

QUALITATIVE EVALUATION REPORT OF TIPSBYTEXT IN DENMARK

*For the ROCKWOOL Foundation
Interventions Unit*

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Qualitative evaluation report of TipsByText in Denmark

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Thank you

This report builds on in depth interviews with 40 different parents who received TipsByText, 20 parents who unsubscribed from TipsByText, and on interviews with 10 kindergarten pedagogues and 5 kindergarten leaders.

The ROCKWOOL Foundation and the author would like to thank the parents, pedagogues and kindergarten leaders for taking the time to share their experiences and reflections on TipsByText with us and thereby making the insights in this report possible.

Your experiences and perspectives are crucial to developing impactful interventions.

Executive Summary

TipsByText is a text messaging program for parents of 3- to 5-year-old children designed to inspire parents to more proactively and in new ways support their children's language development. The ROCKWOOL Foundation Interventions Unit (RFI) has adapted the American programme to the Danish context in collaboration with Professor Susanna Loeb and the Danish researcher in children's language development Pia Thomsen.

Following a positive response from parents to the Danish version of TipsByText in a pilot test in 2018, RFI ran a large-scale quantitative impact evaluation trial of TipsByText in five municipalities between January and September 2020. A qualitative evaluation was conducted concurrently to draw out parents' experiences of TipsByText and produce insights to inform further developments to TipsByText. This report presents the insights from the qualitative evaluation.

The qualitative evaluation found that **most parents interviewed responded positively** to TipsByText and that the programme **prompted parents to dedicate more** time more regularly to their child's language development and **gave parents inspiration** for new or alternative language development activities to do with their children. Ultimately, TipsByText contributed to these parents and children having more interactions and more varied language building interactions.

“Well, for example, I got one the other day that said, “When you read with your child, take his finger and read.” So they get an idea of what direction you're reading in. In fact, I never thought about that being important [...] that's the kind of thing I could use”.¹

These parents appreciated that the texts were **short, clear and concrete**, that the activities proposed could be **easily adapted** and were **fun**. They also valued when the texts introduced them to a new idea or a new way of doing a language development activity, they were already familiar with. A few of these parents reflected that TipsByText made them more **deliberate and confident** in their language development activities with their child.

“I think I have such an enhanced focus on what you do, and what you say, and the way you speak with your child, and how much you speak with your child. How much you read and how many words they hear.”

¹ Quotes in this report have been translated into English from Danish, Turkish and Arabic except for a small number of quotes which were collected through interviews conducted in English.

A few, less than 25% of parents interviewed, engaged less with TipsByText. Parents disengaged if they did not recognise the texts, or because they found the tips too obvious or easy for their children. They tended to either disengage early in the trial because they were unclear as to why they had received the texts, or they disengaged later in the trial because they found the content of the texts ‘obvious’ and/or too young for their child(ren).

*“It’s very obvious what’s in the messages
“Remember to talk to your child about
what’s happened in the space of a day
and listen to your child.” [...] it doesn’t
give me anything new”.*

It is worthwhile noting that over time most parents engaged less with TipsByText than they did at the beginning of the trial. Mostly parents after explained

*“I thought it got too repetitive. That
we’d heard it before or already did it”.*

The insights from the qualitative evaluation for the most part confirm the pre-trial TipsByText Theory of Change. The qualitative evaluation also suggests that TipsByText is most effective when the texts inspire parents with new language development ideas, fun language activities or an appropriate language challenge. This was essential in triggering and maintaining parents’ engagement with TipsByText.

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Introduction

The ROCKWOOL Foundation Interventions Unit's (RFI) approach to social innovation includes evaluation to a) provide confidence in the effectiveness of an intervention and b) learn about the broader impacts of an intervention, how it works and the opportunities for improving or scaling an intervention. RFI is conducting

a randomized controlled trial of TipsByText which seeks to test its effectiveness in improving children's language skills. To complement this a qualitative evaluation was conducted to draw out parents' experiences of TipsByText and produce insights to inform further developments to TipsByText.

The guiding evaluation questions for the qualitative evaluation are:

1.

In what ways was TipsByText delivered across the municipalities and kindergartens? To what extent did it follow the design?

2.

What adaptations did we make to the TipsByText design as a result of the randomized controlled trial? In what ways did the non-text activities (including the provision of information material, etc.) impact parents' engagement with TipsByText?

3.

In what ways did parents respond to TipsByText?
For whom, why, how and under what circumstances?

4.

What were the unexpected and undesired responses to TipsByText? For whom, why, how and under what circumstances?

5.

How might TipsByText be adapted to be more effective in improving children's language skills? How else might the TipsByText model be used?

The qualitative evaluation was co-delivered by RFI and an independent evaluator. The evaluator was responsible for the methodology, conducting the analysis, interpretation of the results, and reporting. RFI provided the data collection team, quality assurance of methods, ethical standards, GDPR compliance, and contributed to the analysis.

This report presents the substantive insights from the evaluation. The report includes the following sections:

An introduction to TipsByText, the randomized controlled trial and the qualitative evaluation methodology. This section also responds to the first two qualitative evaluation questions which aim to identify specific adjustments made to TipsByText for this trial and confirm that TipsByText was delivered as planned. Includes responses to evaluation questions 1 and 2.

An illustrative section describing the four main ways in which parents used TipsByText. This includes three themes related to language development and one theme focused on the development of social skills and family routines. This section only draws on interviews with parents who used TipsByText. This section has been included to show the potential of TipsByText.

A section that explores and presents how parents responded to TipsByText and why these responses varied. This section organizes parents into two groups, a first group whose response to TipsByText aligned to the TipsByText Theory of Change and a second group whose responses differed to TipsByText Theory of Change. This section includes responses to evaluation questions 3 and 4.

A section that consolidates the main insights from the evaluation to propose a revised Theory of Change for TipsByText and suggestions for alternative applications for TipsByText.

The report concludes with a summary of the main insights from the qualitative evaluation organized by evaluation question.



TipsByText, the randomized controlled trial and the qualitative evaluation

TipsByText, the randomized controlled trial and the qualitative evaluation

This section provides a brief introduction to TipsByText, the randomized controlled trial and the qualitative evaluation methodology. It also confirms that the TipsByText trial was delivered as planned and highlights the ways in which parents' experience of TipsByText was influenced by the randomized controlled trial. This section seeks to provide sufficient background and contextual information to appreciate the insights presented in subsequent sections of this report on parents' response to TipsByText.

Background to TipsByText

TipsByText is a text messaging programme for parents of 3- to 5-year-old children designed to inspire parents in how to engage more proactively and in new ways with their children to support their language development. Each week over an eight-month period parents receive three texts on how to engage their children in learning activities. Each text is easy to incorporate in the family's daily routines. The three texts consist of a fact, a tip and a growth text.

The "fact" texts are designed to generate knowledge by highlighting the importance of particular skills. The "tip" text contains a very simple and short exercise, which draws on the knowledge the parents received from the fact text, for parents to use in their interactions with their children. The last text is a "growth" text, which extends the tip and provides encouragement and a deeper insight on the benefits of the exercise (See table below).

TABLE 1. EXPLANATION OF THE TIPSBYTEXT FACT, TIP AND GROWTH TEXTS

MONDAY, FACT	WEDNESDAY, TIP	FRIDAY, GROWTH
<p>The first text of the week is a FACT text.</p> <p>This text provides context and information and explains why the topic of the week is important. The FACT text provides an incentive for following through with the upcoming week's activities.</p>	<p>The second text of the week is a TIP text.</p> <p>This text gives parents or caregivers specific advice about how to do an activity that will build the week's skill, often using props available at home. Activities are designed to be fun and easily incorporated into existing routines. By relieving the stress of decision-making and activity planning, TIP texts lessen the cognitive demands of parenting and caregiving.</p>	<p>The third text of the week is a TIP text.</p> <p>This text describes a follow-up activity building on the week's skill and offers the parent or caregiver encouragement and positive reinforcement.</p>
<p>EXAMPLE</p> <p>Children need to know that letters make up words. Research shows that kids with good letter knowledge become good readers.</p>	<p>EXAMPLE</p> <p>Point out the letters in your child's name in magazines, on signs & at the store. Have your child try. Who can find the most?</p>	<p>EXAMPLE</p> <p>Keep pointing out letters. You're making a big effort to support your child's learning. Now, when you point out a letter ask: what sound does it make?</p>

The programme was originally developed by Professor Susanna Loeb, an education economist from Stanford University and Ben York, the Executive Director of CEPA Labs, a branch of the Center for Education Policy Analysis (CEPA) at Stanford University and has shown positive effects on early literacy in the US². In a study in San Francisco, parents who received TipsByText text messages engaged more frequently in learning activities at home with their children than parents who did not receive the texts.

Since 2017, RFI has adapted the American programme to the Danish context in collaboration with Susanna Loeb and Pia Thomsen, a language

consultant. The Danish version of TipsByText was received positively by parents when it was trialed with 176 parents in three municipalities over a three-month period in 2018. A qualitative study during the trial indicated that the texts influenced parents to use the tips which led them to come up with new ideas on how to support their children's language development. Between January and September 2020 RFI ran a large-scale impact evaluation trial of TipsByText in five municipalities with 6,100 parents and 3,600 children.

TipsByText is available in several languages other than Danish for parents who are not fluent in Danish.

Pre-trial Theory of Change for TipsByText

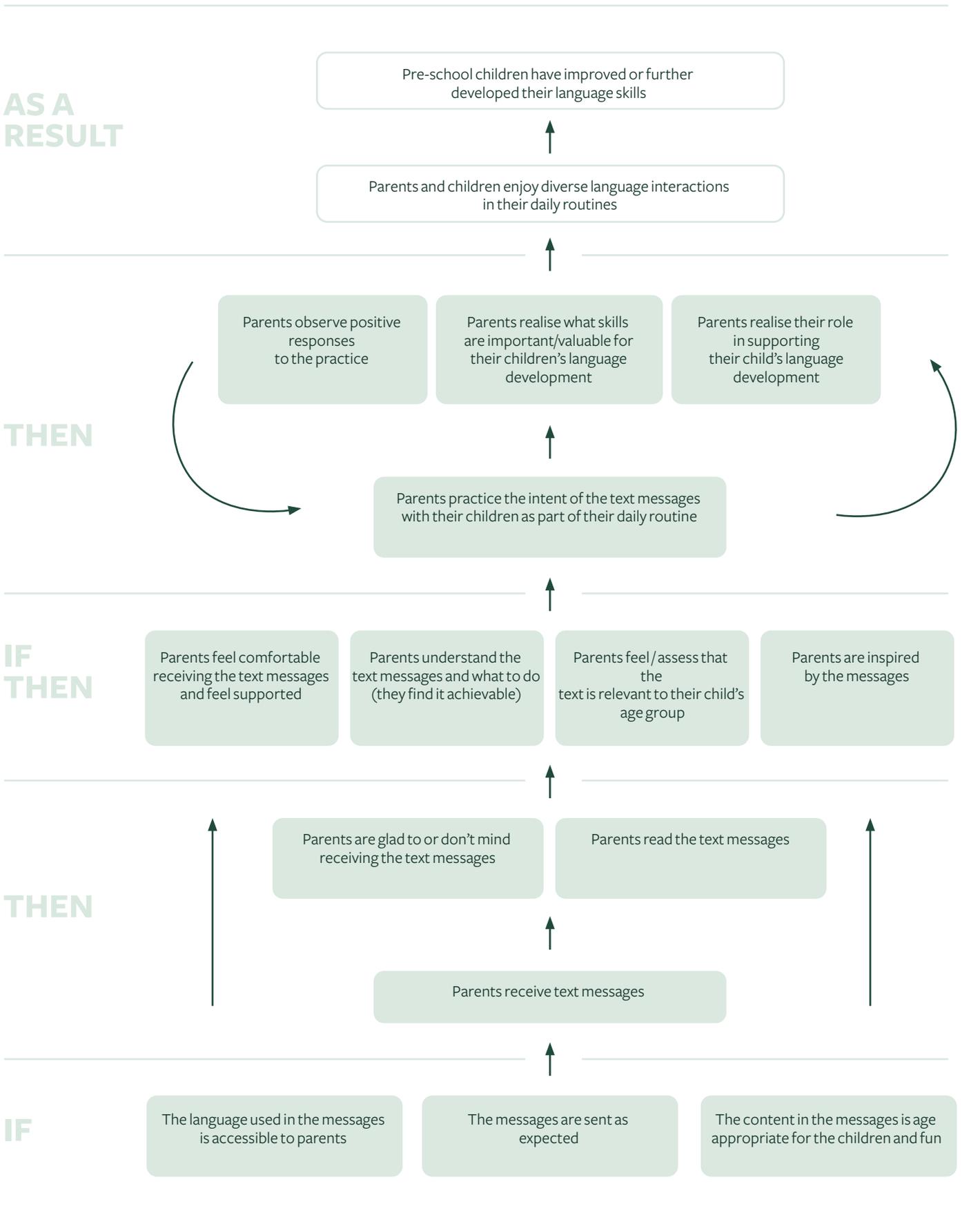
Prior to starting the qualitative evaluation for this trial, the Theory of Change for TipsByText was developed with staff from RFI who had been involved in the previous TipsByText trial. This original Theory of Change (V1) is presented here as a narrative and a diagram (see figure below).

The TipsByText Theory of Change proposes that **if** parents have regular and frequent prompts offering age appropriate, inspiring language tips that are specific and easy to understand and do, **then** they will try out the suggested language development activities with their children. **If** parents **then** observe their children responding positively to the language exercises, and they have fun and receive the growth tips that offer encouragement and positive reinforcement, **then** parents will be motivated to continue the activities, and **as a result** parents will incorporate the TipsByText

exercises into their daily routines with their children. The TipsByText Theory of Change then proposes that **if** parents practice as part of their daily routine a number of language development activities with their children, **then** parents and children will enjoy diverse daily language interactions with their children and **as a result** their children's language skills will develop and improve.

2 Benjamin N. York, Susanna Loeb & Christopher Doss, 2019. One Step at a Time, *Journal of Human Resources*, vol 54(3):537-566.

