

Increasing the uptake of government childcare offers

A report from the Behavioural Insights Team

Research Report 524

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1. Executive summary

In September 2016, Her Majesty's Revenue and Customs (HMRC) and the Department for Education (DfE) jointly commissioned the Behavioural Insights Team (BIT) to investigate how parents make decisions about childcare with the view to developing a set of communications to increase uptake of the new offers, "30 Hours Childcare" and "Tax-Free Childcare" (TFC).

The project was structured in accordance with BIT's TEST (Target, Explore, Solution and Trial) methodology.

- **Target:** During this phase, we pinpointed the exact behaviour change we wished to achieve during this project: broadly, to increase uptake of the childcare offers. We also explored possible measurable outcomes to assess the success of our interventions (i.e. a modified version of the letter sent to parents by HMRC to encourage uptake of childcare provision) in a randomised controlled trial (RCT).
- **Explore:** All activities in this phase were designed to gain a deeper understanding of the factors that underpin decisions about childcare and the barriers parents face in making decisions about childcare. BIT conducted a brief literature review and interviewed 36 parents and 6 practitioners in 3 locations around England to inform their review.
- Solution: BIT coupled the insights gained during the Explore phase with their institutional knowledge of the behavioural science literature. From this, we derived a set of 4 behaviourally-informed letters to help drive uptake of the childcare offers. One letter focused on the financial gains of TFC, another acknowledged the emotional aspects of decisions about childcare. A third variation highlighted the social aspects of how parents make decisions about childcare, while the final version outlined the practical steps required to complete the applications for the childcare offers.
- **Trial:** During the Trial phase, the focus of the project was narrowed to increasing uptake of TFC only. BIT tested the solutions developed in the previous phase using a Randomised Controlled Trial (RCT). The results suggest that the "Practical" letter, which included a checklist of items needed to complete the online application form, improves both the number of started applications and the number of completed applications.

BIT recommended HMRC continue to adapt and re-test the "Practical" letter to increase uptake going forward. They further recommended that HMRC continue to explore which other behavioural insights could be used to motivate parents to apply including "implementation intentions", varying the messenger and making the benefits of the offer more salient (see section 7 for more detail).

2. Description of the childcare offers

Tax Free Childcare (TFC) was introduced in April 2017. As part of the offer, parents create a dedicated childcare account in which they can manage money to be spent on childcare. For every £8 paid in by parents, the government contributes £2, up to a maximum of £500 every 3 months for each child. Parents are eligible if they (a) do not receive Working Tax Credit or Universal Credit; (b) earn at least the equivalent of 16 hours at National Minimum Wage or Living Wage per week; and (c) do not expect to have income of more than £100,000 each per year. TFC aims to benefit working parents by allowing them to manage their childcare costs whilst also receiving a contribution from the government. Take-up of TFC has been lower than the government originally forecast and this research is a key component of the work to increase it.

The 30 Hours Childcare offer was introduced in September 2017. This offer doubles the number of childcare hours for 3 and 4 year olds from 15 hours to 30 hours. To be eligible for this offer, both parents must be (a) in employment (if in a single parent family, the parent must be in employment); and (b) earning the equivalent of 16 hours per week at the National Minimum Wage or Living Wage, and not expect to have income of more than £100,000 each per year. Parents can receive TFC and 30 Hours Childcare at the same time if they are eligible for both.

3. Target

The aim of the Target phase is to pinpoint the exact behaviour change we aim to achieve as a result of our 'intervention' (i.e. the modified childcare letters). Ultimately, the behaviour we aim to encourage is increased take-up of the specified childcare offers which may in turn lead to increased labour market participation.

The communication campaigns for both TFC and 30 Hours Childcare presented the opportunity to test which behaviourally-informed communications were most effective at increasing take-up. At this stage of the project, we sought to understand the factors underpinning childcare decisions more generally, so we focused on take-up of both TFC and 30 Hours Childcare. We then narrowed this focus to just TFC once we reached the Trial phase because TFC channels provided a straightforward option for testing (i.e., the letter sent to households notifying them of the offer). Parents who are eligible for TFC were identified using the database of parents eligible for child benefit.

3.1 Measurable outcomes

The main outcome measures included in this study were:

- **Number of completed TFC applications:** the total number of households that had completed their applications within 8 weeks of the letters were sent by HMRC.
- Number of started TFC applications: in this case, parents started an application but did not complete it. This outcome was gauged 8 weeks after the letters were sent out to parents.
- Traffic to the Childcare Choices website as tracked by Google Analytics: this was included as a 'softer' outcome measure to indicate initial interest in the offers.

We also considered other measures including labour market outcomes such as the number of hours worked by parents and the number of parents in employment. These measures were out of scope for the current project, but we may look into them in future.

We assumed the number of completed TFC applications to be a proxy for the aforementioned labour market outcomes. This assumption is based on the fact that parents must be in employment (full-time or part-time) in order to be eligible for the offer. There may be cases where parents who already fulfil the minimum working requirements use the offers to pay for existing childcare, or to increase their leisure time, rather than increasing the number of hours they work. Again, measuring the extent to which this occurs was out of scope for the current project but we may explore this in the future.

4. Explore

The aim of the Explore phase is to understand the context of the project: to develop a deeper understanding of the policy in practice and the people it impacts. In order to change behaviour, one must have a firm grasp of the existing drivers of behaviour, whether they are attitudes, beliefs, or practical considerations such as the complexity of the task or the clarity of information given. The Explore phase for the current project involved a review of the existing literature in this area and in-depth interviews with parents to better understand the decision-making process underlying their childcare choices. ¹

4.1 Literature review

BIT's review of existing evidence by academics, research institutions and governmental bodies suggested that parents' decision making is influenced by 4 factors: financial (the cost of childcare), emotional (beliefs about what parents should do for their children), social (what others are doing), and practical (what childcare services are feasible for a given situation). We classify financial and practical factors as "barriers of the head", and emotional and social factors as "barriers of the heart". Although each family is unique (e.g., age of children and support networks available), these barriers emerge most frequently in the existing research as the factors that underpin decisions about childcare.

4.1.1 Barriers of the head

"Barriers of the head" refer to the practical considerations such as cost, transportation, and opening hours which inform decisions about childcare.

Financial factors

Both quantitative and qualitative research suggests that price is the most critical factor for parents making decisions about childcare. All parents are sensitive to the cost of childcare, such that if the price increases too much, they will use informal childcare, or not use it at all. This is particularly evident in low-income families - the availability and price of different types of childcare play a major role in parents' decisions. For instance, working mothers on lower wages are less likely than higher-wage mothers to use formal childcare, and are more likely to use informal childcare like grandparents, friends or neighbours instead.²

The Institute for Public Policy Research (IPPR) highlights a number of surveys in which parents report cost as the most significant barrier to taking up childcare, and particularly to mothers returning to work.³ Similarly, work undertaken by the Department for Work and Pensions (DWP) finds that parents identify financial factors as the most important

¹ Connelly, R., & Kimmel, J. (2003). Marital status and full–time/part–time work status in child care choices. Applied Economics, 35(7), 761-777.

² Powell, L. M. (2002). Joint labor supply and childcare choice decisions of married mothers. Journal of Human Resources, 106-128.

³ Thompson, S., & Ben-Galim, D. (2014). Childmind the gap: Reforming childcare to support mothers into work. Institute for Public Policy Research.

consideration when making decisions about childcare, with one survey showing that 43% of parents of 3 and 4 year old children would like to work more, but perceive the affordability of childcare as the main barrier. ⁴

There are significant financial trade-offs associated with childcare decisions. Research from the Institute for Fiscal Studies (IFS) suggests that women who stop working altogether after giving birth face a 2% salary decrease for every year they spend out of the workforce.⁵ When parents consider whether or not to return to work, they are facing an intertemporal choice problem⁶ : In the immediate term, the costs of childcare are high and parents may decide that they are better off looking after their children at home. However, in the longer term, parents' salaries will suffer if they do not return to work quickly, and they will also forego pension savings and potential promotion opportunities.

Some parents may make these intertemporal choices optimally, but behavioural science shows that people often irrationally overweight immediate costs and benefits compared to those in the future - a phenomenon known as "present bias". Moreover, the immediacy of the financial costs of childcare compared to the long-term financial gains of returning to work means that "loss aversion" is likely to be influencing parental decisions. A profound insight from behavioural science has been that people respond to mathematically identical options differently depending on whether they are presented as avoiding losses or making gains.⁷ Behaviourally-informed interventions might help some parents overcome present bias and loss aversion by framing the future costs and benefits of their current actions in a more psychologically compelling way, for example: "For every year you spend out of the workforce, your earnings drop by X%".

