

search Bite

Satisfy your hunger for knowledge with the Research and Advocacy Department's Biannual Newsletter

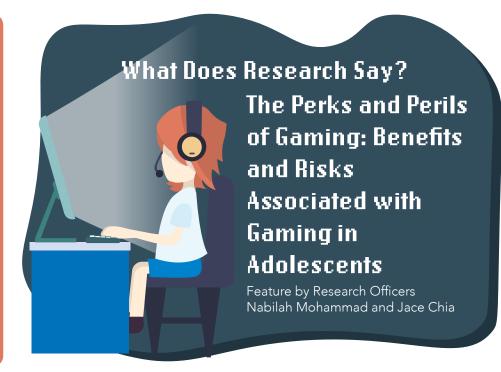
MCI (P) 043/05/2022

ISSUE 13 • JUL 2022

What Does Research Say? The Perks and Perils of Gaming: Benefits and Risks Associated with Gaming in Adolescents

Ask the Experts: How Can Parents Support Their Children and Youth in Navigating the Digital World?

Stranger versus Friend: What Do Young Children **Understand About Protecting** Their Personal Information Online?



Editorial Team

Editor: Charlene Fu

Contributors: Nabilah Mohammad

Jace Chia Clarissa Choo **Toh** Sze Min Tan Su Kee

Advisors: Research Committee

Members

Design: Belinda Tan

Printer: Gan Offset Services



Scan here to subscribe to

Research Bites Newsletter

On the Rise: Screen Time and Online Gaming

In 2020 and 2021, pandemic restrictions have disrupted children's activities, such as their social lives, hobbies, and school lessons. They have also indirectly increased children's reliance on the internet for learning, socialising and entertainment. In turn, this may also pose greater challenges for parents trying to regulate their child's screen time.

As homes become hubs for online learning, children have been given increased access to their gadgets to learn, play, and socialise. A study by Google found that people in Singapore, including children, are clocking in longer hours on the internet during the pandemic, from an average of 3.6 hours daily pre-pandemic, to 4.1 hours after the circuit breaker period.1

The internet is predominantly designed for adults. With no central regulatory authority to safeguard user protection, children are particularly vulnerable to the dynamic and borderless virtual world, since they are often not as cognisant of their actions and expressions online. While there are many aspects

of internet use, this article will focus on online gaming, which has become immensely popular with children and adolescents. As gaming becomes more complex, interactive, and ubiquitous, research that studies its impact is critical.²

To access the e-version of the newsletter, please go to www.childrensociety.org.sg/research-bites

Editor's Note

Dear Readers,

2022 marks the 70th anniversary of Singapore Children's Society. As we celebrate this milestone, it has been a time of reflection where we asked ourselves what makes us tick, and what will help us further our cause. The Research Bites team undertook a similar exercise in planning for this issue.

We remain committed in our goal to present research findings in an accessible manner to our readers, which include members of the public, professionals in related fields, and our own staff. However, you will notice some changes in this issue.

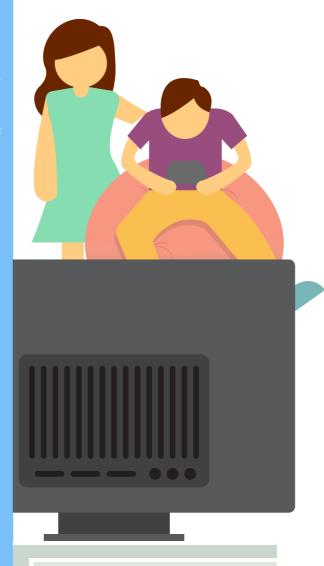
First, we have chosen to capture more nuances of research findings in our current set of articles, while keeping the tone of writing accessible to our audience. This approach is particularly evident in our "What does research say" article on the Perks and Perils of Gaming. We decided to write this article in this manner as research findings are often complex, and seldom clear cut. It is our hope that presenting research findings this way will help readers become more familiar with the complexities that often come into play when making sense of the literature, and over time, that readers may be better equipped in making their own evaluations of research studies.

Second, we will be adopting a thematic approach for future issues, featuring three articles that follow a central theme. For this issue, we are addressing the topic of technology use among children and young persons (CYPs). We felt that this was a timely topic, given that over the course of the pandemic, technology has played an increasingly important role in our lives. CYPs, too, have been reliant on technology as part of their daily lives, engaging with it for learning, entertainment and socialisation. Our three articles focus on different aspects of technology use; gaming, how parents and children can work together to manage children's access to the digital world and children's knowledge of how to protect their personal information online.

The digital world is here to stay and will continue to be an aspect of our lives that we navigate together with our children. We hope that through understanding the research around this topic, you can more confidently manage children's engagement with technology.