FIGURE 1. TIPSBYTEXT THEORY OF CHANGE DIAGRAM V1



Testing of TipsByText through a randomized controlled trial

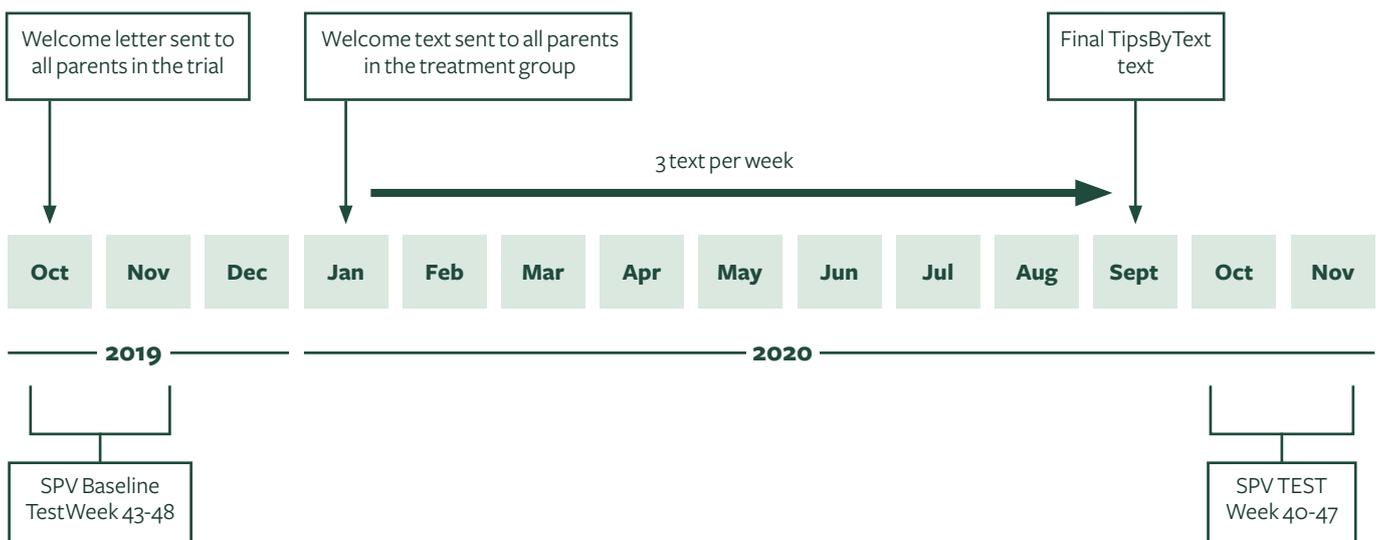
TipsByText was tested using a randomized controlled trial in five municipalities, including Høje-Taastrup, Middlefart, Ikast-Brande, Langeland and Lejre, between January and September 2020. Over this period, parents received three TipsByText texts per week. Parents were able to select the language in which they received the texts. The language options included Danish, English, Arabic, Turkish, Polish, Romanian, Ukrainian or Urdu.

The randomized controlled trial has a treatment group of around 1,600 children whose parents were automatically enrolled in the programme. The treatment group is compared with a control group of around 1,600 children, whose parents were not invited to participate in the programme. The randomized controlled trial aims to produce

evidence to establish whether TipsByText positively effects children’s language development over and above the development that normally occurs in children over the eight-month period. The randomized controlled trial was designed to assess the overall impacts of TipsByText for different groups of people.

The randomized controlled trial used the Danish Ministry of Education’s language assessment tool ‘Sprogvurdering 3-6’ (later referred to as SPV) to measure the impact of TipsByText on participating children’s language development. The data collection took place in both daycare institutions and schools with support from Rambøll Management Consulting. Professor Marianne Simonsen of Aarhus University is the lead for the impact evaluation.

FIGURE 2. TIPSBYTEXT RANDOMIZED CONTROLLED TRIAL TIMELINE



It is worth noting that some elements of the delivery of TipsByText under the randomized controlled trial would not necessarily be replicated if TipsByText was scaled. These elements include:

1) Opt-out programme:

To reduce potential barriers to parents enrolling into the randomized controlled trial, TipsByText was rolled out as an opt-out programme. Parents were informed about TipsByText and the randomized controlled trial through a letter from their child's kindergarten. Parents might also have noticed information posters at their kindergarten. The information shared included directions on how parents could opt out of the programme and the randomized controlled trial. If parents did not opt out at this stage they were automatically enrolled in the randomized controlled trial. 3,600 children were randomly split between the control and the treatment group. The first text, or Welcome to TipsByText text, was sent to 3,207 parents in the treatment group in January 2020. Parents had the option of leaving the randomized controlled trial at any point during the trial.

2) Conducting language assessments:

To enable testing of TipByText's effect on children's language development kindergartens conducted language assessments (SPV) in the fall of 2019 and 2020 with all children in the control and treatment groups. The baseline language assessment took place over a period of three months between parents receiving the TipsByText welcome letter in October 2019 and the first TipsByText text in January 2020. Both the baseline assessments conducted in the fall of 2019 and the endline assessments conducted in the fall of 2020 will be used to evaluate the impacts of TipsByText.

3) Role of kindergarten staff

To reduce factors that might influence the randomized controlled trial, kindergarten staff were asked not to nudge or talk with parents about TipsByText. Kindergarten staff were asked to share the information leaflet with parents (in the relevant language) and to not initiate any conversations with parents relating to TipsByText. Kindergarten staff could respond to questions asked by parents but were encouraged not to influence them, either positively or negatively.

Qualitative evaluation methodology

The purpose of this qualitative evaluation was to learn about how parents from different backgrounds responded to TipsByText and to gain insights into why they responded in the way they did. These insights would then be used to support the interpretation of the randomized controlled trial results and inform opportunities for improving or scaling TipsByText.

It was therefore important for the qualitative evaluation to enable exploration, not be limited to expected themes and to maximize the diversity within the parent sample. The qualitative evaluation was structured around three data collection rounds which meant that the evaluation team could a) follow parents' journeys throughout the TipsByText trial and b) adjust the data collection tool to follow up on insights from the previous data collection round. The evaluation also used a two-part approach to the analysis. The collected data was first analyzed using simple thematic analysis against the pre-trial Theory of Change to identify expected and unexpected responses to TipsByText. The results from this first analysis were then leveraged to build a parent engagement rubric which was used to re-analyze parents' responses grouped by engagement level. This analysis was key in producing the qualitative insights in this report.

Purposive sampling

The data sources for the qualitative evaluation included parents who continued to receive the texts throughout the trial, parents who chose to unsubscribe from TipsByText, pedagogues and leaders from kindergartens in the trial.

It was important that data was collected from a diverse group of parents to uncover and explore how parents from different backgrounds might respond differently to TipsByText. For this reason, using the available descriptors in the list of parent contacts available for the qualitative evaluation, the evaluation team built a purposive sample using the following criteria:

- 1) a near to equal mix of mothers and fathers.
- 2) a near to equal proportion of parents from each of the five municipalities to the proportion of parents by municipality in the recruitment list.
- 3) a near to equal number of parents with children with baseline scores under 25, between 25 and 50 and over 50 on the SPV spectrum³. This meant that parents with children with SPV scores in the lower half of the SPV spectrum were oversampled.
- 4) a balanced mix of parents who were born and raised in Denmark and those that had moved to Denmark as adults. This meant that compared to the randomized controlled trial sample, parents from a non-Danish background were oversampled.

These criteria were applied for both parents who remained in the trial and for parents who unsubscribed, except for criterion 4. We did not have this information for parents who unsubscribed.

3 Children's baseline SPV scores were not provided as actual scores, instead the evaluation team was provided with information about where in the SPV distribution each child was before parents started receiving the TipsByText texts. The score groups were organised as follows: under 25, between 25 and 50 and over 50. Children with SPV scores over 50 are above the median SPV scores for children in a similar age group.

The evaluation team also interviewed pedagogues and leaders from ten kindergartens involved in the trial, two kindergartens from each of the five municipalities. In five of the kindergartens we interviewed the kindergarten leader and a pedagogue that had been involved in doing the SPV baseline tests and in the five other kindergarten we interviewed a pedagogue.

All in all the qualitative evaluation sample included:

- 40 parents who continued to receive the TipsByText messages throughout the trial
- 20 parents who unsubscribed from receiving TipsByText
- 5 Kindergarten leaders
- 10 Kindergarten pedagogues

TABLE 2. PARENT SAMPLE BY CRITERIA FOR PARENTS WHO REMAINED IN THE TRIAL 4

MUNICIPALITY	AIMED NUMBER	NUMBER OF INTERVIEWEES	PARENTS	AIMED NUMBER	NUMBER OF INTERVIEWEES
Høje Taastrup	13	13	Mothers	20	22
Ikast-Brande	14	14	Fathers	20	18
Langeland	3	3			
Lejre	6	6			
Middelfart	4	4			
Total		40			40

CHILD SPV SCORE	AIMED NUMBER	NUMBER OF INTERVIEWEES	LANGUAGE	AIMED NUMBER	NUMBER OF INTERVIEWEES
Under 25	13	13	Danish	20	23
Between 25 - 50	14	14	Bilingual/Danish & other languages	20	17
Over 50	13	13			
Total		40			40

TABLE 3. PARENT SAMPLE BY CRITERIA FOR PARENTS WHO UNSUBSCRIBED FROM THE TRIAL

MUNICIPALITY	NUMBER	PARENTS	NUMBER	CHILD SPV SCORE	NUMBER
Høje Taastrup	5	Mothers	11	Under 25	3
Ikast-Brande	6	Fathers	10	Between 25 - 50	9
Langeland	3			Over 50	9
Lejre	3				
Middelfart	4				
Total	21		21		21

4 The parents were recruited from a sample of 226 parents. 124 parents (55%) were never called. Of the 102 parents (45%) that we attempted to call 27 parents (12%) could not be reached, 36 parents (16% of the total sample and 35% of the parents we attempted to call) declined to take part. Some of these parents were not receiving texts and therefore not relevant to our enquiry and some ended the call before the purpose of the call could be explained. 39 parents (17%) was called and accepted to take part in the interview. One parent was interviewed but never called as they joined the interview their partner had agreed to take part in.

Data collection

The data collection tool was a semi-structured interview guide which used both open questions and probing questions. The parent interviews were conducted in three rounds, one round towards the beginning of the trial, another towards the end of the trial, and a final round four to six weeks after parents stopped receiving texts. In rounds 2 and 3 the team conducted follow-up interviews with five parents, who were interviewed in earlier rounds to explore whether parents' experience of TipsByText changed overtime. Kindergarten staff were interviewed in one round towards the end of the trial.

The interview guides were broadly structured around the TipsByText Theory of Change and curiosities from earlier pilot-testing of TipsByText in Denmark by RFI. The guides for each round were developed following the analysis of the previous round of interviews. In this way the evaluation team was able to refine the exploratory questions and explore new areas of enquiry which had either been revealed in the previous round or had become relevant to the timing of the interview round in the TipsByText trial.

In order to interview a diverse group of parents, interpreters were used during the data collection depending on the parent's preferred language. The interviews were conducted in Danish, Turkish, Arabic and English. Afterwards, all interviews were fully transcribed and translated into English. The interview quotes in this report are for the most part adapted from the translation into English.

Analysis

The analysis was conducted for two purposes throughout the qualitative evaluation. The first was to inform the redevelopment of the interview guides for subsequent rounds of interviews and the second was to produce the results to respond to the evaluation questions. For this second purpose the analysis was conducted using thematic analysis techniques against the TipsByText Theory of Change, the sampling criteria and a TipsByText engagement rubric. This last analytical framework was developed by identifying the shared traits of parents which were grouped according to how closely their reactions and experiences with TipsByText followed the Theory of Change. An engagement rubric was produced (see below) which was useful in exploring how and why parents responded differently to TipsByText.

The 40 parents interviewed were organized as follows against the rubric:

- 23 out of 40 parents could be grouped under **high** engagement
- 8 out of 40 parents could be grouped under **medium** engagement
- 6 out of 40 parents could be grouped under **low** engagement
- 3 out of 40 parents could be grouped under **limited** engagement

The rubric guided the interpretation of the thematic results against the evaluation questions and informed the proposed revised TipsByText Theory of Change at the end of this report.

TABLE 4. PARENT TIPSBYTEXT ENGAGEMENT RUBRIC

	READING THE TEXTS	EXPECTATIONS OF THE TEXTS	USE OF THE TEXTS
HIGH	Read the texts regularly (when they arrive every couple of weeks). Some re-read the texts several times.	Expect to learn something from the texts. This may range from the texts providing one new fun idea to every text providing new and relevant activities to support their child’s language development.	The use varies. Some parents end up using one tip because it offered something new and others use many of the tips. These parents incorporated one to many of the tips into their routine.
MEDIUM	Read the texts, some parents read them regularly, others read them when they can.	Expect that they will know the texts, content and that it aligns to what they are already doing.	Use the tips to confirm that their child is on track and that they as parents are doing the right things to support their child’s language development and/or as a reminder to spend some time supporting their child’s language development.
LOW	Skim read the texts or only read a few texts from time to time.	Expect the text content to be obvious, ‘nothing new’ and below their child’s language level.	Do not reflect on or use the tips.
LIMITED	Limited Ignore the texts and/or delete the texts.	Do not think that the texts are for them.	N/A

Implications of the randomized controlled trial on parents' engagement with TipsByText

It is important to note that some of the delivery elements of the TipsByText trial might have influenced parents' experience of TipsByText⁵. The elements included:

- 1) TipsByText was delivered as an opt-out programme
- 2) baseline SPV testing of all children in the control and treatment groups delivered over a three-month period between the welcome letter and welcome text
- 3) kindergarten staff were asked not to nudge parents engagement with TipsByText.

The analysis indicated the following consequences:

TipsByText as an opt-out programme

– The TipsByText trial leveraged the municipal administrative records for parents' mobile phone numbers. It was expected that at least some of the phone numbers would be wrong. Of the 20 unsubscribed parents interviewed three parents either had no children or had children in their twenties.

SPV language testing of all children in trial

– There were two notable effects:

Firstly, the baseline SPV tests with children in both the control and treatment group required time. This resulted in a three-month hiatus between parents receiving the information letter and the welcome text. Some parents were taken by surprise when they received the welcome text as they had forgotten about TipsByText over the three months. This caused some parents to unsubscribe immediately while others were not affected by this and took the first text at face value.

Some parents who unsubscribed from TipsByText commented that they did not like receiving unsolicited texts and this was the reason why they unsubscribed from TipsByText. Of the 20 parents interviewed who unsubscribed after receiving the welcome text, eight of these said they unsubscribed because they were suspicious of the text. A couple of the parents thought the text was spam, a few others stated that they did not read unsolicited texts, one parent thought they were being hacked, another parent thought it was a competition and a single mum worried that TipsByText would cost money. It is also possible that two of the parents who remained in the trial felt that they had been identified as parents who needed TipsByText when they first received the texts.

Parents who were surprised by the first TipsByText text gave the following reasons for not unsubscribing: the text looked harmless, piqued their curiosity or was sufficiently clear about TipsByText and its relevance to them.

“We brought home a leaflet (on TipsByText) and thought what is it? We thought we'd like to try but forgot all about it. My husband got a text and said: do you think it's spam? We looked up the number and then found out what it was. It took a long time for us to get (receive) the flyer until we got the first text message, so we forgot all about it”.

Caroline, mother of two

⁵ This section draws on the analysis of data from the interviews with kindergarten staff, kindergarten leaders, unsubscribed parents, and parents in the treatment group.

Secondly some parents chose not to unsubscribe despite not engaging with the TipsByText texts because they wanted to support the research effort.

No nudging of parents by kindergarten staff

– The evaluation did not surface any instances of kindergarten staff nudging parents to engage with TipsByText. Some kindergarten staff interviewed shared that they thought they could play a valuable role in the TipsByText delivery. They proposed that

kindergarten staff could help parents understand how to use TipsByText. Some also thought they could leverage TipsByText to complement the kindergartens' language development curriculum. For example, they could align the sequencing in their curriculum with TipsByText so that language development activities at home mirror the ones in the kindergarten.

Confirming TipsByText was delivered as planned

The evaluation found that the TipsByText activities were delivered as planned⁶. The interviews with the kindergarten staff and parents confirmed that parents had received the information leaflet in an appropriate language and that all parents had received the welcome text and the three weekly texts.

The TipsByText programme was delivered to 3,207 parents. Of these 892 parents unsubscribed from TipsByText, 608 of them in the first month.

During the trial five of the texts were not sent as planned (one of these was only delayed) and for four weeks a proportion of the parents only received two instead of three texts. The evaluation interviewed one parent who remembered the frequency of the texts changing while other parents did not notice this. There were also some who received the TipsByText texts by mistake and unsubscribed. (See table below for supporting results).

(see table 5 on the next page)

⁶ This section draws on the analysis of data from the interviews with kindergarten staff, kindergarten leaders, unsubscribed parents, and parents in the treatment group.

