching, educational and training programmes need to be substantially revised. Teacher education and training at National Colleges of Education, universities, and the National Institute of Education, should be developed to include content on best practices in distance teaching methods - including online teaching and

professional development - and learning assessments - such as formative assessments geared towards informing in-process teaching and learning modifications - based on well-researched evidence and in consultation with experts from fields including education, medicine, and psychology. While online tuition advertisement data suggest that most tutors have a diploma or graduate-level educational qualifications, they should also undertake selected courses in teacher training to ensure the required pedagogical expertise is acquired, particularly for teaching in online environments.

7.2.2 Improving Accessibility

The study findings show that many students could access online shadow education classes of their choice regardless of location, subject to device availability and good connectivity. Thus, for students to make maximum use of online shadow education services, better connectivity in terms of devices and internet facilities are essential, especially in rural and marginalised locations. As done in other countries, the government should follow suit to collaborate with shadow education providers as well as other organisations to provide necessary resources for access. While it may not be feasible to provide equipment to each student, the provision of specific numbers of devices and networks in given locations, such as schools and tuition centres, in line with needs can be considered. The country's well-established decentralised education administration system can facilitate coordination among provincial, zonal, and divisional education authorities and *Grama Niladhari* divisions to collect data at the village-level in this regard. In the 2022 Budget, the government proposes to invest in providing fibre optic connections to all schools in Sri Lanka (Ministry of Finance, 2021), which is a welcome suggestion. However, complementary investments in providing computers and other infrastructure too are needed if schools, teachers, and students can make practical use of such facilities.

Improving communication platforms is also vital in addressing accessibility issues in rural locations. According to a global survey of 143 countries on national-level education responses to the pandemic, 82% of countries encouraged different types of interaction methods between teachers and parents and/or students during school closures (UNESCO; UNICEF; World Bank; OECD, 2021). These include phone calls, messaging apps, email, dedicated e-school platforms, and home visits where other methods failed. Similar well-established and organised systems to maintain communication between school teachers, tutors, and students are important, especially during crises. Advertisement data show that, such communication platforms can also inform students and parents about available tutoring options in times of crisis without making them fully reliant on online advertisements. Such methods can be limited to more urban locations and not be within reach of all students.

7.2.3 Improving Equity and Affordability

A common concern about expanding shadow education is its effects on education equity, especially compared to free public education offered in schools. As seen in the study findings, higher income households can afford better quality tuition. This concern is not unique to Sri Lanka but has been observed and dealt with in other countries too. An important example is Sweden, where similar to Sri Lanka, the mainstream education sector is well known as a guarantor of equal education opportunities for all, with the dramatic rise in private tutoring largely seen as a

threat to the equitability of school education. Subsequently, the government worked together with the shadow education industry to explore how shadow education can serve as a bridge of communication between mainstream education and parents via proper regulation, which led to the development of a national policy on supplementary education (Hallsen, 2021). Under this policy, shadow education is encouraged as a critical facilitator to mainstream education while paying close attention to individual students' learning progress. The government provides subsidies or tax deductions for lower-income families to attend tuition classes to combat equity concerns. Scholarships are also offered to academically disadvantaged students who have made remarkable academic progress (Ibid).

Sri Lanka should also consider assisting needy and well-deserving students in attending shadow education classes based on a well-established transparent mechanism to identify such students in collaboration with parents, tutors, school teachers, and schools. One suggestion is to specify a certain percentage of non-fee-paying students per class for group classes and a percentage of hours to be taught for free in the case of individual classes, and have a mechanism to allocate students with affordability issues to benefit from such a scheme. The government can also collaborate with private tutors and with community and religious organisations, to connect students with tutors who are willing to provide tutoring for a minimal fee; as seen, many tutors lowered fees in light of pandemic impacts, suggesting that they may well be open to similar arrangements in non-crisis situations too.

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Appendix - Questionnaires

A1: Online Survey Questionnaire

Demand for Private Tutoring during COVID-19: An Initial Scoping Exercise for Sri Lanka

The Institute of Policy Studies of Sri Lanka (IPS) is conducting this survey to understand how COVID-19 school closures and the shift to remote education is affecting your learning outcomes, especially as you prepare for the O-Levels under these unusual circumstances. In particular, we are interested in understanding the trends in demand for private tuition classes during the COVID-19 pandemic, and how important a role tuition has played in supporting your education and learning outcomes during this period of extended school closures.

All responses shared would be treated as confidential and we will not share this information with anyone else. Our ultimate objective is to explore ways in which your remote education experience can be improved, both in school and tuition classes.

The survey would take about 15 minutes to complete in total. You can provide answers in whatever language most convenient for you. Thank you very much for your participation!

