Early Childhood Development and lockdown in South Africa: An update using NIDS-CRAM wave 3

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Abstract

This updated policy paper identifies Early Childhood Development (ECD) attendance trends up to the last quarter of 2020 using wave 3 of the National Income Dynamics Study- Coronavirus Rapid Mobile Survey (NIDS-CRAM). Compared with the start of the third quarter of 2020, a partial recovery in ECD attendance is identified in the last quarter of 2020. Among NIDS-CRAM adult respondents interviewed in November/December 2020 and living with children aged 0-6, 28% reported at least one child attending an ECD programme in the past 7 days. This is up from just 7% in July/August. Extrapolating these NIDS-CRAM adult responses to the level of the child suggests that about 31% of children aged 0-6 were enrolled in ECD programmes by November/December, compared to at most 15% in July/August. However, of wave 3 respondents (living with children aged 0-6) 39% reported at least one child attending an ECD programme in February 2020. Despite the notable recovery from quarter three to quarter four of 2020, ECD attendance had not recovered to pre-lockdown levels and remained lower compared to prior years. Continued support for the sector remains imperative.

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Executive summary

In September 2020, we released a paper titled “A Sector Hanging in the Balance: Early Childhood Development and Lockdown in South Africa” (Wills, Kotze and Kika-Mistry, 2020). The paper highlighted that attendance at Early Childhood Development (ECD) programmes was at a 20-year low in July/August 2020, even though the hard lockdown in South Africa had ended and programmes could reopen. A lingering question at the end of the paper was whether the “collapse” in ECD programme attendance would persist or whether a recovery would occur.

In this updated policy paper, we answer this question by identifying ECD attendance trends up to the last quarter of 2020 using wave 3 of a longitudinal telephonic survey known as the National Income Dynamics Study - Coronavirus Rapid Mobile Survey (NIDS-CRAM).

1. ECD attendance trends in 2020

- **There was a partial recovery in ECD attendance in the last quarter of 2020 compared with the start of the third quarter of 2020.** Among NIDS-CRAM respondents interviewed in November/December and living with children aged 0-6, 28% reported at least one child attending an ECD programme in the past 7 days. This is up from just 7% reporting attendance in July/August. Extrapolating these NIDS-CRAM individual level responses to the level of the child suggests that about 31% of children aged 0-6 were enrolled in ECD programmes by November/December, compared to at most 15% in July/August. It is not clear what the main reason was for this recovery, but it could be attributed to various factors. A largely informal ECD sector may have been able to bounce back on its own, buoyed by significant recovery in the labour market over the period (Bassier, Budlender and Zizzamia, 2021) and more adults returning to the workplace. Recovery could also be related to external support for reopening of programmes. The partial recovery occurred before the roll-out of an approved government stimulus package targeted at the sector but could have occurred after a court judgement requiring that government subsidies owed to ECD programmes be paid. Efforts to support centre re-openings were also actioned by various non-profit organisations (NPOs) and philanthropy groups.

- **ECD Attendance had not recovered to pre-lockdown levels and remained lower compared to prior years** despite the notable recovery in ECD attendance levels by the fourth quarter of 2020. Among NIDS-CRAM respondents interviewed in November/December 2020 and living with children aged 0-6, 39% reported that at least one child was attending an ECD programme in February 2020 compared to 28% in the past 7 days.

- **Programme closure remained a significant reason for the non-return of children to programmes by the fourth quarter of 2020.** Of wave 3 respondents living with children attending ECD in February but not in the past 7 days, roughly 31% cited temporary closures of centres as the main reason for non-attendance and a further 6% indicated that the centre closed permanently. Therefore, regardless of the reasons for the partial recovery, continued support for the sector remains imperative.

- **The recovery in ECD attendance does not appear to be entirely driven by the same children enrolled in programmes pre-lockdown returning to those programmes by November/December.** The wave 3 data suggests that up to a third of reported ECD attendance in November/December could be attributed to children who were not attending pre-lockdown (in the month of February). There are three possible reasons for this result. First, this could be due to changes in the composition of children residing in NIDS-CRAM respondents’ households across data collection waves or months of the year, or due to children in the household moving out of the
0-6 age bracket. Second, just a few months matter for whether children are deemed ready to attend ECD programmes. More children would have reached an age to be considered ready to join programmes by the end of the year. Third, this may be due to seasonality and irregularities in ECD attendance that exist in the system.

2. Low fee collection poses a threat to further recovery of the sector

The wave 3 data suggests that in addition to programmes being temporarily closed, households’ ability to afford ECD fees was likely a key constraint to a larger recovery of the ECD system towards the last quarter of 2020.

- Of the NIDS-CRAM wave 3 respondents living with children aged 0-6, 68% indicated that in October they or someone in their household were not able to afford the fees for children to attend an ECD facility. What is concerning is that among respondents paying fees for children attending programmes pre-lockdown, almost half (48%) indicate that they couldn’t afford ECD fees in October. This has direct implications for children’s access to ECD programmes.

- The ability to pay ECD fees earlier in the year is significantly associated with whether children attend programmes later in the year. After controlling for respondents’ background characteristics, we estimate that the reported return to ECD programmes in November/December is 11 percentage points higher if fees were being paid pre-lockdown. Furthermore, even after accounting for attendance in February and fees paid that month, respondents (living with children aged 0-6) are 43 percentage points more likely to report a child attending ECD in the past 7 days if they said they could afford fees in October, compared to those that could not afford fees in October.

- Households’ ability to afford ECD fees is closely tied to gender and socio-economic status. Compared with respondents who could afford ECD fees in October, respondents who report that they could not afford ECD fees were more likely to be women, poorer, grant recipients, less likely to be employed and more likely to be unemployed but searching for work. Under the current ECD financing system, this evidence suggests that where ECD attendance is linked to fee payment, widening inequalities in access to ECD are expected.

3. Many children continue to access ECD services without paying fees

NIDS-CRAM wave 3 suggests that while fees are typically charged for ECD services, a sizable proportion of ECD programmes are likely operating despite minimal or no fees being collected:

- Of respondents living with children aged 0-6 that attended ECD programmes in February, a quarter reported that neither they nor anyone else in the household paid fees for those ECD services that month.

- Of respondents that said they were unable to afford ECD programme fees in October and fees were not paid for children to attend pre-lockdown, 29% indicated that children in their household attended an ECD programme in the past 7 days (November/December).

This implies that in many instances, children are being cared for by persons outside the household for little reward or even at a significant loss. Arguably, payment could occur through other in-kind forms of payment. The government subsidy of R17 per-child-per-day may also assist registered operators who comprise only a fraction of all operators. Yet relying on these income sources without collecting fees hardly seems a viable business model. It is highly probable that in many cases children’s access to ECD is buoyed through the goodwill of ECD operators and NPOs. But where fees are not collected, this raises major concern about the quality of services that can reasonably be provided.
4. Concerns about the quality of ECD services

In this paper, we focus on the South African ECD sector from the perspective of programme access. Unfortunately, we do not have supply-side information to accompany this such as current data on the financial health of operators, or how the quality of their services has been affected by reduced fee collection in 2020. It is highly probable that lockdown and the pandemic has not only suppressed access to ECD but has impacted negatively on the quality of programmes as operators struggle to collect fees from parents or caregivers. We cannot observe this directly, but we do note the following:

- **Pre-lockdown, households’ ability to pay ECD fees was associated with whether programmes were able to supply meals to children – an important indicator of quality.** Of NIDS-CRAM wave 3 respondents who indicated that they paid fees for children to attend an ECD programme in February, 61% indicated that a child received a meal at the programme that month. By comparison, among respondents who did not report fees paid for children attending ECD in February, only 41% said children received meals at the programme that month.

In conclusion, the twin goals of increasing both access to ECD services and improving the quality of these services remains under threat in South Africa. As the country faces a “second wave” of COVID-19 infections and a return to an adjusted level 3 lockdown at the time of writing (January 2021), this is likely to stall a further recovery in the ECD sector in 2021. Support for the sector remains imperative.
1. Introduction

In September 2020, we released a paper titled “A Sector Hanging in the Balance: Early Childhood Development and Lockdown in South Africa” (Wills, Kotze and Kika-Mistry, 2020). As the title implied, the Early Childhood Development (ECD) sector was in a major predicament moving into the third quarter of 2020. From mid-July to mid-August 2020, we estimated that about 13% of children aged 0-6 were attending ECD programmes compared to 47% in 2018. The predominant reason for non-attendance at programmes was that programmes had not reopened despite a 6 July 2020 court ruling that they could operate. An unresolved question at the end of the paper was the extent to which and for how long the “collapse” in ECD programme attendance would continue.

In this new paper, we update trends on ECD attendance up to the period early November to mid-December 2020 using wave 3 of the longitudinal telephonic survey called the National Income Dynamics Study - Coronavirus Rapid Mobile Survey (NIDS-CRAM). Due to an improved questionnaire in wave 3 compared to wave 2 of NIDS-CRAM and a larger sample size, we interrogate the validity of the July/August 2020 estimates of attendance from wave 2. We are also better positioned to explore the reasons for non-attendance and non-return to ECD programmes by the end of 2020. The findings are useful for tracking access to ECD services or childcare and could be used to inform the development of new financing strategies for the sector.

The primary aim of this paper is to update trends on ECD attendance in 2020. However, new question additions to the wave 3 ECD module in NIDS-CRAM provide greater specificity as to how supply- and demand-side factors influence ECD attendance rates. For example, questions are added on whether fees were being paid for children to attend ECD programmes pre-lockdown, on ability to afford ECD fees in October 2020, and whether respondents are living within a 5km radius of an affordable and open ECD programme.

The NIDS-CRAM wave 3 results point to a partial recovery of the ECD sector by November/December 2020. The data suggests that ECD programme attendance increased significantly from July/August 2020. Despite the approval of a stimulus package for the ECD sector in October 2020, the package had not been rolled out when NIDS-CRAM wave 3 data was collected. Therefore, the partial recovery occurred before a roll-out of a stimulus package for the sector which is only expected to be implemented in the first quarter of 2021. The partial recovery could be due to various factors. It could relate to the resumption of normal ECD operations (and the ability of a largely informal ECD sector to bounce back on its own). Fee payments, for example, may have been buoyed by significant recovery in the labour market over the period (Bassier, Budlender and Zizzamia 2021). External supporting mechanisms may have also been fundamental to reopening. For example, innovative support activities and programmes implemented by NPOs and donors, coupled with court rulings favouring the payment of outstanding government subsidies to programmes, may have spurred reopening efforts.

Regardless of the reasons for the partial recovery, continued support for the sector remains an imperative. Despite the notable recovery in ECD attendance levels by the last quarter of 2020, attendance had not recovered to pre-lockdown levels and remained notably lower compared to prior years. We find that ability to afford ECD fees is consistently and substantially associated with the return to ECD programmes after the official reopening. In turn, this is likely to affect the supply of ECD services with respect to both the number of programmes in operation and the quality of their offering. While we report on the ECD sector from the perspective of programme access, we do not have information on the financial health of operators, and how the quality of their services has been affected by reduced incomes in 2020. For example, child-practitioner ratios may have been affected as staffing cuts took place across centres or the nutritional content of food provided at programmes may have been negatively affected by reduced turnovers. Furthermore, continued recovery of the sector is now under sustained threat due to a ‘second wave’ of COVID-19 infections underway at the time of writing. This could impact negatively on the sector.

A surge in COVID-19 infections was experienced towards the end of December 2020 and into January 2021 in most provinces, while the Eastern Cape province experienced an earlier second
surge from around mid-November 2020. The recent COVID-19 infections are dominated by South Africa's new COVID-19 variant (501.V2) which is much more transmissible than the initial virus strain.\(^4\) In a statement on 15 January 2021, the delayed reopening of public and private schools was announced, with learners returning on 15 February 2021 rather than the initial date of 25 January 2021.\(^5\) This decision was made in response to increased infection rates and significant pressures on the health system. Although schools are closed, there is nothing preventing ECD operators from remaining in operation, albeit the lack of official directives provided in this regard. Even if programmes are permitted to operate as infections surge, parent concerns about COVID-19 (see Wills, Kotze, Kika-Mistry, 2020) may further suppress the recovery and operators may be reluctant to remain open.