TABLE 5. TIPSBYTEXT DELIVERY RESULTS

TIPSBYTEXT ACTIVITIES	RESULTS FROM ANALYSIS OF INTERVIEWS
Whether parents received the TipsByText information leaflet from kindergartens in an appropriate language	<ul style="list-style-type: none">• Kindergarten staff ensured that all parents received the TipsByText information leaflet in an appropriate language.• Most (not all) parents interviewed from our sample of parents who remained in the trial remembered the TipsByText information letter.• Parents found the information clear. Non-fluent parents appreciated the leaflet being available in other languages.• Several parents interviewed who unsubscribed during the trial were not expecting the TipsByText texts. Some thought that it was spam which indicates that they either did not receive or did not remember the TipsByText information letter.
Whether parents received the welcome text	<ul style="list-style-type: none">• All parents in the qualitative evaluation sample received the welcome text.• Three of the unsubscribed parents interviewed in Round 1 said they unsubscribed because they recognized that they received the text by mistake. Two of these parents have children in their twenties and one does not have any children.
Whether parents received the three weekly TipsByText texts	<ul style="list-style-type: none">• All parents received all texts as planned (a few exceptions – technical reasons).• Four texts out of 97 planned texts to parents in the treatment group were not sent and one text was delayed. No more than one text per week was missed and so there were four weeks throughout the trial in which parents only received two of the messages.

Illustrations of parents practicing the TipsByText tips



Illustrations of parents practicing the TipsByText tips

*This section presents the main ways in which parents reported applying the TipsByText tips. These descriptive examples are taken from parents who demonstrated **medium** to **high** engagement with the TipsByText programme⁷.*

The examples are presented under four themes, the first three are focused on language development and the fourth on additional ways in which parents harnessed TipsByText facts, tips and growth texts. The four themes are:

1. Early literacy: Letters, books, reading direction, and going to the library
2. Language use: Focus on dialogue techniques
3. Vocabulary: More nuanced and diverse vocabulary, better enunciation
4. Social skills, relations, and family routines

This section is included here to give the reader an understanding of the potential of TipsByText in supporting parents with their child's (or children's) language development. After which the report seeks to unpack when, how, why and for whom TipsByText contributed or not to parents' efforts in supporting their child's language development.

⁷ This section draws on the data from the interviews with parents who demonstrated medium to high levels of engagement with TipsByText using the engagement rubric. This included 31 parents out of 40, 23 with high levels of engagement and 8 with medium levels of engagement with TipsByText.

Early literacy: Letters, books, reading direction and going to the library

A common observation made by parents who engaged with TipsByText was that the programme led them to dedicate more time to reading with their children and reading in more interactive ways by stopping to ask their children questions tapping into their imagination and creating discussions around the reading material:

“So if we read a book, we ask him, what have we read about? What do you think he’s going to do? We’re trying to build a dialogue with him about what we’ve read... before the text messages we just read the book, but after that, we started talking to Nikolai about what we have read about” (Maksim, father of two).

For some parents the texts on reading and the library led them to visit their local library with their children to borrow books and spend some time in the children’s section. For parents who had recently moved to Denmark, this was often the first time they had been to their local library. As Maksim, one of the father’s in the trial explained:

“It’s was a very nice experience in the children section”

Two of the parents specifically mentioned the tip on showing their child the reading direction and commented that this was new and helpful to them.

“Well, for example, I got one the other day that said: “When you read with your child, take his finger and read.” So they get an idea of what direction you’re reading in. In fact, I never thought about that being important. But I suppose there is some research behind that, that it is important [...] I’m a mother of three, and I’ve never thought about that. So that’s the kind of thing I could use” (Jeanette, mother of three).

Torben, a father of two also spoke of how he uses the tips to teach his daughters about letters:

“We have picked a letter, it could be the first letter of Helene’s name. Finding that. To look for an object, which begins with the same letter”.

Many parents commented that the activities in TipsByText helped them to make learning literacy fun⁸. A father related how he learned to treat learning like a game and to have fun rather than treating learning like a duty. He said:

“We teach her Arabic letters, but the normal way is like “this letter blah blah blah”. But a good thing in TipsByText is making it like a game. This was very useful for us” (Mohammed, father of one).

⁸ 12 out of 31 parents (all demonstrating high engagement) specifically spoke of the tips being fun. They included 5 fathers and 7 mothers, 5 who grew up in Denmark and 7 who moved to Denmark as adults, 4 parents with children with a baseline SPV score under 25, 5 with children between 25 and 50, and 3 with children over 50.

Language use: Focus on dialogue techniques

Parents commented on how TipsByText had led them to interact and converse more in diverse and different ways with their children. For example, a parent shared:

“The best thing was to talk to children about what we do. We usually just do things without telling them what’s going on. But now we usually tell them each time about what we’re doing” (Maksim, father of two).

Some parents also spoke about the conversations prompted by some of the tips. This included Caroline, a mother of one who shared how her frequent use of one of the tips had led her to a conversation with her son about a swan they had seen while driving.

“The one in the car, looking out. He looks out on what we’re driving by, and we make a competition of who finds five yellow cars first. We’re eyeing something – for example, every day we drive by a tall chimney, and I say “today, we need to find it” and then we continue from there. What should we look for to find it? The other day we drove by a swan, that we talked about, and we ended up stopping the car to look at it.”

A couple of the parents spoke specifically of the tips prompting them to ask their child(ren) about their day. One of the fathers interviewed, explained about a new activity he started doing:

“One of the things we use almost daily, is to ask: What did you do in kindergarten today and who have you been playing with? [...] it’s also to get our daughter [...] to be able to retell” (Frank, father of one).

Another father interviewed shared that the tip on asking your children about the best thing that happened during their day is the ‘best tip of all

time’. He continued to use this tip even after the TipsByText texts stopped coming because it leads to good conversations between him and his two sons.

“There is actually one, we have incorporated when saying goodnight to our kids every night. A very simple cognitive task. Which is really just asking if they’ve had a good day. Even if you’ve done so over dinner, it’s just that so much is going on at the dinner table. But here it is a task, which makes them relax before they go to sleep. And it’s really good. Asking ‘What has been the best, and the worst part of the day?’ Because in this way, they also begin to reflect on what has happened AND they begin to put it into words. And now they don’t want to be without it. When we say goodnight and they go ‘Hey, what about the worst and the best?’. This has probably been one of the tasks, we have embraced the most, and use every day! And it has been amazing to have that dialogue, because it also brings about completely different dialogues” (Kristian, father of two).

STORY 1. KAREN – Sometimes when kids talk, you just say “Oh yes”

Karen is originally from the Ukraine and was trained as a teacher. She is married and has two sons, the youngest, Otto is part of the TipsByText trial. The children are growing up bilingual in Ukrainian and Danish.

Karen first heard about TipsByText through her kindergarten and she explains that she went online to find out more about it as she couldn't quite understand it from the leaflet. Karen shares at the end.

“I think it's great that there's such a project, I think there are a lot of parents who are busy every day and they probably need more tips on how to help their child without having to do a lot of research on how to do it [...] when I was working at a school there were many parents who just expect it to be the institution that should provide for it (language development), and as a parent you just make sure there is food (on the table) ...But I don't agree with that. For example, we try to do everything we can at home to support the child in their development”.

Karen says that the main difference has been that she has become better at developing conversations with her son: *“What I do differently is that I am more at ease but may find it easier to talk about many more different things. And develop a dialogue with Otto. Because sometimes when kids talk, you just say, “Oh yes” (laughs). But I actually think we've all gotten better at developing dialogue and asking back and asking for details and developing on the words”.*

Karen receives the texts in Danish but was interested in receiving them in Ukrainian too. *“it's been great fun so far'. She describes the texts as “straight forward. They are easy and simple'. Karen says that she generally appreciates the usefulness of text messages, she also says that she finds it difficult to give concrete examples of exactly what she has done and when. She says “when I read the text message, it actually sits in my head. Sometimes at the weekend I can just go through the last one I've received [...] you get a text and think when could I do that. It's fine it's on text message, where it's easy to find it and read through”.*

Vocabulary: More nuanced and diverse vocabulary, better enunciation

The texts prompted parents to reflect on their own use of language and how they could further help their children to expand their vocabulary. Several parents shared that the texts, even when they included tips they knew well, triggered them to think through their own practice and whether they could do more with their children to build and diversify their vocabulary. Parents described how they are using the tips to play word games, use daily activities like setting the table or putting on their shoes before going out to share new and more complex words with their children and practice enunciation.

“Now we always think that she should learn new things [...] before that, I tried to find words she understood. But now I just tell her new words, and she learns them” (Mohammed, father of one).

Several parents described how they were now naming foods and utensils at the dinner table and during meal preparation⁹. One parent described how she now uses certain tips as part of her daily routine including putting into words the things that they do in the kitchen. Another parent shared:

“It’s (TipsByText) really good because it’s stuff you don’t normally think about. For example, why just call a flower a flower, instead of calling it a sunflower if it’s a sunflower. Or a rose, if it’s a rose, to give him greater vocabulary” (Kristian, father of two).

Parents also spoke of how TipsByText had led them to become more aware and deliberate when doing language activities with their children and more reflective of their own practice. As one parent explains:

“I’ve been paying a lot more attention to using the words and trying to articulate it as best I can. Yes, and I actually talk to her more, explain more” (Aminah, mother of two).

Some parents were quite explicit about how the texts had made them reflect on their language development practice with their children. Even when they found the actual tip ‘banal’ it still prompted them to think about emphasizing certain practices such as being more deliberate in using different, more specific and diverse vocabulary in their conversations with their children.

“For example, there have been some about reading. The first was kind of: “It’s good to read to your child”. Where I just thought, well, yes... We’ve been doing that since my daughter was six months old, right? (Birgitte makes big eyes). But then there’s the one with: “Let your child tell what’s going on in the next page”. That is actually a step up, where it’s not just us who have to do something, but where it’s the child who needs to get involved. At least that’s the one, I think, that has made me reflect most on my own practice. But then also one of the first messages, the one about the shoe: we need to add more words to it, right. I found myself thinking, I need to remember that... For example my youngest points out if I say that she needs to wear her boots. “Yes, I’m sorry, it’s rubber boots.” So this thing about them also wanting to learn more words, they want it to be precise. Yes, so in that way it has made me reflect. Although it is banal, it has led me to reflect on adding more adjectives, to make their language more nuanced” (Birgitte, mother of two).

⁹ All of these parents moved to Denmark as adults.

¹⁰ TIP: Stand in front of a mirror with your child. Discuss: Do your noses, hair or eyes look alike? Who else does your child look like?

STORY 2. CAROLINE – *The one where you expand on the word*

Caroline lives with her husband and her two sons who are 7 and 3 years old. Her youngest son is part of the TipsByText trial.

Caroline reads the texts before she picks up her children from school. Caroline mentions that she does know some of the tips and that they act as a good reminder. She describes how she has thought about and tried different tips.

“The one with the mirror¹⁰ I’ve considered doing that with him when we have time [...] The texts that are easy to fit into everyday life, e.g. when he says water. Then I say fresh-water and he replies “crazy” (laughs). He has picked up on us combining with funny words, and he’s starting to do the same [...] I remember the one that built on the order when the child says a word, instead of just blue then build on it. For example, at the table we talk about the potato being soft or cooked or white [...] The one where you expand on the word – I hadn’t even thought about it. So, for example, he said apple, and then his father says pomegranate (in Danish this is a compound word that includes the word apple and grenade) for fun, and he says it out loud, and then his father responds hand grenade – We build on and laugh about it”.

Social skills, relations, and family routines

Finally, parents described how the tips inspired them to focus more on good routines and building their children's broader social skills. TipsByText had a broader influence on parents than the specific language-related practices they do with their children. One mother described how a tip about talking to the child while they are putting on clothes had changed her opinion of whether she should help her son with dressing or let him practice doing it on his own.

"In the kindergarten, they have told me many times "He should put on clothes himself." And I said "No, he is so small! Why should he do it on his own, I can help him, or my husband can help him. But when I got the text, I changed my mind. After that, I thought, "Ok, they are right""

Interviewer:

"Yes, why do you think that the text was different than when the kindergarten said the same?"

"It is funny. I think it is a bit funny for the children. Sometimes I get a text and I open it, and it makes you think in a different way. You look at the text and think "Okay this way is good. You can do it this way" (Morsal, mother of three).

Another mother highlighted how she had gained confidence in setting boundaries for her children, through using one of the TipsByText texts.

"The one with setting boundaries. That one has been really good for me. For example when they are allowed to go outside or to the playground. Then I say "We'll go home in half an hour, or you need to be home in half an hour". (Senay, mother of three).

The texts also involved tips on how to create routines for your child, see Mohamed's story below. One parent told us that she found a lot of inspiration which she had then shared with her family in Pakistan:

"I also told my family in Pakistan about reading bedtime stories and they learned a lot of new things. Like telling the bedtime stories, it's not common nowadays. Most parents give the mobile phone to the children or watch cartoons or television and then go to sleep. But I told my family that you can tell the children a story at night when they should go to sleep. It's good for me, because my children like it [...] And when you're doing housework you must involve your children. All the time" (Inaya, mother two).

STORY 3. MOHAMED – Now we always think that she should learn new things...

The couple Mohammed and Anisa are from Syria. Together they have a 5-year-old daughter Yasmin who is part of the TipsByText trial and has an SPV score under 25. They speak Arabic at home and Yasmin also speaks Danish with her friends at kindergarten. Mohammed was interviewed three times during the period he received TipsByText. The first time both Mohammed and Anisa were interviewed.

They heard about TipsByText through their kindergarten and clearly understood the programme from the information provided in the leaflet. Mohammed commented

“I thought it was a perfect idea”. Anisa adds “Yes, that’s how it’s going to be exciting to come home and do it with my daughter. [Yes, then more a sense of excitement] yes, and ideas, I mean sometimes I don’t know what to do with her, so it’s kind of something to talk about, I can tell her something new”.

Mohammed found that developing a routine around the tips helped him to support his daughter to become more confident. He says: *“I have taught her to sing without being shy. To support her, I say to her: you are great, you are a great singer. And she is more confident now [...] with the repetitions (her shyness) goes away step by step. I’ve learned that through the text about routines, that children love routines. And that’s what I think is useful: that the tips don’t give you one way to apply, they are flexible. So I change it when it’s not suitable for us”.* The encouragement text from TipsByText stating that it is OK to skip tips and to repeat others helped Mohammed to be comfortable and more focused on developing a routine around the tips.

At the beginning of the trial Mohammed read all the texts and would discuss them with Anisa. Later in the trial Mohammed said that he was less consistent in reading the messages *“Recently maybe I look at them every two or three weeks and read two or three messages at one time”.* He has not been annoyed by the messages but feels they are a little repetitive. When we spoke to Mohammed towards the end of the trial, he explained that *“Generally speaking we are now using TipsByText less than before, but the important thing is that what was in the tips and text we use [...] It becomes a habit, so we remember them”.*



Exploring parents' response to TipsByText

Exploring parents' response to TipsByText

This section presents the insights from the analysis of parents' responses to TipsByText. These are organized into four sections. The first two present the main insights into how parents responded in expected ways to TipsByText (as detailed in the pre-trial TipsByText Theory of Change) and when parents were less responsive to TipsByText. The third section focuses on three characteristics which appear to have some influence over how parents responded to TipsByText. The last section briefly acknowledges two occurrences in which parents had an unintended response to TipsByText.