1. BACKGROUND INFORMATION

1. Email address
2. I. What type of school do you attend? *
 1. National school
 2. Provincial school
 3. Private school (government approved)
 4. International school
 5. Semi-Government school
3. II. Up to which grade does your school operate? *
 1. Grades 1-11
 2. Grades 6-11
 3. Grades 1-13
 4. Grades 6-13
4. III. If your school has Advanced Level classes (grades 12 and 13), is the Science stream available?
 1. Yes
 2. No
 3. Do not know

5. IV. District of residence? *

1. Colombo
2. Gampaha
3. Kalutara
4. Kandy
5. Matale
6. Nuwaraeliya
7. Galle
8. Matara
9. Hambantota
10. Jaffna
11. Mannar
12. Vavuniya
13. Mullaitivu
14. Kilinochchi
15. Batticaloa
16. Ampara
17. Trincomalee
18. Kurunegala
19. Puttalam
20. Anuradhapura
21. Polonnaruwa
22. Badulla
23. Monaragala
24. Rathnapura
25. Kegalle

6. V. Gender *

1. Female
2. Male

7. VI. Ethnicity *

1. Sinhalese
2. Tamil
3. Muslim
4. Burgher
5. Other?

9. VIII. Parents' highest level of education *

	1. No formal schooling	2. Primary School completed	3. Secondary school completed	4. GCE O/L completed	5. GCE A/L completed	6. Degree/ Diploma or higher
Father	☐	☐	☐	☐	☐	☐
Mother	☐	☐	☐	☐	☐	☐

10. IX. Parents' employment status (scroll left to see all the options) *

	1. Employed– Government/ Semi Government sectors	2. Employed – Private Sector	3. Entrepreneur (Business owner)	4. Self- employed (No employees under him/ her)	5. Overseas/ foreign employment	6. Housewife/ Househusband
Father	☐	☐	☐	☐	☐	☐
Mother	☐	☐	☐	☐	☐	☐

11. X. How many members currently live in your household? *

12. XI. How many school-going siblings do you have? *

13. XII. How many members in your household earn an income? *

14. XIII. What is your household's monthly income (LKR)? *

1. Below 30,000
2. 30,000 - 50,000
3. 50,001 - 70,000
4. 70,001 - 100,000
5. 100,001 - 200,000
6. Above 200,000

15. XIV. Did your household experience a loss in income due to the pandemic? *

1. Yes
2. No

16. XV. If yes, approximately by how much, per month (LKR)?

1. Less than 5,000
2. 5,000 - 10,000
3. 10,001 - 25,000
4. 25,001 - 50,000
5. Above 50,000

2. TUITION AND SCHOOL CLASS ATTENDANCE

17. 2.1 What is the current status of the operation in your school? *

1. Fully closed
2. Partially open (selected grades are in operation)
3. Fully open

18. 2.2 If you chose option b. above, is your school open for your grade?

1. Yes
2. No

19. 2.3 Out of the following, for which subjects do you currently attend tuition classes, and how many classes per subject? *

	Not attending	One class	Two classes	More than two
1. Science	☐	☐	☐	☐
2. Mathematics	☐	☐	☐	☐
3. First Language (Sinhala/Tamil Language and literature)	☐	☐	☐	☐
4. English (as Second language)	☐	☐	☐	☐

20. 2.4 What type of class do you attend? (Select all that apply)

6. Individual
7. Small group (2-10 students)
8. Medium group (11-50)
9. Large group (51-100)
10. Mass/hall (more than 100)

21. 2.5 In a typical week, approximately how many hours do you spend on all of your tuition classes? *

1. Less than 2
2. 2-4
3. 6-8
4. 8-10
5. Over 10

22. 2.6 In a typical week, approximately how many hours do you spend on all your school classes?

1. Less than 10
2. 10-20
3. 21-30
4. 31-40
5. Over 40

23. 2.7 What device do you use most regularly for online/remote learning? *

1. Laptop computer/iPad
2. Desktop computer
3. Smartphone
4. Basic mobile phone
5. Landline telephone
6. Printed material
7. Television
8. Radio
9. Other:

24. 2.8 How are lessons delivered in the school and tuition classes you attend? (Select all that apply) *

	a. Online, through platforms like Zoom or Microsoft Teams	b. Online, through WhatsApp or Viber	c. Other remote methods like telephone calls	d. Face- to-face
School	☐	☐	☐	☐
Tuition	☐	☐	☐	☐

25. 2.9 What types of learning material are provided in your school and tuition classes? (Select all that apply) *

	a. Digital hand-outs or notes	b. Material sent (posted) as hardcopies	c. No hand-outs are provided. (only note-taking)
School	☐	☐	☐
Tuition	☐	☐	☐

26. 2.10 How is teaching conducted? (Select all that apply) *

	a. Repeats the textbook	b. Reads out notes prepared	c. Encourages active participation and engagement (questions, quizzes, student discussions etc.)
School	☐	☐	☐
Tuition	☐	☐	☐

27. 2.11 How are lessons delivered? *

	1. Using both audio and video	2. Audio only
School	☐	☐
Tuition	☐	☐

28. 2.12 What are the types of tuition classes you attended before school closures in March 2020? (Select all that apply). *

1. Individual
2. Small group (2-10 students)
3. Medium group (11-50 students)
4. Large group (51-100 students)
5. Mass/hall class (over 100 students)

29. 2.13 How were lessons delivered in these classes? (Select all that apply) *

1. Face-to-face (physical)
2. Online, through platforms like Zoom or Microsoft Teams
3. Online, through WhatsApp or Viber
4. Other remote methods like telephone calls

30. 2.14 Are there any subjects for which you started tuition classes specifically due to school closures following the pandemic? * Mark only one oval.

