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### Exploring play and creativity in pre-schoolers' use of apps

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# Exploring Play and Creativity in Pre-Schoolers' Use of Apps

A Guide for Parents



# Play and creativity with apps:

How to get the  
most out of using  
apps with your  
pre-schooler

# Background to the project

Apps weren't around when we were young and so the use of them with your little one can often feel very unfamiliar. This guide for parents explores the use of apps for fostering fun, play and creativity with your under-5s and offers help on choosing and using apps.

The findings are based on a research project conducted by the Universities of Sheffield and Edinburgh, in partnership with CBeebies, the children's media companies Dubit and Foundling Bird and Montenev Primary School, Sheffield. The full report can be found at [www.techandplay.org](http://www.techandplay.org)

## **What did we do?**

During our in-depth study we surveyed 2000 parents of 0-5 year olds who had tablets in their home and asked them about their children's use of apps. We followed six children at home in greater depth over a period of three months and looked at what they did with apps. We also filmed twelve children aged 3-5 in a school using popular apps and then we analysed the apps themselves to see how far they promoted play and creativity. By creativity, we mean producing original content and/ or encouraging diverse ways of thinking and interacting.

# Survey findings



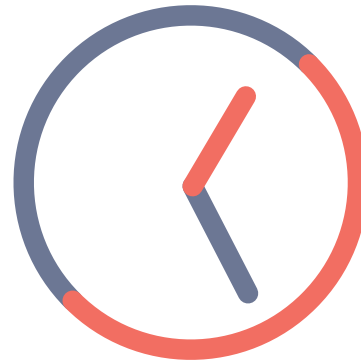


## How long do children aged 0-5 use tablets, on average, on a typical day?

**Figure 1: Tablet Duration**



**1 hour 19 minutes  
hours on a weekday**



**1 hour 23 minutes  
hours on a weekend day**

### How does your child's time on tablets and apps compare?

If your child wants to use a tablet for much longer than this, what can you do? Children need a balance of activities across the day, and most choose this for themselves. However, if you find your child wants to spend long hours using media, then there are things you can do that might work for you:

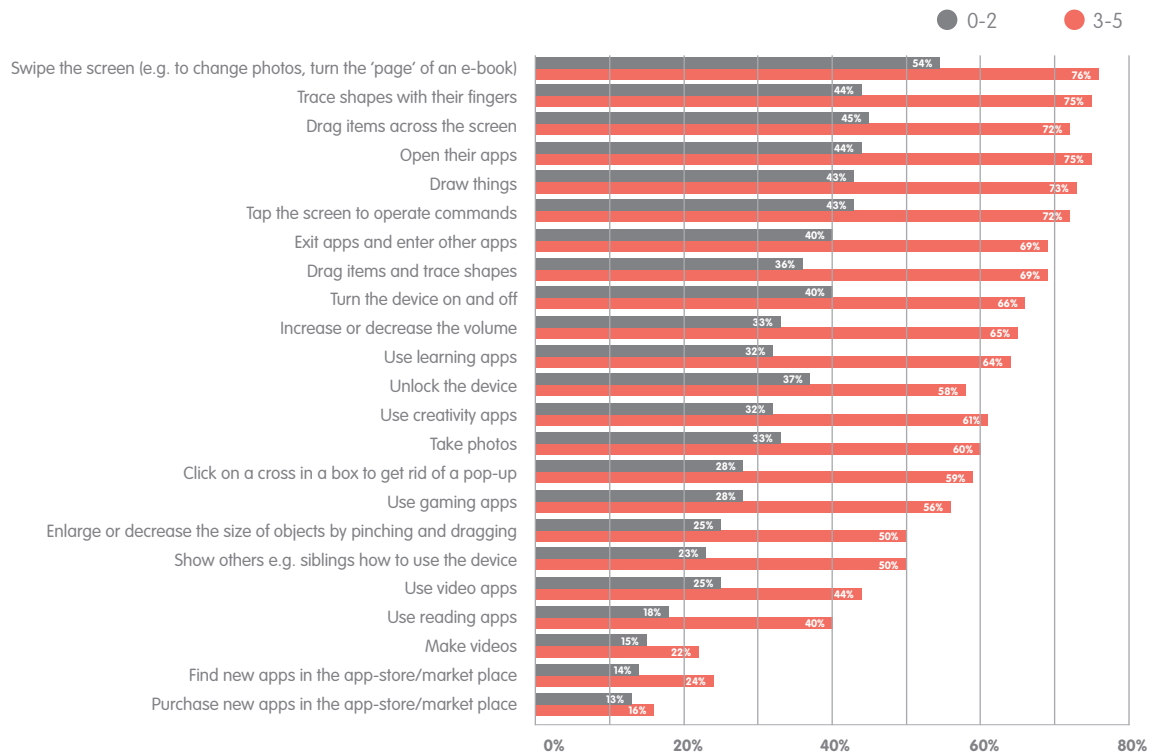
- Have regular periods for 'tablet time', so that your child gets used to only using it in those periods. It also helps to have this tablet time in a regular space, so it becomes habitual.
- Stay strong when you say no. If they are constantly asking for the device, distraction with other activities often helps. If you don't back down, they'll soon learn you mean no when you say it.
- Tablets for shared use at bedtime can foster quiet, soothing time as you listen to lullabies or read bedtime stories together. However, don't let your toddler or pre-schooler take a tablet to bed to use on their own. Research suggests that screen use last thing at night hampers sleep, and also they may turn the tablet back on when you leave the room.
- In order to manage your child's tablet use, you need to know when it is on. You may want to set a device passcode or lock to ensure they ask.
- Have 'device free' times of day now and again and plan fun things to do on them.
- Act as a good role model – ensure you are not seen glued to a screen all day!

In addition, it is important to think about the quality of use as well as quantity of use. Thirty minutes using a high-quality app that promotes interaction is better than 10 minutes using an app which offers little in the way of play, creativity and/ or learning.

## What can children do when using a tablet?

**Figure 2: Tablet Use – Is able to do unassisted**

Parents told us about the skills their children demonstrate when using tablets on their own. Older children (3-5) were more likely to develop these skills than younger children.



## What skills has your child learnt?

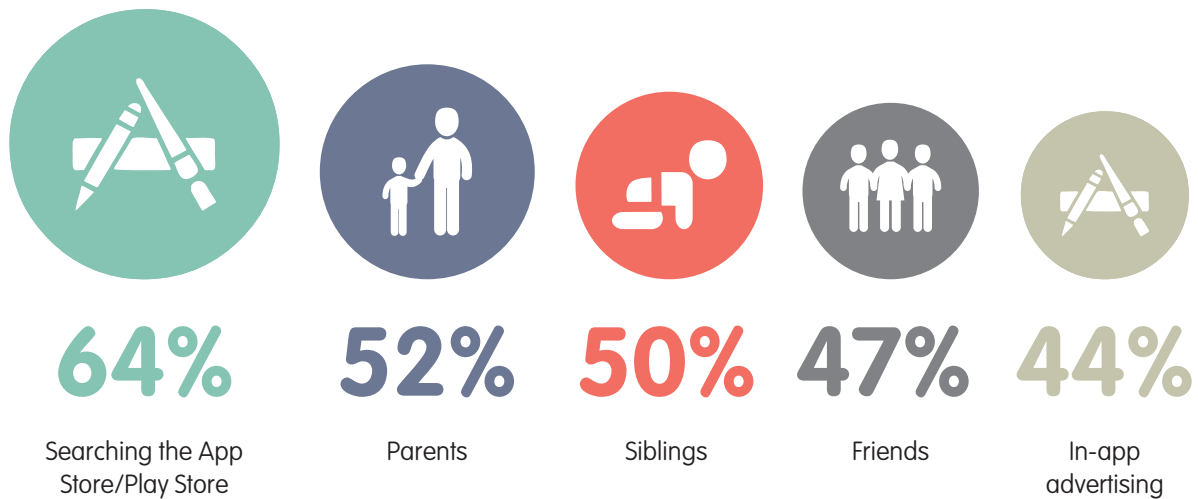
Whilst children can learn some of these skills through trial and error, they would benefit from being taught them by adults from an early age. Just as children need to know how to read books, or operate toys, they benefit from learning some of the basics about using tablets so they can be independent. Key skills at this age are:

- Turning the device on and off
- Being able to find 'their' apps (it helps if you put these in one folder – they soon know where to find this, and they are less likely to accidentally find apps not intended for them to use)
- Opening apps by tapping on them
- Hand and finger movements that enable them to engage with apps – swiping, tapping, pinching, spreading fingers, tracing and dragging items
- Knowing how to get back to a home screen in an app
- Knowing how to get rid of a pop-up advert (by clicking on the cross)
- Being able to turn the volume down or up

## Where do children find out about apps?

We asked parents how children found out about apps. They drew on a range of sources:

**Figure 3: Apps - Influences on downloads**



## How should you and your child choose their apps?

Whilst searching the App/ Play Store was the most frequently used strategy for finding new apps, it might not be the most effective, given the large number of apps available for pre-schoolers. Instead, parents can influence their children's choices positively if they take some time to find out about apps.

- A helpful guide for parents is Common Sense Media (<https://www.commonsensemedia.org/app-reviews>). Although it is a US-produced site, many of the apps reviewed are available in the UK.
- Another useful site is Apps Playground (<http://appsplayground.com>), produced by the Guardian journalist Stuart Dredge
- Often if you search the Internet using the search term 'Top ten best apps for ...' you will get useful leads.
- If you find good apps for your child, why not share their titles with other parents in playgroups and nurseries?
- Also, talk together with your child about making app choices from the start – that way, they can learn to identify for themselves the things they like and don't like about apps.



## How far can apps promote pre-school children's play and creativity?

We identified the top ten favourite apps of children aged under 5 from the survey and we then examined how far they promoted play and creativity through observations of children using the apps at home and school. The top ten apps were, in order of preference:



The apps in the list above that are not designed for the pre-school age group (e.g. Angry Birds and Candy Crush Saga) did not promote as wide a range of play and creativity/ creative thinking in our observations as other apps that are designed for under 5s (e.g. CBeebies apps, Disney Imagicademy, Peppa's Paintbox and Toca Boca apps). The non pre-school apps were also used for the least amounts of time. Therefore, parents may wish to consider how appropriate these apps are for their pre-school children.

### So, how do you choose an app?

Just as you would ensure your child had a range of books and toys, it is fine for them to enjoy a variety of different types of apps. Indeed, a range is better than them only playing one type of app all the time.

Inevitably, there are differences in the apps that children like and those their parents like for them. Children are more likely to enjoy gaming apps, such as strategy games, dressing up games and nurture games such as looking after pets. Parents are more likely to prefer apps that promote learning more directly.

If you can afford it, do consider paying for quality apps now and again. Some parents in our study bought books and toys for their children, but only downloaded free apps. This meant that their children experienced a lot of in-app advertising and did not get access to the best quality app experiences. So consider apps as a key resource for your child which deserve consideration for purchase - or as special occasion gifts - alongside toys and books.

There are apps that foster learning that are also fun and enjoyable. Try not to choose apps for your child that are just like boring worksheets, which offer few opportunities for play and creativity (e.g. simply filling in the missing letter in a word). Children enjoy apps that offer a satisfying experience as well as rewards and recognition for what they do.

Think about the the following points if you want to choose apps that promote play and creativity:

- Is the app designed for a pre-school audience?
- Is the app produced by a company that has made other apps for this age group?
- Are the aims of the app clear?
- Does the app relate to my children's interests?
- Does the app promote play and experimentation, rather than focus on a narrow set of skills?