Practical factors

The childcare decision is often made during a stressful time in parents' lives. They will be adjusting to a new family dynamic, providing their baby with the near constant attention that it needs, and they will also almost certainly be experiencing periods of sleep deprivation.⁸ For parents who are just about managing, sleep deprivation, a lack of money and not having enough time could mean that they have less cognitive capacity to process information and make informed decisions about childcare.⁹

Consistent with this narrative, research shows that childcare searches are often short, suggesting that parents spend relatively little time finding information and studying different

⁶ Kalenscher, T., & Pennartz, C. M. (2008). Is a bird in the hand worth two in the future? The neuroeconomics of intertemporal decision-making. Progress in neurobiology, 84(3), 284-315.

⁴ Borg, I., & Stocks, A. (2013). A survey of childcare and work decisions among families with children. Department for Work and Pensions.

⁵ Monica Costa Dias, William Elming and Robert Joyce, The Gender Wage Gap, IFS Briefing Note BN186, August 2016, https://www.ifs.org.uk/uploads/publications/bns/bn186.pdf.

⁷ Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica: Journal of the econometric society, 263-291.

⁸ Chaudry, A., Pedroza, J. M., Sandstrom, H., Danziger, A., Grosz, M., Scott, M., & Ting, S. (2011). Child care choices of low-income working families. Urban Institute, Washington, DC.

⁹ Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. Science, 338(6107), 682-685.

options.¹⁰ Furthermore, many parents say they find it difficult to obtain clear information about different childcare offers.¹¹ Policy Lab research which investigated the user journey for governmental childcare offers highlights the confusion parents can experience when researching offers. For example, some parents were unsure of what would happen if their income fluctuated around the eligibility threshold for TFC.

Even when parents have chosen a childcare provider, they report having to undertake considerable planning of their day to day activities in order to make it work.¹² For example, they may have to rearrange their work schedule to fit the opening hours of childcare providers (many of which close at 4.30 pm), decide who will drop off/collect the child, consider transport links to and from the nursery, etc. If these logistical issues become too great, parents may choose to reduce their uptake of childcare.¹³ ¹⁴The importance of such practical matters should not be underestimated. Numerous studies from BIT and from the academic literature have shown that removing seemingly trivial barriers from administrative processes can have dramatic impacts on a wide range of behaviours, from attendance of NHS appointments to payment of taxes.¹⁵ Richard Thaler, Nobel Prize winner and one of the world's most prominent behavioural economists has adopted the mantra that if we want to encourage a behaviour, we need to "make it easy."¹⁶

4.1.2 Barriers of the heart

Barriers of the heart relate to more emotive and subjective elements of the childcare decision. For example, feelings of guilt at leaving one's child in the care of another, or concerns surrounding the opinions of friends and family.

Emotional factors

Deciding to put one's child into childcare can be an emotional decision for many parents. Some parents, particularly mothers, can experience guilt for wanting to return to work as opposed to caring for their child at home. Other parents actively choose to stay at home to care for their child until they start school. Qualitative work conducted in the UK shows that only half of parents without a paid job say they would choose to return to work if they had the "ideal" (e.g., affordable, high quality, close to home) childcare of their choice.¹⁷ However, this could be an example of 'cognitive dissonance', where people seek to rationalise

¹⁰ Government Digital Service, Childcare research presentation.

¹¹ Policy Lab, Childcare Support Workshop

¹² Lowe, E. D., & Weisner, T. S. (2004). 'You have to push it—who's gonna raise your kids?': situating child care and child care subsidy use in the daily routines of lower income families. Children and Youth Services Review,26(2), 143-171.

¹³ Bihan, B. L., & Martin, C. (2004). Atypical working hours: Consequences for childcare arrangements. Social Policy & Administration, 38(6), 565-590.

¹⁴ Verhoef, M., Tammelin, M., May, V., Rönkä, A., & Roeters, A. (2016). Childcare and parental work schedules: a comparison of childcare arrangements among Finnish, British and Dutch dual-earner families. Community, Work & Family, 19(3), 261-280.

¹⁵ The Behavioural Insights Team (2015). Update Report 2013-2015. Behavioural Insights Limited.

¹⁶ Thaler, R. H., & Sunstein, C. R. (2009). Nudge: Improving decisions about health, wealth, and happiness. New York: Penguin Books.

¹⁷ Bryson, C., Kazimirski, A., & Southwood, H. (2006). Childcare and Early Years Provision: A Study of Parents' Use, Views and Experiences. Department for Education and Skills.

inconsistencies in what they say they want and their actual behaviour by changing their stated preference to reflect what has actually occurred (e.g., "If I stayed at home it's because I wanted to stay at home").¹⁸

Concerns about the quality of care can weigh heavily on the minds of mothers and fathers as they consider childcare. Furthermore, understanding how to assess the quality of care can also be difficult - a study in the US suggests that parents do not always use the most relevant information (like the child-staff ratio, group size and the average education of staff) to assess quality, and instead base their decisions on physical aspects of the centre itself like the cleanliness of the reception area, how articulate the centre director is, or whether they were offered coffee.¹⁹

Parents report trust between them and the provider as one of the most crucial factors. Indeed, some parents choose informal childcare over formal childcare because of the greater levels of trust that it offers.²⁰ Further to this, behavioural science has shown that social groups with certain characteristics (low income, little education, living in an ethnically diverse area) are less likely to trust others and the government, although this study does not mention that this mistrust extends to government-funded childcare facilities.²¹ This suggests that these groups are less likely to feel comfortable placing their children in formal childcare, which may partly explain why they are more likely to use informal childcare. For parents who do use formal childcare, perception of the emotional relationship between the provider and their child is important. For example, 59% of parents rank a warm and caring atmosphere as essential.²²

Communication strategies would have to address these powerful drivers of parents' attitudes towards childcare if they are to successfully reassure parents who are worried about spending less time looking after their children themselves.

Social factors

A powerful and prominent insight from behavioural science is that humans are highly influenced by perceptions of what other people they identify with are doing, known as descriptive 'social norms'.²³ Research on how parents gather information on childcare providers indicates that social norms and other social dynamics are likely to be influencing behaviour. Most parents begin their childcare decision-making process based on information from friends, family and neighbours.²⁴ In a survey of low-income parents, 64% who use formal childcare were either referred by friends, family or neighbours, or had an existing

 ¹⁸ Festinger, L. (1962). A theory of cognitive dissonance (Vol. 2). Stanford university press.
 ¹⁹Mocan, N. (2007). Can consumers detect lemons? An empirical analysis of information asymmetry in the market for child care. Journal of population Economics, 20(4), 743-780.

²⁰ Vincent, C., & Ball, S. J. (2006). Childcare, choice and class practices: Middle class parents and their children. Routledge.

²¹ Alesina, A., & La Ferrara, E. (2002). Who trusts others?. Journal of public economics, 85(2), 207-234.

²²Brind, R., Norden, O., McGinigal, S., Garnett, E., Oseman, D., La Valle, I., & Jelicic, H. (2011). Childcare and early years providers survey 2010.

 ²³Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance.
 ²⁴ Pungello, E. P., & Kurtz Costes, B. (2000). Working women's selection of care for their infants: A prospective study. Family Relations,49(3), 245-255.

relationship with the provider.²⁵ In general, parents tend to access information on childcare locally and 41% of the time this takes place via word of mouth.^{26 27}

Parents often share information through conversations they have with each other when dropping off and collecting their children from nursery.²⁸ Although this can be a useful way for parents to access information, one concern might be that tightly knit networks tend to include people who are too similar to each other. This social homogeneity can result in parents receiving a restricted range of information relating to childcare choices. This problem could be exacerbated amongst low-income families as they are less likely to receive information on childcare than more well-off families.²⁹

Some communities hold the shared cultural belief that using childcare at all is inappropriate. For example, only a very limited proportion of Italian families use formal childcare.³⁰ In the UK, children from Pakistani, Bangladeshi, other Asian and Black African backgrounds are less likely to receive childcare (both formal and informal) than children from other ethnic groups.³¹ Additionally, there are likely to be varying norms in different social groups/cultures on the age at which it's appropriate to place a child in formal childcare. Communication strategies will have to consider the power of such social influences if they are to successfully drive behaviour change.

4.1.3 Conclusions on the existing literature

BIT's review of existing literature in this area indicates that both barriers of the head (financial and practical factors) and barriers of the heart (emotional and social factors) influence decisions about childcare. Whilst many of the issues pertaining to childcare are behavioural in nature, few researchers have examined the underlying behavioural biases that drive decisions. Moreover, we are not aware of any research examining how each of the 4 factors we highlight relate to each other; the majority of research focuses on one element of the decision rather than investigating how different factors interact.

In order to confirm these behavioural biases and to gain a deeper understanding of the behaviours at play during decisions about childcare and therefore, the types of

²⁵ Layzer, J. I. (2007). National Study of Child Care for Low-Income Families. Care in the Home: A Description of Family Child Care and the Experiences of the Families and Children Who Use It. Wave 1 Report: Executive Summary.