- 1. Yes
- 2. No

31. 2.15 If yes, what are these subjects? (Select all relevant options)

If no, please skip to question 2.17

- a. Science
- b. Mathematics
- c. First Language (Sinhala/ Tamil)
- d. English

32. 2.16 What are the reasons you started tuition for these subjects? (Select 3 most important reasons)

- a. There were no remote lessons conducted by the school
- b. Remote classes were conducted in school, but were not effective due to connectivity issues
- c. Remote classes were conducted in school, but were not effective due to poor teaching methods
- d. Other classmates started classes
- e. Parents' wish/request
- f. School teachers' request
- g. Advertisements posted by tutors
- h. More time available due to school closures

33. 2.17 What are the reasons you attended tuition classes before the pandemic?

(Select 3 most important reasons) *

- a. School lessons were not adequate to prepare for the O-Levels
- b. Poor quality teaching of school teachers
- c. Since most other classmates attended
- d. Parents' request
- e. School teachers' request
- f. Advertisements/requests by tutors
- g. Own decision/preference

3. AFFORDABILITY AND ACCESSIBILITY

34. 3.1 On average, how much do you spend (LKR) on data costs per month for both school and tuition classes?

- a. Less than 500
- b. 500-1,000
- c. 1,001-1,500
- d. 1,501-2,000
- e. Over 2,000

35. 3.2 How much do you spend in total as tuition fees for all your tuition classes per month (LKR)? *

36. 3.3 How many tuition classes do you attend in total? *

37. 3.4 Did tuition fees change for any of your classes during the pandemic? *

If no, please skip to question 3.8.

1. Yes
2. No

38. 3.5 If yes, on average, did it increase or decrease?

Increased

Decreased

39. 3.6 By how much (in LKR, approximately) did it change in total?

- a. Less 500
- b. 1,000
- c. 1,500
- d. 2,000
- e. Over 2,000

40. 3.7 What is the main reason for the change?

1. The move to online/other remote learning platforms
2. Other pandemic-related issues (loss of household income, lockdowns etc.)
3. The usual annual increase in fees
4. Change in the number of students in the class
5. Introduction of revision classes
6. Do not know

41. 3.8 Did the average duration of your tuition classes change during the pandemic? *
1. Yes, it increased
 2. Yes, it decreased
 3. No, it did not change
42. 3.9 If the duration changed, what is the main reason for the change?
- a. Travel time saved by the move to online/other remote learning platforms
 - b. More/less time needed than before to cover the material in a remote environment
 - c. Time or cost constraints using remote methods (e.g.: a free Zoom session lasts for only 40 minutes)
 - d. Connectivity issues related to remote methods
 - e. Change in the number of students in the class
 - g. Do not know
43. 3.10 Were you able to continue tuition classes without any long-term interruptions since the onset of the pandemic? If yes, please skip to question 3.13. *
1. Yes, I didn't face any problems
 2. No, I faced a lot of issues
 3. I faced some interruptions from time-to-time
44. 3.11 If you had accessibility issues, what are the main reasons? (Select 3 most important reasons)
- a. Poor signals/connections
 - b. Lack of necessary devices
 - c. High data costs
 - d. Travel restrictions
 - e. Increase in tuition fees
 - f. Loss of household income
45. 3.12 Did you have to completely stop any of your tuition classes due to such issues?
1. Yes
 2. No
46. 3.13 Were you able to attend more tuition classes than before, when tuition moved to online platforms? *
1. Yes
 2. No

47. 3.14 If yes, in what way? (Select all that apply) *

1. Ability to attend online classes held in distant locations
2. Increased time available to attend classes due to school closures
3. Increased time available to attend classes due to saved travel time
4. Online classes offered for free

4. QUALITY

48. 4.1 Has the quality of your learning experience in school and tuition classes changed during the pandemic? *

If no, please skip to question 4.5

	1. Yes	2. No
School	☐	☐
Tuition	☐	☐

49. 4.2 If yes, in what ways has the quality of school classes changed? (Select all that apply).