To contextualise the timing of the NIDS-CRAM wave 3 interviews, they were conducted before the ‘second wave’ of COVID-19 cases in South Africa. These interviews also took place when the stringency of lockdown regulations was at its lowest (level 1 lockdown) and COVID-19 daily cases averaged between 770 to about 8,000 towards the end of the survey. The planned 4th and 5th set of NIDS-CRAM interviews are scheduled for the first quarter of 2021. Thus, we hope to be able to provide an update on the status of ECD attendance in the coming months.

The structure of this updated paper is as follows: The first section summarises findings on the pre-lockdown reach of ECD services to children and households, discusses existing financing in the sector and highlights key findings from NIDS-CRAM wave 2. In sections 3 and 4 we outline our key research questions and describe the data used. In particular, section 4 highlights how the NIDS-CRAM wave 3 ECD module resolves some shortcomings of the wave 2 ECD module. A key improvement is the removal of a restrictive “skip pattern” in wave 2 which limited the identification of new attendees at ECD programmes and failed to acknowledge seasonality in ECD attendance. The removal of this restriction makes a significant difference to attendance estimates as discussed in section 5. Sections 6 and 7 provide some context on who has been attending ECD programmes since lockdown, as well as reasons for non-attendance. Finally, section 8 considers the quality of ECD provisioning by focusing on meal provision, after which we conclude the paper with policy recommendations for the ECD sector.

2. Background

2.1. The reach of ECD services to households and adults

In our September 2020 paper, we provided context about the ECD sector in South Africa pre-COVID. We reiterate some salient characteristics. First, the sector is large and when considered in terms of the numbers of children participating in ECD programmes, it is considerably larger than what is generally believed or cited in government reports (Gustafsson 2018). As many as 3.8 million children aged 0-6 were enrolled in ECD programmes in 2018 if we consider all types of ECD programmes, including ‘day-mothers’, ‘gogos’, and ‘child-minders’. South Africa experienced a significant expansion in access to ECD programmes between 2002 and 2018. The General Household Survey (GHS) shows that while less than 20% of children aged 0-6 were enrolled in ECD programmes pre-2003, about 45% were enrolled in 2018.

Access to ECD services impact beyond just the child who attends. The 2018 GHS indicates that 2.3 million households contained a child aged 0-6 attending an ECD programme. This equates to about 6-7 million adults residing in households with children aged 0-6. The NIDS-CRAM wave 2 findings indicate that about 5.6 million adults residing with a child aged 0-6, report at least one child attending an ECD programme before the national lockdown in March 2020 (Wills, Kotze and

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4 A large study by health officials in Britain found that young children are half as likely as adults to transmit the UK variant (quite distinct from the South African variant) to others. But it also found that the new variant is 30-50% more contagious than the initial strain for both adults and children. This implies that more children will get the virus, even if they are still proportionally less contagious and less prone to get infected than adults (See Nierenberg 2021, and Public Health England 2020).

5 Statement was made by the Deputy Minister of Basic Education, Dr Reginah Mhaule.
Thus, the closure of ECD programmes due to the national lockdown would have had an impact beyond ECD operators to the lives of millions of children, millions of households and millions of adults who rely on these services.

2.2. Financing of the ECD sector pre-lockdown

The ECD sector in South Africa is mostly comprised of informal services, and to a large extent, these services are provided by private providers, including non-profit organisations (NPOs), subsistence entrepreneurs, or micro-social enterprises (BRIDGE et al. 2020). The provision of ECD services is largely demand-driven with services emerging in response to the needs of communities. ECD programmes serving the poorest communities are often small-scale and consist of a few staff members who earn subsistence stipends, often without formal employment contracts or any benefits (BRIDGE et al. 2020).

A key characteristic of the sector is that it is heavily reliant on parent/caregiver’s ability to pay fees (Ilifa Labantwana et al. 2019). Using the General Household Surveys (2017-2018), we have previously shown that fees are charged for 74% of children aged 0-6 years attending ECD programmes that are not Grade R or school-based programmes (Wills, Kotze and Kika-Mistry 2020). If one excludes the services of ‘day-mothers’, ‘gogos’ and ‘child-minders’ from the group of ECD programmes, then fees are charged for as many as 87% of children aged 0-6 years. While ECD programmes are dependent on fees, income from fees, especially in the most marginalised communities can be inconsistent due to parent/caregiver’s ability to pay and seasonal changes in demand and attendance.

In addition to fees, the government through the Department of Social Development, provides an operational subsidy of R17 per-child-per-day to registered ECD centres for about 264 days a year (less than R4500 per-child per-year). By comparison, per-day spending on primary school learners in South Africa is roughly R96 per learner per-day.6 To qualify for the subsidy for any particular child, ECD programmes need to demonstrate that the child qualifies in terms of an income means test whereby the joint income of the child’s household is below a certain threshold.7 While the subsidy is provided to registered centres, it only supports at most 700,000 children at registered centres while unregistered centres account for about 1.5 million children who would likely meet a subsidy means-test. (BRIDGE et al. 2020).8 Further, the payment of these subsidies is tied to the daily attendance of each child enrolled in the programme. Thus, attendance of children at ECD centres drives the flow of income to operators in the form of state subsidies and/or fees from parents.

We note that further research work is required to better understand levels of subsidization in the sector, and accounting for the provision of conditional grants for infrastructure or maintenance that are also occasionally allocated by provinces. For example, it’s currently not clear what percentage of programmes are solely reliant on private fee collection, or solely reliant on subsidies.

2.3. Summary of main findings from wave 2

Following the declaration of a state of national disaster to contain the spread of COVID-19, ECD programme operators across South Africa were instructed to close on 18 March 2020. The reopening of programmes was delayed relative to the phased reopening of the economy. Eventually, a High Court judgement on 6 July 2020 ruled that ECD programmes could reopen immediately, subject to meeting safety standards (Fabricus 2020). Using wave 2 NIDS-CRAM data, we identified that 38% of adults living with children aged 0-6, reported at least one child attending an ECD programme before the lockdown in March 2020 (Wills, Kotze and Kika-Mistry 2020). But only 12% (of the 38%) indicated that children had returned to these programmes by mid-July, after programmes were permitted to reopen. Extrapolating our results to the child level we estimated that just 13% of children

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6 This is based on the R19,099 per learner per year current expenditure, discounted using the Basic Education Price Index (BEPI) (Spaull, Lilenstein and Carel 2020).
7 The bulk of ECD-related budgets are managed at a provincial level, and a 2011 study which looked at government funding for ECD across three provinces (North West, Western Cape and Eastern Cape) found that the threshold for eligibility varied across provinces, ranging from a joint income of R1800 per month in the North West to R3000 per month in the Western Cape (Giese, et al. 2011).
8 Further research work is required to clarify levels of subsidization in the sector.
-aged 0-6 were attending ECD programmes between mid-July to mid-August 2020 compared to 47% in 2018 as indicated in the General Household Survey.

The dramatic contraction in the ECD sector between March and July/August 2020 was attributed to the prohibitive requirements associated with reopening safely imposed by the regulatory environment. Constraints to reopening were coupled with shocks to the demand for ECD services, specifically in relation to reduced household income and parent fears of children contracting COVID-19 at programmes. Respondents were more likely to report that children had returned to ECD programmes after the lockdown in urban compared to rural contexts. Sending older children back to school was strongly associated with younger children returning to ECD programmes. Where ECD attendance had not resumed, the burden of childcare was borne within the household, particularly among mothers.

### 2.4. Policy changes and emergence of support for the ECD sector since NIDS-CRAM wave 2

This section provides an outline of the current policy environment that ECD providers operate in, as well as identifying changes in policy that have emerged in 2020 to mitigate the impacts of the lockdown on the ECD sector. This section also highlights the emergence of support from Non-Government Organisations (NGOs), Non-Profit Organisations (NPOs) and other ECD stakeholders to provide immediate relief to the sector. While there are delays in implementation for some of these support packages, the commitment by the state and other role players in society is a significant step in the right direction.

Following the High Court Judgement allowing programmes to reopen on 6 July, the Minister of the Department of Social Development (DSD) gazetted directives for all ECD programmes to open on 10 July 2020, and conceded that all programmes could open immediately, subject to meeting the requirements outlined in the directives and Standard Operating Procedures (SOPs) (Government of South Africa 2020). Communication regarding the reopening process and requirements for reopening was not as coherent as it could have been and communications were not easily accessible by ECD operators. In the midst of confusion, it was clear that the significant compliance requirements would have to be borne by ECD operators with very minimal support from the state provided only to registered ECD programmes.

However, in a statement issued in mid-August 2020, Minister Lindiwe Zulu stated that R1.3 billion out of the country’s economic stimulus package would be allocated to the short-term employment of 36,000 youth compliance monitors for ECD programmes. The initial idea was for these youth compliance officers to collect information from registered and unregistered centres which would help in moving towards a comprehensive database of ECD operators and an ECD management information system for better targeted support, wider reach of subsidies and strengthened monitoring and evaluation in the sector. However, this was more of a medium-term strategy and was unlikely to provide the emergency support required by the sector. The announcement was followed by heated debate and a week-long national protest involving several ECD stakeholders against this ‘illogical’ allocation without urgent financial aid to support more than 175,000 individuals in the ECD workforce who were at risk of losing their jobs (Chabalala 2020).

On 15 October 2020, President Cyril Ramaphosa announced his “Public investment in a mass employment strategy to build a new economy”, with the Department of Social Development (DSD) establishing the Temporary Employment Protection Support Scheme which is a relief fund for registered and unregistered ECD programmes. The stimulus package was established to minimise the loss of income, support the continued operation of ECD programmes and reduce the risk of permanent closure (The Presidency, Republic of South Africa 2020). The scheme was set up with a budget of R380 million to support 83,333 employees or sole practitioners of eligible ECD programmes for a maximum of six months. While the grant amount is only R760 per person per month, the fact that it targets both registered and unregistered programmes is a significant step towards supporting the sector. As part of the broader strategy, R116.3 million has been earmarked
for the DSD to provide top-up payments to 25,000 employees to meet COVID-19 regulations for sector reopening. To date, the stimulus package has not been implemented, with several challenges and delays in establishing a system to facilitate payments to the largely informal ECD sector.

On 11 May 2020, Minister Zulu directed that provincial DSDs would “continue to pay subsidies in order to fulfill their administrative responsibilities and payment of stipends” (South African Government 2020) regardless of attendance. But there were several reports of non-payment of owed subsidies during the lockdown, furthering the plight of some registered ECD programmes (Vorster 2020). On 20 October 2020, a North Gauteng High Court Judgement against the Minister of Social Development and all MECs (except the MEC in the Western Cape) ruled that the Minister and MECs must pay full subsidies to registered ECD programmes for the duration of all lockdown alert levels, whether they are operational or not, for the entire 2020/21 financial year (SA Childcare Association 2020). The judgement⁹, therefore, applies retroactively, meaning that programmes who are owed subsidy payments from the DSD have the right to expect these payments. This applies to programmes which have signed service level agreements to receive these subsidies as well as those who had not been able to sign them during the national lockdown. The judgement granted leave for the applicants to approach the court again to enforce the order should the MECs fail to make payment without delay and if the Minister fails to discharge her constitutional duty to ensure payment immediately.

In addition to government-led programmes, there are several initiatives led by NGOs, NPOs and other ECD stakeholders to support the sector. For example, Ilifa Labantwana, with support from four funders¹⁰, have been leading a COVID-19 Response Project for ECD implemented between October 2020 and January 2021 (Ilifa Labantwana 2020). The project involves providing a suite of support services to about 1,800 unregistered ECD sites across South Africa. The package of support includes a hamper for ECD programmes to meet full COVID-19 compliance requirements as well as an innovative food voucher system whereby regular vouchers are issued to ECD programmes with the value based on the number of children registered at the site (see Appendix B).

The National Early Learning and Development Programme Support Fund during COVID-19 in the Republic of South Africa (the ECD support fund) was established under the auspices of the National Early Childhood Development Alliance (NECDA)¹¹ (National Early Childhood Development Alliance 2020). The fund’s primary and strategic focus is on ECD programmes which are registered or conditionally registered for a period of 12 months or more and operate on not-for-profit principles. The aim is to provide immediate support to sustain not-for-profit ECD programmes which may include salaries of practitioners and support staff, and operational costs related to ECD programmes. The initial target for the fund is R5 million, with the aim of impacting about 14,000 children and 547 ECD programmes by providing 50% of the national minimum wage for two months.¹² To date, R5.5 million has been raised.¹³

3. Method

The research process underpinning our first paper on this topic was guided by these three research questions:

1. How has attendance at ECD programmes been affected by the lockdown?
2. As the economy opened-up, what have been the main drivers of reduced attendance at ECD programmes? Is this being driven by demand-side shocks and/or barriers to the supply of services?