- Is the app easy for children to navigate? For example, is the home page clearly visible? Is the use of written text limited?
- Does the app offer guidance for children on how to use it e.g. arrows that point to what to tap on, or a voiceover that tells children what to do if there is a long pause?
- Are pop-up adverts and in-app purchases absent or limited in number?
- Can children add their own features into the app e.g. by inserting their own photographs or drawings in the app etc.?
- Do children get encouragement and feedback e.g. by characters cheering, badges and so on?
- Does the app challenge children to solve problems and think about possible alternatives?

### **From our findings, here are the types of apps we recommend for fostering play and creativity**

- Apps that enable children to create their own stories by taking photographs or creating drawing and adding simple texts. These apps can also promote outdoor play, by being used to capture stories about day-trips or a visit to the park. A simple visit to the local supermarket can be captured using photographs and then a story created about that trip later – even if that is just talking through the photographs and not moving on to create the book, the language experience will be valuable.
- Story apps that allow children to speak / blow into the microphone, or shake the tablet to make characters move and so on.
- Music-making apps that allow for experimentation and sound like real instruments.
- Drawing and painting apps that enable children to create videos of their creations as they are made step-by-step. This can help children to think about their actions and so they can repeat the most effective actions when they use that app again, if they wish to do so.
- Simple animation or film-making apps.
- Collage apps that allow children to make virtual creations from a large range of resources, such as photos, stickers and drawings.
- Apps that enable children's creations to be embedded in a scenario e.g. they create a virtual ice-cream that then appears in an ice cream shop.
- Very young children enjoy apps that draw on their early, everyday understanding of toys and games, but take them into a new, imaginative dimension e.g. peek-a-boo with animals/ monsters and so on.
- Apps that interact with dolls, robots and soft toys can promote imaginative play.

### **Grown-ups' help and encouragement is vital**

We know you do not have all the time in the world to use a tablet alongside your child, but do try to occasionally take time to use apps with them and join in their play and creativity – especially when it is a new app. Sitting alongside and appreciating what your child is doing gives them support. You could even ask them to show you how to use an app and that way they can share their growing knowledge and skills by being the expert.

Children learn more from media when adults interact with them in this way. In addition, think about how their favourite apps can inform non-digital play. Can you re-create that in-app rocket, for example, in your living room using a cardboard box and a bit of imagination?

### **Set up safe habits from an early age**

Whilst very young children are less likely than older children to be using apps that give them direct online access, accidents can happen – such as toddlers inadvertently spending a fortune on in-app purchases. It is best to set up parental controls and develop safety strategies from the beginning. A good place to get advice on managing safety issues and finding resources to help in this area is the UK Safer Internet website:

**[www.saferinternet.org.uk/advice-and-resources](http://www.saferinternet.org.uk/advice-and-resources)**

## Top tips – from parents, to parents

We asked the parents in our case study families to offer other parents advice on pre-schoolers' use of apps. Here are some of the things they said:

Follow the child's lead, letting the child explore for themselves to try and have a go at doing it for themselves instead of taking over. Let them have a go. Obviously, they shouldn't be able to access any inappropriate stuff, but direct them to where they need to go. And if they can't do it, show them, and then let them have a go so that they know what they need to do.

Encourage your child so that their confidence is high enough so that they can use the apps themselves.

Before you introduce your child to the app just have a little look at it yourself, just play about with it yourself.

Try and get involved in it... if you get involved in it and they know that you enjoy it, I think they enjoy it as well.

## What parents think

It's important to talk to them while they're doing it rather than just leaving them to get on with it, and asking them questions to see whether it's actually having any value, what they're doing.

I'd just say to try and make it fun for them, try and find apps that are fun... don't just go for the plain old boring learning ones. And try to find something that they like incorporated into the apps... they enjoy it as well.



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