	Improved	Worsened
1. Teaching methods	☐	☐
2. Learning material	☐	☐
3. Individual attention/instruction received. from tutor	☐	☐
4. Learning progress/outcomes	☐	☐
5. Assessments to monitor learning.	☐	☐

50. 4.3 In what ways has the quality of tuition classes changed? (Select all that apply).

	Improved	Worsened
1. Teaching methods	☐	☐
2. Learning material	☐	☐
3. Individual attention/instruction received.	☐	☐
4. Learning progress/outcomes	☐	☐
5. Assessments to monitor learning.	☐	☐

51. 4.4 Are there any other ways in which the quality of your learning experience in school or tuition classes changed? Please explain.

52. 4.5 Compared to remote school lessons, how would you rate the quality of tuition classes provided during the pandemic? * Mark only one oval.

- a. Same as school lessons
- b. Better quality
- c. Poorer quality
- d. Depends on the specific subject or class
- e. Not sure

53. 4.6 If you selected b, c, or d above, in what ways do you observe quality differences?

- a. Teaching methods
- b. Learning material
- c. Individual attention or instruction received from tutor
- d. Learning progress made.
- e. Assessments used to monitor learning outcomes.

5. FUTURE OF THE TUITION INDUSTRY

54. 5.1 In your opinion, how has the importance of private tuition in your education and learning changed following school closures due to the pandemic?

- 1. It has increased in importance
- 2. It has decreased in importance
- 3. It has not changed
- 4. Not sure

55. 5.2 In your opinion, will the importance of tuition increase in the future? *
1. Yes
 2. No
 3. Uncertain
56. 5.3 Do you have any other comments with regard to the role or importance of the tuition industry?

End of Survey. Thank you for your participation.

A2: COVID-19 Impacts on Education in Sri Lanka: Student Interview Guide

Introduction to the study

The Institute of Policy Studies of Sri Lanka (IPS) is currently conducting a study on remote education during COVID-19 in Sri Lanka. The main objective of this study is to understand how the access to and quality of education in schools and tuition classes have been affected during the pandemic. The ultimate objective is to explore ways in which students' remote education experience can be improved, both in school and tuition classes.

Confidentiality

All responses shared would be treated as confidential and we will not share this information with anyone else. We are planning to analyse the responses we gather through this survey and produce a summary document to be shared, using either print or electronic media.

Voluntary participation

Your participation in this study is voluntary. You are free not to participate at all or to withdraw from the study at any time, despite consenting to take part earlier. You could at any time request to destroy the samples and information gathered from you.

1 Background Information

1. What type of school do you attend? (If the respondent is unsure of the type, ask for full name of the school).
 - a. National
 - b. Provincial
 - c. Private
 - d. Semi-government
 - e. International

2. District in which school is located: _____
3. District of residence (if different from above) _____
4. Gender
- Male
 - Female
5. Ethnicity
- Sinhalese
 - Tamil
 - Muslim
 - Burgher
 - Other (specify) _____
6. Current grade _____
7. Parents' highest level of education:

	Father	Mother
No formal schooling		
Primary School completed		
Secondary school completed		
GCE O/L completed		
GCE A/L completed		
Degree or higher		

8. Parents' employment status

Employment Status	Father	Mother
Employee in the government/semi-government sector		
Employee in the private sector		
Employer – business owner/entrepreneur		
Self-employed/own household business		
Overseas employment		
Housewife/Househusband		
Retired		
Unemployed		
Deceased/do not know		

9. Number of household members: _____
10. What is your household's average monthly income (LKR)?
 - a. Below 30,000
 - b. 30,000-50,000
 - c. 50,001-70,000
 - d. 70,001-100,000
 - e. 100,001-200,000
 - f. Above 200,000
11. Did your household experience loss in income during the pandemic?
 - a. Yes
 - b. No
12. If yes, approximately by how much (LKR)?
 - a. Less than 5,000
 - b. 5,000-10,000
 - c. 10,001-25,000
 - d. 25,001-50,000
 - e. Above 50,000
 - f. Do not know

2 COVID-19 Impact on School Education

1. Since March 2020 when schools first closed, has your school ever been in operation? If so, when and for how long? (If the respondent cannot remember exact dates etc., just get an estimate of the total duration in which the school was in operation).
2. During school closures, has your school been conducting remote lessons?
 - a. Yes
 - b. No

If no, please skip to question 9.

3. If yes, what are the methods used?
- a. Online, through platforms like Zoom or Microsoft Teams
 - b. Online, through WhatsApp or Viber
 - c. Other remote methods like telephone calls
 - d. Sent printed material to home
 - e. Face-to-face
 - f. Other (please specify) _____
4. Were you able to access learning through any of these methods?
- a. Yes
 - b. No

If no, please skip to question 9.