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9 The court case was brought by SA Childcare and seven others. It was presided over by Judge Janse van Nieuwenhuizen.
10 ELMA Foundation, Allan Gray Orbis Foundation Endowment, the Standard Bank Tutuwa Community Foundation and the DG Murray Trust.
11 NECDA is a membership body of ECD NPOs and sector experts and is managed by an independent oversight committee.
12 https://social-tv.co.za/ecd-support-fund-story-for-consideration/
13 Applications from ECD programmes were processed in December 2020 and payments are set to commence in January this year.
3. Related to this, in which contexts and households are children more likely to have returned to ECD programmes?

These questions remain relevant in this paper, and we update trends accordingly with the wave 3 data. In addition, the inclusion of new wave 3 questions in the ECD module allow us to shed light on some other questions or to add greater specificity to answering the existing questions. For example, in relation to question 2, we have more information on whether parents were paying fees for children to attend ECD centres pre-COVID and their ability to afford fees in October 2020. We also explicitly ask and identify whether there exist affordable ECD centres within 5km of where respondents live. Responses to these questions allow us to better untangle the distinction between how demand and supply-side factors are driving reduced attendance rates. We also ask a new question on whether children were receiving meals at ECD programmes in February.

4. Data

This paper relies primarily on wave 3 of the National Income Dynamics Study - Coronavirus Rapid Mobile Survey (NIDS-CRAM). We link this to the first two waves of NIDS-CRAM and wave 5 (2017) of the National Income Dynamics Study (NIDS). Again, we position the results against ECD attendance rates from the annual General Household Surveys (GHS) from 2002 to 2018. For those unfamiliar with the first paper, we briefly outline each of these datasets.

- The **National Income Dynamics Study (NIDS) 2017** is a panel survey that commenced in 2008 with interviews of a nationally representative sample of 28,000 people across South Africa. In 2017, the NIDS sample was expanded to account for the attrition of wealthier sub-groups over the years to generate a sample of 40,000 individuals that were broadly representative of South Africans in 2017. NIDS contains comprehensive information on individuals and households, including information on children in the household and their ECD and school attendance (Southern Africa Labour and Development Research Unit 2018).

- The **General Household Survey (GHS)**, collected by Statistics South Africa, is a nationally representative sample of over 70,000 persons and 20,000 households. Since its inception in 2002, it has collected detailed socio-economic indicators on persons and households, including information on ECD attendance. The GHS has historically been a primary source of information used to track the demand for ECD services in South Africa.

- **NIDS-CRAM** was initiated by researchers across various South African universities to measure the socioeconomic impacts of the national lockdown. This is a unique follow-up telephonic survey, roughly 20-minutes in length, conducted with a subsample of adults surveyed in NIDS wave 5 in 2017 (Ingle, Brophy and Daniels 2020). The first wave of NIDS-CRAM is a broadly representative sample of persons 15 years or older in 2017 in South Africa, who were re-interviewed in 2020 for NIDS-CRAM (Kerr, Ardington and Burger 2020). The first wave of NIDS-CRAM was conducted between 7 May and 27 June with 7073 adults. The second wave occurred between 13 July and 13 August where 5676 adults (80% of the original wave 1 sample) were successfully reinterviewed. The third wave was conducted between 2 November and 13 December 2020. Successful interviews were completed with 5046 (71%) of the original wave 1 sample. Additionally, a ‘top-up’ sample was added in wave 3 where successful interviews were completed with an additional 1084 individuals sampled in NIDS 2017 bringing the total wave 3 sample to 6130. In this paper, we refer to the combined panel sample and ‘top-up’ sample as the NIDS-CRAM wave 3 “cross-section”.

4.1. Limitations of NIDS-CRAM

Again, we highlight that unlike the GHS or NIDS, NIDS-CRAM does not contain a household roster. Thus, statistics at the level of the child or household cannot be generated directly from NIDS-CRAM.

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14 These people were re-interviewed every two to three years, as well as anyone they were living with.
CRAM. We do not know which children in the household, of specific ages, are attending ECD programmes. But we can say something indicative of whether children aged 0 – 6 in a respondent’s household are reported as attending ECD programmes at different points in the 2020 year. Making certain assumptions, we are also able to infer how ECD attendance rates reported by adults may translate into attendance rates at the level of the child as explained in Box 1. Additionally, socio-economic indicators of the households in which adults live can be used to explore patterns and factors associated with returning to ECD programmes post the hard lockdown of 2020.

A complication of using NIDS-CRAM for panel analysis involving household level indicators is that in the absence of a household roster we do not know whether the same children were in the respondent’s household from the first to the third waves. One can conduct checks using samples living with the same reported number of children from wave to wave. However, even where equal numbers of children are reported in households from wave to wave, these may not be the same children if they move in and out of households. Furthermore, children could get older shifting out of the 0-6 age bracket across waves. This is a limitation of the analysis in general that cannot be addressed further with the available data. For this reason, we make limited use of the panel for analyses in this paper.

4.2. NIDS-CRAM ECD module and sample sizes in wave 3

An ECD module was only introduced from wave 2 of NIDS-CRAM. In wave 3, alterations to some of the ECD module questions and/or related skip patterns were made to resolve shortcomings of the wave 2 module and to add greater specificity to the research questions of interest without compromising comparability. In addition to the new questions described earlier, we note two key changes:

- A shortcoming of the wave 2 ECD module is that questions on ECD attendance in June and in the past 7 days were only asked of those respondents that indicated that children had attended ECD programmes in March. This restriction is removed in wave 3 to account for new attendance or the seasonality of attendance. For example, if children aged 0-6 only start attending later in the year, the ECD attendance estimates then exclude these new attendees. As described in section 5.2, removing this restriction makes a big difference to the estimates of attendance.

- In wave 3, we ask about attendance at ECD programmes in February 2020 rather than March 2020 to resolve concerns that ECD attendance pre-lockdown (i.e. in March) may have been underestimated in wave 2 due to the uncertainty that COVID-19 infections had already introduced into the system. 15 However, we note that these two questions may not necessarily be asking about attendance among the same group of children if children moved in and out of respondent’s households during those months.

Table 1 summarises information on data collection dates for each wave, and the time points at which ECD programme attendance data was collected in each wave. The table also contextualises the interviews relative to when ECD programmes were officially allowed to reopen in 2020. We identify the time passed between the 6 July 2020 court ruling allowing ECD programmes to reopen and the interview dates. The days passed between the 6 July 2020 reopening date and obtaining interview responses on ECD attendance in the past 7 days was on average 3 weeks in wave 2 but an average of 20 weeks in wave 3.

15 The module also corrects a skip error in wave 2 where the ECD module was asked of respondents in households with any children under 18, rather than any children aged 0-6. This does not affect the comparability of the estimates with the initial paper because ECD attendance estimates using the wave 2 data were restricted on respondents living in households with children aged 0-6.
Table 1: Summary of survey interview dates, and when ECD programme attendance is measured across NIDS-CRAM waves 1-3

<table>
<thead>
<tr>
<th>NIDS-CRAM</th>
<th>Dates of telephonic interviews</th>
<th>ECD module included</th>
<th>Attendance at ECD programmes measured at the following time points</th>
<th>Time between re-opening of programmes on 6 July 2020 and interview date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 1</td>
<td>7 May – 27 June</td>
<td>No</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Wave 2</td>
<td>13 July – 13 August</td>
<td>Yes</td>
<td>March 2020</td>
<td>Average: 19 days (3 weeks) Range: 7-33 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>June 2020*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Past 7 days*</td>
<td></td>
</tr>
<tr>
<td>Wave 3</td>
<td>2 November – 13 December</td>
<td>Yes</td>
<td>February 2020</td>
<td>Average: 143 days (20 weeks) Range: 119-160 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Past 7 days</td>
<td></td>
</tr>
</tbody>
</table>

Notes: *Questions only asked if attended in March.

The introduction of a ‘top-up’ sample in NIDS-CRAM wave 3 coupled with the removal of restrictive skips limiting questions asked on ECD attendance (in the past 7 days) to children attending in March, overcomes small sample size challenges in wave 2. For example, there are 3322 respondents in wave 3 living in households with children aged 0-6 at the time of the interview, compared to only 2722 in wave 2. After accounting for non-response (7%), 3107 (932 + 2184) respondents in wave 3 living with children aged 0-6 at the time of interview answered the question on ECD attendance in the past 7 days.¹⁶ This compares to just 949 responses to the same question in wave 2.

Table 2 summarises information on sample sizes available for the ECD analysis. In the wave 3 data there is some non-response on the past 7-day ECD attendance question at 7% of the sample living with children aged 0-6. In Section 5.1 and Appendix C, we explore how this may bias attendance estimates. Table 3 provides a comparison of select ECD attendance questions asked in NIDS-CRAM waves 2 and 3.

¹⁶ The 7% missing information on the ECD attendance in the past 7 days question is split roughly equally across “don’t know” responses and a direct “non-response”.

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**Table 2: Sample sizes available for the ECD analysis from NIDS-CRAM wave 3 (panel and top-up included)**

<table>
<thead>
<tr>
<th>Sample Description</th>
<th>Unweighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full NIDS-CRAM wave 1 sample (N)</td>
<td>7073</td>
</tr>
<tr>
<td>Wave 3 panel respondents (N)</td>
<td>5046</td>
</tr>
<tr>
<td>Wave 3 panel respondents as percentage of wave 1</td>
<td>71%</td>
</tr>
<tr>
<td>Wave 3 top-up sample</td>
<td>1084</td>
</tr>
<tr>
<td>Total wave 3 sample (panel + top-up)</td>
<td>6130</td>
</tr>
</tbody>
</table>

**Respondent sample from the wave 3 cross-section by whether they live with children aged 0-6**

- Yes (N) | 3322 |
- No (N) | 2802 |
- Missing (N) | 7 |

Missing as a percentage of wave 3 sample | 0.1% |

**Reported ECD attendance in February 2020* using a sample living with children aged 0-6**

- Yes (N) | 1291 |
- No (N) | 2003 |
- Missing (N) | 28 |

**Reported ECD attendance in the past 7 days^ (Nov/Dec 2020) using sample residing with children aged 0-6**

- Yes (N) | 923 |
- No (N) | 2184 |
- Missing (N) | 215 |

Missing as a percentage of respondents living with children aged 0-6 in wave 3 | 7% |

**Table 3: Comparison of select ECD attendance questions in NIDS-CRAM waves 2 and 3**

<table>
<thead>
<tr>
<th>Wave 2 attendance questions</th>
<th>Wave 3 attendance questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the lockdown started in March, were any children in your household attending an early childhood development (ECD) centre such as a pre-school, creche, playgroup or day-mother? (Interviewer: Note ECD centres do NOT include Grade R in primary schools.)</td>
<td>In February, were any children in your household attending an early childhood development (ECD) programme such as a pre-school, creche, playgroup or day-mother? (Interviewer: Note ECD centres do NOT include Grade R in primary schools.)</td>
</tr>
<tr>
<td>If yes…</td>
<td>If yes OR no…</td>
</tr>
<tr>
<td>Did they attend in the month of June?</td>
<td>“Did any children in your household attend an Early Childhood Development Centre in the past 7 days?”</td>
</tr>
<tr>
<td>And did they attend in the past 7 days?</td>
<td></td>
</tr>
<tr>
<td>If no attendance in the past 7 days…</td>
<td>If no attendance in the past 7 days…</td>
</tr>
<tr>
<td>What is the main reason that the child/children have not attended the Early Childhood Development Centre in the past 7 days? (Interviewer: Do not read out options.)</td>
<td>What is the main reason that the child/children have not attended the Early Childhood Development Centre in the past 7 days? (Interviewer: Do not read out options.)</td>
</tr>
</tbody>
</table>
5. ECD attendance trends

5.1. Partial recovery of the ECD sector in November/December 2020

NIDS-CRAM wave 3 reveals a partial recovery of the ECD sector from the third to the fourth quarter of 2020. Of respondents living in households with children aged 0-6 at the time of the interview, 28% indicated that at least one child had attended an ECD programme in the past 7 days. The percentage of respondents in households with children aged 0-6 reporting any child attending ECD programmes increased from about 7% in July/August to 28% in November/December. This implies that many programmes that were closed in July/August had reopened by November/December. However, as explained in the next section, centre closures in the fourth quarter of 2020 remained a constraint to recovery of the sector. Unfortunately, there exists no available institutional data to track how many and which ECD programmes reopened and which stay closed.