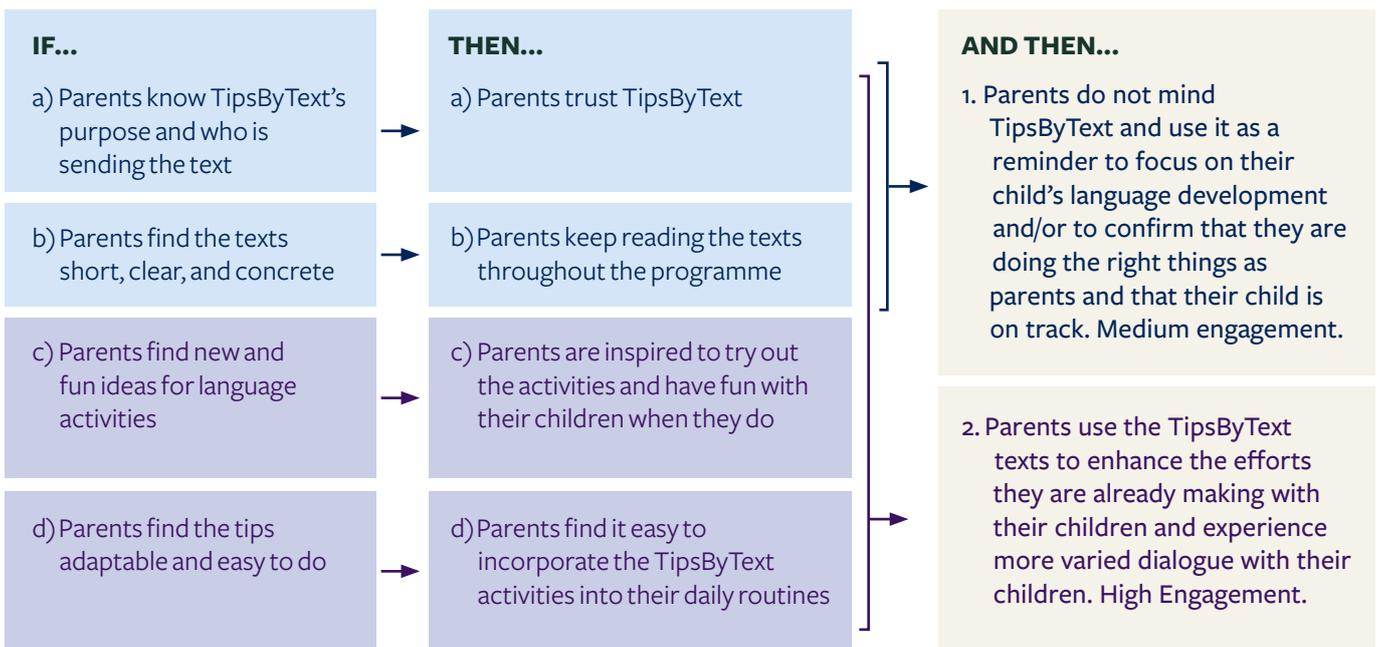
When TipsByText works as intended

This section describes parents' response to TipsByText when parents responded in line with the TipsByText Theory of Change¹¹. It draws on the interviews with the parents who demonstrated **medium** and **high** engagement with TipsByText. The key difference between these two groups of parents relates to their ultimate use of TipsByText. Parents demonstrating **medium** engagement felt that TipsByText acted as a useful reminder to focus on language development activities with their children. Whereas parents demonstrating **high** engagement deliberately used TipsByText

to enhance their existing language development efforts with their children (See figure below)¹².

The analysis in this section examines the aspects of TipsByText that led to parents responding to TipsByText in these ways. The figure below summarizes the insights presented in this section using a causal pathway structure to show the relationship between the behaviors reported by parents and the elements and characteristics of the TipsByText programme that are likely to have influenced parents' behaviors.

FIGURE 3. LIKELY CAUSAL PATHWAYS OF TIPSBYTEXT WHEN IT WORKED



11 This section draws on the interviews with the 31 (out of 40) parents who demonstrated **medium** and **high** engagement with TipsByText. 23 parents demonstrated high engagement and 8 **medium** engagement with TipsByText.

12 **High** engagement: 23 parents, 14 parents who moved to Denmark from elsewhere and nine who grew up in Denmark, 13 mothers and ten fathers, nine parents with children with an SPV score under 25, nine with an SPV score between 25 and 50 and five with SPV score over 50.

a. IF parents know about TipsByText

Most parents already knew about TipsByText when they received the first text¹³. They knew from the information leaflet what TipsByText is, how it works, and some also remembered that the trial was a ROCKWOOL Foundation initiative. This knowledge meant that when parents received the first text, they were expecting it and were comfortable receiving the texts. A few parents said that they knew that the ROCKWOOL Foundation was involved, and this gave them confidence that TipsByText was a legitimate programme¹⁴. Some parents even expressed feeling 'excited' and 'happy' when they 'finally' received the first text.

"I was happy!! (Morsal exclaims loudly and strikes out with her arm in excitement) there's a text coming! It was good. I also told my 12-year-old son: "Come and have a look at this" (Morsal, mother of three).

"Hell, I think it's a good idea! We talked about it back then, that the worst thing that could happen, was that we read the texts, and that would be it" (Anders, father of two).

"So I think it's very short [...] Concrete! Useful! [...] you can read and borrow and buy a ton of books about children's development [...] but there isn't always the time to read them all, [...] (TipsByText) It's simple and short, and some things you can translate into action! So I've been really positive about it and would really like to continue with it" (Jeanette, mother of three).

There were some parents who were surprised when they received the first text¹⁵. Some thought the text was spam and others that it was a mistake. These parents either did not remember or had not received the TipsByText information leaflet. All

these parents came around to trusting TipsByText enough to continue receiving the texts because they either did their own research on TipsByText and found sufficient information or found the TipsByText texts harmless enough. (See Torben's story below - Story 4).

Another parent, did not remember how she was enrolled in TipsByText she explained that when she started receiving the messages she thought:

"What happened? I didn't do anything for it, but I thought it didn't do any harm. It just gives you new ideas when you get the text messages" (Senay, mother of three).

There were also a few parents who determined from the text that significant research and effort had gone into TipsByText¹⁶.

"But when I received the messages, I discovered it was good advice, and I got the impression that someone had studied the subject" (Fahad, father of four).

These responses suggest that:
IF clear information is available to parents on TipsByText **AND** the TipsByText messages are clearly focused on children's language development **THEN** parents will know enough about TipsByText **AND THEN** they will trust TipsByText enough to continue receiving the TipsByText messages.

¹³ 22 out of 31 of the high to medium engaged parents were not surprised and were expecting the first TipsByText text.

¹⁴ Two of the parents.

¹⁵ 8 out of 31 of the high and medium engaged parents were surprised when they received the first TipsByText text.

¹⁶ 2 out of the 31 parents of the high and medium engaged parents.

b. If parents find the texts short, clear and concrete

Several parents commented on the format of the TipsByText texts, describing these as short, clear, and concrete¹⁷.

- **Short:** the texts were described as short as they fit on the phone screen and can be read in full without scrolling.
- **Clear:** the language in the text was described as 'easy to understand', no parents expressed not understanding the texts.
- **Concrete:** when asked to recall the TipsByText texts most parents described the activity they did. Parents described the texts as concrete, ready to use, manageable, easy to incorporate into the day.

Many parents described leading busy lives, dividing their time between their children, work, and other commitments (education, renovations, etc.)¹⁸.

They appreciated being able to quickly read the texts in between tasks, whilst commuting, or briefly at the end of the day or on the weekend because the texts were short and clear. They also appreciated that the tips in the texts did not require a lot of thinking and preparation to do. Some parents used the tips straight after reading them, trying them out on the way home from kindergarten with their kids. Others used the tips spontaneously when an occasion arose.

"If you ask me, the texts I received are crystal clear, and understandable. There is no hard English, where I have to go to a dictionary to look up the meaning. So, I would find, it is easy. [...] But I'm pretty happy with the content and the ways of expression, and the simplicity. [...] Whenever there is a person reading the text, he will also begin to think about how easy it is to implement" (Sarthak, father of one).

"Easy, manageable, and at times enhancing. It's certainly positive, certainly instructive as a parent. A great and easy way to learn about language development. It can't scare anyone away – again, the format it has, a text message, which is so easily read and so non-

committal. If the text said something to motivate me to go in and read an email, it would have been different. This is so concrete, it's easy and straightforward to access" (Anders, father of two).

For some parents receiving short, clear, and concrete texts meant that they stayed engaged with TipsByText throughout the trial. Many of the parents described their day to day lives as 'busy' and some even felt overwhelmed by the many responsibilities they have. A few parents also commented on feeling overwhelmed by the amount of information they received in relation to their children. The interviews with these parents indicated that:

- if the texts took a longer time to read and understand the texts might not be read.
- if the texts were longer it might be hard to remember the information and the tips.
- if the tips required preparation or thinking through parents might decide not to try the tips.

"They're short, it's easy. And they should be, if they're too long I'll skip it. It's best to have short messages" (Daniela, mother of three).

"They are not too long and not too short [...] good short description, so you understand it and can follow. And then you can remember it! Because when it's too long, I cannot remember it".

"Even if they fit into everyday life, it's not always I feel that there's time. It's like there's not enough time in the day for that" (Senay, mother of three).

"Whenever the message comes, I read it, and I try to use it [...] it is not like a long message, it is just a two-line message, it will not take a minute to read it, so normally when it comes, if I have my phone I read it right away" (Asha, mother of two).

These responses suggest that:

IF the texts are short, clear and concrete **THEN** parents will continue to read them throughout the trial.

¹⁷ 14 out of 31 parents from the high and medium engaged parents.

¹⁸ 7 out of 31 parents from the high and medium engaged parents.

c. If parents find new ideas for fun language activities with their children

Two of the reasons given by parents for staying engaged with TipsByText was that they had either found something new in the texts and/or they had enjoyed trying the tips with their children. For some parents, the tips either brought them completely new ideas of how to support their children's language development and/or new ways to build on similar tips they were already doing¹⁹. One parent described TipsByText as

"Inspiration to make children's curiosity germinate and start their language in a slightly different way."

"When I see the message, I get so happy. Because when I pick up my daughter, she wants something new every day. But when I don't have anything new. She says: "mama, it's too boring today! I want something new" (Inaya, mother two).

A couple of parents described TipsByText as a trustworthy bank of ideas on fun and constructive activities that parents could do with their children. For example, a parent explained:

"It is good for parents and children with busy lives. We don't have time to find new things and activities for the children all the time. It's really good that you send messages, so you have a platform, then you don't have to go on the internet to find new things for your children. You just have your phone and read the messages" (Inaya, mother of two).

These parents appreciated the additional ideas they received from the TipsByText texts, even when parents felt they already knew most of the tips they still liked to remain engaged with TipsByText just in case a tip that was new to them was shared.

STORY 4. TORBEN – It has been good inspiration

Torben and his wife have two daughters who are five and six years old. Their five-year-old is part of the TipsByText trial and has an SPV score over 50. At the time of the interview, Denmark was going through the first lockdown and both children were therefore at home. Torben felt that they had adjusted well to the lockdown but mentioned *"I've actually noticed that they're a little under-stimulated"*.

Torben receives the texts messages, his wife does not. He shares that *"I must honestly admit that when I got the first SMS, I wondered a little about what it was. [...] I was unsure about how I was signed up for this. But it sounded exciting. [...] I thought it was a good idea to get such a reminder every once in a while about how to do better [...] I searched the net. There was a video of an English lady who told me how they'd done it at a university over there, as far as I'd remember. Is that true?"*

Torben has found that the exercises in the texts might be for younger children than his. *"The only thing I've noticed is that [the text are for] younger*

19 There were 14 parents who commented on the TipsByText texts giving them new ideas and/or inspiration. These parents included 12 parents with **high** engagement with TipsByText and 2 with a **medium** level of engagement with TipsByText, six parents who grew up in Denmark and eight who moved to Denmark, parents with children with SPV score across the spectrum (4 under 25, 4 between 25-50, 6 over 50).

kids than what I have [...] It's been a suggestion that you should look for certain colours or letters or something' He noticed that the texts "help give me focus back on my girls". During the TipsByText trial Torben was busy renovating their home which took a lot of his time.

Torben receives the messages when he is on his way to picking up his daughters from school, he reads them while waiting for them in his car and then he usually uses the exercises on the way home in the car.

Some parents were appreciative of the fun they had with their children when trying out some of the tips²⁰. A few parents compared TipsByText activities to a game and highlighted the value of having less formal ways of helping their children to develop their language,

"Just have fun and not be serious all the time"
(Ane, mother of two).

Some of these parents even shared how the TipsByText activities had led to fun times. (See Caroline's story in the previous section).

These responses suggest that:

IF at least some of the TipsByText texts offer new ideas **AND** the tips shared are fun (like a game) and make parents and children laugh **THEN** parents will continue to read the TipsByText texts **AND THEN** parents will continue to try out TipsByText language development games with their children.

d. If parents find the tips adaptable

Most parents understood that the TipsByText tips were ideas for activities that they could use and adapt into their own routine. Parents felt comfortable reading the texts and choosing the ones that would add or complement what they were already doing towards supporting their children to develop their language. They took TipsByText as suggestions rather than a checklist of specific tasks for them to do.

"This is so concrete, it's easy and straightforward to access. Clapping the syllables? That works for someone like me, who is busy at times. There are no extra tasks."
(Anders, father of two).

For parents using the tips in a language other than Danish they were also all comfortable using the tips in their own language.

"I'd say I'm probably doing half. For example, reading a book. Or I say coffee-cup, instead of cup. And I do that in Turkish, because they learn Danish anyway in kindergarten".

A few of the parents found encouragement in the

²⁰ Out of the 23 parents who demonstrated **high** engagement with TipsByText, 12 of them specifically commented on the tips being fun to do with their children. These parents included seven mothers and five fathers, seven parents who moved to Denmark and five who grew up in Denmark, four parents with children with SPV scores under 25, five with SPV score between 25 and 50 and three with SPV score over 50. None of the parents with **limited**, **low** or **medium** level of engagement with TipsByText commented on the tips being fun.

texts and this strengthened their perception of the tips as flexible and adaptable²¹. For one parent it relieved her feeling of guilt and for another parent the encouragement texts made him feel comfortable engaging with the text in a way that fitted into his routine.

"I've learned through the text about routines, that children love routines. And that's what I think is useful: that the tips don't give you one way to apply, they are flexible. So I change it when it's not suitable for us" (Susan, mother of three).

These responses suggest that:

IF the tips are presented as suggestions **AND** texts are sent to reassure parents that they do not have to do all of the tips all of the time **THEN** parents will pick and select the tips they try **AND THEN** parents will find it easier to incorporate tips into their routines.

1. Parents use TipsByText as a reminder and confirmation

Some parents tended to use TipsByText as a reminder to dedicate time to support their children to develop their language and/or to confirm that they are doing the right things as parents and that their children are on track²². Most of these parents shared that they already knew the content of the TipsByText texts.

Martin is a father of two and his oldest is part of the trial and has an SPV score between 25-50. He provided examples of the texts he has read:

"Then there was the one about some games on the way home, where we think, well we already do that, but it's just a good confirmation that you do something that is right, or good for the kids. Without it being exactly what

it says, but that you are doing something right, and there is also a sense of security in that".

Interviewer:

"Good, so it's also a nice feeling, even if it's not all new" -

Martin replied laughing:

"Yes, definitely! That you are not completely off the track as far as that goes" (Martin, father of two).