²⁶ Speight, S., Smith, R., La Valle, I., Schneider, V., Perry, J., Coshall, C., & Tipping, S. (2009). Childcare and early years survey of parents 2008.Research Brief, DCSF-RB136, Department for Children Schools and Families.

²⁷ Huskinson, T., Hobden, S., Oliver, D., Keyes, J., Littlewood, M., Pye, J., & Tipping, S. (2016). Childcare and Early Years Survey of Parents in England, 2014 to 2015.

²⁸ Small, M. L. (2009). Unanticipated gains: Origins of network inequality in everyday life. Oxford University Press.

²⁹ Speight, S., Smith, R., La Valle, I., Schneider, V., Perry, J., Coshall, C., & Tipping, S. (2009). Childcare and early years survey of parents 2008.Research Brief, DCSF-RB136, Department for Children Schools and Families.

³⁰Del Boca, D., Locatelli, M., & Vuri, D. (2005). Child-care choices by working mothers: The case of Italy. Review of Economics of the Household,3(4), 453-477.

³¹ Huskinson, T., Hobden, S., Oliver, D., Keyes, J., Littlewood, M., Pye, J., & Tipping, S. (2016). Childcare and Early Years Survey of Parents in England, 2014 to 2015.

communication strategies that would be most likely to overcome these barriers, BIT conducted their own qualitative research with parents and childcare providers. They were particularly interested in other aspects of the decision that did not arise in the review of the academic literature and how these impact behaviour. For instance, many parents who participated in the interviews mentioned the benefits of childcare for children's development through socialising with other children and learning in a structured way.

4.2 Structured interviews with parents and practitioners

This section describes the methodology BIT employed to conduct the interviews with parents and childcare providers.

Qualitative research enables us to explore themes in detail. It is not designed to be representative of the wider population. BIT developed an interview guide which included questions on how parents came to the decision to return to work or to remain at home, what they felt were the greatest barriers for parents when considering putting their children into formal childcare, and whether they believed their child had benefitted as a result of their enrolment in childcare.

At the time of the interviews, TFC and 30 Hours Free Childcare had not yet been introduced. Therefore, a key focus of the interviews was to understand where parents currently sought and found information regarding childcare. BIT asked parents what they felt was the best medium to communicate with busy parents. They also posed questions to gauge parents' first reflections on what were at the time, the forthcoming government offers - whether parents thought the offers would prompt a return to work, or increase the number of hours in work.

The interviews were conducted almost exclusively in person, with 2 parent interviews and 1 childcare provider interview conducted over the telephone. Interviews were structured and based on the interview guide which BIT developed in light of the literature review. Interviews took an average of 25 minutes, although this varied depending on the length of responses.

Table 1 provides summary statistics on the parents and childcare providers interviewed. BIT spoke to 18 working parents, 19 non-working parents and 6 childcare providers. The sample is diverse: they were able to speak to parents across the income and education distributions; however, given the small sample, the findings cannot be generalised to the broader population.

	Greenwich	Liverpool	Hertfordshire	Nottingham
Working parent	7	7	4	0
Non-working parent	11	6	2	0
Childcare provider	2	1	2	1

Table 1: Summary statistics for interviewed parents and childcare providers

4.3 Key insights from interviews

This section is structured around how respondents reacted to 'head' and 'heart' barriers to childcare decisions. BIT categorised financial and practical factors as barriers of the head and emotional and social factors as barriers of the heart.

Figure 2 illustrates the number of times parents mentioned financial, practical, emotional, or social factors and so shows the weight that parents in our sample place on each of these factors. As responses were coded as being positive or negative, the chart also demonstrates which factors are generally viewed positively, which were viewed negatively, and which elicit mixed responses. An example of a response that would be coded as "social" and "positive" is: *"it was word of mouth, it was trusting people you know."* An example of a response that would be coded as "emotional" and "negative" is: *"worrying constantly about whether they are okay, is there anything wrong with them, are they missing me."*

Examining how these factors interact is a novel way of looking at childcare decisions. It is clear from the graph that social factors like being reassured about one's childcare choices by another parent drive decisions, whilst emotional factors including feelings of guilt act as the main constraint. Parents have mixed feelings about financial factors whilst practical factors seem to feature less than other aspects of the decision.

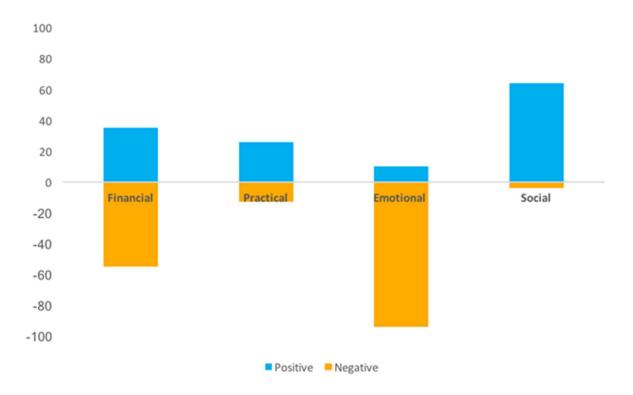


Figure 2: References by parents to financial, practical, emotional and social factors

4.3.1 Barriers of the head - interview findings

In this section, we present findings from the qualitative research related to barriers of the head, which we break down into two subcategories: financial factors and practical factors. Throughout this section, we put forward a number of hypotheses as to the behavioural drivers at play when parents make decisions about childcare. These are conjectures based on BIT's knowledge of the behavioural science literature. All the quotes cited in this section are direct from the parents and childcare providers BIT interviewed.

Financial factors

Summary

- The cost of childcare is a significant barrier for both working and non-working parents.
- Many non-working parents compare the cost of childcare to their take-home salary and conclude that working is simply not worthwhile.
- The majority of parents (both working and non-working) were positive about the introduction of the new childcare offers but some expressed reservations that the offers do not benefit the most disadvantaged in society.
- Behavioural biases like "present bias" and "loss aversion" are at play when parents consider the financial aspects of childcare. Communication strategies that increase the salience of the long-term benefits of returning to work may help to increase take-up of the new offers.

When parents consider putting their children into formal childcare, barriers of the head in the form of financial considerations are clearly highly salient. Financial aspects were mentioned more than any other factor by parents and the majority of the references to finance were

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negative in tone. Almost all parents in the sample mentioned the cost of childcare at least once, and for some, it was the focal point of the discussion. Parents were clearly frustrated by the cost of childcare, using adjectives like *"exorbitant"*, *"ridiculous"*, *"expensive"* and *"unaffordable."*

For the non-working parents interviewed, the cost of childcare seemed to be the primary factor preventing them from returning to work. Many described in detail the process of calculating their net earnings after childcare: *"We wrote it all down on paper and I think I would have been going to work for about £25 a week."* Many respondents did not see the point of returning to work under such circumstances: *"The nursery would take all of my wages."* Many non-working parents felt that if they were going to make such a small amount, or just break even from working, they would be better off staying at home: *"I would rather look after my own child than pay someone else and not have anything to show for it."* For non-working parents in this position, not working was presented as the logical outcome: *"It was either give my child to someone else to mind, or stay at home to look after them myself. It just made sense for me to stay at home."* Many non-working parents like advancing their careers or being financially independent. Indeed, one might argue that they are overweighting current costs over future benefits, indicative of "present bias" in their thinking.

For the full time working parents interviewed, the financial gain from employment was viewed more positively, providing the few positive references to financial factors in the study. Often this was centred on what going back to work would mean for their children, and a desire to give them a better life than they had: *"I wanted her to be able to have the things that I didn't get to have."* This sentiment was echoed by a number of working parents: *"I like to buy them nice things and take them nice places."* Many full-time working parents returned to work to maintain their standard of living: *"We're used to having a certain amount of money."* Some parents also expressed a desire to return to work for more personal reasons like having independence: *"I have my own independence - I like to get out and do things"*, or the value of work: *"I want my kids to see me working."*

Many of the part-time working parents interviewed felt that their decision to work was finely balanced: "Sometimes it feels like you're just going to work to pay the nursery, and you're not really that much better off, but sometimes in life, there's things you just have to do." These parents felt that they would not be able to afford the childcare costs associated with a return to full time work: "I would pay basically all of my wage to the childminder, so it's just cheaper to do part-time."

Other part-time working parents expressed a desire to work that went beyond purely financial factors: *"I'd prefer to be at work than sitting at home twiddling my thumbs."* As well as keeping themselves busy, some part-time working parents wanted to make a financial contribution to their family, however small: *"I just want to be able to commit to the financial upkeep of our home."* A small minority of part-time parents mentioned the importance of returning to work to avoid *"gaps in one's CV"* saying that *"quitting the workforce altogether for a number of years just makes you less employable in the long-term."*

As part-time parents have already made the decision to use formal childcare, they are perhaps most likely to respond to an improved financial incentive to work more. Many part-

time parents may have already overcome barriers of the heart (social and emotional concerns) in making their decision to use childcare, and so may be more open to increasing their working hours if barriers of the head (practical and financial concerns) can be alleviated.