Despite this notable recovery towards the end of 2020, ECD programme attendance had not recovered to pre-lockdown levels. Of wave 3 respondents living with children aged 0-6, 39% reported a child attending an ECD programme in February 2020 compared to 28% in November/December 2020. The confidence intervals on these two estimates are quite wide, but do not overlap (see Table A 2).

Additionally, ECD attendance at the end of 2020 remains lower relative to prior years. In the GHS 2018, on average 44% of adults in households with children aged 0-6 would have reported a child attending an ECD programme compared to 28% at the end of 2020. As a strong caveat, we make this comparison aware of significant differences in the mode of survey implementation and questions asked on ECD attendance across NIDS-CRAM and the General Household Surveys (GHS) (see Wills, Kotze and Kika-Mistry 2020 for more information).

Although ECD attendance figures are not reported at the level of the child in NIDS-CRAM, we are able to extrapolate estimates to the level of the child. We do this by assuming a parallel relationship between attendance rate trends reported at the level of the adult and the level of the child (see Box 1). While 47% of children aged 0-6 were reported as attending ECD programmes in the GHS 2018, by early November to mid-December 2020 it is estimated that 31% of children aged 0-6 were attending. By the end of 2020, ECD programme attendance among children aged 0-6 is roughly in line with attendance reported in the GHS between the years 2008 to 2012 as seen in Figure 1. We note however, that the estimate of 31% of children aged 0-6 attending in November/December may lie within a wide band.

We qualify that the attendance recovery in November/December is not due to large numbers of “grade Rs” returning to school being erroneously included in responses on ECD attendance in the past 7 days. A prompt is included in the NIDS-CRAM questionnaire for the interviewee to ensure grade R attendance in primary school is not counted as ECD attendance. But we also conducted an analysis to identify ECD attendance by whether respondents also report children attending grade R (and/or grades 1-3) in the past 7 days. In households where no grade Rs are attending school, reported estimates of ECD attendance are still high at around 27% which is not too different from the figure of 28% for the full sample (see Figure 2). When restricting on respondents in households with grade Rs attending school in the past 7 days, reported attendance is higher - about 47% indicate a child attending ECD in the past 7 days. But this is not a cause for concern if siblings who are more likely to attend ECD, particularly 3- and 4-year-olds, are more likely to be represented in households with children aged 5 and 6 years (in grade R) given expected birth-spacing patterns.

It is noted that our November/December estimate of 28% of respondents (living with children aged 0-6) reporting at least one child attending an ECD programme in the past 7 days includes all respondents with missing responses in the denominator. For the 7% with missing information on attendance in the past 7 days, missing responses are replaced with February attendance responses.17 If we exclude

17 The 22 missing responses on both November/December and February ECD attendance are coded as not attending in November/December.
the ‘missings’ from the denominator, the estimate is higher at 30.5% because those with missing attendance responses in the past 7 days predominately report no ECD attendance in February (see row h and i in Table A 2 and discussion in Appendix C). But the confidence intervals of the two estimates overlap. If we consider both sets of confidence intervals together, they suggest that the percentage 18 reporting children attending ECD programmes in November/December could lie anywhere between 26% and 33%. Thus, there is a fair amount of imprecision around the November/December estimate of ECD attendance but it remains statistically significantly higher than the July/August estimate.

In the next section, we provide our rationale for updating estimates of ECD attendance in June and the past 7 days from the July/August interviews. This has implications for identifying the extent of the decline in ECD attendance and recovery observed in 2020. Section 5.3 also discusses how the NIDS-CRAM data points to possible irregularities in month-to-month ECD attendance not previously identified in cross-sectional GHS estimates.

**Box 1: Extrapolating ECD attendance rates to the level of the child in Figure 1**

We use the NIDS-CRAM results to make assumptions about ECD attendance rates at the level of the child aged 0-6. Because attendance rates at the two different units of analysis (adult and child) tend to move in tandem, as observed from GHS attendance trends, we assume that the attendance rates of children aged 0-6 would have fallen by the same absolute amount as observed at the adult level. To get a conservative picture of the decline in attendance rates associated with lockdown, we assumed that the 2019 19 level (an average of the 2017 and 2018 GHS rates) is the point from which the fall in attendance in the second half of 2020 occurs. We also use an absolute rather than relative approach for the interpolation.

Consistent with our September 2020 paper, we extrapolate an estimate for the percentage of children aged 0-6 enrolled in ECD programmes in November/December in the following way. First, we get the absolute difference between the GHS 2017/2018 average estimate and NIDS-CRAM November/December estimate of ECD attendance for those adults living with children aged 0-6. Second, we subtract this absolute difference from the percentage of children aged 0-6 attending ECD programmes in the GHS 2017/2018 (child as the unit of analysis).

We extrapolated an estimate of the percentage of children aged 0-6 enrolled in ECD programmes in July/August using the same approach. As discussed in section 5.2, we have raised the interpolated estimate of children aged 0-6 enrolled in ECD programmes in July/August from 13% to 15%. It is noted though that 15% is likely an upper bound. If we had used a relative approach to the interpolation process (i.e. ECD programme attendance at the level of the child falls by the same ratio as that reported at the level of the adult in NIDS-CRAM), then just 7% of children aged 0-6 would have been identified as enrolled in July/August.

We note that the 31% estimate of children aged 0-6 enrolled in November/December is quite robust to whether an absolute, or relative approach to interpolation is used.

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18 Of respondents living with children aged 0-6.

19 The GHS 2019 results have been released by Statistics South Africa but the data is not yet available for public use.
Figure 1: ECD attendance rates of children aged 0-6 from 2002-2018 (GHS) against 2020 NIDS-CRAM estimates

Source: Statistics South Africa GHSs 2002-2018; NIDS-CRAM 2020 wave 2 and 3. Own calculations on each dataset. Notes: The dotted lines reflect interpolated estimates by assuming parallel trends between estimates at the level of the adult and estimates at the level of the child. At the time of writing, the GHS 2019 was not yet available for analysis, so we take the average of the 2017 and 2018 GHS estimates for 2019. Error bars are the 95% confidence intervals (calculated where possible). Compared to Figure 5 in Wills, Kotze and Kika-Mistry (2020), the July/August 2020 estimates have been revised upwards to account for additional intake of new child attendees at ECD programmes between March and July/August. See Table A 2 for raising factors.

Figure 2: Reported ECD attendance in November/December by whether there are Grade Rs attending school in the household. Sample includes respondents living with children aged 0-6.

Source: NIDS-CRAM wave 3 “cross-section”. Notes: Weighted and clustered. Error bars reflect 95% confidence intervals.
5.2.Updating ECD attendance estimates for June and July/August (past 7 days) from the wave 2 data

As young children get older during the year, they are more likely to be considered ready to join ECD programmes. Just a few months may matter for parents in deciding whether their children are ready to attend ECD programmes. There is less likely to be an “exit” of older children from ECD programmes until the new school year begins again. Thus, a net increase in ECD programme attendance during a calendar year is reasonably expected in more stable periods, albeit seasonality in attendance is known to affect the sector. A continuous increase in ECD attendance would be expected the further and further one gets into the year as more children reach an age considered old enough to attend ECD programmes.

In wave 2, identifying ECD programme attendance in the past 7 days required assuming that only children who were attending programmes in March would attend programmes after the reopening date (i.e. no new children start attending between March and July/August). The reason for this assumption is that respondents were only asked about ECD attendance in June or the past 7 days provided that any child had been attending an ECD programme in March. This “skip pattern” may have resulted in an underestimate of attendance in June or July/August if more children come of age to join ECD programmes. Fortunately, the restrictive “skip pattern” was removed in wave 3. We can identify to what extent this skip pattern in the wave 2 ECD module resulted in an underestimate of ECD programme attendance in June and July/August. Our method for doing this is explained in Appendix D. Our analysis suggests that the original wave 2 estimate of the percentage of respondents reporting ECD programme attendance in July/August could be increased from 4.7% to 6.9%. When extrapolating estimates to the level of the child, this implies that 15% of children aged 0-6 were attending ECD programmes in July/August – an upward adjustment from 13% reported in our initial September 2020 paper (see Wills, Kotze and Kika-Mistry 2020).

5.3. Irregularity in month-to-month ECD attendance in NIDS-CRAM

In wave 3, we asked about ECD programme attendance in February 2020 (well before the start of the shutdown in mid-March and the hard lockdown at the end of March). The reason for this was to identify whether the pre-lockdown attendance rates reported for March 2020 in wave 2 were underestimated. Attendance levels in March may have already been affected by COVID-19 concerns. The February 2020 ECD attendance estimate at 39% using the wave 3 cross-section is very similar to the 38% figure for March using the wave 2 sample only (see Figure 1 and Table A2).

On the one hand, we are confident that the pre-lockdown attendance rate is consistent across waves. On the other hand, if we compare February and March reports on ECD attendance among the same respondents, there is less overlap than we would have expected. For example, an unweighted comparison of response transitions from wave 2 to 3 indicates that 40% of those reporting children attending ECD in February don’t report attendance in March as seen in Table 5.

A similar pattern pointing to irregularity in month-to-month attendance is observed in wave 2 data which asked about June and July/August attendance. We find that in the unweighted sample about 37% of respondents reporting June ECD attendance report no attendance in the past 7 days (July/August) in the same interview.

Then in Table 5 we provide a matrix comparing attendance in February against attendance in the past 7 days reflected in the November/December interviews. It suggests that among those reporting children attending in November/December, just 66% identify children attending in February. In other words, at most a third of the estimate of reported ECD attendance at 28% in November/December could be attributed to children attending who may not have been attending ECD programmes in February.

There are four possible explanations for these results. First, since the composition of respondents’
households may be changing from wave to wave, with children moving in and out of households, estimates of ECD attendance at different points or across waves may refer to different children. Second, some children may get older falling outside of the 0-6 age bracket used to identify younger children in the households of NIDS-CRAM respondents. Third, from February to March parents may have chosen to take their children out of programmes as COVID-19 concerns mounted. Fourthly, there may be less consistent frequency in programme attendance than we may expect, fluctuating with monthly or even weekly ability to pay or the availability of carers in the household to look after young children.\textsuperscript{21} Attendance may be sporadic even if children are enrolled at ECD programmes. As seen in the 2001 ECD audit, the number of children attending on the day of the audit visit across the sample was 86\% of the total numbers enrolled at programmes (DSD and EPRI, 2014, p. 45).\textsuperscript{22}

In this regard, the static “cross-sectional” estimates of ECD attendance that are typically gathered in the GHS need to be reconsidered. They do not account for the seasonality of attendance that likely exists within the sector. More questions on attendance at different time points in the same year should be included in household surveys to determine the frequency and regularity of attendance. This would provide important context to better understand the workings of the system, with implications for how best to finance the sector.

Table 4: Unweighted transitions of February and March attendance at ECD programmes. Sample includes respondents living with children aged 0-6

<table>
<thead>
<tr>
<th>Attending ECD in February 2020 (wave 3 question)</th>
<th>Attending ECD in March 2020 (wave 2 question)</th>
<th>No</th>
<th>Yes</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (row %)</td>
<td></td>
<td>79.8</td>
<td>19.5</td>
<td>0.7</td>
<td>100</td>
</tr>
<tr>
<td>No (#)</td>
<td></td>
<td>876</td>
<td>214</td>
<td>8</td>
<td>1,098</td>
</tr>
<tr>
<td>Yes (row %)</td>
<td></td>
<td>39.6</td>
<td>60.2</td>
<td>0.3</td>
<td>100</td>
</tr>
<tr>
<td>Yes (#)</td>
<td></td>
<td>319</td>
<td>485</td>
<td>2</td>
<td>806</td>
</tr>
<tr>
<td>Unknown (row %)</td>
<td></td>
<td>81.8</td>
<td>18.2</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>Unknown (#)</td>
<td></td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Total (row %)</td>
<td></td>
<td>62.9</td>
<td>36.6</td>
<td>0.5</td>
<td>100</td>
</tr>
<tr>
<td>Total (#)</td>
<td></td>
<td>1,204</td>
<td>701</td>
<td>10</td>
<td>1,915</td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 2 and 3 panel. Notes: Wave 2 to 3 panel living with children aged 0-6 in both waves. Unweighted.

