

# Games and Child Development

When designing a website for younger gamers there are many factors that we must keep in mind. At such an impressionable age we have to appeal to not only the kid but also the parent. According to a study by Early Intervention Research Group they found the following details about the impact on gaming on children.

## **“What do we know already?”**

Video games and digital media play a significant role in many children’s lives. Surveys show that young children (ages 2-4) play video games for an average of about 20 minutes per day. This increases as children grow older. Children ages 5-8 play for an average of about 40 minutes per day, and children ages 8-12 play for an average of about 80 minutes per day. Some schools are taking advantage of video games’ popularity and including educational video games in their lessons. One school has even developed a whole curriculum based on video game play and design. Despite video games’ popularity and rising use in education, there is still relatively little research on their positive and negative effects on children’s brains.

What did the researchers study?

These researchers gathered data from previously published studies to see if there were trends related to the impact of video game play on children. They then describe recommendations for policies about video game use in education.

What did they find?

The researchers found that video games and apps that were interactive and educational had a positive effect on children’s brain development. However, violent and exclusively entertaining media had a negative effect on child brain development.

One study showed that educational games can help preschoolers learn coding, literacy, and math skills. Another study focused on characters in educational games showed that creating a strong bond with an in-game character can improve the child’s learning. A study that looked at games that involved movement and exercise, called “exergames,” found that the games can help improve children’s decision-making and overall main functions of the brain.

Many studies have looked at the effect that parents can have on children’s learning when watching educational TV shows with them. When parents watch and interact with their child (e.g., by asking questions and praising correct answers), children learn better from the program. As a result of this research, the American Academy of Pediatrics encourages parents to watch educational shows with their children. Now, parents are encouraged to play educational video games with their children to help improve their learning.

The majority of the research on video games has been done with young children and adolescents. The authors note that very little is known about the impact of video games during middle childhood (ages 6-12), and they encourage more research to be done.

What should be my takeaway?

Overall, research shows that educational video games are useful for children's brain development and learning. As a parent, you can do the following things to promote your children's learning while playing video games:

Encourage your child to play educational video games rather than solely entertaining and/or violent ones.

Interact with your child during the game. You can play with your child or watch them and interact by asking questions and praising them if they do something correctly.

Find games that have relatable characters. If children can form bonds with the characters, they will be able to learn better and develop better social skills.

Find exercise video games to help your child get some movement while improving their overall brain function."

In conclusion the element of the game, the characters involved in the plot line down to the human factors such as sound, colors and fonts are all going to be important aspects. The goal is not only to keep the kids on the game for an extended period but also curate a positive learning environment. By making sure the content does not steer the child in the wrong direction or create an unpleasant experience. Maybe testing certain games on a small pool of kids to see how long they are entertained is the best direction to take for making a proper gaming site. I think certain games can be adjusted if the code is easily edited to fit the overall theme of this research.

## How much do kids learn from 'educational' video games?

"YouTube has emerged as a key platform for both younger and older kids. Fully 89% of parents of a child age 5 to 11 say their child watches videos on YouTube, as do 81% of those who have a child age 3 to 4 and 57% of those who have child age 2 or younger. And while majorities of parents whose child uses YouTube credit the platform for entertaining and educating their children, a majority of these parents are concerned about their child being exposed to inappropriate content on the video sharing site.

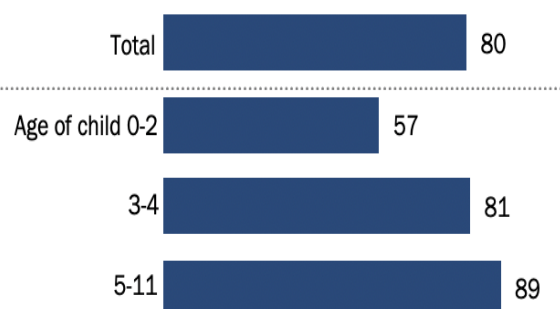
But the conversation around screen time is not limited to children. Parents themselves grapple with their own device distractions. When asked if they spend too much, too little or not enough time on their phone, more than half of parents overall (56%) say they spend too much time on their smartphone, while about seven-in-ten (68%) say they are at least sometimes distracted by their phone when spending time with their children.

These findings come from a nationally representative survey of 3,640 U.S. parents who have at least one child under the age of 18, but who may also have adult children, conducted online March 2-15, 2020,

using Pew Research Center's American Trends Panel and the Ipsos KnowledgePanel. The following are among the other major findings."

## Majority of parents say their child 11 or younger watches videos on YouTube

*% of U.S. parents of a child age 11 or younger who say their child ever watches videos on YouTube*



Note: If parent has multiple children, they were asked to focus on one child when answering this question. Those who did not give an answer are not shown.