Søren is a father of four, his youngest is part of the TipsByText trial and has an SPV score between 25 and 50. When asked about whether receiving the texts had in anyway affected their routine he says:

"No I don't think they have. Not our routine, it's a reminder. [...] It's a reminder to just talk and ask about something". He further explained: "I already know and use all the tips, so I don't really use the messages".

For these parents TipsByText worked as follows:

1) **IF** clear information is available to parents on TipsByText **AND** the TipsByText messages are clearly focused on children's language development **THEN** parents will know enough about TipsByText **AND THEN** they will trust TipsByText enough to receive the TipsByText messages. **AND**

2) **IF** the texts are short, clear and concrete **THEN** parents will continue to read them throughout the trial. **THEN**

3) Parents will use the texts as a reminder to dedicate time to their children's language development **AND/OR** as confirmation that they are doing the right things and that their children are on track.

21 Two out of the 31 parents from the high and medium engaged parents.

22 12 out of 31 parents from the high and medium engaged parents.

2. Parents use the tips to enhance their efforts to develop their children's language

Some parents demonstrated that they tried at least some of the tips and incorporated some of the tips into their routines with their children²³. There are significant variances across these parents in relation to the numbers of tips they tried. Some parents who were already very familiar with the tips in the texts, made small changes to their existing routines while others found a number of new tips that they used regularly with their children.

"I think I am more focused on what you do, and what you say, and the way you speak with your child, and how much you speak with your child. How much you read and how many words they hear. That it is important. So it isn't concrete, but more like a generally enhanced focus on what is important".

"To be honest, there is one I do not forget and still use; that one must divide and pronounce the word clearly and distinctly. Although it may be difficult for her to pronounce, I try to do so, so that she can imitate me. For example, I clearly say B Ø R N and then she repeats after me, or e.g. HAVE, then I say clearly and unequivocally HA-VE." (Jeanette, mother of three).

Some of the parents in this group shared their reflections on how being part of the TipsByText trial had influenced their parenting²⁴. For example, one parent reflected:

"It's a good question whether it has made a difference for my child. I don't necessarily think so. But it's made a difference to ME" (Birgitte, mother of two).

Parents spoke of TipsByText causing them to become more aware and deliberate when doing language activities with their children and more reflective in their own practice²⁵. For example,

a parent thought that TipsByText had a positive effect which he mostly qualifies as raising his awareness of how he supports his son's language development.

"Positive, for sure! And it's back to awareness again... I think we were already aware that he needed a different effort than we were used to[...], well the texts have just brought a different focus to it. Not that we're changing our focus, it's not what I mean, but that we're pouring gasoline on the same focus. I hope that makes sense" (Kristian).

Another parent mentioned that some of the texts

"made me more aware of being precise or expanding their vocabulary" (Birgitte, mother of two).

Some parents also felt that TipsByText had helped them to become more confident when doing language activities with their children²⁶. The tips felt achievable, gave them confidence to challenge their children and made them feel more at ease in doing language activities with their children. This is evident in Karen's story (story 1) and Mohammed's Story (Story 3) both in previous sections.

Parents commented on how TipsByText had led them to interact and converse more and in diverse and different ways²⁷. For example, a parent shared:

"The best thing was to talk to children about what we do. We usually just do things without telling them what's going on. But now we usually tell them each time about what we're doing." And another said "I'm using more pictures in books or on TV, on the way to the kindergarten I talk actively with her. I talk to her more than before, I've noticed that she's improving so I keep on doing that. She's asking more questions, I can see that" (Maksim, father of two).

23 23 parents, all of those demonstrating high engagement with TipsByText.

24 13 out of the 23 parents who demonstrated high engagement with TipsByText.

25 5 out of the 23 parents who demonstrated high engagement with TipsByText.

26 3 out of the 23 parents who demonstrated high engagement with TipsByText.

27 5 out of the 23 parents who demonstrated high engagement with TipsByText.

STORY 5. ANE – *The texts helped with other ideas*

Ane lives with her husband and their two children. Her youngest, a boy of five, is part of the TipsByText trial and has an SPV of less than 50. Ane works for the municipality. When she first heard about TipsByText from the kindergarten, she felt a bit intimidated, she thought she might have been selected to receive 'a helping hand'. Eventually, this feeling disappeared once Ane had received a few messages and she began to see them as helpful reminders. Ane tends to read the messages as soon as she receives them. In the early days of the trial, she ignored some of the texts and some she has accidentally deleted. She would like it if at the end of the trial, parents could receive a book with all of the tips.

Ane talks about TipsByText as a bit of a circuit breaker in her busy day. She says *"The texts created a break, an opportunity to slow down in a hectic day. I think it helped me [...] often my days are very structured and very planned, but these text messages broke up the day for me, and then you can think a little out of the box, I think that's been great."* The text messages have reminded her that *"[...] often it's easy to give the kids an iPad or put them in front of the TV, but the texts helped with other ideas. [...] you might be having a bad day [...] and it can help to say "Hey! We're going to start afresh. Today started badly but we're going to finish it well," right?"* For Ane the texts acted as a reminder and provided concrete actions for creating a positive and uplifting dialogue with her children. Ane says that the tips were especially helpful when she was feeling down *"[...] I was feeling really down for quite a while, and during that time I used them a lot. When you are feeling down you have less energy and time for your kids. And then you feel bad about that too and it just becomes a vicious circle [...] these texts have been part of helping me to feel good again"*.

Ane also points out that the text messages have *"[...] Made us think about other things as well, because the kindergarten runs their own course to teach our children a lot of different things, but then as parents we can also do it at home and not just think "Well, but okay, learning happens at the kindergarten". Because it doesn't just happen there. I think it's been a really good (the children are) learning from us at home too, that we don't just, you know, throw it all to the kindergarten to do"*.

Ane spoke about how the tips have led her to
“teaching your children that this is a cucumber, this is a carrot, so they know the different foods. And just generally talk about where does the milk come from, how is the butter made? Well, things like that”.

Although TipsByText has been instrumental in influencing the quality and the frequency of Ane's language interactions with her children, she emphasizes the importance of, *“[...] children should also be allowed to be children. So yes again, the professional, it's really fine, but it should also still be fun to be kids...I think that's just a great thing [...] that you also just have fun and not be serious all the time”.* Ane appreciated TipsByTexts' focus on using fun games to learn language.

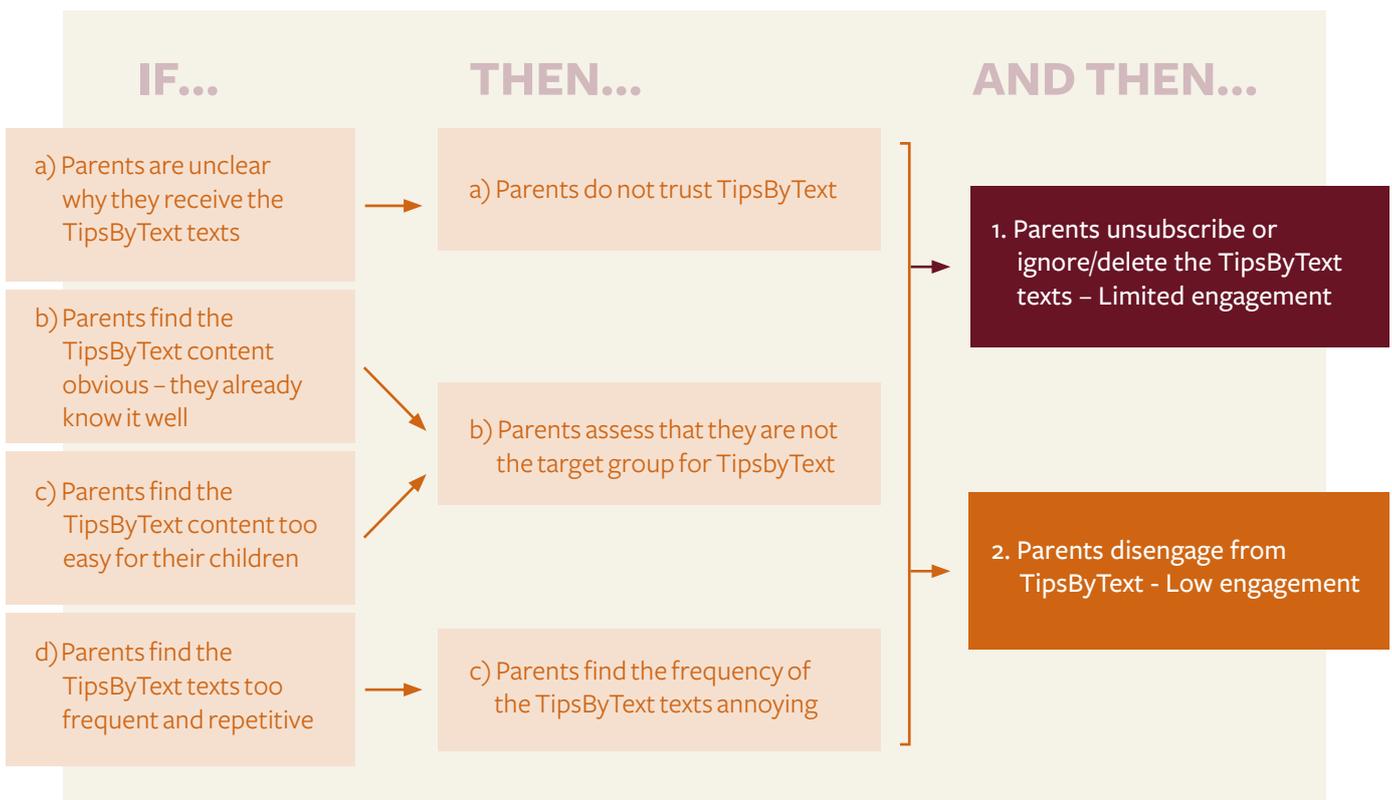
For these parents TipsByText worked as follows:

- 1) **IF** clear information is available to parents on TipsByText **AND** the TipsByText messages are clearly focused on children's language development **THEN** parents will know enough about TipsByText **AND THEN** they will trust TipsByText enough to receive the TipsByText messages. **AND**
- 2) **IF** the texts are short, clear and concrete **THEN** parents will continue to read them throughout the trial. **AND**
- 3) **IF** at least some of the TipsByText texts offer new ideas **AND** the tips shared are fun (like a game) and make parents and children laugh **THEN** parents will continue to read the TipsByText texts
- AND THEN** parents will continue to try out TipsByText language development games with their children. **AND**
- 4) **IF** the tips are presented as suggestions **AND** texts are sent to reassure parents that they do not have to do all of the tips all of the time **THEN** parents will pick and select the tips they try **AND THEN** parents will find it easier to incorporate tips into their routines. **AND THEN**
- 5) Parents will use the TipsByText texts as a bank of good ideas to incorporate into their routines with their children **AND THEN** children and parents will experience more diverse and fun dialogue.

When TipsByText does not work as intended

This section focuses on the key reasons identified by interviewees for not engaging with TipsByText²⁸. These interviewees either unsubscribed or stayed for the duration of the trial but did not use the TipsByText tips. The key reasons are presented in the table below and described in more detail below.

FIGURE 4. LIKELY CAUSAL PATHWAYS OF TIPSBYTEXT WHEN IT DID NOT WORK



Some of the themes in the list of reasons given by interviewees in this section for disengaging or unsubscribing from TipsByText are also present in interviews with parents who demonstrated **medium** and **high** engagement with TipsByText.

If parents are unclear about why they are receiving the TipsByText texts

Some parents disengaged and/or unsubscribed from TipsByText from the very beginning of the

trial because they did not recognize TipsByText when they received the first text. This was true for the eight parents who unsubscribed after receiving the welcome text and for one of the parents interviewed who had not unsubscribed.

“Yeah. Can you tell me why I actually receive them, what is the idea behind it?”

²⁸ This section draws on the interviews with parents who unsubscribed from TipsByText (21 parents who unsubscribed) and the parents interviewed who remained in the trial but had either **limited** or **low** engagement with TipsByText throughout the trial (9 out of 40 parents interviewed). Interviews with parents who unsubscribed were very short (5 to 10 minutes in duration) and all conducted over the phone. Whereas the interviews with parents who remained in the trial were much longer some were conducted over the phone and some face to face.

These parents did not trust the TipsByText texts. Some thought the first TipsByText text was spam, others that they were being hacked, that the text was advertising a competition, and that continuing with TipsByText would result in a fee. A few parents simply said that they did not engage with unsolicited messages. Once the interviewer explained during the interview the purpose of TipsByText and how it worked some of these parents asked whether they could rejoin the TipsByText trial.

For some parents, the first TipsByText text was also the first time that they were exposed to TipsByText. Not knowing about TipsByText prior to receiving the text led them to distrust TipsByText and to either unsubscribe or disengage from TipsByText.

We do not have data on why these parents had not heard of TipsByText prior to receiving the first text. Drawing on the data from the other interviews we conducted with parents in the trial two reasons can be proposed. The first is that these parents might not have received the TipsByText information leaflet or seen the TipsByText posters at their children's kindergarten. The second is that like others we interviewed they might simply have forgotten about TipsByText over the three-month period between when they received the TipsByText information leaflet and the first TipsByText text (See previous section 'Implication of the randomized controlled trial' for more information).

If parents find the TipsByText obvious and/or 'too young'

There were two common themes across the interviews held with parents in the trial and those that had unsubscribed that were given by parents to explain why they did not think that they were part of TipsByText's target group. The first was that the TipsByText content was already well known to them and the second was that they found the TipsByText content to be too young for their children. The parents in this group included parents with characteristics from across our sample.

"It's very obvious what's in the messages "Remember to talk to your child about what's happened in the space of a day and listen to your child." Yes, well, I suppose you do that as a parent. [...] sometimes I've read them and thought, it doesn't give me anything new" (Mathias, father of two).

For a few of the interviewed parents who unsubscribed from TipsByText this was the key reason for them unsubscribing. We spoke to three of these parents in the first eight weeks of the trial and one during the lockdown period between March and April.

STORY 6. JENS – *It doesn't expand my horizons in anyway*

Jens and his wife Sofie have two children, Mia and Thomas. Mia, who has turned four years old, is part of the TipsByText trial and has an SPV of over 50. Jens is often the one to drop off and pick up the children from kindergarten, scouts, swimming, and gymnastics as he is studying.

Jens is engaged in his children's language development and had high expectations of TipsByText. Jens lost interest in TipsByText and after six weeks stopped reading and using the tips. Jens has chosen not to unsubscribe out of curiosity and because he respects the research effort.

"The first text messages, we tried them, [...] the very first ones were about extending words. I remember clearly how we tried it, and me and Sofie we talked about how to do it, and we tried to experiment a little with it and the kids [...] as we received more and more texts we found them a little monotonous, and they were very much about behaviour. They were not concrete and [...] were about things we already did [...] the fact that if you read with your children, their vocabulary will increase, or something like that, and we know that, and we are happy to read books with our children, [...] it doesn't tell me anything I don't already know".

Jens and Sofie found the tips were below their daughter's language level and were not very stimulating.

"I did not notice a great difference from start to finish" Jens points out that "[...] Maybe it would have suited us better if there was one [tip] every week ... but often I saw that the next one had come before I had even tried the last one[...] It was almost over the top, wasn't it?"

The interview prompted Jens to reflect on the programme's potential

"I think it's just been because I haven't paid attention to it [...] I could imagine that if we had started to use TipsByText better, then I could imagine that it would actually have been a really good tool to make something meaningful with the kids at home (during lockdown)".