\textsuperscript{21} We rerun tables but restricting on individuals reporting the same number of children in the household in wave 2 and 3 (and further restricting on respondents living with their own children in waves 2 and 3) and get similar results.

\textsuperscript{22} In the 2014 ECD audit, it was noted that data on children present was not reliable and in most cases higher than the number of children enrolled.
Table 5: Comparing responses on ECD attendance in February and the past 7 days (November/December). Sample includes respondents living with children aged 0-6.

<table>
<thead>
<tr>
<th>Attended ECD in November/December 2020 (past 7 days) (wave 3 question)</th>
<th>No</th>
<th>Yes</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#)</td>
<td>1524</td>
<td>294</td>
<td>185</td>
<td>2003</td>
</tr>
<tr>
<td>(% row)</td>
<td>72.4</td>
<td>15.6</td>
<td>12.0</td>
<td>100</td>
</tr>
<tr>
<td>(% col)</td>
<td>69.2</td>
<td>34.0</td>
<td>91.3</td>
<td>61.1</td>
</tr>
<tr>
<td>No</td>
<td>655</td>
<td>628</td>
<td>8</td>
<td>1291</td>
</tr>
<tr>
<td>(% row)</td>
<td>51.1</td>
<td>48.2</td>
<td>0.7</td>
<td>100</td>
</tr>
<tr>
<td>(% col)</td>
<td>30.7</td>
<td>66.0</td>
<td>3.4</td>
<td>38.4</td>
</tr>
<tr>
<td>Attended ECD in February 2020 (wave 3 question)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(% row)</td>
<td>23.4</td>
<td>1.2</td>
<td>75.3</td>
<td>100</td>
</tr>
<tr>
<td>(% col)</td>
<td>0.2</td>
<td>0.0</td>
<td>5.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>1</td>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>(% row)</td>
<td>0.2</td>
<td>0.0</td>
<td>5.3</td>
<td>0.6</td>
</tr>
<tr>
<td>(% col)</td>
<td>0.2</td>
<td>0.0</td>
<td>5.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>2184</td>
<td>923</td>
<td>215</td>
<td>3322</td>
</tr>
<tr>
<td>(% row)</td>
<td>64.0</td>
<td>28.0</td>
<td>8.0</td>
<td>100</td>
</tr>
<tr>
<td>(% col)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 3 “cross-section”. Notes: Sample counts are unweighted but row and column percentages are weighted and clustered. All missing data entries are shown.

6. Reasons for not returning to ECD programmes after the official reopening

In our September 2020 paper we explored reasons for why children had not returned to ECD programmes. Supply-side related constraints to ECD provision were the dominant reasons for children not returning by July/August. For example, in wave 2 about 55% of respondents living with children attending in March (pre-lockdown) but that did not report children attending in the past 7 days said that ECD programmes were still temporarily closed. Other reasons for non-return included programmes being inadequately prepared for a reopening in a COVID risk environment (6%), or programmes having closed permanently (4%). Fears that the child may get infected with COVID at the ECD facility were also reported as a reason for non-return (29%).

Respondents in the wave 3 November/December interviews were again asked about the main reason for children not having attended an ECD programme in the past 7 days. In panel A of Table 6, main reasons for non-attendance are expressed as a percentage of all respondents living with children aged 0-6 and identifying at least one child attending an ECD programme in February. By restricting the sample to those with children attending in February, the table could be broadly interpreted as reasons for not having returned to an ECD programme, rather than general reasons caregivers may have for not sending their children to an ECD programme. Albeit we caution that we do not know if the same children have remained in the household from February to November/December.

23 This is an almost direct repeat of the question in the wave 2 ECD module. This question is only asked of respondents who stated that children aged 0 – 6 in their household have not attended an ECD programme in the past 7 days. In wave 2 however a further restriction applies in that only those who report attendance in March would have been asked about attendance in the past 7 days and thus a limited sample answered this question on reasons for non-attendance.
In comparing the dominant reasons for non-attendance across NIDS-CRAM waves 2 and 3, this must be done aware that many more children were attending ECD programmes in November/December compared with July/August. For this reason, we show two sets of estimates in Panel A and B. Panel A contextualises the percentage responding with reasons for non-attendance against the percentage reporting attendance in the past 7 days. Panel B shows the reasons in percentages for those not reporting ECD attendance in the past 7 days but indicating children attended in February.

The first row of Panel A shows that of respondents indicating children attended ECD in February, 49% report ECD programme attendance in the past 7 days (November/December). Of the 51% that do not report attendance, the main reasons provided for children not having attended an ECD programme in November/December included: Centres being temporarily closed (31%); a fear that the child may get Coronavirus at the centre (24%); not being able to afford the fees (16%); centres not being adequately prepared for Coronavirus (7%); and centres having closed permanently (6%).
Table 6: Reported reasons for not attending an ECD programme in the past 7 days (November/December)

<table>
<thead>
<tr>
<th>Sample: Respondents living with children aged 0-6</th>
<th>Panel A: At least one child attended ECD in February</th>
<th>Panel B: At least one child attended ECD in February but no reported attendance in the past 7 days (Nov/Dec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate (%)</td>
<td>Lower Upper</td>
<td>Estimate (%)</td>
</tr>
<tr>
<td>95% CI</td>
<td>N.A N.A N.A</td>
<td>Lower Upper</td>
</tr>
<tr>
<td>Did attend in past 7 days</td>
<td>48.6 43.7 53.4</td>
<td>N.A N.A N.A</td>
</tr>
<tr>
<td>Supply-side reasons</td>
<td>22.7</td>
<td>44.0</td>
</tr>
<tr>
<td>Centre is temporarily closed due to lockdown</td>
<td>15.8 12.6 19.0</td>
<td>30.7 25.2 36.1</td>
</tr>
<tr>
<td>Centre not prepared for Coronavirus - no safety measures</td>
<td>3.7 2.1 5.2</td>
<td>7.1 4.3 10.0</td>
</tr>
<tr>
<td>Centre has closed permanently</td>
<td>3.2 1.7 4.6</td>
<td>6.2 3.4 8.9</td>
</tr>
<tr>
<td>No ECD programme in area*</td>
<td>0.0 -0.0 0.1</td>
<td>0.1 -0.1 0.2</td>
</tr>
<tr>
<td>Demand-side reasons</td>
<td>24.8</td>
<td>48.2</td>
</tr>
<tr>
<td>Child may get Coronavirus at centre</td>
<td>12.3 9.5 15.1</td>
<td>23.8 18.9 28.7</td>
</tr>
<tr>
<td>Can’t afford the centre fees</td>
<td>8.4 6.0 10.9</td>
<td>16.4 12.1 20.8</td>
</tr>
<tr>
<td>Caregiver/ parent/ family member prefers to look after child</td>
<td>0.9 0.4 1.5</td>
<td>1.8 0.7 2.9</td>
</tr>
<tr>
<td>Child is sick</td>
<td>0.8 0.0 1.5</td>
<td>1.5 0.0 2.9</td>
</tr>
<tr>
<td>Child will attend next year*</td>
<td>0.5 0.1 0.9</td>
<td>0.9 0.2 1.7</td>
</tr>
<tr>
<td>Child is too young for ECD</td>
<td>0.4 0.0 0.7</td>
<td>0.7 0.0 1.4</td>
</tr>
<tr>
<td>Other transport problems</td>
<td>0.3 0.1 0.6</td>
<td>0.6 0.1 1.2</td>
</tr>
<tr>
<td>Child is too old for ECD</td>
<td>0.2 -0.1 0.5</td>
<td>0.4 -0.2 1.0</td>
</tr>
<tr>
<td>Child is attending grade R in school</td>
<td>0.0 -0.0 0.1</td>
<td>0.1 -0.1 0.3</td>
</tr>
<tr>
<td>No children attending ECD</td>
<td>0.0 -0.0 0.1</td>
<td>0.1 -0.1 0.2</td>
</tr>
<tr>
<td>Other reasons &amp; Don’t know/Refused</td>
<td>4.0</td>
<td>7.8</td>
</tr>
<tr>
<td>Other</td>
<td>1.1 0.1 2.1</td>
<td>2.2 0.3 4.2</td>
</tr>
<tr>
<td>Don’t know/refused</td>
<td>2.9 0.8 4.9</td>
<td>5.5 1.5 9.6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>N</td>
<td>1 283</td>
<td>655</td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 3 “cross-section”. Notes: Weighted and clustered. *A coded response from “other, specified” responses added to list of reasons.
In Table 6 we have also classified reasons for non-attendance into those related to supply-side constraints to ECD access and those that relate to demand-side conditions such as caring preferences and ability to pay. Supply and demand-side constraints are reported as almost equal constraints to attendance in November/December. In determining ECD access, however, supply and demand-side conditions are highly interrelated. For example, if most caregivers are unable to pay ECD fees to the operator (a demand-side constraint), then programmes are less likely to open (supply-side constraint) because in most instances fee collection is vital to covering operating costs. For this reason, we explore further household’s ability to pay ECD fees.

6.1. Further interrogating how ability to pay relates to the return to ECD programmes and current ECD attendance

To explore the association between ECD attendance and ability to pay fees, we turn our attention to the new questions added in the wave 3 ECD module including:

- Payment of fees for ECD attendance in February. *(Question: “In February, did you/ someone in your house pay fees for the children to attend the ECD programme?”)*

- Ability to afford ECD fees in October. *(Question: In October, were you/ someone in your household able to afford the fees for these children to attend an ECD facility? Interviewer: Even if the child is no longer attending, ask the respondent if they could “afford” the fees).*

Drawing on these questions, Tables 7, 8 and Figure 3 are generated to highlight the following realities about the South African ECD sector:

- **Access to ECD programmes is highly correlated with caregiver’s ability to pay fees.** Table 7 identifies the percentage of respondents indicating that fees were paid for ECD attendance pre-lockdown (February), for a sample reporting ECD attendance that month. For most children that attended programmes pre-lockdown, fees were being paid. Of NIDS-CRAM respondents indicating children attended in February, three quarters said that fees were paid in February. This agrees with the GHS which indicates that fees were charged for at least 75% of children aged 0-6 attending ECD programmes in 2018 (Wills, Kotze and Kika-Mistry, 2018). The strong correlation between ability to pay fees and attendance is also suggested by Figure 3. It shows the percentage reporting children attending in the past 7 days (November/December) but disaggregating the respondent sample by reported ECD attendance in February, by whether fees were paid in February and by ability to afford ECD fees in October. Reported attendance in the past 7 days (November/December) is much higher where respondents indicate attendance pre-lockdown and by ability to afford fees in October. In the next section, we explore the correlation between ability to pay and current attendance in a multivariate context.

- **The data suggests that household ability to afford ECD fee payments became a more dominant constraint to the sustainability of the ECD system towards the fourth quarter of 2020.** Of the respondents, 68% indicated that in October they or someone in their household were not able to afford the fees for children to attend an ECD facility as seen in Table 8. As expected, inability to afford ECD fees in October is more prevalent where children did not attend ECD programmes pre-lockdown (77% can’t afford fees in October) or if children attended ECD programmes pre-lockdown but fees weren’t paid (74% can’t afford fees). What is concerning for the system is that of the respondents paying fees for children pre-lockdown, almost half (48%) said they couldn’t afford ECD fees in October.

- **Household ability to afford ECD fee payments is closely tied to gender and socio-economic status.** In Table A 5 we show that compared to respondents indicating they or someone else in the household could afford ECD fees in October, those who couldn’t afford fees are more likely to be women, poorer, grant recipients, less likely to be employed and more likely to be unemployed but searching for work.
Despite the strong association between ability to pay and attendance, in many instances attendance does occur even where caregivers do not pay fees. For example, of respondents living with children attending ECD in February, a quarter said that ECD fees were not paid that month (see Table 7). Then among respondents that were unable to afford ECD programme fees in October and did not pay fees for children to attend in February, 29% report children attending in November/December (see Figure 3). This suggests that practitioners are continuing to care for children despite non-collection of fees from caregivers. In future research it would be useful to understand to what extent goodwill from practitioners has and continues to support children’s access to ECD programmes.

