

Family Online Safety **Institute**

CONNECTED FAMILIES:

How Parents Think & Feel about Wearables, Toys, and the Internet of Things

EXECUTIVE SUMMARY

Research conducted by:



Supported by:



METHODOLOGY

In 2017, Hart Research Associates conducted qualitative and quantitative research among parents of connected children age two to 12 on behalf of the Family Online Safety Institute.

On August 9, 2017, Hart Research convened two focus groups in Bala Cynwyd, Pennsylvania, among parents with access to the Internet. The groups were divided by the age of children, with one group among parents of two- to seven-year-old children, and one group among parents of eight- to 12-year-old children. On August 23, 2017, Hart convened a third online focus group among parents of two- to 12- year-old children who have an Internet-connected toy.

From September 21 to 28, 2017, Hart Research conducted an online national survey of 601 parents of connected two- to 12-year-old children. Parents were considered to have "connected" children if their child owned or had access to at least one of the following: a tablet computer or iPad; a video game console; a cell phone or smartphone; an iPod or handheld device that has Wi-fi or Internet capability; or a desktop or laptop computer. To simplify survey administration, parents of multiple children in the age bracket were asked to answer questions about their child who had the most recent birthday.

The research's objective is to explore how the Internet of Things (IoT), specifically connected toys and other connected devices, impacts families and their children.

OVERVIEW

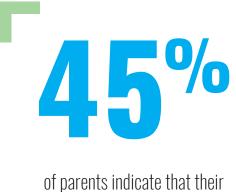
The Internet of Things

The Internet of Things (IoT) is not a widely recognized term among parents of connected children, even though many have technologies in their households that are part of the IoT. Upon reading a description of the IoT, parents react favorably and recognize its impact on their family today and in the future.

- These parents live in highly connected households:
 - Not only do their children have access to at least one connected device¹, but their children are heavily connected: nearly half (45%) of parents indicate that their child has three or more of his/her own connected devices and another 41% say their child has one or two of his/her own connected devices. Just 14% say their child does not have any connected devices of his/ her own.
 - These parents also are heavily connected themselves: they report spending an average of 6.2 hours per day using electronic devices at home.
 - Smart TVs are the most widespread smart home device among parents of connected children: two-thirds of parents have one in their home. Internet-enabled home security systems, Internet-enabled thermostats, and smart speakers are less commonly owned, but 38% of

parents say that they have at least one of them in their home, and many more are considering getting them.

- In households that have them, parents report heavy use of connected devices—particularly smart TVs and voice-controlled smart speakers—by their children.
- Nonetheless, when asked to indicate their feelings about the Internet of Things, nearly half of parents say they are unfamiliar with the term. Upon hearing a description of the IoT, however, parents react favorably: 61% favorable, 24% neutral, 15% unfavorable.
- Additionally, more than half of parents say that the Internet of Things affects their family's daily life today, and eight in 10 think it will have an impact on their family 10 years from now.



of his/her own connected devices.

¹ In order to qualify for the survey, parents had to say their child uses the Internet and that their child has access to at least one of the following: a tablet computer or iPad; a video game console; a cell phone or smartphone; an iPod or handheld device that has Wi-fi or Internet capability; or a desktop or laptop computer.

Weighing the Benefits vs. the Harms

Parents weigh the potential benefits and the potential harms of various technologies differently.

- Overall, parents are more likely to say that the potential benefits of their child using technology outweigh the potential harms, but nearly half of parents think that the benefits and harms of technology are about equal.
- When looking at specific types of technology, parents are more likely to anticipate benefits from their child having a cell phone that is not a smartphone (57% benefits outweigh, 15% harms outweigh) than to anticipate benefits from their child having a smart phone (38% benefits outweigh, 31% harms outweigh). They express similarly mixed views about the benefits vs. the harms of smart speakers (37% benefits outweigh, 29% harms outweigh), but are more positive about connected toys (45% benefits outweigh, 19% harms outweigh). Parents are particularly skeptical about their child having a social media account: 22% benefits outweigh, 55% harms outweigh.
- Parents whose children have their own connected device or social media account are notably more optimistic about the benefits of that technology than are those parents whose children do not have them.