Childcare providers were largely in agreement with individual parents on the heavy burden of childcare costs: *"For some, the main barrier is definitely cost."* Moreover, some providers could pinpoint specific conversations they had had with parents in which the parent indicated they would work more if childcare costs were not so high: *"She weighed up the cost of childcare against her salary and calculated that she'd be about £200 better off a month. But then she added in the cost of her commute to and from London and realised returning to work just wasn't viable."*

After discussing the financial barriers with parents, the researchers briefly summarised the then forthcoming childcare care offers³² before asking parents what they thought of them, and whether the offers would help to alleviate some the financial constraints to childcare. Working parents responded very positively to the new offers with many voicing their approval that this extra help was being targeted towards parents in employment: *"We spend so much of our salaries on childcare every month."* A childcare provider added that the new offers might help to reduce the burden on informal care providers: *"The offers could mean grandparents won't have to mind kids as often."*

Some non-working parents saw how the new offers would change their circumstances, with a few articulating how it would prompt them to explore returning to work. Some initial questions arose around how the offer would work in practice, e.g., one non-working parent expressed a concern about how she would get a job without having the free hours: *"Can you get the hours so that you can look for work?."* This highlights the difficulties that exist for many unemployed people who feel that there is a "catch 22" when it comes to finding work.

Other non-working parents were less positive about the new offers. When one parent was asked if they knew about childcare support from the government, they responded, *"I don't, they're taking everything away, aren't they?*" Some parents mentioned that they felt most government support is geared towards single child families as opposed to families with multiple children: *"At the moment childcare offers are more focussed on the families that have only one child."*

Part-time working parents felt that while they were not in a position to return to work full-time at present, the new offers would make a difference. One parent mentioned that his wife (who currently works part-time) would probably work less as a result of the offers as the free additional hours would act as a substitute for paid hours which meant she would not need to work as much as she currently does.

When discussing their opinion on whether the new offers were a good or a bad idea, the distinction between working and non-working parents blurred, with parents expressing views that were more political or ideological in nature. Some parents were very much behind the changes: *"I think they should give priority to working parents, rather than people on benefits"*, whilst others felt that the offers were targeted towards people who were doing well rather

³² Our interviews with parents were conducted in October 2016, before the new offers had been introduced.

than focussing on the most disadvantaged in society: *"I just think that money would be better spent on schemes for disadvantaged families."* Some also questioned whether the policies' intention to get people back into work would suit all parents: *"I don't think people who aren't working now will ever work... they have so many problems - they wouldn't be able to work."*

The cost of childcare poses a significant barrier for both working and non-working parents. Although financial barriers to childcare are more structural in nature, the framing of financial decisions can impact the way individuals choose between options. Insights from behavioural science suggest that refocusing the childcare decision to emphasise the long-term benefits of a return to work instead of the short-term costs could help to increase labour market participation by overcoming "present bias". Moreover, highlighting the potential loss of earnings over an extended period may help parents to recognise the value of work in the long run.

Practical factors

Summary

- Parents have a strong preference for a nearby nursery, or a nursery that is on the way to work.
- Parents want childcare that is compatible with their working schedules including shift work.
- The time at which parents begin to consider childcare options varies significantly across families.
- There was little consensus amongst parents as to the best medium of communication to reach parents.
- All parents expressed a need for clear, easy-to-understand information about the eligibility criteria of the new offers and for more information on childcare in general.
- Excessive cognitive load or having to cope with the high demands of parenthood may cause parents to make decisions that they otherwise may not make in many areas of their lives including childcare. Making processes as easy as possible and prompting parents to think about the practicalities of their childcare choices early on may help parents to overcome this barrier and thus increase take-up of the offers.

Whilst financial factors act as a significant barrier of the head, practical considerations also play a role. These include the proximity of the childcare facility to a parent's home or work, travel arrangements, and the opening hours of providers. Some non-working parents aspired to return to work but found practical factors an issue: *"I haven't started working because I just thought, 'how am I going to do it'?"* This quote reflects the psychological strain many parents experience after the birth of a child. Parents have a preference for convenience at this time so small adjustments like the simplification of information can have disproportionate impacts. Later, we will show how insights from behavioural science can be used to overcome this barrier.

For the non-working parents interviewed, who used formal childcare, there was a strong desire to be as close to the nursery as possible, with lots of parents picking a particular nursery because *"it was literally across the road from us."* A significant number of parents valued proximity over all other factors, with some ignoring other considerations entirely: *"It's purely where you live and that's why it's convenient. Most nurseries are the same."* Some

non-working parents were very open about the lack of further research they did beyond just looking at location: *"To be honest, I just live down the road, and I knew it was a nursery."*

One childminder we spoke to explained how this preference for proximity sometimes acts as a barrier to parents putting their children into childcare: *"Although they might only live a mile or so away, if they haven't got transport, it's a problem."*

Similarly to non-working parents, the working parents interviewed also valued location, in that they wanted something close by or on their way to work. Working parents outlined the importance of having a practical arrangement that fits their daily routine: *"I just drop her off, get on the bus and then go to work... it's fairly straightforward."* A small minority of working parents were prepared to ignore distance if it meant sending their child to a better nursery: *"I have to come out of the city and then drive back in to go to work, but we want the best for our child."*

Another practical concern for both full-time and part-time working parents was the opening hours of nurseries: *"If you had to be at work for 8 [in the morning], you have to set off at 7."* Many working parents found that once they restricted their choices to what would fit with their working schedules, they were left with a limited number of options: *"Some nurseries don't open until 7:30/8:00 am, so they just wouldn't work."* For parents with significant commuting times, this often meant being restricted to private nurseries: *"I haven't found any public nurseries whose hours facilitate working in central London."* For parents doing shift work, childcare arrangements were particularly difficult: *"It's all shift work when I'm on placement and so the nursery wouldn't be able to pick up the slack."* Many parents who do shift work had informal childcare arrangements in place.

Across working and non-working parents, the time when parents began considering childcare options varied significantly. For example, one non-working parent began thinking about childcare during pregnancy, whilst a working parent started considering options after the birth of her child: *"Right after I gave birth, I started thinking about childcare because I obviously knew I wanted to go back to work."* Other part-time working parents actively put off considering childcare until they absolutely had to: *"I just put it to the back of my mind - I just didn't want to have to think about it."* Childcare providers expressed some frustration at parents leaving it late: *"We do get some parents that come in early, but a lot of them do leave it to the last minute. They come in and say they are going back to work next week and expect a place right away."*

Another practical consideration for many parents thinking about childcare is where to find information. To determine the most effective information channels for parents, the researchers asked the interviewees what they felt was the best way to communicate with busy parents. We found little consensus amongst parents (both working and non-working) on this point. Some parents had a preference to receive communications via post as *"emails are a lot easier to delete and forget about"*, whilst others felt email was better because *"letters just get put into a pile up and never get read."*

Apart from finding information about the offers, many parents expressed a need for information about childcare more generally. As we will describe later in the "Social" section, it appears that most parents find out about childcare through their friends. Some parents said they felt the gov.uk website was a trustworthy source, but that the information was not easy

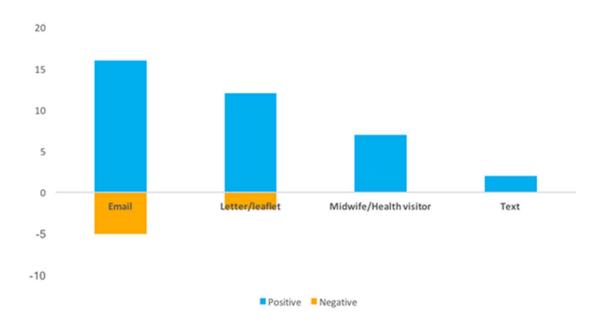
to find or to understand: "I've been on the gov.uk website, but found it really difficult to use so I don't go there anymore – it's just too confusing." Some working parents felt the best way to find information was to visit the childcare provider directly: "When we went to the nursery and actually spoke to staff, I think I found that the most useful information of all." This highlights parents' want for easy, understandable information that is all in one place. Parents often experience excessive cognitive load after the birth of a new child, so providing information in a clear and concise manner can help to make parents' decision making process easier.

Others thought communicating with parents as they go through the different stages of the pre and post-natal care cycle would align well with parents' thought processes at this time: *"First you go to your GP, then you go to the hospital for scans, once the child is born you get a visit from the midwife; there are lots of points in the process where you could give parents information about childcare.*" Moreover, many parents highlighted the significance of midwives for new parents; *"Parents always listen to the midwife – they always listen and they take the advice on board, probably more so than anyone else.*" Some parents also suggested advertising in GP surgeries, or to add information about childcare to the standard notifications parents receive from GPs via post in relation to child health checks, vaccines etc. for children under 3 years old.