**Table 7: Payment of ECD fees in February 2020 – percentage of respondents in NIDS-CRAM reporting payment of fees in February**

<table>
<thead>
<tr>
<th>Sample: Respondents in households with children aged 0-6 reporting any child attending an ECD programme in February</th>
<th>%</th>
<th>SE</th>
<th>Unweighted sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended in February, paid fees</td>
<td>72.1</td>
<td>2.3</td>
<td>902</td>
</tr>
<tr>
<td>Attended in February, didn’t pay fees</td>
<td>25.7</td>
<td>2.2</td>
<td>364</td>
</tr>
<tr>
<td>Payment of fees unknown</td>
<td>2.1</td>
<td>0.6</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td>1,291</td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 3 “cross-section”. Notes: Weighted and clustered.

**Table 8: Ability to afford ECD fees in October 2020 by ECD attendance and fee payment in February 2020**

<table>
<thead>
<tr>
<th>Did not attend in February</th>
<th>Attended in February, paid fees</th>
<th>Attended in February, didn’t pay fees</th>
<th>Payment of fees unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not able to afford fees for children to attend an ECD facility in October</td>
<td>77.0</td>
<td>48.4</td>
<td>74.4</td>
<td>21.0</td>
</tr>
<tr>
<td></td>
<td>(1.7)</td>
<td>(3.4)</td>
<td>(4.0)</td>
<td>(7.3)</td>
</tr>
<tr>
<td>Able to afford fees for children to attend an ECD facility in October</td>
<td>12.0</td>
<td>50.4</td>
<td>25.1</td>
<td>11.0</td>
</tr>
<tr>
<td></td>
<td>(1.7)</td>
<td>(3.3)</td>
<td>(4.0)</td>
<td>(4.9)</td>
</tr>
<tr>
<td>Don’t know or missing response</td>
<td>11.0</td>
<td>1.2</td>
<td>0.5</td>
<td>68.0</td>
</tr>
<tr>
<td></td>
<td>(1.4)</td>
<td>(0.5)</td>
<td>(0.3)</td>
<td>(8.6)</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Due to the strong association between ability to pay ECD fees and child attendance at programmes, Table 9 considers the reasons for non-attendance in November/December 2020, disaggregated by households’ ability to afford ECD fees. As in Panel B of Table 6, reasons for non-attendance are expressed for those reporting no attendance in the past 7 days but attendance in February 2020. We note two cautions in viewing this table. First, the confidence intervals on reasons for non-attendance are large due to small sample sizes. Second, the table percentages for this sample should be viewed acknowledging that reported ECD attendance is 2.6 times greater among those that could afford fees in October compared with those that couldn’t afford fees in October (see Figure 3).

Despite large confidence intervals, what is clear is that the temporary closure of centres is cited as a reason for non-attendance by both groups, but significantly more so among those who can afford fees in October. This is an unexpected result. One explanation for this is that fees are considerably more likely to be reported as a significant barrier to accessing ECD for those unable to afford fees in October, and thus centre closure is less likely to be chosen as the main reason attributed to non-attendance. Over 20% of both groups report concerns that children may get Coronavirus at the centre as a reason for non-attendance.
Table 9: Reported reasons for not returning to ECD programme in the past 7 days (November/December), by ability to afford fees in October

<table>
<thead>
<tr>
<th>Sample: Respondents living with children aged 0-6. At least one child attended ECD in February but no reported attendance in the past 7 days (Nov/Dec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can’t afford ECD fees in October</td>
</tr>
<tr>
<td>Estimate (%)</td>
</tr>
<tr>
<td>Supply-side reasons</td>
</tr>
<tr>
<td>Centre is temporarily closed due to lockdown</td>
</tr>
<tr>
<td>Centre not prepared for Coronavirus - no safety measures</td>
</tr>
<tr>
<td>Centre has closed permanently</td>
</tr>
<tr>
<td>No ECD programme in area*</td>
</tr>
<tr>
<td>Demand-side reasons</td>
</tr>
<tr>
<td>Child may get Coronavirus at centre</td>
</tr>
<tr>
<td>Can’t afford the centre fees</td>
</tr>
<tr>
<td>Can’t afford transport to centre</td>
</tr>
<tr>
<td>Other transport problems</td>
</tr>
<tr>
<td>Child is sick</td>
</tr>
<tr>
<td>Caregiver/parent/family member prefers to look after child</td>
</tr>
<tr>
<td>Child is attending grade R in school</td>
</tr>
<tr>
<td>Child is too old for ECD</td>
</tr>
<tr>
<td>Child is too young for ECD</td>
</tr>
<tr>
<td>No children attending ECD</td>
</tr>
<tr>
<td>No ECD programme in area*</td>
</tr>
<tr>
<td>Will attend next year</td>
</tr>
<tr>
<td>Other reasons &amp; Don’t know/Refused</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Don’t know/refused</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

N 498 147

Source: NIDS-CRAM wave 3 “cross-section”. Notes: Weighted and clustered.
7. Who attended ECD programmes in the past 7 days from early November to mid-December?

In our September 2020 paper, we identified determinants of returning to ECD programmes in July/August. The likelihood of reported ECD attendance was higher if respondents lived in urban rather than rural areas; lower if they reported being worried about learners in the household returning to school; and higher if other children in the household had returned to school.

We run OLS estimations again in this paper to identify the determinants of attendance for two sets of samples: the wave 3 respondent sample living in households with children aged 0-6 and then a limited sample that report that children attended ECD programmes in February. We run an initial set of regression models (models 1-3) with a similar set of determinants as included in the earlier paper. The respondent and household determinants included are:

- The employment status of the respondent
- The respondent’s gender
- Whether the household has piped or tap water
- The urban or rural location of the respondent’s residence
- Whether anyone in the household receives a social grant
- The number of adults in the household
- The presence of learners in the household attending school in the past 7 days
- And worries about learners in the household attending school during COVID-19

Three new variables of interest in the wave 3 data related to ability to pay and availability of ECD programmes are included as controls in regression models 4, 5 and 6 namely:

- Whether ECD fees were paid in February if children attended in February.
- Whether the respondent or anyone else in the household could afford to pay ECD fees in October.
- Whether the respondent indicates there is an open and affordable ECD programme within 5km of where they live. (Question: Within 5km of where you live, do you know of an affordable ECD centre (such as a pre-school, creche, playgroup or day-mother) that is currently open?)

The regression results are shown in Table A 4. In models 1 to 3, none of the determinants included up to model 3 are significantly associated with reported ECD attendance with the following exception:

- The respondent’s employment status is associated with ECD attendance in the past 7 days. ECD attendance is reported as higher by about 6 percentage points if the respondent is “employed”, compared to those that are not economically active. Additionally, reported ECD attendance is roughly 7 percentage points higher if the respondent is unemployed and searching for work compared to ECD reports from not economically active respondents. Employment is more strongly correlated with attendance in the past 7 days when restricting the sample to those identifying that children attended ECD programmes in February.

In model 4 we add a control for ECD attendance in February by whether fees were paid to attend ECD programmes that month.

- The coefficients are large and very significant on the control for February attendance by fee payment. If respondents reported that a child attended in February and fees were paid, then they are 34 percentage points more likely to report that a child attended an ECD programme in the last 7 days compared to respondents indicating that children hadn’t attended ECD programmes in February. If respondents reported that a child attended in February and fees were not paid, they are 22 percentage points more likely to report that a child attended an ECD programme in the last 7 days compared to respondents indicating that children hadn’t attended ECD programmes in February. Reported attendance is 11 percentage points higher if fees were paid in February compared to if fees were not paid. As expected, this reflects that respondents who reported children attending ECD pre-lockdown were significantly more likely to report children in their household attending later in the year. In addition, the ability to pay fees pre-lockdown is associated with an increased likelihood of children in respondents’ wave 3 household having returned to programmes.
Then in model 5, we include a control for whether the respondent or someone in the household was able to afford ECD fees in October regardless of whether children attended that month.

- The coefficient on this control for the affordability of fees in October is very large and doubles the explanatory power of the model. Respondents indicating they or someone in their household could afford the fees for children to attend an ECD facility in October, are 43 percentage points more likely to report that children attended ECD programmes in the past 7 days. We can’t rule out that the strong explanatory power of this variable may be due to this question capturing not only the ability to pay fees but whether children attended programmes in October. Additionally, we note that the related question is a challenging one to respond to. It’s not clear whether respondents would know what ECD fees were if no child in their household ever attended ECD.

Finally, in model 6 we remove the control for affording fees in October, and replace this with a control for whether the respondent knows of an affordable and open ECD centre within 5km of where they live.24

- Respondents are 5 percentage points more likely to report that a child attends an ECD programme if they know of an affordable and open ECD centre within 5km of where they live. This control is even more strongly correlated with attendance when restricting the sample to those reporting that children attended ECD programmes in February —reported attendance rises by 13 percentage points. This result holds despite controlling for ability to pay fees at the start of the calendar year. This suggests that an available supply of programmes in the area may be important for access to ECD programmes.

We do note some weak evidence of a positive association between learners in the household attending school and ECD attendance and a negative association if respondents are a little worried about COVID-19 at schools or the respondent is female. We draw little attention to these results as they lack robustness and consistency in the wave 3 data.

8. Access to meals at ECD programmes and current hunger

The Norms and Standards for ECD programmes stipulate that ECD programmes are obliged to ensure the provision of a nutritious daily meal (Children’s Act No. 38 of 2005). The financing model of ECD programmes determines that the cost of the daily meals needs to either be funded through fees paid by caregivers or through the minimal subsidy25 that some ECD programmes can qualify for. Figure 4 below shows that in February, prior to the COVID pandemic and the subsequent lockdown, paying fees was closely linked to the likelihood of a child having received a meal at the programme that they were attending. It shows that of respondents who indicated that they paid fees for children to attend an ECD programme in February, 61% indicated that the child/children received a meal at the programme. This is compared to only 41% of respondents who did not pay fees for the child/children to attend in February. Even before the shock of COVID and lockdown, it was evident that there was a direct link between caregivers’ ability to pay for ECD services and the quality of ECD care (reflected in meals) that was being provided. This implies that the ability of households to pay fees not only matters for access to ECD services, but the quality of those services provided. Given the reduced ability of households to afford fees due to the economic shocks of lockdown and COVID, this has implications for further declines in the quality of available ECD services.

24 The responses to this question may be least accurate for those that prefer not to send their children to ECD programmes, as they may be less likely to know about ECD programmes in their area.

25 Only registered ECD programmes may qualify for the subsidy. In 2020 the subsidy was increased to R17 per child per day, only for means tested children. The subsidy is intended to cover all the daily meals, as well as all other costs of the programme – including salaries.
Unfortunately, no questions were asked about whether children were receiving a meal when they attended in November/December. We did, however, look at the association between ECD attendance and the prevalence of child hunger in households in the past 7 days. There is little evidence of any difference in reported child hunger in wave 3 by ECD attendance and meal receipt at programmes in February (see Figure A 1).

9. Policy recommendations

Having identified a partial recovery in ECD attendance from the third to the fourth quarter of 2020 and having considered factors that present a bottleneck to further recovery, we now consider what this implies for policy. The following recommendations for the short-term and mid-to-longer term should be read in conjunction with those provided in our September paper.

9.1. Short-term policy

i. We reaffirm the importance of the stimulus package to enable both registered and unregistered ECD programmes to continue to operate and recommend that programmes in financially constrained areas be prioritised.

The proposed stimulus package will bring much needed relief to ECD programmes deprived of fee collections for most of 2020. The availability of finance is vital for sustained access to ECD services, as well as the quality of ECD provision. Factors such as households’ ability to pay fees prior to lockdown and an available supply of programmes near to where people live matters for children’s access to ECD services. Furthermore, households’ ability to pay fees is also correlated with the likelihood of receiving meals at programmes prior to lockdown. Supporting programmes located in poorer areas may have a significant impact in supporting programme reopening or paying staff salaries, enabling caregivers to send their children to ECD programmes and improving the quality of services provided.

26 The reason for this is that the NIDS-CRAM questionnaire length is severely limited due to being a telephonic survey, and we did not anticipate such a significant recovery by the fourth quarter (and thus large enough sample size to analyse this question) to warrant including this question.
ii. **ECD practitioners and staff need to be prioritized in phase two of the vaccine rollout as essential workers along with teachers.**

South Africa’s vaccine strategy as at 11 January 2021 (The Presidency, Republic of South Africa 2021) identifies priority groups to be vaccinated as vaccine doses become available during the year. Phase one prioritises about 1.2 million frontline health workers. Phase two seeks to prioritise essential workers such as teachers, police, municipal workers, and other frontline personnel; as well as individuals over the age of 60, adults with co-morbidities, and those in institutions such as old-age homes, shelters and prisons. Along with teachers, ECD operators and respective staff should also be prioritised in this second phase. They provide essential childcare services, enabling those who are employed or searching for work to return to the labour market, and especially so for frontline healthcare workers in need of this critical service. Additionally, where vaccines have not been approved for use in young children, vaccinating ECD practitioners could provide an important barrier to the spread of the virus and keeping ECD programmes open. It may also allay some parent fears of their children contracting COVID-19 at ECD facilities.