Some of the parents interviewed during the trial thought that there was 'nothing new' in the texts for them²⁹. They described the content of the texts as obvious and banal. They also stated or indicated that they were already doing many of the tips suggested in the texts.

"The messages I have received, I have read, and I think it is all something you do. Most of it is something that we already do, it is something we are already aware of, for example something on letters, names and talking to the child in such a way that the vocabulary can be expanded, I already do that" (Guslum, mother of three).

Some of these parents also described the TipsByText tips as too easy and better suited to younger children, or children who might be behind in their language development. Some of them were hoping for a degree of "difficulty" or challenge from the tips. Some of the parents who unsubscribed gave the low level of the tips as a key reason for unsubscribing.

These responses suggest:

IF TipsByText does not bring either new knowledge or adequately challenging language development tips for parents to use with their children, **THEN** parents will at most stay abreast of the information shared by TipsByText **AND THEN** parents will not try the tips.

If parents find the texts too frequent and repetitive

A few parents described the TipsByText texts as too frequent and repetitive. When these were combined, they led to parents feeling annoyed or irritated by the TipsByText texts. The parents who unsubscribed during the lockdown and the summer gave this as the main reason for unsubscribing.

Some of the parents who had a **limited to low** engagement with TipsByText spoke of the frequency of the texts being too high. Even though the texts were sent three times a week, many of these parents described the texts as 'coming every day'. They felt that the texts came too many times per week and that the frequency should be reduced. This is evident in Jens' story above (Story 6).

The perceived high frequency of the TipsByText texts may have been compounded, as suggested by another parent, by the amount of information parents receive.

"I would say that if I were to go in and sign up and actively do so, then I would at least like that there was an opportunity to be able to choose how many messages one would like to receive. There is all kinds of information coming into one's phone. [...] I want one message a week".

²⁹ These parents included five fathers and four mothers who remained in the trial, with children with SPV scores from across the full SPV score range (four had an SPV score under 25, two an SPV score between 25 and 50, and three with an SPV score over 50). Six of the parents grew up in Denmark, two moved to Denmark as adults, for one parent we are unsure.

STORY 7. MAJA – There's a lot to keep track of

Maja is 30 and a social and health care assistant. She has three children with her partner, a ten-year-old daughter, and two younger boys one is four and one is three. The four-year-old boy is part of the TipsByText trial, he has an SPV score under 25 and has received language development support in the past

"The middle child, we've had a lot of language education, and then my mom, she was an educator all her life, so she's also come up with some tips on what we can do [...]"

Maja and her husband both work and during lockdown they had to organize to work in shifts so that they could balance work with looking after their children.

Maja does not remember how she was signed up to the trial. She does not read the messages and deletes them all. *"I must honestly admit that I have deleted them [...]"* I've ignored them, rather than thinking about how I could unsubscribe". Maja explains that she receives a lot of information *"You have to get a handle on a lot when you have three children [...]"* you have to have three different log ins to keep up with everything. *There's a lot to keep track of"*.

When the interviewer explains TipsByText to Maja she expresses interest.

"My sons are a little linguistically challenged. Especially the older one, who's almost five years old. And I've tried some tips from some of the language consultants who have been to the kindergarten. So I don't really remember the [TipsByText] messages [Grinning] I have to apologize [...]" You know, there are so many messages for everything".

Some of the parents interviewed also commented on how they found the texts repetitive. This led to parents feeling irritated and annoyed and reduced their engagement with TipsByText..

"When you get a message several times in a week that says more or less the same thing, then you might just choose to skim the next message. If it was something new, every time, it might well be you'd read it [...]" Here, for example, we have got, on 24 February, "Reading daily has documented effect on your child's development" and the next is "Look in books with your child", the next is "You make a difference if you read" and the next is

"Research shows that children's knowledge of books is [...]" "you can see, so it's all the time "Go to the library and borrow a book" (Jørgen, father of two).

These responses suggest:

IF parents receive several texts per week that appear to them to contain the same information, **THEN** they will find these texts repetitive and annoying **THIS WILL LEAD** them to ignore or unsubscribe from TipsByText.

Other factors that might have influenced parents' response to TipsByText

The analysis of the interview data also sought to explore whether any of the following factors might have influenced in some way parents' response to TipsByText. These factors included:

1. Children's SPV scores
2. Parents who relocated to Denmark from elsewhere as adults and parents who grew up
3. Parents with a child who is already in a language support programme
4. Parents with more than one child
5. Parents' level of education

Only the first two, the children's SPV score and whether parents had grown up in Denmark or moved to Denmark as adults appeared to have some influence on parents' response to TipsByText. The evaluation also looked at how parents' engagement with TipsByText might have changed over the period of the trial. In the sections below, we present the results from this analysis.

Children's SPV score

The evaluation grouped parents' interview responses by their child's SPV score to explore whether there were any notable differences between parents' experience of TipsByText across these groups. The differences were less notable in relation to what parents thought of TipsByText and more notable in relation to how parents felt TipsByText had affected their language development practice with their children.

Across the parent sample of 40 parents:

- 13 had children with a baseline SPV score under 25
- 14 had children with a baseline SPV score between 25 and 50
- 13 had children with a baseline SPV score over 50.

Parents with **high** engagement, regardless of their child's SPV score shared two themes, the first is that some noticed that their child responded well to the TipsByText activities and the second is that some noticed changes in their conversations with their child(ren). For some parents they simply had more conversations and for others the change related to the quality of the conversation.

There were also some variances across the group of parents who demonstrated **high** engagement with TipsByText in relation to how TipsByText has affected them. Parents with a child with an SPV score under 25 related having a sense of agency in how they used TipsByText. While parents with children with an SPV score over 25 noted that TipsByText helped to make them feel 'on track' and provided a reminder to do language development activities with their children. (See table below)

Parents with **limited, low** and **medium** engagement with TipsByText and who had children with SPV scores between 25 and 50 tended to remain engaged with TipsByText in a 'light' way. They still checked the texts from time to time and found that the texts acted as reminders to dedicate time to their child's language development and for some it acted as confirmation that their child was on track. Parents with **limited, low** and **medium** engagement with TipsByText and who had children with SPV scores under 25 or over 50 tended to disengage from TipsByText. (See table below)

TABLE 6. SUMMARY OF HOW TIPSBYTEXT AFFECTED PARENTS GROUPED BY THEIR CHILD'S SPV SCORE AND PARENTS' ENGAGEMENT LEVEL

Parents with a child with and SPV score under 25	Parents with a child with and SPV score between 25 and 50	Parents with a child with and SPV score over 50
Effects of TipsByText on parents who demonstrated high levels of engagement		
<ul style="list-style-type: none"> ✓ Parents feel they have agency ✓ Experience good responses from their children ✓ Describe more and different types of conversations with their kids 	<ul style="list-style-type: none"> ✓ Parents feel that they are on track ✓ Reminder to focus on kids (present) ✓ Leads to uplifting, positive dialogue with kids ✓ Leads to new routines 	<ul style="list-style-type: none"> ✓ Children have fun ✓ Parents experience more depth, different types of or more conversations ✓ Good reminder and confirmation
Effects of TipsByText on parents who demonstrated limited, low and medium engagement		
<ul style="list-style-type: none"> ✗ Disengage from TipsByText 	<ul style="list-style-type: none"> ✓ Not bothered by TipsByText ✓ Appreciate the confirmation ✓ Appreciate the reminder ✓ Appreciate checking their child is on track 	<ul style="list-style-type: none"> ✗ Disengage from TipsByText ✗ Stay in trial to support the RCT

Parents who grew up in Denmark and those who did not

The evaluation intentionally included parents who grew up in Denmark and parents who moved to Denmark as adults in the sample to explore whether these two groups of parents experienced TipsByText differently. This was one of the 'curiosities' raised through earlier qualitative enquiry projects on TipsByText. The analysis of the interviews identified distinctive themes for each group (see table below).

There were a few noteworthy differences between the group of parents who grew up in Denmark and those who moved to Denmark as adults. Parents who moved to Denmark as adults expressed greater openness to TipsByText. They tended to think of TipsByText as a welcome aid that could help them to find resources, ideas, and information on how as parents they could support their children's language development. One parent explained:

"I'm a housewife and I don't have many friends or family here with children, so otherwise (without the texts) I'm not able to learn new things for my children" (Inaya, mother of two).

Unique to this group of parents were the comments they made on how TipsByText would be useful in helping them, the parent, learn Danish and learn about Denmark.

Some of the parents in this group also had some shared concerns. These included being worried about teaching their children the wrong Danish pronunciation and being worried about their children making fun of their Danish language if they did the TipsByText activities in Danish.

"The first time when I received the message, I thought "I have to use this with my son" and I was trying to make some sentences, whether it was right or wrong I don't know, but I tried to use the word in a sentence and I used

to try to speak to him. But later on I realized it is not the right thing to do, that I speak to him and I can have the wrong pronunciation and he can learn wrongly. So I ... I have told my daughter to do that one. Because her's is good, she is going to school. So I have shifted this work to my daughter".

Asha also highlights that she benefits from receiving the texts

"It's very helpful for me too, because I am also a learner of the Danish language and I'm also going to school".

This parent's husband also receives the texts. She has encouraged him not to use them with their son though as he might also get them 'wrong'.

"When I read books in Danish, he (Danilo's son) does not bother to listen because he says "I do not understand you" [laughs]. So I just translate it into Ukrainian, because he understands what the book is all about. And it was the same in the text messages: I translated the activity and he just did it, e.g. using lower case and upper case letters, he can write almost all of them in Danish, and he knows what is the difference between lower and upper case letters and how they look".

TABLE 7. DISTINCT THEMES FOR PARENTS WHO GREW UP IN DENMARK AND THOSE WHO MOVED TO DENMARK AS ADULTS

PARENTS WHO MOVED TO DENMARK AS ADULTS	PARENTS WHO GREW UP IN DENMARK
<ul style="list-style-type: none"> ✓ Tend to be more open to TipsByText ✓ Because they are new to Denmark and don't have established networks, TipsByText has helped create language learning opportunities 	<ul style="list-style-type: none"> ✓ Confidence in TipsByText because of the ROCKWOOL Foundation's reputation
<ul style="list-style-type: none"> ✓ See TipsByText as an opportunity for their kids and for themselves. ✓ See TipsByText as generally good for language development in Danish and the language(s) they speak at home 	<ul style="list-style-type: none"> ✓ Appreciate that the texts are short and quick to read ✓ Appreciate TipsByText acts as a reminder ✓ Appreciate the tips are easy to integrate into everyday
<ul style="list-style-type: none"> X Worry about teaching their child(ren) the wrong Danish pronunciation. X Worry about being corrected by their child(ren) when they speak Danish to them. 	<ul style="list-style-type: none"> X Tend to find the content of texts banal and obvious X Tend not to feel like the target group

The group of parents who grew up in Denmark also had some distinct themes. A few of the parents in this group knew about the ROCKWOOL Foundation by reputation and this instilled confidence in TipsByText. This was not widespread but noteworthy. It was also in this group that parents tended to appreciate that the texts were short and that the tips were easy to integrate into their daily activities. All the parents who thought that TipsByText worked well as a reminder for parents to focus on their children's language development were also in this group. This group included parents who felt that they were not the target group for TipsByText and who found the information and the tips in the texts banal and obvious.

Changes in parents' engagement with TipsByText over the period of the trial

The evaluation team had the opportunity to explore whether parents' engagement with TipsByText changed over the period of the trial.

It was evident that there were three different journeys of engagement with TipsByText over time. These included:

- A. Parents who were initially highly engaged and who over time became less engaged.
- B. Parents who maintained similar levels of engagement throughout the trial.
- C. Parents who over time demonstrated more engagement with TipsByText.

Journey A was the most common. Jeanette (story below) is an example of a parent who was more engaged in TipsByText at the beginning of the trial than towards the end. A few parents appeared to maintain a similar level of engagement throughout the trial. These included parents with limited, low, medium and high levels of engagement. There was only one parent who shared that she had increased her level of engagement with TipsByText. (See Susan's story below).

STORY 8. JEANETTE – From more to less engagement with TipsByText

Jeanette was interviewed twice (second and third round of interviews). She lives with her husband and their three sons. The youngest, William is 5 years old and is part of the TipsByText trial. He has an SPV score between 25 and 50.

When first interviewed in June 2020, Jeanette was positive about TipsByText: *“Well I actually think it’s really good! [...] It’s manageable! And you’re just reminded, “oh yes, it’s good to read a book,” and “oh, yes, it’s good to show what the reading direction is.” Concrete! Useful!”* She also remarks: *‘you can read and borrow and buy a ton of books about children’s development [...] but there isn’t always the time to read them all, [...] It’s simple and short, and some things you can translate into action! So I’ve been really positive about it and would really like to continue with it’.*

Jeanette read all the texts. She does not remember how she came to be signed up to TipsByText and did not know who was sending the texts. Despite this she felt comfortable receiving, reading and following the exercises in the texts. She reflects that had there not been a lockdown she would have asked for more information from the pedagogue. She also says that it was good the texts are short as it meant that she read the first few. She says that she gets a lot of spam on her phone.

She described a tip she had used at the time *“Well, for example, I got one (TipsByText text) the other day that said, “When you read with your child, take his finger and read.” So, they get an idea of what direction you’re reading in. In fact, I never thought about that being important. But I suppose there is some research behind that, that it is important [...] I’m a mother of three, and I’ve never thought about that. So that’s the kind of thing I could use”.*

Jeanette explains that she likes the texts because they are easy to remember and to implement in your existing daily routine: *“I think it’s been good. But I think it’s good that there are examples! That it’s not just theory. That it’s good to read a book to your child every night – yes, I know! But then there’s a little bit of “Try to do this” so it’s a little bit like what you’re doing in the routine! So, it becomes very action-oriented, ... because it’s so short and concrete, I actually remember it when I’m with him. So”.*

Jeanette stated that the texts changed how she talks with all of her children *“I think it has affected me in the way that I might use more diverse words with them”*. And she feels that her son’s vocabulary is expanding but is unclear whether it is because of her new habits. *“I think he’s got a bigger vocabulary, I actually think so. But whether it’s because he’s gotten bigger, I don’t know [...] And I’ve seen that with the other two too”*.

When talking to Jeanette in the third round, about five weeks after the last text was sent, her impression of TipsByText is still predominantly positive. She says that she read all the texts, but when asked if her engagement and interest has changed throughout the period, she says:

“Oh, I think that towards the end, I’d had enough. By then I was thinking, now it would be okay if it stopped. [...] I think I thought it got too repetitive. That we’d heard it before or already did it. I mean, in some way it was just too much”.

She said she was not irritated by the texts but that the content ‘went in one ear and out the other’. This might have been in part due to the family being busy preparing William for school.

Jeanette thought that a break from the text for a month or so followed by a more intensive period of text during the holiday might have worked better for her. Jeanette did not notice the activities becoming more challenging. She describes practising some of the more advanced activities with her son, such as finding books to go *“letter-hunting”* in and rhyming.

Jeanette explained how she thought the texts affected her.

“I think I have an enhanced focus on what I do, and what I say, and the way I speak with my child, and how much I speak with my child. How much I read and how many words they hear. That it is important. So it isn’t concrete, but more a generally enhanced focus on what is important”.

STORY 9. SUSAN – From less to more engagement with TipsByText

Susan was interviewed twice, once at the beginning of the trial and once towards the end of the trial in June/July). Susan has three children. The eldest, a daughter of nearly six, and two boys, ages 3 and 2. Her daughter is part of the TipsByText trial, she has an SPV score under 25. Her daughter presents with some language development challenges; at this stage they believe it is to do with her hearing.