Confidence

The majority of parents feel confident in their ability to keep track of and manage their child's technology use, and the more connected devices their child has, the more confident parents are.

- Two-thirds of parents are highly confident in their ability to keep track of and manage their child's technology use.
- Parents' level of confidence increases as their children have more connected devices: 51% of parents whose child does not have his/her own connected devices feel highly confident in their ability to manage their child's technology use; the proportion who are highly confident increases to 63% among parents whose child has one or two connected devices and goes up to 73% among parents whose child owns three or more devices.
- Parents whose children have their own wearable, connected toy, or social media account express high levels of confidence in their ability to manage their children's use of those devices. Parents whose children use a smart speaker in the home report a similarly high degree of confidence.

Parents whose children have their own connected device or social media account are **more optimistic about the benefits** of that technology.

Smart Speakers

More than one in five parents of connected children own a voice-controlled, Internet-connected smart speaker, such as Google Home or Amazon Echo or Echo Dot, and nearly all parents who have a smart speaker feel comfortable with their child using it.

- Twenty-three percent (23%) of parents of connected kids have a smart speaker in their home, and another 37% of parents are seriously considering purchasing one.
- Nearly all parents who have a smart speaker are comfortable with their child using it (94%), while parents who do not have a smart speaker are notably less comfortable with their child using one (57% comfortable).

Connected Toys

More than three in 10 parents of connected children say their child has an Internet-connected toy, defined as an interactive toy that collects, uses, and shares data over the Internet. Parents whose children have them are notably more comfortable with their child having a connected toy than are parents whose child does not have one.

- About half (49%) of parents have seen, heard, or read at least some about connected toys and just under a third (31%) say their child has a connected toy.
- More than nine in 10 parents whose child has a connected toy are comfortable with their child having it, while only six in 10 parents whose child does not have a connected toy are comfortable.

After reading about the benefits of and concerns about connected toys, parents become more ambivalent about the benefits vs. the harms, though their comfort level with connected toys drops only slightly.

 Parents think that each of the four benefits of connected toys listed in the survey is important: enabling children with special needs, providing education value, give kids more freedom because of inclusion of GPS tracking, and providing an immersive experience and enabling new ways to play. They are most likely to feel that enabling children with special needs is important, however. **94**%

of parents who have a smart speaker are comfortable with their child using it.

- There is greater differentiation in parents' reactions to the six concerns about connected toys tested in the survey. Their top concern is that connected toys' could put children's safety at risk if hackers and cyber criminals communicate with their children through the toys. The second-most concerning aspect is whether the data collected by connected toys is secure from hackers and identity thieves.
- Initially, parents are much more likely to think that the potential benefits of their child having a connected toy outweigh the potential harms (45% benefits outweigh, 19% harms outweigh), but after reading about the benefits and concerns described above, parents are divided evenly (36% benefits outweigh, 34% harms outweigh). There are drops in parents' optimism about their child having a connected toy regardless of whether their child has one. However, parents whose children do not have a connected toy start out less optimistic than their counterparts and end up more likely to

70%

of parents are comfortable with their child having a connected toy and that proportion **drops to 63%** after reading about the benefits and concerns.

think the harms outweigh the benefits, whereas the majority of parents whose children have a connected toy still end up thinking the benefits outweigh the harms.

 The proportion of parents who feel comfortable with their child having a connected toy drops slightly from 70% to 63%. There are similar declines in comfort level regardless of whether their child has a connected toy; but parents whose children do not have one start out less comfortable and end up divided.

Parents' level of comfort with their child having a connected toy rebounds and surpasses initial levels upon reviewing recommended guidelines for companies that make connected toys.

Initially, 70% of parents are comfortable with their child having a connected toy, and that proportion drops to 63% after reading about the benefits of and concerns about them. After reading recommended guidelines (e.g., notice of data practices, parent consent to data collection and use, and safeguarding data), however, the proportion of parents comfortable with their child having a connected toy increases to 80%—an increase of 10 points from the initial ask. This jump is almost entirely driven by the increased comfort level expressed by parents whose children do not have a connected toy.



© 2017 www.fosi.org