5. If yes, what device/s do you use to access classes?
- a. Laptop/iPad
 - b. Smart phone
 - c. Basic mobile phone
 - d. Landline telephone
 - e. Printed material
 - f. Other (specify) _____
6. What issues have you faced in accessing classes?
- a. High data costs
 - b. Poor connectivity (signal coverage issues)
 - c. Lack of necessary devices
 - d. Travel restrictions
 - e. Other (specify) _____
 - f. No issues faced
7. Did your school use any methods to assess your learning during this period? (Assessments, assignments, tests etc.) If yes, please provide some details about the nature of assessments, how often they were conducted etc.
8. Overall, how has your experience been with remote learning provided by your school? Please explain. (Ask about teaching methods used, types of learning material shared, learning progress made, attention/support received from teachers etc.)

Answer question 9-11 if you did not or could not access remote education provided by your school. Otherwise, please proceed to Section 3.

9. Did you have access to any remote lessons provided by the government or private sector? If yes, which ones?

- a. Online platforms like the E-Thaksalawa Learning Management System
- b. YouTube educational videos
- c. Television programmes
- d. Other (specify) _____

10. If no, what were the reasons?

- a. High data costs
- b. Poor connectivity (signal coverage issues)
- c. Lack of necessary devices
- d. Travel restrictions
- e. Other (specify) _____
- f. No issues faced

11. Has your school taken any other measures to keep you involved in your studies during this period? If yes, in what ways? Please explain. (Assessments, learning material sent to home, inquiries from teachers etc.)

3 COVID-19 Impact on Tuition Classes

1. Do you attend tuition classes at present?

- a. Yes
- b. No

If no, please skip to question 7.

2. If yes, please provide some details about the classes you attend.

Type of class (individual/group/mass class)	
Total number of classes attended	
Total monthly amount spent on classes (LKR)	

3. How are these classes conducted during the pandemic?
- Online, through platforms like Zoom or Microsoft Teams
 - Online, through WhatsApp or Viber
 - Other remote methods like telephone calls
 - Printed material sent to home
 - Face-to-face
 - Other (please specify) _____
4. Overall, how has your experience been with remote learning provided in tuition classes? Please explain. (Ask about teaching methods used, types of learning material shared, learning progress made, attention received from teacher etc.)
5. Have you observed any quality differences in education received in school and tuition during the pandemic?
- Yes
 - No
6. If yes, in what ways?
- Teaching methods
 - Learning material
 - Individual attention or instruction received from the teacher/tutor
 - Learning progress made
 - Assessments used to monitor learning outcomes
 - Other (please specify) _____
7. Did you attend tuition classes before the pandemic?
- Yes
 - No

If no, please skip to Section 4.

8. If yes, please provide some details.

Subjects	
Type of class (individual/group/mass class)	
Total number of classes attended	
Total monthly amount spent on classes (LKR)	

9. What are the main reasons you stopped attending classes during the pandemic?
 - a. Loss of household income
 - b. Increase in tuition fees
 - c. Inability to access classes conducted via remote methods
 - d. Inability to afford data costs for both school and tuition classes
 - e. Travel restrictions
 - f. Other (please specify) _____

4 Education Support during the Pandemic

1. Have your parents or any other adult family member in the household helped you with your remote studies during the pandemic?
 - a. Yes, parent
 - b. Yes, other adult family member
 - c. No

If no, please skip to question 4.

2. If yes, in what ways?
 - a. In following/understanding lessons conducted by the school or tuition classes
 - b. In completing homework given by the school or tuition classes
 - c. In completing assessments given by the school or tuition classes
 - d. Other (please specify)
3. How important has such assistance been to you in your learning experience during this time?
 - a. Extremely important, I cannot manage without it
 - b. Fairly important, I would have faced problems in learning without it
 - c. Somewhat important, but I can manage without it
 - d. Not important, I can manage without it
4. Have you received support from any other individuals or organisations to continue online or other remote classes (school and/or tuition) during the pandemic?
 - a. Yes
 - b. No

5. If yes, please provide some information on the sources and types of support received. (Financial support from the government, private organisations, individuals etc./free or subsidised devices/ free teaching etc.)

6. Do you think remote education has been effective during the pandemic? If not, based on the challenges you have faced, what are some practical measures you could suggest to the government/school administrators/tutors in improving access to and quality of learning? (Ask about each separately).

- Government
- School administrators (principals/teachers)
- Tutors

End of questionnaire. Thank you very much for your participation and feedback.

A3: COVID-19 Impacts on Education in Sri Lanka: Teacher/Tutor Interview Guide

Introduction to the study

The Institute of Policy Studies (IPS) is currently conducting a study on Private Tutoring during COVID-19 in Sri Lanka. The main objective of this study is to understand how the demand for private tutoring has been affected by the COVID-19 pandemic, and its implications on access to and quality of education received. The ultimate objective is to explore ways in which students' remote education experience can be improved, both in school and tuition classes.

Confidentiality

All responses shared would be treated as confidential and we will not share this information with anyone else. We are planning to analyse the responses we gather through this survey and produce a summary document to be shared, using either print or electronic media.