Other parents felt that reaching people through the usual forms of media like television, posters, billboards, local newspapers, radio, social media and information websites like "<u>Netmums</u>" and "<u>Bounty</u>" and retailers like "<u>Mothercare</u>" and "ASDA" would help to raise awareness about the forthcoming government offers. Some working parents also suggested advertising in local schools as many children who attend childcare would have older siblings who attend school.

Figure 3 presents information preferences broken down by medium. Whilst email was mentioned most frequently, it also had the greatest number of negative references. Using the midwife/health visitor as a method of communication was positively viewed by all parents who mentioned it.





When asked about the types of information parents require in order to make an informed decision, both working and non-working parents mentioned that clear, easy-to-understand information about the eligibility criteria was invaluable: *"The government should make their adverts easier to understand and free from all the usual legal jargon they have in them."* They also cited a need for more information on childcare in general, and suggested the creation of a website which acts as a "one-stop-shop" for parents to research their childcare decisions. The website could contain information about the different types of childcare, how to assess quality, the nurseries/childminders in their local area, the availability of places at a given time, the Ofsted ratings, and the government offers including eligibility criteria and how to apply.

Practical factors like the proximity of the childcare facility to one's home or place of work, the opening hours of the childcare facility and where parents source their information all impact the way in which parents make decisions about childcare. Such practical considerations can sometimes be barriers at a subconscious level. For example, people who receive a standard tax letter prompting them to file an online tax return do not perceive finding the website to be a barrier. However much of BIT's work in recent years has shown that by making the process easier by removing seemingly irrelevant "friction costs" (like having to search for the HMRC website via Google instead of having a specified URL for the exact page required to hand) can have a disproportionate impact on behaviour.

Parents often find it difficult to cope with the demands of parenthood after the birth of a child³³, and this can cause them to make decisions differently. Insights from the behavioural sciences suggest that policies, including communications campaigns, should be designed to make enacting the desired behaviour as easy as possible. This might mean providing clear-

³³ Kim, P., Strathearn, L., & Swain, J. E. (2016). The maternal brain and its plasticity in humans. Hormones and behavior, 77, 113-123.

cut information to parents in ways that are easy for them to understand. Moreover, prompting parents to make a plan which outlines the where, what and how of a desired behaviour can help to alleviate cognitive load.

4.3.2 Barriers of the heart - interview findings

Barriers of the heart are the emotional elements of the decision to put a child into childcare, for example, the feeling of guilt from leaving one's child with someone else. Barriers of the heart also include social aspects that may make a parent feel more or less emotionally comfortable, for example a parent may feel happier leaving their child in a nursery if it has been personally recommended by a relative, or more anxious about using a childminder if friends have had bad experiences. Even if parents manage to overcome the barriers of the head outlined above, barriers of the heart may make the decision more difficult, causing some parents to abandon the idea altogether.

Emotional factors

Summary

- Many parents find making childcare decisions emotionally draining.
- Improvements in their child's development as a result of attending nursery can help to alleviate feelings of guilt and worry.
- Some parents prefer to keep their children at home until they reach a certain age (e.g., 2 years old).
- Part-time working parents view part-time work as a compromise they maintain employment but also have time with their children.
- Childcare providers recognise their role in helping parents be more emotionally comfortable.
- Reassuring parents that it is normal to experience anxiousness when they first start using formal childcare, and that these feelings subside once their child is settled, may help to stem emotional factors and thus increase take up of the new offers.

Choosing to put one's child into care can be an emotional decision for many parents. The gravity of leaving a small child in the care of someone else can weigh heavily on many parents' minds: *"Leaving your child in someone else's care is a big deal."* For some, emotional factors were even stronger than financial considerations: *"I got offered a job, but when I started looking into childcare, I just got too upset and had to stop."*

Many of the working parents interviewed used words like "horrendous", "upsetting", "nervewrecking" and "heart-breaking" to describe the first time they dropped their child off at their chosen childcare facility. For these parents, the overwhelming emotion experienced was guilt – guilt that they were leaving their child in the care of "a stranger", guilt that they were not giving their child the same upbringing as they had: "I feel so sorry for him because I had a better childhood - I had my mum"; guilt that their child will not receive the same care as they would at home: "I didn't want to give her to anyone else as I don't think anyone else can look after her the way I can"; and guilt that their child is somehow less well off than other kids whose parents don't both work: "It's tough that you have to drop him here whilst other kids are still sleeping." Some working parents described the emotional toll the decision to use childcare had taken on them: "I was crying in work and I was getting family members to pick her up early so that I'd feel better." A minority of parents mentioned that at times, emotional factors were so great that they considered quitting work altogether: "I was quitting work to be honest with you, I was leaving my job - it was just so heart-breaking to see her sobbing uncontrollably like that. She was terrified. And then for me to just walk away... it was awful."

Many working parents reported seeing the benefits of childcare and a subsiding of their guilt once their children had settled into childcare. For example, one working parent reported seeing marked progress in her child's development as a result of the child mixing with other children and learning in a structured way. For many parents, formal childcare was viewed as an opportunity to build social skills and routine in their children. For instance, one parent recalled how her daughter had made rapid progress in her speech soon after starting in formal childcare: *"Even though it was heart-breaking to have to walk away from her, it was worth persevering through it until she was settled. Our baby's speech has come on so much – she's so clever from attending nursery."*

Many non-working parents felt that putting their children into childcare before the age of 2 was too early: *"When he's 2 or 3 years, then I'll think about nursery--right now he's too small."* They worried that they would miss out on important moments in their child's development if they returned to work too quickly after birth: *"Literally every day, there's something new, and I want to be there to see it".* Other working parents preferred informal childcare (e.g., grandparents) so as not to miss out entirely on significant events: *"If he walks for the first time, my mum would be there to see it and appreciate it, whereas a stranger wouldn't care."*

This contrasted with the views of working parents who recognised the importance of work for both themselves: *"I'm a mum, but I'm also a person, and I just couldn't sit at home all day"*; and their children: *"I like having time away from my children so that we can appreciate the time we do have together."* Some emphasised the value of childcare in their lives: *"It's a weight off my mind knowing I can put my kids into childcare and go back to work."* In choosing a provider, the majority of working parents reported trust between them and the provider as the most significant factor: *"Without trust, there's going to be a lot of upset and worry."*

Many of the part-time working parents interviewed draw parallels with both working and nonworking parents when it comes to emotional factors. Many non-working parents wanted to spend some time with their children when they were small because *"there are some things you just don't want to miss because you'll never get them back - I don't want someone else to teach him his first word or his first steps - I want to do that.*" Whilst many part-time working parents experienced guilt at having to leave their children, they viewed returning to part-time work as striking a balance between working and not missing out on important moments in their child's development. One mother commented: *"It was really hard, so that's why I chose to come back part-time."*

Many of the part-time parents also shared some emotional responses with working parents in their recognition of the importance of work: *"I've always worked, even before I left school, I've always worked, and I enjoy working."* For some part-time working parents, work is a release

from the burden of childcare: "To be honest with you, I was a bit sick of being at home all day long." Other part-time parents recognised the importance of "keeping your foot in the door" should they ever want to return back to work full-time: "The company told me that within 6 months or a year, I could always come back to full-time, so that's very good."

When it comes to emotional factors, providers reiterated the sentiments of parents saying that the emotional strain is significant. Providers recognised their role in alleviating these concerns as best they could: *"The most important thing is the feeling they get when they first walk in."* Providers also emphasised the importance of doing the little things: *"We build a relationship with parents - we know their names and the names of their children."* Emotional factors also played a role in what kind of childcare facility parents chose. Childminders recognised that one of their key selling points was their ability to keep families together: *"Brothers and sisters are together, whereas in a nursery, they would be in different rooms."*

Many parents find the decision to place one's child into formal childcare emotionally draining. With time, however, feelings of guilt and worry subside as parents begin to see the progress their child is making as a result of being in childcare. Insights from behavioural science suggest that normalising this emotional reaction and reassuring parents of the long-term benefits of childcare in terms of their child's progress may help to overcome emotional factors and, in turn, increase take-up of the new offers.

Social factors

Summary

- Parents use their social network for information.
- Parents use informal childcare to supplement formal childcare.
- Providers are very aware of the importance of word of mouth for their business.
- Choosing an appropriate messenger to deliver information and using social norms could reassure parents that others like them use childcare.

Whilst emotional factors comprise most of the barriers of the heart, the interviews showed that social factors also play a role, both before the decision is made to use, or not to use, childcare, and again after this decision has been taken through the supplementation of childcare hours by people in one's social circle, like neighbours or family.