9.2. **Medium to longer-term**

iii. **Develop a new financing strategy for the ECD sector that promotes sustainability.**

The current financing system for ECD is based on a financially unsustainable model that is too sensitive to demand-side shocks and is subject to implementation challenges. The operational subsidy system to non-state providers is tied to the daily attendance of each child enrolled in the programme. Therefore, ECD operator’s incomes in the form of subsidies or fees from parents/caregivers is highly sensitive to attendance. The per-child per-day subsidy is also seen to be inefficient, with far too many providers experiencing irregularities and inconsistencies in the receipt of subsidies during the earlier lockdown period (BRIDGE et al. 2020, Vorster 2020). The current financing mechanism is also limited in reach. It is suggested that the subsidy supports an estimated 700,000 children in registered programmes while unregistered programmes account for about 1.5 million children (BRIDGE et al. 2020). A new financing strategy would require the availability of better costing studies as well as detailed supply-side data.  

iv. **Establish an ECD management information system, with a specific focus on collecting supply-side data to strengthen monitoring, evaluation, and quality assurance in the system.**

Currently, there is limited comprehensive information available on ECD provisioning, which is hindering informed resource allocations, policy development and planning initiatives. While this paper reports on the ECD sector from the perspective of programme access, we have very little information on the financial health of operators and how the quality of their services has been affected due to reduced incomes. A sustainable financing strategy for the sector necessitates the increased availability of comprehensive data relating to the number of registered and unregistered programmes, where they are located, costs and staffing.

10. **Conclusion**

In our September 2020 paper (Wills, Kotze and Kika-Mistry, 2020) it was evident that the reopening of the ECD sector after the hard lockdown was very slow. **By the fourth quarter of 2020 the reopening gained momentum.** An estimated 28% of NIDS-CRAM wave 3 respondents (living with children aged 0-6) indicted that in November/December a child in their household had attended an ECD programme in the past 7 days, up from 7% in the July/August interview. Extrapolating these results to child-level attendance rates, we estimate that about 31% of children aged 0-6 attended

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27 In turn, further research is required to better understand the current subsidisation model, accounting for conditional grants that are allocated for infrastructure and maintenance and how this state support compares to actual operating costs.
an ECD programme in November/December relative to at most 15% in July/August. Despite this recovery, programme attendance was still significantly lower than pre-lockdown levels where 47% of children aged 0-6 attended ECD programmes in 2018 (GHS 2018 own calculations). This implies that while many programmes that were closed in July/August had reopened by November/December, there remain programmes which have not been able to open. It also implies that child attendance numbers per programme are lower than before lockdown.

We find that in November/December 2020, ECD attendance was correlated with respondents’ employment status, children’s ECD attendance earlier in the year, ability to pay fees and the availability of affordable programmes in the respondent’s area of residence. The main reasons provided for children not having attended in the November-December period included programmes being temporarily closed, fears of children getting COVID-19 at the programme or not being able to afford the fees. **In particular, we observe that access to ECD programmes is highly dependent on households’ ability to pay fees.** Given the financial pressure that the pandemic has brought to many households, the ability to pay ECD fees appears to have become a more dominant constraint for the sustainability of the ECD system.

The greater uncertainty faced by households as they enter 2021 due to the rampant surge in infections, and increased transmissions related to the new COVID-19 variant, will likely translate into lower ECD attendance in the first few months of 2021. This may mean another income shock for the ECD sector, and will particularly affect ECD programmes reliant on fees for survival. **A well targeted stimulus package, aimed to provide relief to ECD programmes which have been most susceptible to financial shocks, will support both an increase in access to ECD services and improve the quality of programme delivery.**
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Appendix

A. NIDS-CRAM sample size, representivity and attrition

There appear to be slightly more respondents living with children aged 0-6 in the NIDS-CRAM wave 3 cross-section (panel and top-up sample) compared with wave 1 and 2 or compared to the General Household Surveys; however, the confidence intervals overlap suggesting this difference is not statistically significant.

Table A 1: Adults (18+) living with children aged 0-6 in the household, survey comparisons

<table>
<thead>
<tr>
<th></th>
<th>Estimate (%)</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS 2017</td>
<td>42.5</td>
<td>41.5</td>
<td>43.4</td>
<td>46376</td>
</tr>
<tr>
<td>GHS 2018</td>
<td>42.8</td>
<td>41.9</td>
<td>43.8</td>
<td>45913</td>
</tr>
<tr>
<td>NIDS 2017</td>
<td>43.8</td>
<td>41.9</td>
<td>45.7</td>
<td>23441</td>
</tr>
<tr>
<td>NIDS-CRAM wave 1</td>
<td>44.9</td>
<td>42.6</td>
<td>47.1</td>
<td>6721</td>
</tr>
<tr>
<td>NIDS-CRAM wave 2</td>
<td>44.6</td>
<td>42.0</td>
<td>47.1</td>
<td>5293</td>
</tr>
<tr>
<td>NIDS-CRAM wave 3</td>
<td>47.0</td>
<td>44.6</td>
<td>49.4</td>
<td>6123</td>
</tr>
<tr>
<td>NIDS-CRAM wave 1-3 panel only</td>
<td>45.9</td>
<td>43.1</td>
<td>48.6</td>
<td>4505</td>
</tr>
</tbody>
</table>

Source: NIDS 2017, GHS 2017, GHS 2018, NIDS-CRAM wave 1, 2 and 3
Notes: Estimates are weighted and clustered.

B. More about the CoCare voucher system to support ECD programmes

Implementing partners of the COVID-19 Response Project for ECD include Ilifa Labantwana, SmartStart, the Unlimited Child, and Violence Prevention through Urban Upgrading. They have implemented a voucher system, known as CoCare, which uses a financial technology platform owned by a company called Flash to send SMS vouchers to beneficiaries. The CoCare vouchers are meant for the purchase of nutritional foods from local communities (thousands of ‘spaza’ shops in the Flash network). ECD staff receive a voucher every two weeks and have been signed up to purchase highly nutritious foods with the vouchers to feed children attending the programme or to distribute food parcels if centres remain closed. ECD staff also benefit from the system by receiving monthly vouchers as support in lieu of the loss of income experienced.

C. Missing data on attendance in the past 7 days – implications for November/December estimates

In NIDS-CRAM wave 3, 7% of respondents living with children aged 0-6 did not respond to the question on ECD attendance in the past 7 days. Non-responses could influence the ECD attendance estimates obtained. In Table A 2 we identify the sensitivity of the November/December estimates, varying how we treat missing data in row h and i. The row h estimate of attendance in November/December at 30.5% excludes respondents with missing data on this question from the denominator of the calculation (n = 3107). Row i includes all respondents with missing November/December ECD responses in the denominator (n = 3222) and replaces missing information on November/December attendance with February attendance responses. The resulting estimate in row i is lower at 28% because those with missing data on November/December attendance predominately report no ECD attendance in February. We feel this is a more reliable estimate. However, confidence intervals overlap across the two sets of estimates in row h and i. If we consider both sets of confidence

28 The 22 missing responses on both November-December and February ECD attendance are coded as not attending in November-December.
intervals together, they suggest that of respondents living with children aged 0-6, the percentage reporting children attending ECD programmes in November/December could lie anywhere between 26% and 33%. Thus, there is a fair amount of imprecision around the November/December estimate of ECD attendance.

D. Upward adjustment of 2020 ECD attendance in June and July/August (past 7 days)

Exploiting the panel nature of the data, we can identify to what extent this skip pattern in the wave 2 ECD module resulted in an underestimate of ECD programme attendance in June and July/August.

We do this in four steps:

i. Obtain the percent reporting November/December attendance at an ECD programme for the sample of respondents living in households with children aged 0-6 in both wave 2 and 3.29

ii. Obtain the percent reporting November/December attendance for the same sample but only counting attendance in the past 7 days if respondents reported that children aged 0-6 in the household attended ECD programmes in March (in the wave 2 data).

iii. Identifying the ratio between i) and ii) to obtain a ‘raising factor’.

iv. Adjusting upwards the June and July/August attendance estimates from wave 2 by multiplying by the raising factor, adjusted for the number of months between March and June or July (as fewer children may join in months prior to the end of the year).

The comparative estimates are 19% (see row e in Table A 2) and 33% (see row j in Table A 2) respectively. The ratio of these estimates is 1.75 which is large. It implies that our June/July estimates using the wave 2 data in our September 2020 paper release, may have underestimated attendance in those months as the estimates did not incorporate new attendance.

We apply the adjusted raising factors in rows f and g of Table A 2. The percentage of respondents in households with children aged 0-6 reporting that any child attended an ECD programme in July/August increases from 4.7% (row d) to 6.9% (row g). When extrapolating estimates to the level of the child, this implies that 15% of children aged 0-6 were attending ECD programmes in July/August – an upward adjustment from 13% reported in our initial September 2020 paper (see Wills, Kotze and Kika-Mistry 2020).

29 By using the panel sample, this excludes the wave 3 top-up sample from the calculation.
Table A 2: ECD programme attendance in 2020 from NIDS-CRAM. Percentage reporting any child in household attending ECD at different periods (Samples: Respondents living with children aged 0-6)

<table>
<thead>
<tr>
<th>Row</th>
<th>Estimate (%)</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
<th>N</th>
<th>Sample used in the calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>February 2020</td>
<td>38.6</td>
<td>35.8</td>
<td>41.4</td>
<td>3 294 W3 (panel + top-up). Respondents living with children 0-6 in household.</td>
</tr>
<tr>
<td>b</td>
<td>March 2020</td>
<td>37.8</td>
<td>34.6</td>
<td>40.9</td>
<td>2 706 W2. Respondents living with children 0-6 in household in W2.</td>
</tr>
<tr>
<td>c</td>
<td>June 2020</td>
<td>3.1</td>
<td>2</td>
<td>4.2</td>
<td>2 706 W2. Respondents living with children 0-6 in household.</td>
</tr>
<tr>
<td>d</td>
<td>July-Aug 2020</td>
<td>4.7</td>
<td>3.4</td>
<td>5.9</td>
<td>2 706 W2. Respondents living with children 0-6 in household.</td>
</tr>
<tr>
<td>e</td>
<td>Nov-Dec 2020</td>
<td>18.6</td>
<td>15.5</td>
<td>21.8</td>
<td>1 782 W2 &amp; 3. Respondents living with children 0-6 in household in W2 &amp; 3.</td>
</tr>
<tr>
<td>f</td>
<td>June 2020 (Row c X raising factor)</td>
<td>4.3</td>
<td>2 706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>July-Aug 2020 (Row d X raising factor)</td>
<td>6.9</td>
<td>2 706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>Nov-Dec 2020 (excl. missing responses on attendance)</td>
<td>30.48</td>
<td>27.5</td>
<td>33.4</td>
<td>3 107 W3 (panel + top-up). Respondents living with children 0-6 in household.</td>
</tr>
<tr>
<td>i</td>
<td>Nov-Dec 2020 (imputing missing responses on attendance)</td>
<td>28.3</td>
<td>25.5</td>
<td>31.1</td>
<td>3 322 W3 (panel + top-up). Respondents living with children 0-6 in household.</td>
</tr>
<tr>
<td>j</td>
<td>Nov-Dec 2020</td>
<td>32.6</td>
<td>28.7</td>
<td>36.4</td>
<td>1 782 W2 &amp; 3. Respondents living with children 0-6 in household.</td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 2 and wave 3. Notes: Estimates from June and July/August 2020 which do not measure new attendance, are raised by factors drawing on the difference between the November/December attendance rates allowing for and not allowing for new attendance after March.