Voluntary participation

Your participation in this study is voluntary. You are free not to participate at all or to withdraw from the study at any time, despite consenting to take part earlier. You could at any time request to destroy the samples and information gathered from you.

1. What type is your school? (National/Provincial/Private/International/semi-government)
2. What are the classes you teach and subject/s?
3. How has the pandemic affected the studies and extra-curricular activities of the school in general?

4. Could you briefly explain about how your school conducts online classes?
 - a. What platforms do you use?
 - b. How many hours per day? Any extra allocation for OL and AL students?
5. Have you received any support from the government (MoE) or any other private/ NGOs for conducting and facilitating online studies? If yes, please explain.
6. What is your experience on student's engagement in online classes? Do they actively participate? Barriers they face? Any actions your school had taken to increase student's participation?
7. What are the issues faced by teachers when conducting online lessons? Did you have to purchase the necessary devices using personal funds?
8. Do you also conduct private tuition classes?

If no, please skip to question 16.

9. If yes, could you briefly explain about tuition classes you conduct, both before the pandemic and since March 2020?

	Before the Pandemic	Since the Onset of the Pandemic
Subject/s, Grades		
Number of students/Type of class (individual/group/mass class)		
Mode (online/other remote method/in-person)		
Location		
How many days per week, how many hours per class?		

10. How has the COVID-19 pandemic affected your tuition classes?
 - a. Have you completely moved to online classes, or do you conduct physical classes as well depending on the situation?
 - b. What are some of the constraints you faced in moving to online/other remote platforms?
 - c. What are some of the constraints faced when conducting in-person classes during the pandemic?
 - d. Did you have to stop classes at least for a short period? If so, what are the main reasons? (Time needed to switch to remote platforms, student's inability to join online classes, dissatisfaction with online classes etc.)

11. Can you give us some details about the online classes/other remote classes you conduct?
 - e. Online platforms you use
 - f. Methods of teaching
 - g. Learning material used
 - h. Methods of assessing student learning
 - i. Extra costs/ time involved
12. If you have had to incur more costs and/or time due to the shift to remote classes, how did you account for this? Did you increase tuition fees?
13. Did you change the duration of any of our classes? If so, did you increase or decrease? What are the main reasons?
14. How is the student participation for tuition classes?
 - a. Do they actively participate in classes? Do you observe any particular trends?
 - b. Do you see an increase or decrease in the number of students enrolled after moving to online platforms? What are the reasons for such changes?
 - c. Can you see a difference in participation/engagement of students for school lessons and private tuition?
15. What are the main issues/ challenges you and your students face due to online education? (Skip if relevant information was obtained already)
16. In your opinion, what are the positives and opportunities of online/remote education?
(Prompt: travel time, using new teaching methods, open to students from all over the country, physical capacity etc.)
17. In your opinion, what are the negatives and adverse impacts of online/remote education?
(Prompt: Difficult to keep attention, low attendance, cannot identify weak students, poor connections/ lack of devices, assessments, difficult to track payments etc.)
18. Do you have any suggestions to improve online education further?
19. Do you think that the role of private tuition in education is increasing in Sri Lanka, especially after the onset of the pandemic? If so, is this a positive or negative development? Please explain.

End of questionnaire. Thank you very much for your participation and feedback.

Appendix - Tables

Table 13: Descriptive Statistics of the Online Survey and Telephone Interviewed Student Samples

Variables	Online survey		Telephone interviews	
	OL (%)	AL (%)	Number	Share (%)
Gender				
Female	72.6	64.8	30	76.9
Ethnicity				
Sinhala	92.6	88.8	16	41.0
Tamil	3.2	5.6	22	56.4
Muslim	2.1	3.9	1	2.6
Burgher	0	1.3	0	0
Other	2.1	0.4	0	0
School type				
National	60.6	70.0	11	28.2
Provincial	20.2	6.5	25	64.1
Semi-government	3.2	7.4	0	0
Private	9.6	13.9	3	7.7
International	3.4	2.6		
Subject stream				
Biological Science	NA	7.7	NA	
Physical Science		57.5		
Commerce		21.0		
Arts		12.9		
Technology		0.9		
Grade				
8	NA		4	10.5
9			3	7.9
10-11			19	50.0
12-13			12	31.6
District				
Colombo	35.5	43.0	1	2.6
Gampaha	30.1	23.3	0	0
Kalutara	5.4	6.1	0	0
Kandy	2.2	4.8	0	0
Matale	1.1	0.4	4	10.3
Nuwaraeliya		2.2	9	23.1
Galle	1.1	1.3	0	0
Hambantota		4.8	0	0
Matara	4.3	2.6	1	2.6
Jaffna	1.1	0.4	7	17.9
Ampara		0.4	0	0
Kurunegala	1.1	3.5	1	2.6
Puttlam	2.2	0	0	0