Parents do not make decisions about childcare in isolation. The vast majority of parents interviewed mentioned sourcing information from other parents who had already used a nursery/childminder, their friends and family, or online (forums and social media). Parents rely heavily on word of mouth when assessing the quality of a given nursery or childminder. All parents said that they would trust the word of another parent above any other advice: *"I don't think you'd find a better opinion than that of another parent."* When interviewing parents during a play group, one parent mentioned that a local dad had sent his child to a nearby nursery with the result of 5 more parents following suit. This demonstrates the rippling effect of one parent's decision on many other parents in the community.

Parents meet and speak to each other when they visit the nursery. One woman who was enrolled in a parent class emphasised the social nature of children's centres: *"I always talk to*"

the ladies in the class – some of them say their kids are in nursery, some say that their babies are not ready."

The full-time and part-time working parents interviewed often use their social circles to supplement formal childcare. For instance, if one parent is running late from work, her friend might collect her daughter along with her own children and bring them all back to her house. Similarly, some working parents use a mixture of formal and informal childcare (e.g., grandparents): *"My mother helps out a lot – some days, she'll pick him up for me or drop him off in the morning."* Here, informal care acquired through a parents' social circle has facilitated a return to work, and assisted with any gaps in childcare between parents' working hours and their childcare provider's hours. Some full-time working parents also reported using childminders as they feel they offer more flexibility. Some part-time working parents acknowledged that relying on their social circle involved a bit of give and take: *"We sort of help each other as well. If I'm not at work, I'll drop off someone else's kids if I'm going that way."*

The providers interviewed were very aware of the importance of word of mouth for their business: *"I think a lot of parents get information about us from their friends and family."* Providers noted that for some parents, putting one's child into formal childcare afforded parents an opportunity to socialise themselves: *"A lot of parents do spark off friendships by virtue of their children going into the same nursery, when they would probably not have met in everyday circumstances."*

A well-known insight from behavioural science is the power of "social norms": an individual's behaviour can be greatly influenced by the behaviour of others, particularly if those others are people they hold in high regard like family or a good friend. As parents tend to trust other parents, having another parent act as the "messenger" for the new childcare offers could help to foster trust amongst parents and potentially increase take-up.

5. Solution

Through BIT's review of the academic literature and their qualitative work with parents and practitioners, they found that certain behavioural biases in decision making about childcare re-emerge frequently. In this section we outline behaviourally-informed solutions to offset these biases so as to increase take-up of TFC.

This section is structured to reflect the 2 main themes mentioned throughout this report: barriers of the head and barriers of the heart. The communications in this section commence with a call to action making the required behaviour salient and easy to understand. BIT have found this technique improved response rates in previous work; when people understand what they have to do next, they are much more likely to do it. For ease of interpretation, we present each communication individually, as each targets a different behavioural driver.

5.1 Applying behavioural insights to overcome barriers of the head

5.1.1 Helping to make future financial gains more salient

Financial factors weigh heavily on parents' minds when making decisions about childcare. Almost all parents discussed the high cost of childcare as a barrier to returning to work. Several parents described how they wrote down what they would earn from returning to work and compared it to what they would have to spend on childcare.

When parents consider a return to work, they are facing an 'intertemporal choice' problem - that is, parents must make decisions about their child's care where they evaluate tradeoffs at different points in time.³⁴ In the short-term, returning to work may not feel financially worthwhile and hence many parents decide to look after their children at home. This has a negative, long-term impact on their potential earnings over their careers. Behavioural science suggests that parents may not account fully for this long-term impact when making childcare decisions. Research from the IFS has shown that women who stop working altogether after giving birth face a 2% salary decrease for every year they spend out of the workforce.³⁵ Despite this, we rarely observed parents recognising the long-term implications of a return to work for their careers during the qualitative research.

These parents could be described as having "present bias",³⁶ which is a behavioural tendency to give stronger weight to payoffs that are closer to the present time when considering trade-offs between two future moments. Their behaviours and attitudes are also consistent with 'loss aversion', which is the tendency to disproportionately overweight guaranteed losses in the present compared to future gains which are uncertain albeit of a much larger magnitude. These parents who might have to spend a larger proportion of their

 ³⁴ Kalenscher, T., & Pennartz, C. M. (2008). Is a bird in the hand worth two in the future? The neuroeconomics of intertemporal decision-making. Progress in neurobiology, 84(3), 284-315.
 ³⁵ Monica Costa Dias, William Elming and Robert Joyce, The Gender Wage Gap, IFS Briefing Note BN186, August 2016, <u>https://www.ifs.org.uk/uploads/publications/bns/bn186.pdf</u>.

³⁶ O'Donoghue, T., & Rabin, M. (1999). Doing it now or later. American Economic Review, 103-124.

earnings on childcare now - feeling the 'loss' of that earned income - might not consider increases in earnings over the longer term. Insights from behavioural science may help parents to overcome these biases. A potential solution might be to leverage loss aversion by increasing the salience of earnings parents stand to forego by choosing to remain at home to look after their children. The explicit framing of losses compared to potential earnings may be more likely to prompt parents to consider the long-term consequences of their decision than framing the impact on wages as potential gains. The example below draws on these behavioural insights.³⁷

There's a big financial gain to returning to work - for every year a parent spends out of work, their wages are likely to be 2% lower when they return, according to new research. That's around £550 per year for the average earner.

5.1.2 Helping parents navigate practical concerns

Regardless of individual circumstances, parents of young children are busy. The psychological strain, or 'cognitive load', of coping with the demands of parenthood can cause parents to choose differently than they might do otherwise in many areas of their life including childcare. The phenomenon of people making suboptimal decisions when faced with scarce time and resources has been well validated in multiple contexts and is likely to be influential here too.³⁸

Behavioural science can help parents to overcome the effects of this 'scarcity' in 3 ways. First, this insight encourages us to design policies which make the behaviour we wish to encourage as easy as possible. If people are too busy to think decisions through in detail, we need to free up as much of their 'cognitive bandwidth' to focus on the decision being made as possible and not waste it on the bureaucratic and administrative obstacles that can arise in poorly-designed policies. BIT places a strong emphasis on making the target behaviour as 'easy' as possible. This is why for any communication, they including a clear call to action at the top, in bold, with a simple statement explaining the purpose of the communication and how the recipient is expected to respond to it.

Second, behavioural scientists can help people to overcome administrative barriers by encouraging them to plan ahead. Implementation intentions are designed to help people think about the different actions they need to take in order to make a behaviour or action actually happen.³⁹ Their effectiveness lies in defining the where, when and how of our actions so that when the time does come around to enact a behaviour, we know exactly what to do to make it happen. BIT employed this technique in Jobcentres and found that encouraging claimants to focus on making specific commitments to future activities, linked to

³⁷The suggested communication strategies outlined in this section are for illustrative purposes so that readers can understand the behavioural underpinnings of the childcare decisions. All communications strategies would need to be moderated by HMRC/DfE to ensure they are palatable for the audience they will serve.

 ³⁸ Mullainathan, S., & Shafir, E. (2013). Scarcity: Why having too little means so much. Macmillan.
 ³⁹ Gollwitzer, P. M. (1999). Implementation intentions: strong effects of simple plans. American psychologist, 54(7), 493.

their daily routines, helped them to follow through on their job search intentions. For example, "After I have breakfast, I will go to the library, log on to the computer and see what new jobs are available to me today." ⁴⁰Parents with young children may have less cognitive bandwidth to deal with administrative barriers than at other times during their life. We therefore expected that helping them to plan when and where they would complete their application would make them more likely to follow through on it.

Checklists are also a useful tool to make a behaviour easier for people to engage in. Checklists have shown to be effective across a range of industries including aviation⁴¹, patient care⁴² and corporate decision making.⁴³ For example, the World Health Organisation's use of checklists have been shown to reduce morbidity and the average length of in-hospital stay.⁴⁴ In the TFC letter, we prompted parents to think about where and when they would apply and included a checklist listing the information required to complete the form (i.e., a form of ID, their National Insurance number, and their partner's National Insurance number).

Think about when and where you'll apply. Before you start your application for Tax-Free Childcare, you'll need (tick them off when you find them):

- A form of ID (passport or P60)
- □ Your National Insurance number
- □ Your partner's National Insurance number (if they have one)

Then to apply, go to www.childcarechoices.gov.uk.

⁴⁰ Sanders, M., Briscese, G., Gallagher, R., Gyani, A., Hanes, S., & Kirkman, E. (2019). Behavioural insight and the labour market: evidence from a pilot study and a large stepped-wedge controlled trial. *Journal of Public Policy*, 1-24.

⁴¹ Hales, B. M., & Pronovost, P. J. (2006). The checklist—a tool for error management and performance improvement. Journal of critical care, 21(3), 231-235.