Implied raising factor
November/December 32.6/18.6 = 1.75

Raising factor - June (1.75-1)*3 months / (8 months) + 1 = 1.37

Raising factor - July (1.75-1)*4 months / (8 months) + 1 = 1.47
### E. Other tables and figures

**Table A 3: Patterns of return to ECD programmes in the last two quarters of 2020 using a sample with the same number of children aged 0-6 in the household in waves 2 and 3**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Estimate (%)</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>W2-3 (panel), respondents living with the same number of children 0-6 in household in W2 &amp; 3</td>
<td>41.9</td>
<td>36.6</td>
<td>47.1</td>
<td>150</td>
</tr>
<tr>
<td>W2-3 (panel), respondents living with the same number of children 0-6 in household in W2 &amp; 3 attending in March</td>
<td>7.2</td>
<td>3.3</td>
<td>11.1</td>
<td>423</td>
</tr>
<tr>
<td>W2-3 (panel), respondents living with the same number of children 0-6 in household in W2 &amp; 3 attending ECD in March</td>
<td>13.9</td>
<td>8.1</td>
<td>19.7</td>
<td>423</td>
</tr>
<tr>
<td>W2-3 (panel), respondents living with the same number of children 0-6 in household in W2 &amp; 3 attending ECD in March</td>
<td>46.6</td>
<td>38.2</td>
<td>54.9</td>
<td>423</td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 2 and 3 panel. Notes: Weighted using wave 3 panel weights. Sample restricted to respondents living with children aged 0-6 in waves 2 and 3 and those with no missing data on ECD attendance in March, June, July-August and November-December. As an important caveat, reported return could be noisy because household compositions may have changed, respondents may move households, children may move in or out of households, or children get older shifting out of the 0-6 age bracket.
Table A: Estimates of ECD attendance in the past 7 days (November/December) of any child in the household

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate (1)</th>
<th>Estimate (2)</th>
<th>Estimate (3)</th>
<th>Estimate (4)</th>
<th>Estimate (5)</th>
<th>Estimate (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed (not searching)</td>
<td>-0.016</td>
<td>-0.014</td>
<td>-0.009</td>
<td>0.001</td>
<td>-0.014</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.041)</td>
<td>(0.041)</td>
<td>(0.040)</td>
<td>(0.041)</td>
<td>(0.033)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>Unemployed (searching)</td>
<td>0.068*</td>
<td>0.070*</td>
<td>0.073*</td>
<td>0.073*</td>
<td>0.080**</td>
<td>0.071*</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.040)</td>
<td>(0.039)</td>
<td>(0.039)</td>
<td>(0.038)</td>
<td>(0.039)</td>
</tr>
<tr>
<td>Employed</td>
<td>0.061*</td>
<td>0.060*</td>
<td>0.062*</td>
<td>0.053</td>
<td>0.021</td>
<td>0.051</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.036)</td>
<td>(0.035)</td>
<td>(0.035)</td>
<td>(0.031)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.040</td>
<td>-0.038</td>
<td>-0.038</td>
<td>-0.047*</td>
<td>-0.023</td>
<td>-0.046*</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.028)</td>
<td>(0.028)</td>
<td>(0.026)</td>
<td>(0.025)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Household has piped water</td>
<td>-0.024</td>
<td>-0.024</td>
<td>-0.017</td>
<td>-0.026</td>
<td>-0.026</td>
<td>-0.031</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.029)</td>
<td>(0.025)</td>
<td>(0.029)</td>
</tr>
<tr>
<td>Urban (Ref: Rural)</td>
<td>0.009</td>
<td>0.007</td>
<td>0.008</td>
<td>0.006</td>
<td>-0.009</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.032)</td>
<td>(0.033)</td>
<td>(0.029)</td>
<td>(0.026)</td>
<td>(0.029)</td>
</tr>
<tr>
<td>Grant receiving household</td>
<td>-0.028</td>
<td>-0.039</td>
<td>-0.027</td>
<td>0.002</td>
<td>-0.028</td>
<td>-0.099</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.051)</td>
<td>(0.044)</td>
<td>(0.036)</td>
<td>(0.044)</td>
<td>(0.081)</td>
</tr>
<tr>
<td>Number of adults in the household</td>
<td>0.004</td>
<td>0.000</td>
<td>0.002</td>
<td>-0.008</td>
<td>0.001</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.006)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>Learners in household attended school past 7 days (ref: none attending)</td>
<td>0.052</td>
<td>0.067*</td>
<td>0.071**</td>
<td>0.069*</td>
<td>0.042</td>
<td>0.058</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.037)</td>
<td>(0.033)</td>
<td>(0.037)</td>
<td>(0.072)</td>
<td>(0.070)</td>
</tr>
<tr>
<td>No learners in household (ref: none attending)</td>
<td>0.003</td>
<td>-0.007</td>
<td>-0.065</td>
<td>-0.016</td>
<td>0.057</td>
<td>0.055</td>
</tr>
<tr>
<td></td>
<td>(0.073)</td>
<td>(0.056)</td>
<td>(0.075)</td>
<td>(0.055)</td>
<td>(0.120)</td>
<td>(0.118)</td>
</tr>
<tr>
<td>A little worried about learners going to school during COVID-19 (Ref: not worried)</td>
<td>-0.075</td>
<td>-0.087**</td>
<td>-0.064</td>
<td>-0.089**</td>
<td>-0.086</td>
<td>-0.078</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.044)</td>
<td>(0.041)</td>
<td>(0.044)</td>
<td>(0.071)</td>
<td>(0.069)</td>
</tr>
<tr>
<td>Very worried about learners going to school during COVID-19 (Ref: not worried)</td>
<td>-0.014</td>
<td>-0.019</td>
<td>-0.001</td>
<td>-0.020</td>
<td>-0.057</td>
<td>-0.047</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.045)</td>
<td>(0.041)</td>
<td>(0.045)</td>
<td>(0.063)</td>
<td>(0.062)</td>
</tr>
<tr>
<td>Attended ECD in February, paid fees</td>
<td>0.343***</td>
<td>0.188***</td>
<td>0.337***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.032)</td>
<td>(0.029)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended ECD in February, didn’t pay fees</td>
<td>0.223***</td>
<td>0.178***</td>
<td>0.219***</td>
<td>-0.113*</td>
<td>0.011</td>
<td>-0.108*</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.042)</td>
<td>(0.051)</td>
<td>(0.059)</td>
<td>(0.049)</td>
<td>(0.058)</td>
</tr>
<tr>
<td>Could afford fees in October</td>
<td>0.429***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affordable ECD centre within 5km</td>
<td>0.054**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: NIDS-CRAM wave 3 “cross-section”. Notes: Weighted and clustered. ***, **, and * indicate significance at the 1, 5, and 10 percent level.
<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not pay fees in Feb</td>
<td>Paid fees in Feb</td>
<td>t-test Difference</td>
<td>Not able to afford fees in October</td>
</tr>
<tr>
<td>Mean/SE</td>
<td>Mean/SE</td>
<td>(1)-(2)</td>
<td>Mean/SE</td>
</tr>
</tbody>
</table>

**Population group:**

- **Black**
  - Mean/SE: 0.917 [0.030]
  - Mean/SE: 0.869 [0.032]
  - Difference: 0.048*
  - Mean/SE: 0.943 [0.020]
  - Mean/SE: 0.804 [0.049]
  - Difference: 0.139***

- **Coloured**
  - Mean/SE: 0.077 [0.029]
  - Mean/SE: 0.089 [0.029]
  - Difference: -0.012
  - Mean/SE: 0.029 [0.013]
  - Mean/SE: 0.159 [0.048]
  - Difference: -0.129***

- **Asian/Indian**
  - Mean/SE: 0.000 [0.000]
  - Mean/SE: 0.008 [0.005]
  - Difference: -0.008*
  - Mean/SE: 0.009 [0.006]
  - Mean/SE: 0.002 [0.002]
  - Difference: 0.007

- **White**
  - Mean/SE: 0.005 [0.004]
  - Mean/SE: 0.034 [0.015]
  - Difference: -0.028*
  - Mean/SE: 0.019 [0.013]
  - Mean/SE: 0.035 [0.018]
  - Difference: -0.017

**Respondent is female**

- Mean/SE: 0.606 [0.041]
- Mean/SE: 0.631 [0.024]
- Difference: -0.025
- Mean/SE: 0.687 [0.025]
- Mean/SE: 0.545 [0.034]
- Difference: 0.143***

**Best age - years**

- Mean/SE: 37.806 [0.864]
- Mean/SE: 37.871 [0.559]
- Difference: -0.065
- Mean/SE: 38.670 [0.581]
- Mean/SE: 37.115 [0.763]
- Difference: 1.556*

**Income quintile: 1 - 3 (NIDS 2017)**

- Mean/SE: 0.660 [0.043]
- Mean/SE: 0.575 [0.030]
- Difference: 0.085*
- Mean/SE: 0.643 [0.031]
- Mean/SE: 0.537 [0.038]
- Difference: 0.106**

**Income quintile: 4 (NIDS 2017)**

- Mean/SE: 0.238 [0.046]
- Mean/SE: 0.220 [0.024]
- Difference: 0.019
- Mean/SE: 0.217 [0.031]
- Mean/SE: 0.236 [0.031]
- Difference: -0.018

**Income quintile: 5 (NIDS 2017)**

- Mean/SE: 0.102 [0.025]
- Mean/SE: 0.205 [0.030]
- Difference: -0.104***
- Mean/SE: 0.139 [0.026]
- Mean/SE: 0.227 [0.031]
- Difference: -0.087*

**Area:**

- **Traditional**
  - Mean/SE: 0.103 [0.028]
  - Mean/SE: 0.101 [0.017]
  - Difference: 0.002
  - Mean/SE: 0.107 [0.021]
  - Mean/SE: 0.096 [0.019]
  - Difference: 0.011

- **Urban**
  - Mean/SE: 0.422 [0.056]
  - Mean/SE: 0.532 [0.034]
  - Difference: -0.110*
  - Mean/SE: 0.484 [0.040]
  - Mean/SE: 0.537 [0.041]
  - Difference: -0.053

- **Rural**
  - Mean/SE: 0.446 [0.051]
  - Mean/SE: 0.354 [0.030]
  - Difference: 0.092*
  - Mean/SE: 0.389 [0.034]
  - Mean/SE: 0.355 [0.038]
  - Difference: 0.034

- **Missing**
  - Mean/SE: 0.029 [0.025]
  - Mean/SE: 0.013 [0.006]
  - Difference: 0.016
  - Mean/SE: 0.020 [0.012]
  - Mean/SE: 0.012 [0.009]
  - Difference: 0.008

**Household receives any grant + covid**

- Mean/SE: 0.890 [0.034]
- Mean/SE: 0.832 [0.028]
- Difference: 0.057
- Mean/SE: 0.893 [0.021]
- Mean/SE: 0.787 [0.039]
- Difference: 0.106**

**Employment: UE - Discouraged**

- Mean/SE: 0.129 [0.027]
- Mean/SE: 0.139 [0.018]
- Difference: -0.011
- Mean/SE: 0.155 [0.022]
- Mean/SE: 0.114 [0.022]
- Difference: 0.041

**Employment: UE - strict**

- Mean/SE: 0.159 [0.028]
- Mean/SE: 0.174 [0.019]
- Difference: -0.015
- Mean/SE: 0.200 [0.021]
- Mean/SE: 0.138 [0.021]
- Difference: 0.062**

**Employment: Employed**

- Mean/SE: 0.551 [0.041]
- Mean/SE: 0.519 [0.028]
- Difference: 0.032
- Mean/SE: 0.454 [0.030]
- Mean/SE: 0.617 [0.031]
- Difference: -0.164***

**Employment: Not economically active**

- Mean/SE: 0.158 [0.026]
- Mean/SE: 0.154 [0.018]
- Difference: 0.003
- Mean/SE: 0.173 [0.020]
- Mean/SE: 0.131 [0.023]
- Difference: 0.043

**Employment: Unknown**

- Mean/SE: 0.004 [0.003]
- Mean/SE: 0.013 [0.009]
- Difference: -0.010
- Mean/SE: 0.019 [0.012]
- Mean/SE: 0.000 [0.000]
- Difference: 0.018

**Number of adults in the household**

- Mean/SE: 3.885 [0.230]
- Mean/SE: 3.366 [0.082]
- Difference: 0.518**
- Mean/SE: 3.401 [0.088]
- Mean/SE: 3.597 [0.175]
- Difference: -0.196

**N**

364

902

713

549

Clusters

175

296

252

242

**Source:** NIDS-CRAM wave 3 “cross-section”. Notes: The value displayed for t-tests are the differences in the means across the groups. Standard errors are clustered at variable cluster. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.
Figure A1 shows the percentage of respondents reporting child hunger in their household, by whether children attended an ECD programme in the past 7 days (November/December) and whether children in their household received a meal at the programme in February.