Susan's first interaction with TipsByText was when she received the welcome text. She explained *"I just started receiving texts all of a sudden. My boyfriend told me about them. I don't remember any information material. I'm not exactly the parent who is always checking the billboard at the kindergarten. At first, I thought, it's a strange message [...] I thought: who is texting me?"* Susan knows that she needs to help her daughter with her language development but that this has not become a habit for her yet. She says that for her boyfriend *"it comes a little more natural for him"*, because he is more 'academic' than she is.

Susan finds it hard to change her habits. *"I asked myself if (the texts) keep coming will using the texts become a habit? Thomas uses it, but for me it has to become a habit. I need to break down the old habit and develop a new one"*. She also states: *"I'm not going to unsubscribe. I'm thinking it's just going to get under my skin eventually and become a habit [...] my boyfriend probably does it the most [...] I'm more about relaxing with the kids on the couch"*.

Susan is usually busy when the texts arrive, she prefers to engage with them later after the kids are asleep. Susan explained that she receives a text *"I read it over quickly"* but she explains *"it's not at the best time. A better time to receive the texts for me would be 8pm when the kids are in bed"*. Susan says that she likes to receive the text messages as a whole and that the content overall is fine, but that the texts are also a weekly reminder that she does not do the language development activities with her daughter. *"The text messages can make me feel guilty, you didn't get it done again"*.

She remembers some of the texts including the one about the library and books, the one about 'shampoo', the one about using descriptive adjectives for common objects (the blue cup) and the one about singing. She said that she does not discuss the tips with her boyfriend even though he also receives them, but she has heard him use them with the kids.

She says that she was already doing some of the tips with her daughter and with her younger sons.

When we spoke to Susan again, she shared that the lockdown had its good points and challenging points. She says that it was nice to have more time with the kids at home but also explained that it had been challenging to maintain routines with the kids at times. Susan's boyfriend works nights and so the kids had to be quiet during the day so that he could sleep. Susan also thinks that the unique conditions of the lockdown meant that she engaged more with TipsByText.

Since the first interview, Susan has been told that her daughter may have ADHD. At 6 years old she is too young to be tested. Susan expresses that it will be easier for them to help her daughter once they know what is holding her back.

Susan has been reading and using the texts more and more. She says she is less 'casual' about reading the texts. She doesn't necessarily read all of the texts but when she does and there is something new in them, she will try the tip. The conditions of the lockdown might have helped with creating a space for her to do this. Now that things are back to normal, she feels that the chores have started again and this means that she has less time to engage with the tips.

The tips that Susan has most adopted are the ones on pronouncing words clearly, using rhymes and being more specific in her language use (using descriptive adjectives). *"the one with saying many words with S, e.g. snake. That's where I've taken it to be clearer, with everything they say, especially if they say something wrong. For example, if we've read about a snake, we've taken it in syllables and talked about the word. I've embraced that the most.* Her three-year-old is responding well to these and she has noticed that his language and pronunciation of words has improved. Susan's boyfriend Thomas seems to be reading the texts more regularly and using them more frequently too.

Susan finds that the more concrete and straightforward tips are the ones that she responds the best to. If the tips require engaging with her boyfriend to do them then she will not try those tips. She also appreciated the text in April encouraging parents; it seems to have alleviated some of her feelings of guilt.

Unintended effects of TipsByText

When coding the data against the Theory of Change, we made sure to take notes of records outside of the expected use and pathways to change. There were only two notable cases - these are detailed in this section.

TipsByText at first triggered a feeling of guilt for one parent

One parent mentioned that receiving the texts made her feel guilty. The text reminded her that she should be doing activities with her children to help develop their language.

Susan is a mother of three young children. The oldest is enrolled in TipsByText and has an SPV below 25. We interviewed Susan twice, once in March and once during the lockdown. In the first interview she shared the following:

“The text messages may make me feel guilty, now you didn’t get it done again. I read it quickly and then we’re busy – it can make me feel guilty”.

Susan explained that she liked to receive the text messages as a whole - and that the content overall was fine - but she also felt that the texts were a weekly reminder that she doesn’t find the time to help her daughter with her language development. When we spoke to her later during the lockdown she had started using some of the tips and shared that the encouragement in the texts had helped to alleviate some of her feeling of guilt.

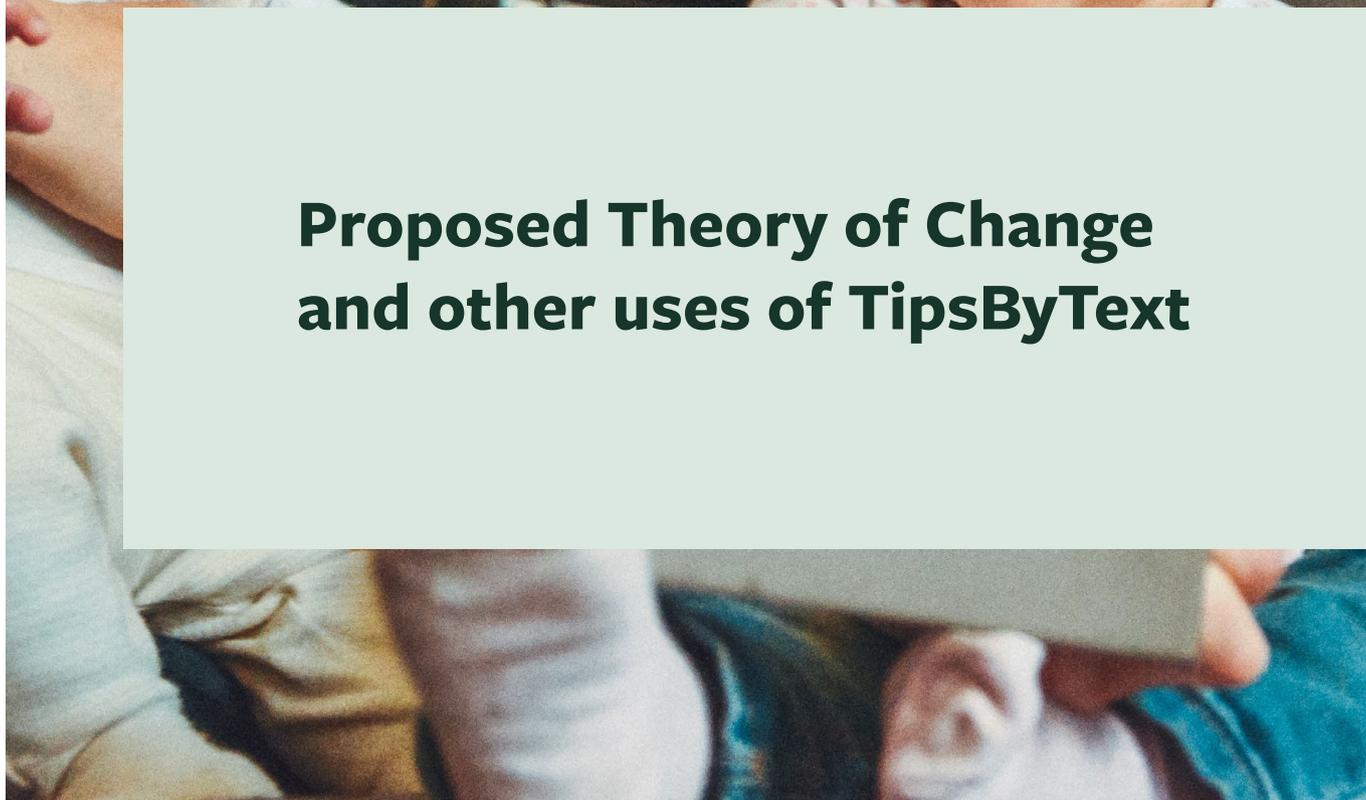
TipsByText made a parent feel vulnerable

A parent shared that she did not tell anyone that she was receiving the TipsByText texts. She was concerned that she might be judged negatively for being part of TipsByText. She thought that it might be assumed that someone had assessed that she needed help with her children.

“Some people will criticize such a programme [...] Some might think that you get help from somewhere. Honestly, I didn’t tell anyone about this. It doesn’t matter to me what other people think, they can think what they want, I don’t think about it. But, for example, the [...] course I was at. Some people had told me that, and I heard some criticism that I was getting help, that I was getting help from someone for my children. But there I chose to close my ears. But honestly, I haven’t told anyone about TipsByText. I’m sure you understand that that’s the way it is in our culture” (Senay, mother of three).



Proposed Theory of Change and other uses of TipsByText



Proposed Theory of Change and other uses of TipsByText

This section draws on the previous results sections to propose a revised Theory of Change for TipsByText and briefly presents ideas and suggestions generated from the analysis of the collected data on how else TipsByText could be used.

Revised TipsByText Theory of Change

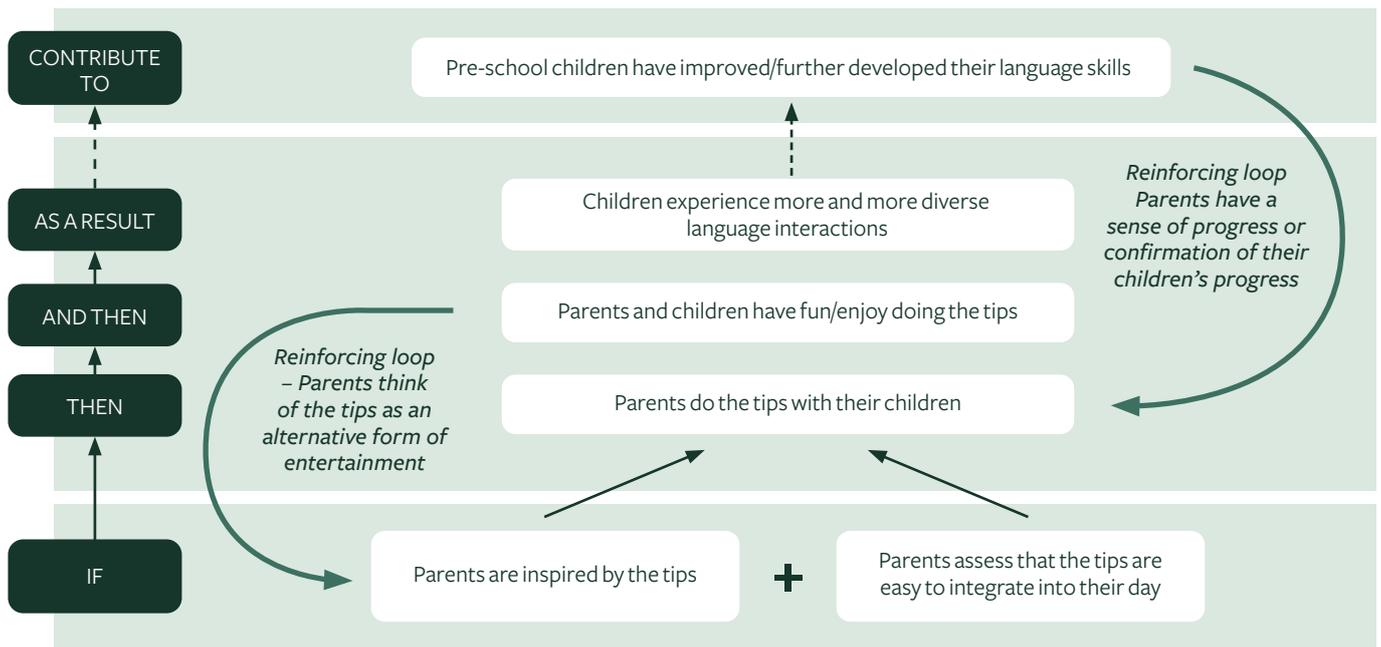
The revised TipsByText Theory of Change proposes that TipsByText contributes to improving pre-school children's language skills by triggering parents and children to engage in more frequent and diverse dialogues.

The Theory of Change assumes that parents already know that their children's language development is part of their parental responsibilities. TipsByText's role does not therefore, include educating parents about this. Instead, TipsByText seeks to trigger parents to do more language activities with their children by inspiring parents, making it easy for parents and making the language activities fun/enjoyable for parents and children.

The theory proposes that **IF** parents are inspired by the tips **AND** assess that the tips will be easy to integrate into their day **THEN** parents will try the tips and have fun/enjoy doing the tips with their children. **AS A RESULT** children will be doing language activities. Furthermore, **IF** parents observe their children having fun **THEN** they will do the activity again and try more TipsByText tips **AND THEN** children will experience more frequent and more diverse language interactions **AND AS A RESULT** their language skills will improve. (See diagram below).

There are two likely feedback loops that reinforce this Theory of Change. The first is that parents, if nothing else, will value the tips as an alternative form of entertainment to screens and other activities they are already doing with their children. The second reinforcing loop is that parents will either observe their children getting better at doing the TipsByText activity and therefore will be motivated to do more of the TipsByText tips. Or parents will observe that their children can already do the tip and will use TipsByText to test or confirm that their child's language development is on the right course.

FIGURE 5. TIPSBYTEXT REVISED THEORY OF CHANGE OUTCOME LEVELS



For TipsByText to activate this Theory of Change the tips and the way they are delivered need to meet certain requirements in order to **activate ‘parents being inspired’**:

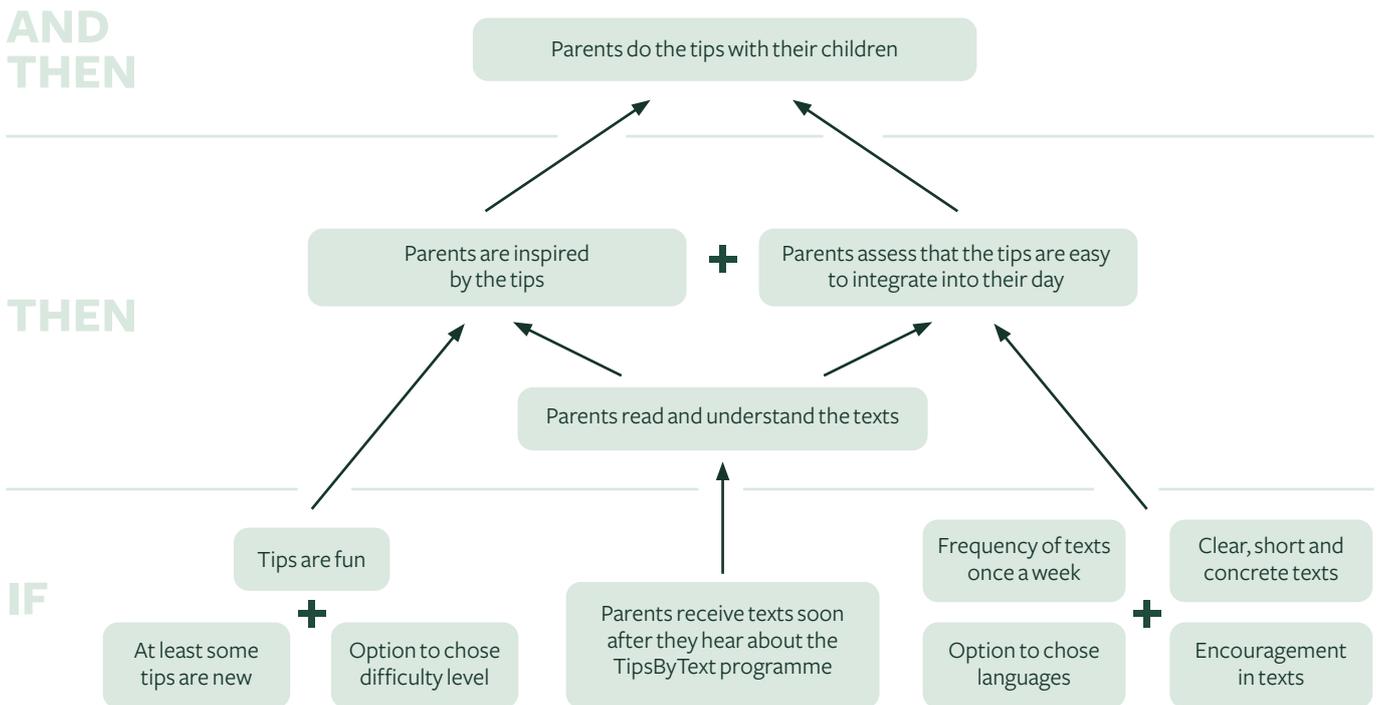
- a. The tips **must be fun** or engaging – many parents shared how the tips had been fun to do with their children and how they had observed their children enjoying the activities. This is also important for the first reinforcing loop.
- b. **At least some of the tips must be new** or provide a new angle/approach to a well-known activity – for example, many parents enjoyed the tip that guided parents to ask their children to imagine what was on the next page of the book they are reading together before turning the page.
- c. There is an **option to set the level of difficulty** so that parents can read tips that are at an appropriate level for their children – some parents found the tips too hard, others found them too easy. When the tips were too easy parents tended to disengage from TipsByText. Including an option to set the level could also support the reinforcing loop: parents having a sense of progress or confirmation.