⁴² Bergs, J., Hellings, J., Cleemput, I., Zurel, Ö., De Troyer, V., Van Hiel, M., ... & Vandijck, D. (2014). Systematic review and meta analysis of the effect of the World Health Organization surgical safety checklist on postoperative complications. British Journal of Surgery, 101(3), 150-158.

⁴³ Kahneman, D., Lovallo, D., & Sibony, O. (2011). Before you make that big decision. Harvard business review, 89(6), 50-60.

⁴⁴ Haugen, A. S., Søfteland, E., Almeland, S. K., Sevdalis, N., Vonen, B., Eide, G. E., ... & Harthug, S. (2015). Effect of the World Health Organization checklist on patient outcomes: a stepped wedge cluster randomized controlled trial. Annals of surgery, 261(5), 821-828.

5.2 Applying behavioural insights to overcome barriers of the heart

5.2.1 Helping parents to feel at ease with their childcare choices

The qualitative work with parents and childcare providers highlighted that barriers of the heart play a huge role in decisions about childcare. Many parents experienced initial guilt over choosing to leave their child in formal care rather than keeping them at home. However, it is important to note that while even parents who used formal childcare felt this guilt at first, in the vast majority of cases it subsided once their child had settled into childcare and was progressing in various aspects of their development. It therefore seems that the initial feeling of guilt is powerful and unavoidable, but not an insurmountable obstacle.

When considering childcare, many parents face emotional pain in the short-term but emotional benefits in the long-term as they see their child's social and cognitive development progress. On the first day at a new childcare facility, children may cry and be upset, and the parent is often distressed at having to walk away. The immediate response may be to stay with the child or take him/her out of care altogether, whilst a decision based on long-term outcomes would be to walk away and persevere until the child is settled. Many parents described the emotional turmoil of the initial visit but then went on to state how much their child had developed as a result of being in a structured environment with other children of a similar age.

A key insight from the qualitative work was that the vast majority of parents source information from either their friends and family or other parents who have already used childcare. Many felt that the word of another parent was the best reassurance one could find. This reflects an insight from the behavioural sciences around the importance of the source of information, i.e., the 'messenger'.

The authority and identity of the individual imparting information influences how we perceive the message and whether or not it impacts our behaviour. For instance, people are more likely to trust information if they believe that it is coming from an expert, or from someone like them. For example, a trial by BIT found that secondary school pupils in Somerset were more likely to apply to university when encouraged to do so by an adult who had also grown up in Somerset and gone to university.⁴⁵

Incorporating these behavioural insights, a potential solution might be to use a direct quote from a parent which acknowledges the short-term anguish parents experience during the first weeks of childcare but emphasises the long-term benefits of childcare for children. In the TFC letter, we tried to leverage messenger effects, normalise anxieties that parents might be feeling, and make the benefits of childcare more salient.

⁴⁵ The Behavioural Insights Team (2015). Behavioural Insights and the Somerset Challenge. Behavioural Insights Limited.

Many parents report that their children benefit from childcare, below is a quote from a working parent:

"The difference we've seen since she started is unbelievable - she's so much more confident now."

5.2.2 Leveraging social networks to increase the uptake of childcare

As we saw in both the academic literature and the qualitative work, social influences play a major role in decisions about childcare. Many parents value the opinion of another parent over all other sources when researching their childcare options. This insight can be leveraged to create communications that are amenable to parents.

Following on from the 'messenger' concept outlined above, a related concept is that of a 'network nudge'. This describes how once one individual is influenced to change their behaviour, they can act as a catalyst for change amongst others in their social circle. An example of this was the 2014 'Ice Bucket Challenge' which raised more than \$100M over a 30-day period for research into Amyotrophic Lateral Sclerosis (ALS).

Drawing on these behavioural insights, the strategy below aims to tap into the social nature of childcare decisions by making the parent the messenger, prompting them to nudge others in their social networks to find out more about the government offers.

Have you and your friends heard about Tax-Free Childcare? It's a new scheme that offers support with your childcare costs and could help if you're thinking about a return to work, or increasing your hours. Why not have a chat about this scheme to your friends?

6. Trial

In this section, we describe the design, implementation and results of a randomised controlled trial testing four behaviourally-informed letters sent to households encouraging them to apply for TFC. Each of the 4 letters targeted barriers of the head and heart, as discussed throughout this report.

6.1 The treatment letter

All letters were sent by HMRC and included both HM Government and Childcare Choices branding. We started out by simplifying the existing letter; cutting down the text and bolding it where necessary to draw attention to key information throughout. We also ensured that all 4 variants of the treatment letter included a clear call to action, with a link which led directly to the gov.uk website where parents could commence their application. The behavioural insights which informed each of the 4 treatment letters are outlined in the table below.

Condition		Description
	Financial (making the financial gains more salient	There's a big financial gain to returning to work. For every year a parent spends out of work, their wages are likely to be 2% lower when they return, according to new research. That's £628 per year for a national minimum wage earner.
Barriers of the head	Practical (helping parents to navigate the application form)	 When will you apply? (think of a time when you'll have 20 mins free e.g. after the kids go to bed on Tuesday) Where will you apply? (at work/at home? Using your mobile/tablet/PC?) How will you apply? Make sure you have the following information: Form of ID (passport or P60) Your National Insurance Number Your partner's National Insurance Number

		These questions are asked on a tear-off portion, which parents are encouraged to fill-in and stick to their fridge.
Barriers of the heart	Emotional (helping parents to feel at ease)	Many parents report that their children benefit from childcare: 'The difference we've seen since she started is unbelievable - she's so much more confident now' (Working parent in Liverpool)
	Social (leveraging social networks to increase uptake	Have you and your friends heard about the new childcare offers? Why not have a chat about them the next time you meet. This letter also included a picture of two parents talking to each other.

6.2 Sample selection and eligibility

The sample included 298,245 Child Benefit customers with children aged 6 months to 2 years. Participants were randomly allocated to 1 of 6 groups (roughly 49,700 participants in each group): 4 treatment arms and 2 control arms. The trial was run between May and July 2018. The data were UK-wide and included parents who had opted-in and -out of Child Benefit payment.

The data excluded:

- Anyone who had a current tax credit award (they can be former tax credits customers) that they had received money for – i.e., nil awards can be included in the sample;
- Anyone who had been involved in a previous sample for the Childcare Service (aka TFC) trial;
- Any records with a death date present;
- Any records marked DLO (Dead Letter Office) or RLS (Returned Letter Section) as these letters would be returned if sent out; and
- Anyone who had applied for TFC or 30 hours free childcare already.

6.3 Outcome measures

There were three primary outcome measures in this trial:

- 1. **Completed applications:** The proportion of letter recipients who complete application forms.
- 2. **Started applications:**⁴⁶ It was important to assess the number of started applications to ensure parents who started but did not finish applications were accounted for. We assumed there would be a proportion of parents who would start but not finish application forms for several reasons:
 - a. The TFC application is lengthy.
 - b. The application form requires specific information. Applicants need to know their and their partner's (if they have one) National Insurance numbers, the date they started work and details of any government support they currently receive. If applicants do not have this information to hand, they will be prevented from proceeding. This creates a break in the application process, and increases the possibility that applications are abandoned.
 - c. The timeframe of the trial (8 weeks) is short. Childcare is an important decision for most parents and therefore, they may require longer than the 8 week time period of this trial to consider their options.
- 3. Parental interest: Given the issues noted above with our primary outcome measures, it was necessary to include a measure to assess general engagement with TFC. Engagement is defined as 'accessing the Childcare Choices website through the URL provided in the letter.' We tracked engagement using Google Analytics. Each of the intervention letters included a link to the Childcare Choices website; the start of the TFC application process. Each link included a reference number enabling us to track hits to the web page. Note that in order to be tracked, parents had to type the full URL in the letter, which included a short tracking reference. In instances where parents typed the standard Childcare Choices URL, they would not have been tracked as part of this trial.

6.4 Analysis strategy

The primary analysis for this trial was an ordinary least squares (OLS) linear probability model on the likelihood of a household starting/completing an application for TFC.

⁴⁶ This will involve working with GDS on the 'government gateway' platform.

BIT included a multiple deprivation index for the postcode of the households in the analysis. This allowed us to see if application rates differed by the socio-economic characteristics of the area.

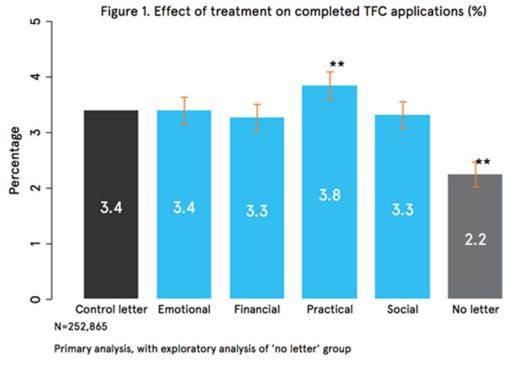
6.5 Results

6.5.1 Primary analysis findings

Outcome 1: Completed applications

BIT found that the 'Practical' letter had a statistically significant and positive effect on the number of parents completing the TFC application form: there was a 0.42 percentage point increase in the group who received that 'Practical' letter compared to the control group.