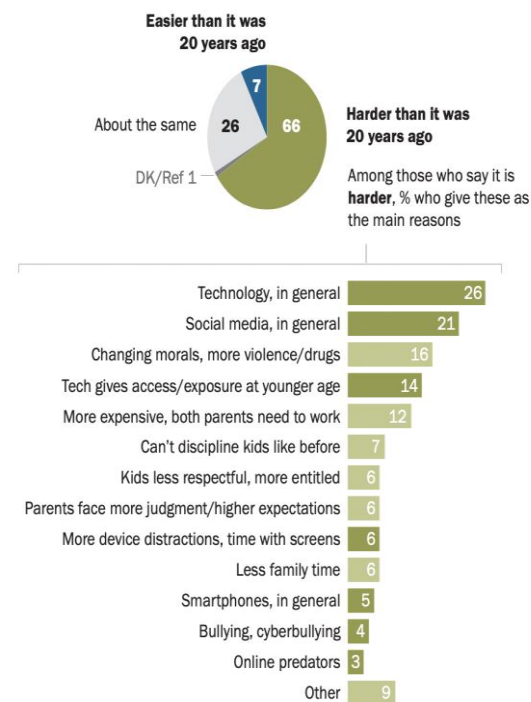
Source: Survey of U.S. adults conducted March 2-15, 2020.

"Parenting Children in the Age of Screens"

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## A majority of parents today say parenting is harder today than two decades ago, with many citing technology as a reason why

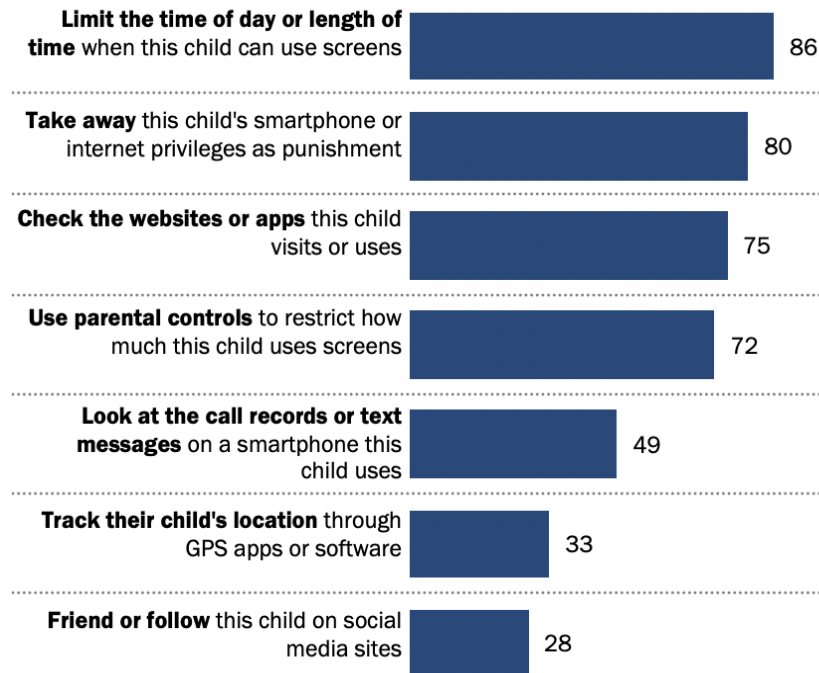
*% of U.S. parents who say that for most parents, parenting is ...*



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## Roughly eight-in-ten or more parents limit when and how long their child can use screens or digitally ‘ground’ their child

*% of U.S. parents of a child age 5 to 11 who say they ...*



Note: If parent has multiple children, they were asked to focus on one child when answering this question. Those who did not give an answer or who gave other responses are not shown.  
Source: Survey of U.S. adults conducted March 2-15, 2020.  
“Parenting Children in the Age of Screens”

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## Vast majority of parents say parents and guardians responsible about online content

“Parents’ confidence about their own awareness of what their child is doing or watching on various digital technologies varies by activity. Roughly seven-in-ten parents of a child between the ages of 5 and 11 say they are very confident they are aware of the types of things their child posts on social media sites (70%), what this child watches on television (67%) and the types of video games their child plays (67%). Roughly half of parents or more have the same level of confidence in their awareness around what websites this child visits (57%) and the types of videos this child watches online (51%).

There are differences in confidence levels by the race and ethnicity of parents with children in this age range. Across several of the digital monitoring activities measured in this survey, white parents with a child between the ages 5 to 11 are more likely than Hispanic or Black parents to say they are very confident they know what their child is doing online. Fully 77% of white parents say they are very confident they know what their child posts on social media sites, compared with 67% of Black parents and 58% of Hispanic parents. White parents are also more likely than those who are Hispanic to say they are very confident in knowing the types of video games this child plays and the websites they visit, and white parents are more likely than Black parents to say they are very confident they are aware of what their child watches on television.”

<https://www.pewresearch.org/internet/2020/07/28/parenting-children-in-the-age-of-screens/>

<https://ei.northwestern.edu/video-games-and-child-development-what-does-the-research-say>

<https://www.latimes.com/opinion/story/2021-05-11/video-game-learning-board>