Variables	Online survey		Telephone interviews	
	OL (%)	AL (%)	Number	Share (%)
Anuradhapura		1.3	0	0
Polonnaruwa	1.1	0.4	1	2.6
Badulla		0.4	9	23.1
Monaragala		0.9	6	15.4
Rathnapura	15.1	2.6	0	0
Kegalle		1.8	0	0
Father's education				
No formal schooling	2.2	0.9	1	2.6
Primary school completed	6.5	4.8	7	17.9
Secondary school completed	16.1	11.8	5	12.8
O/L completed	21.5	21.4	17	43.6
A/L completed	23.7	34.9	5	12.8
Diploma/degree and above	30.1	26.2	1	2.6
Mother's education				
No formal schooling	2.2	1.3	0	0
Primary school completed	6.5	3.9	9	23.1
Secondary school completed	15.1	12.7	4	10.3
O/L completed	16.1	20.5	18	46.2
A/L completed	25.8	31.9	5	12.8
Diploma/degree and above	34.4	29.7	0	0
Father's employment status				
Employee in the government sector	20.4	19.2	5	12.8
Employee in the private sector	33.3	32.2	21	53.8
Employer – business owner/entrepreneur	12.9	22.3	0	0
Self-employed	22.6	10.5	8	20.5
Overseas/foreign employment	0	5.2	0	0
Housewife/Househusband	1.1	0.9	1	2.6
Retired	5.4	4.8	0	0
Unemployed	0	3.5	1	2.6
Diseased/do not know	4.3	1.3	2	5.1
Mother's employment status				
Employee in the government sector	18.5	11.9	1	2.6
Employee in the private sector	9.8	4.9	6	15.4
Employer – business owner/entrepreneur	5.4	11.9	0	0
Self-employed	6.5	7.6	3	7.7
Overseas/foreign employment	0	0.5	2	5.1
Housewife/Househusband	45.7	53.5	19	48.7
Retired	4.4	1.1	0	0
Unemployed	9.8	8.1	1	2.6
Deceased/Do not know	0	0.5		
Household members	4.5 (1.0)	4.5 (1.0)	4.9 (1.4)	
Number of earners	1.6 (0.8)	1.8 (1.1)	NA	
Number of siblings	0.9 (0.8)	0.9 (0.8)		

Variables	Online survey		Telephone interviews	
	OL (%)	AL (%)	Number	Share (%)
Monthly household income (LKR)				
Below 30,000	14.7	14.6	26	66.7
30,000>= & <50,000	26.3	20.2	10	25.6
50,000>= & <70,000	17.9	12.9	1	2.6
70,000>= & <100,000	16.8	19.7		
100,000>= & <200,000	13.7	20.2	1	2.6
Above 200,000	10.5	12.5		
Income loss during the pandemic	63.2	68.2	24	61.5
Monthly loss amount (LKR)				
Less than 5,000	6.6	5.6	3	7.7
5,000>= & <10,000	47.5	21.0	11	28.2
10,000>= & <25,000	14.8	33.3	4	10.3
25,000>= & <50,000	22.9	20.4	1	2.6
Above 50,000	8.2	19.8	1	2.6
Average monthly tuition fees	7,653.5 (6,916.1)	12,563.6 (9,634.9)	3,000	
Observations	96	234	39	

Note: NA = Not applicable or not available.

Source: Author's tabulation based on Online Survey and Telephone Interviews.

Table 14: Summary Statistics of the Teacher Sample Interviewed

No	Designation	Tuition Class Type	School Type	Area/District	Subject and Grade
1	Instructor at the National Institute of Education (NIE) and teacher advisor	Small group classes	NA	Sri Jayewardenepura Education Zone, Colombo	OL and AL Sinhala
2	Full-time tutor	Individual and small group	NA	Matara	A/L physics
3	Vice Principal and part-time tutor	Small group	National	Colombo	O/L English
4	Full-time tutor	Large and mass classes	NA	Nugegoda and Gampaha	A/L Business Statistics
5	School teacher and part-time tutor	Medium group	Provincial	Gampaha	O/L English, A/L General English
6	Full-time tutor and owner of a tuition institute	Mass classes	NA	Matara	A/L Sinhala
7	School teacher and part-time tutor	Medium group	Provincial	Colombo	O/L Commerce
8	School teacher and part-time tutor	NA	Provincial	Kegalle	English-Grade 5, 8, 7, 13
9	School teacher and part-time tutor	Small group classes	International	Kandy	O/L English
10	School teacher	NA	Provincial	Jaffna	English and Literature
11	School teacher and part-time tutor	Individual and small group	Provincial	Kurunegala	A/L Biology
12	School teacher	NA	Provincial	Nuwaraeliya	History, Geography and Civics (grades 8-11), Political Science (AL)
13	School teacher and part-time tutor	Group	Provincial	Nuwaraeliya	Science (grades 8-10), Mass media (grades 10 & 11)
14	School teacher and part-time tutor	Individual	Provincial	Rathnapura	Mathematics, Environmental Studies, Tamil- Grade 2 Christianity- Grade 6-11
15	School teacher and part-time tutor	Individual and group	Provincial	Badulla	ICT- Grades 6-11 GIT- A/L
16	School teacher and part-time tutor	Group	Provincial	Rathnapura	Islamic religion- Grades 10-13

Note: NA = Not applicable or not available.