Households in more deprived areas were less likely to complete an application: each decrease in IMD decile⁴⁷ reduced the likelihood of completing an application by 0.21 percentage points. Households with more children were also less likely to complete an application: each additional child reduced the likelihood by 0.18 percentage points. Not sending a letter to households had a statistically significant and negative effect on completed applications: there was a 1.09 percentage point decrease when compared to the control group.

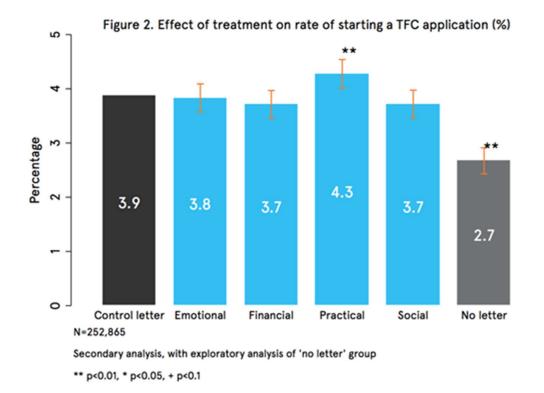


** p<0.01, * p<0.05, + p<0.1

⁴⁷ Lower values of the IMD decile indicate higher deprivation.

Outcome 2: Started applications

The 'Practical' letter also had a statistically significant and positive effect on the number of started applications: there was a 0.36 percentage point increase in started applications compared to the control group. Not sending a letter had a statistically significant and negative effect on the number of started applications: there was a 1.17 percentage point decrease compared to the control group. We also found that households in more deprived areas were less likely to start an application (0.28 percentage point decrease with each decrease in IMD decile). These results for started applications are all similar to those for completed applications. However, while more children had a negative effect on completing an application, households with more children were more likely to start an application (0.25 percentage point increase with each additional child).



6.5.2 Secondary analysis findings

Outcome 3: Visits to the website

When looking at the number of letter recipients who visited the Childcare Choices website after receiving the letter, we see that the 'Emotional', 'Financial' and 'Practical' letters all had a statistically significant and positive impact on the number of visits. Compared to the control, there was a 0.57 percentage point increase in visits with the 'Emotional' letter, a 0.35 percentage point increase with the 'Financial' letter, and a 0.71 percentage point increase with the 'Practical' letter. The 'Social' letter had a statistically significant and negative impact: a 0.48 percentage point decrease in visits to the website than in the control group.

6.6 Discussion

These results suggest that sending a letter is an effective way of improving take-up of TFC. The 'Practical' letter outperformed the other variants on completing and starting applications, which suggests that making the application process easier by including a checklist of requirements is most effective. BIT recommended that HMRC use this variation of the letter in future communications to parents.

These results are interesting for several reasons. Firstly, although the vast majority of parents we interviewed during the Explore phase said that financial considerations were most important when making decisions about childcare, highlighting the potential cost savings of TFC did not spur more started or completed applications. It did, however, drive more people towards the Childcare Choices website. The 'Financial' letter included research from the Institute of Fiscal Studies (IFS) showing that for each year a parent is out of the workforce, their lifetime earnings decreases by roughly 2%. The sample included parents of children aged 0-2 - perhaps when a child is this young, parents are less concerned with potential income losses than simply wanting to be present for their child.

The 'Emotional' letter, which highlighted the progress children make from attending childcare, also showed a null effect on the 2 main outcome measures (completed applications and started applications), but had a statistically significant and positive effect on the number of people visiting the website. Earlier versions of this letter included an acknowledgement that the first day at nursery can be difficult for parents as they experience guilt and other emotions at leaving their child. In the final letter, we removed this insight as we felt it was not appropriate given the formal nature of the communication. Instead we emphasised the progress children make as a result of attending nursery. It appears that although this was enough to spur people to visit the website, it did not sufficiently motivate them to apply. BIT recommend revisiting this concept to understand if there's a way emotional factors can be weaved in in perhaps a more subtle way.

One of the key insights from the qualitative research was that parents speak to other parents to inform their childcare decisions. In the 'Social' letter, we tried to draw on the social aspects by including a picture of parents chatting to one another along with the tagline *"Have you and your friends heard about Tax-Free Childcare?"* We found that this letter had a null effect on the 2 primary outcomes (completed applications and started applications) and a statistically significant and negative impact on visits to the website. It is difficult to decipher why this letter was somewhat less successful that the others. Perhaps parents disliked the picture or could not relate to it. Another possible reason is that the picture was out of sync with the rest of the letter which looked quite formal or that parents felt there was inconsistency between the messenger (HMRC, who usually send information about tax) and the message which revolved around parenting and children.

The 'Practical' letter, which prompted parents to think about where and when they might complete the application as well as providing them with a checklist of the items required to do so, was most effective, increasing both the number of completed applications and the number of started applications by 0.4%. This finding is in line with previous work by BIT which highlights the value of providing people with easy-to-understand and actionable information.

7. Recommendations

Tweaking communications in line with insights from behavioural science can be an effective way to improve take-up of TFC. We found that making it easy for parents by providing them with a checklist of items needed to complete the online form increases both the number of started and completed applications. The results also suggest that the perceived practical barriers to signing up for TFC are significant enough to prevent some parents from applying.

BIT recommended HMRC continue to refine and re-test the 'Practical' letter. Additional variations which could be tested include:

- Having parents set a concrete implementation intention: encouraging parents to think through where and when they will complete their application could improve takeup rates. We alluded to this in the 'Practical' letter; *"Think about where and when you'll apply"* but the intention could be made more concrete by prompting parents to write down a location (e.g. at work) and specific time (e.g. during lunch) they will complete the application.
- Including a testimonial from another parents: although the results of the 'Social' letter in the current project were less promising than some of the other variations, given social factors were a strong theme in the qualitative research, BIT recommended revising and re-testing how messages from other parents might encourage take up of the TFC. A possible variation could be to include a quote from a parent which mentions the time it takes to complete the form (e.g. 20 minutes) and where they completed it (e.g. at work during my lunch).
- Drawing parallels with what the saved money could be spent on: making the benefits of TFC more salient in the minds of parents may motivate them to apply. In the 'Financial' letter, we drew out the possible savings; "that's around £550 per year for the average earner." Perhaps prompting parents to think about what they could spend this money on or including a message from another parent stating what they spend it on could increase take-up.

Applying behavioural insights to the TFC online form:

These results show that sending a letter has a statistically significant and positive impact on the number of started and completed applications. In addition to the letter, BIT suggested more could be done with the online TFC application form itself, including:

- **Removing frictions:** the effort required to perform an action often puts people off. In the case of the online application form, removing friction could mean cutting down on the number of pages/clicks parents have to get through in order to complete their application.
- **Simplifying information:** making the message clear often results in a significant increase in response rates to communications. In particular, it's useful to identify how a complex goal can be broken down into simpler, easier actions. Chunking the online application form into different parts and ensuring that parents can see their progress throughout could help them to follow through on their intention to complete it.
- Including a clear call to action at each stage of the application: ensuring parents understand what their next immediate step is could make the application form more

manageable. This might involve simple signposting, for example; "*in the next section, you'll be asked to enter your national insurance number - make sure you have it to hand,*" so that parents know what comes next.

8. Conclusion

This report describes each of the four phases of this project; Target, Explore, Solution and Trial. During the Target phase, we honed in on the exact behaviour change we wished to achieve as a result of sending modified versions of the TFC letter; broadly, to increase uptake of TFC among eligible parents. In the Explore phase, BIT interviewed 36 parents and 6 childcare providers in 3 locations across England to get a deeper understanding of the factors that underpin decisions about childcare and the barriers parents face in making such decisions. During the Solution phase, we coupled the insights gained during the Explore phase with BIT's institutional knowledge of the behavioural science literature to produce 4 variations of the letter sent to parents.

One letter highlighted the financial gains of TFC, another focused on the developmental progress children make as a result of being in childcare. Another version focused on the social elements of childcare decisions and how many parents seek recommendations from other parents, while the final version outlined the practical steps to completing the online TFC application form. During the Trial phase, we tested each of these variations against 2 control conditions; one in which no letter was sent and another in which a 'business as usual' letter (i.e. the letter HMRC were already using) was sent to households. The results suggest that the 'Practical' letter, which provided parents with a checklist of items needed to complete the online form, was the most effective in improving the number of started and completed applications for TFC.

This project has highlighted the value of testing communications to understand what drives behaviour. BIT recommended that we continue to hone and re-test the 'Practical' letter to improve take-up even further, and to test other behavioural insights as outlined in section 7 above.