To activate ‘parents assess that the tips are easy to integrate into their day’ the TipsByText need to:

- d. Continue being **clear, short and concrete** – this often meant that the texts were read by parents and that they could use the tips either just after reading them or when an occasion arose without having to do any preparation.
- e. Have an **option to set the frequency of texts** or have them sent no more than once a week – parents often felt that they had not had enough time to read or try out the tips, and they might have had a sense of falling behind.
- f. Have an **option to set the time at which parents receive the texts** – many parents liked receiving the texts at school pick up time but many also expressed preferring receiving them in the evening when they had more time.
- g. Continue to have an **option to select a language** to receive the texts in – many parents who did not speak Danish chose to receive the tips in their own language.
- h. Continue **encouraging parents in the texts** – some parents found this helped them to continue using the tips in a way that suited them.

Finally, it is important that the TipsByText programme start sending the texts soon after informing parents about the programme (see diagram below).

FIGURE 6. TIPSBYTEXT REVISED THEORY OF CHANGE – THEORY OF ACTION LEVEL



Further suggestions on the Theory of Change

Some of the kindergarten staff interviewed felt that they could play a role in supporting parents’ use of TipsByText. The role of the kindergarten staff they suggested could include introducing TipsByText to parents, assisting parents in understanding how to use the TipsByText tips, and leveraging the TipsByText tips to support the kindergarten language development curriculum.

It is clear from the interviews with parents who remained in the trial and those who unsubscribed, that it is important that parents understand and have sufficient confidence in TipsByText to stay engaged. Furthermore, there was one instance

during a follow-up interview in Round 2 in which a parent reflected on how being part of an interview in Round 1 had nudged her to reflect on TipsByText. The interview was with Susan, a mother of three children who had expressed in her first interview that she was not engaging or using the tips. Her oldest daughter was part of the trial and had an SPV score under 25. In the second interview, she related that she had been using some of the tips regularly. Through the interview she opined that this was in part due to the first interview prompting her to reconsider TipsByText. This would seem to support a role for the kindergarten staff in the roll out of TipsByText.

Other uses of TipsByText

There were two other uses for TipsByText that were suggested by the interview data with parents. These suggestions came from parents who had moved to Denmark as adults. The first was the opportunity to use TipsByText to communicate to newly arrived parents information on the education system in Denmark and the second was to use TipsByText as a language teaching platform for adults.

TipsByText provided insights into Denmark and its culture for one parent

We interviewed Sarthak, a father from India who recently moved to Denmark. We interviewed Sarthak three times throughout the trial. His son is six years old and has an SPV score over 50. From the first interview Sarthak was particularly interested in using TipsByText to learn about Danish culture and Danish education. This was important to him in helping his son better integrate into Danish society, Danish education and to make friends at school.

“We gained something from these tips. Some things are completely new to us, regarding (Danish) culture [...] it really helps me a lot to adapt. ... Not only culture, but I mean, one of the tips you were sending was saying, “He may also learn it from the school.” But me and my wife, we don’t know these things. We are not going to the kindergarten. And these tips are helping us to learn what he might learn in school and what he should expect from us as parents”.

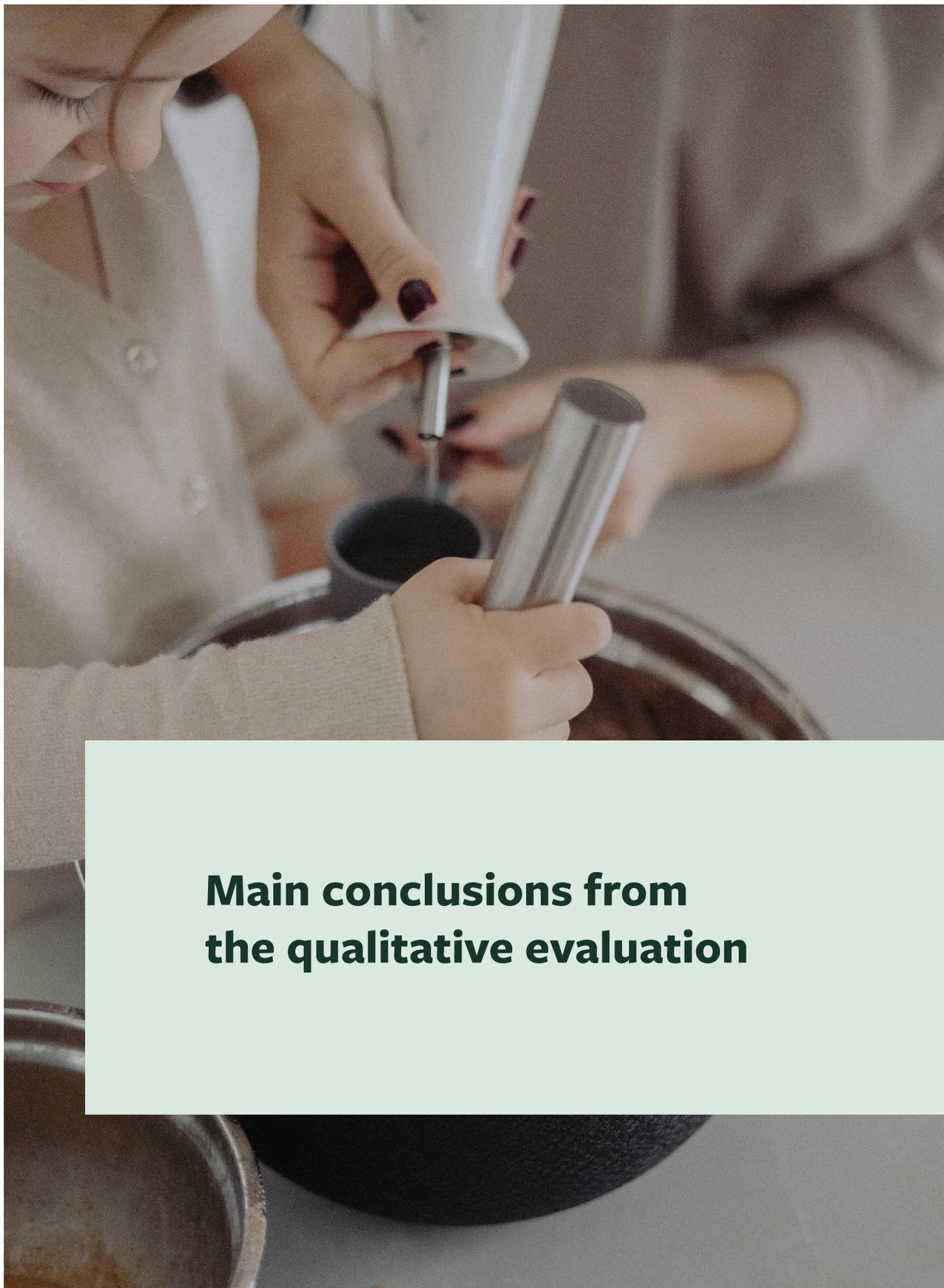
“I think okay, maybe this is the way I am supposed to spend time with him, this is the way I have to show him interest on the books, this is the way I show him interest in pictures, show him interest in the playground and playing with other kids. And all of those things. So, as I said, it is a mindset, and it is really helping me as a person and as a father to change my mindset, so I can spend that time with him” (Sarthak, father of a son).

TipsByText Danish lessons for adults

The parents whose own Danish language skills were limited, were excited about using the TipsByText tips to develop their Danish language. For this reason, many of the parents we interviewed who did not grow up in Denmark chose to keep receiving the texts in Danish. Their sentiment was also that since they live in Denmark, they should receive the texts in Danish. For example, one mother related *“It’s good because I’m in a language group and I know it’s good for me, too. The new words are new to me, so it also helps with my language - not just for the children”.*

Another mother originally from Turkey receives the texts in Danish and translates using Google Translate the few words she does not understand. She says that it is good for her own Danish language development to receive the texts in Danish. She uses the tips to teach her son Turkish as she says he already learns Danish from the kindergarten and speaks it with his friends and sisters.

Just two parents changed the language they received the texts in, one to English, and one to Urdu. For example, one parent said that when she received the first text, she chose to change the language to Urdu. She explained *“It’s my mother tongue and it’s good for me to understand the content. It’s good for me to say the things to my children, but if it’s in English, then it’s a problem for me [...] now when they send me the messages in Urdu then I understand it well, and then I can do it in Danish with my children [...] I go to my Google Translate app and copy it and then translate it into Danish. (Interviewer: Which texts did you translate?) All of the texts” (Inaya, mother of two).*



Main conclusions from the qualitative evaluation

Main conclusions from the qualitative evaluation

This qualitative evaluation sought to provide answers to five questions. The first two were focused on confirming that the TipsByText programme was delivered as designed. These two questions are important as they provide insights into adaptations that would support scaling of TipsByText.

TipsByText was delivered as designed

The evaluation found that the TipsByText trial was delivered as designed. The three-month time lapse between parents receiving the TipsByText information letter and the TipsByText welcome text might have led to some parents unsubscribing from TipsByText.

The qualitative evaluation was then concerned with two questions which sought to surface the different ways in which parents from different backgrounds responded to TipsByText. These questions aimed to describe and unpack parents' responses to TipsByText and what might have influenced their responses.

TipsByText engaged parents, who dedicated more time to their children's language development

The evaluation found that most parents interviewed (31 out of 40) tended to engage with TipsByText and when they did TipsByText either prompted parents to dedicate more time more regularly to their child's language development and/or gave parents inspiration for new or alternative language development activities to do with their child. Ultimately, TipsByText contributed to these parents and children having more interactions and/or more varied language

building interactions with their child. A few parents interviewed (9 out of 40) did not engage as much with TipsByText.

Parents felt more at ease and confident doing language development activities

Some of the parents who responded positively to TipsByText and used the tips, not just as useful reminders but drew inspiration from the tips and used them with their child, shared their reflections prompted by their engagement with TipsByText. These included bringing awareness and being more deliberate when doing language activities with their child, being more at ease and confident when doing language development activities with their child and allowing language development to be fun and interactive.

Parents found the texts to be clear, concrete, easily adaptable and fun

Parents who responded positively to TipsByText confirmed the TipsByText pre-trial Theory of Change. They appreciated that the texts were short, clear and concrete, that the activities proposed could be easily adapted and were fun. They also valued when the content brought something new, either an idea or a new take on or way of doing a language development activity already well-known to parents. Parents who did not respond as expected to TipsByText tended to disengage early in the trial because they were unclear as to why they had received the texts. Or they disengaged later in the trial because they found the content of the texts 'obvious' and/or too young for their child and over time they found the frequency of the texts 'annoying'.

Parents tended to reduce their engagement with TipsByText over time

It is worthwhile noting that throughout the trial parents tended to reduce their engagement with TipsByText over time. This was also the case for parents who demonstrated high engagement with TipsByText. Parents explained that they tended to engage less with TipsByText because they found the texts were too frequent (three per week).

Future use

The last evaluation question asked how TipsByText might be adapted to be more successful and how else the TipsByText model might be used. The proposed revised TipsByText Theory of Change essentially confirms the pre-trial TipsByText Theory of Change but highlights the importance of the content inspiring parents. This might be achieved in three ways: the activity is fun, and/or the activity is new and/or the activity presents an appropriate challenge for the child.

All the parents interviewed who moved to Denmark as adults responded positively to TipsByText. It was this group of parents who proposed that TipsByText could also act as a platform for adults to learn Danish or as a mechanism through which newly arrived parents could learn about the Danish education system.

TABLE 8. SUMMARISED RESPONSES TO THE EVALUATION QUESTIONS

QUALITATIVE EVALUATION QUESTIONS:	SUMMARISED RESPONSES:
<p>1. In what ways was TipsByText delivered across the municipalities and kindergartens? To what extent did it follow the design?</p>	<p>The evaluation found that the TipsByText trial was delivered as designed.</p>
<p>2. What adaptations were made to the TipsByText design as a result of the randomized controlled trial? In what ways did the non-text activities (including the provision of information material, etc.) impact parents' engagement with the TipsByText?</p>	<p>Three elements were identified which might differ if TipsByText was delivered at scale instead of tested through a randomized controlled trial:</p> <ol style="list-style-type: none"> 1) Opt-out programme. 2) Baseline language testing with all children in trial 3) No nudging from kindergarten staff. <p>Only the second, which created a three-month time lapse between parents receiving the TipsByText information letter and the TipsByText welcome text might have led to some parents unsubscribing from TipsByText.</p>
<p>3. In what ways did parents respond to TipsByText? For whom, why, how and under what circumstances?</p>	<p>Parents demonstrated four different responses to TipsByText:</p> <ol style="list-style-type: none"> 1) Immediate disengagement by unsubscribing or ignoring the texts. 2) Limited engagement with parents occasionally reading the texts. 3) Medium engagement with parents using the texts as a reminder to do language development activities with their children. 4) High engagement with parents using the tips to reflect on and boost their own practice. <p>Three factors seemed to have some effect on parents' engagement with TipsByText:</p> <ol style="list-style-type: none"> 1) Parents who moved to Denmark as adults tended to be more open and engaged with TipsByText. 2) Parents with children with an SPV score below 25 or above 50 were more likely to disengage from TipsByText. 3) Over time, most parents tended to engage less with TipsByText.
<p>4. What were the unexpected and undesired responses to TipsByText? For whom, why, how and under what circumstances?</p>	<p>They were some unexpected responses from parents who moved to Denmark as adults. These parents gained cultural insights into Denmark and were using the texts to learn Danish.</p> <p>They were only two examples of undesirable effects: 1. One parent said the texts contributed to her parental guilt, and 2. One parent felt that if her community knew she was receiving the texts they might question her parenting abilities.</p>
<p>5. How might TipsByText be adapted to be more effective in improving children's language skills? How else might the TipsByText model be used?</p>	<p>The following could improve TipsByText's efficacy:</p> <ol style="list-style-type: none"> 1) To better activate parents becoming inspired: Parents can set the level of difficulty. 2) To better activate parents integrating texts into their routine: Parents can set the frequency, date and time at which they receive the texts. <p>The model could also be used to support newly arrived adults learning Danish and learning about parenthood in Denmark.</p>