Source: Author's tabulation based on Teacher Interviews.

Table 15: Summary Statistics of Tutoring Websites

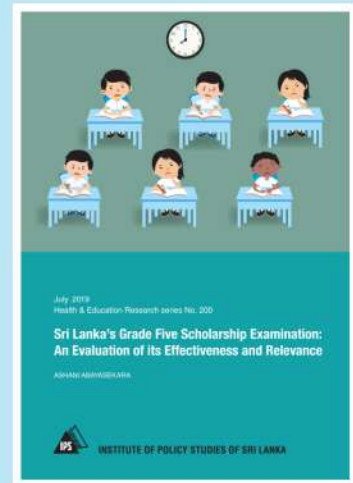
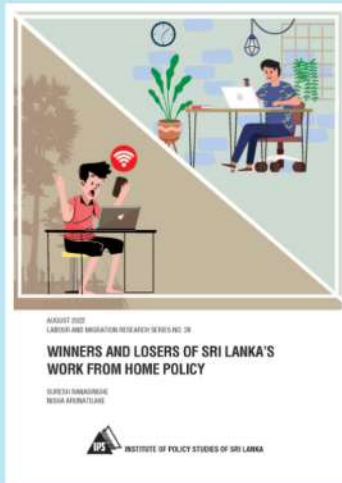
	TeacherOn	MyTutor	Ikman	SaleMe
Province (%)				
National	0	NA	21	0
Western	67		62	89
Central	14		5	11
Southern	5		1	0
Northern	1		0	0
Eastern	1		0	0
Northwestern	5		2	0
North Central	1		1	0
Uva	1		0	0
Sabaragamuwa	5		1	0
Multiple	0		6	0
Subject stream (%)				
AL Bio/Physical Science	28	21	12	49
AL Commerce	22	8	13	23
AL Arts	7	4	1	23
AL Technology	10	0	2	0
OL Science and/or Mathematics	28	15	23	0
OL Commerce	0	4	3	0
OL ICT	4	8	7	0
First language (grade 6- adult education)	0	0	3	0
English language & literature (primary- adult education)	0	0	7	0
OL other	0	9	0	0
London OL/AL	0	0	1	6
Primary	1	0	0	0
Professional courses	0	6	0	0
Medium of instruction (%)				
Sinhala	89	59	21	NA
Tamil	0	03	0	
English	11	38	33	
Sinhala and English	0	0	46	
Qualifications of tutors (%)				
Post-graduate	2	16	NA	NA
Graduate	13	64		
Undergraduate	26	6		
Professional/Diploma	57	13		
AL	2	0		
Experience of tutors (no of years)				
Total	4.5	NA	NA	NA
Online	1.6			
Mode of classes (%)				
Online	NA	48	75	NA
Home visits		0	15	
Online and home visits		0	9	

	TeacherOn	MyTutor	Ikman	SaleMe
Tuition fees (LKR)				
Hour	1652 (1386)	NA	1,468.47 (1,309.21)	NA
Day	1979 (1024)		NA	
Month	7074 (1387)			
Week	1729 (1683)			
No of views (average)	NA	NA	95 (129.7)	193 (76.3)
No of advertisements	279	157	1,283	37

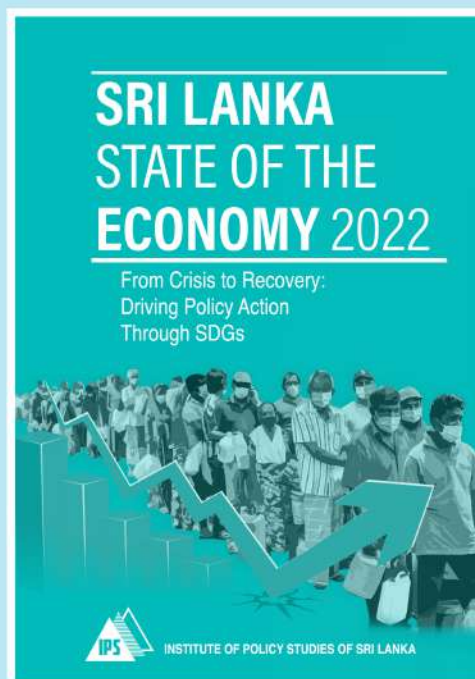
Note: Standard errors of mean values are indicated within parentheses, where relevant.
NA = not available.

Source: Data extracted from tutoring websites.

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