We hope that you enjoy this new Issue, and that you will find this issue useful and informative. For any suggestions or feedback, please reach out to us at researchbites@childrensociety.org.sq.

Regards, Charlene Fu Editor





Distinguishing Game Addiction from Engagement

Gaming can be conceptualised in various ways. Spending more time playing games does not necessarily equate to problematic gaming or gaming addiction. Various terms (e.g., pathological gaming, problematic gaming, or gaming addiction) have been used interchangeably to describe gaming behaviours that negatively impact well-being or functioning.³

A common classification based off the Gaming Addiction Scale⁴ has been used to distinguish between three types of gamers: addicted gamers, problem gamers, and highly engaged gamers.^{3,5-6}

- Studies have shown that boys and older adolescents were more likely to exhibit problematic gaming.⁷ In addition, children and adolescents with problematic gaming habits were more likely to face peer pressure, family conflict, and poorer family relationships.8
- Highly engaged gamers were at lower risk of feeling low, irritable, anxious, and tired as compared to gaming addicts or problem gamers.³ In addition, gamers who were highly engaged were at lower risk of poorer psychological outcomes than gamers who were addicted.³
- Adolescents who were addicted gamers differed from highly engaged gamers by the types of unhelpful cognitions that they hold, including placing too much importance on gaming rewards and identities, and using gaming to increase selfesteem and social acceptance.9

The varied experiences of these different groups of gamers suggest that playing games may not necessarily lead to negative outcomes. For a selected group of children and adolescents however, gaming addiction may be a real and valid concern (see Box 1).

Box 1. When Gaming Becomes a Disorder

In severe cases, gaming may become pathological. A gaming disorder occurs when an individual's gaming behaviours are dysfunctional enough to heavily disrupt their daily activities or functioning for at least twelve months. 10-11 In adolescents, these symptoms affect their familial relationships and makes them perceive their home environment as less favourable to live in.¹²

Although the World Health Organisation and American Psychiatric Association have proposed their respective definitions of gaming disorders, these definitions are not perfect. 13-15 Some limitations of current conceptualisations of gaming disorders include:

- No consensus among experts on what is considered a gaming disorder and how it should be measured
- Low quality of research evidence
- Consequences of pathologising gaming (e.g., disregards potential benefits that gaming offers, may send a message that all forms of gaming are bad)



Read on to find out more about the hazards and benefits of gaming on the next 2 pages.

Hazards of Gaming

Gaming Not All Bad: Benefits Associated with Gaming

Research studies have documented several associated risks of gaming spanning across various domains. These effects may be especially detrimental for children and adolescents, who are still experiencing physiological and psychological developmental changes.

The following are some negative effects linked to gaming:

Poorer Sleep

Compared to nonproblematic gamers, problematic gamers were more likely to have a shorter sleep duration, diminished sleep quality, more daytime sleepiness, and sleep problems.16

Children and adolescents with internet gaming disorder were also at risk of poorer sleep and academic performance.8

Poorer social skills and mental health



Among adolescents receiving clinical support, those who had greater difficulties with problematic gaming were more likely to face challenges developing social relations, and exhibited a reduced ability to feel pleasure.7

Problematic video gaming has also been linked to lower life satisfaction and higher levels of anxiety, depression, and loneliness. 17-19



Gaming elevates mood and positive emotion, and may relieve stress and anxiety.²³⁻²⁴ The immersive experience that games provide may also trigger a state of flow, in which players experience being highly absorbed and focused.²⁵

Improved mood

Games have also been used to promote emotional intelligence and well-being among adolescents.²⁶ Adolescents who participated in a video game intervention based on principles of emotional intelligence showed fewer maladaptive behaviours and hyperactivity.²⁶

users, including children, to develop skills and competencies. When played in moderation and with mindfulness, gaming can be a catalyst for mental health improvement and development of social skills.

The following are some of the benefits linked to gaming:

Beyond risks, there are also benefits to gaming. Gaming can create a dynamic that can inspire

Enhanced problem-solving skills



problem-solving skills.²⁴ A longitudinal study found that adolescents

who played more strategy-based games had greater improvements in their self-reported problem-solving skills.²⁷

Greater tendency for aggression



The link between violent video games and aggression has been a constant topic of debate.

Findings across several research studies suggest that playing violent video games may be associated with a small but significant increase in aggression levels.^{7,20}

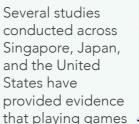
Poorer sustained attention

The evidence appears to be mixed for how gaming affects attention.²⁰

Some studies have found that children and adolescents who play more video games report greater attentional problems²¹, while other studies provided evidence for better visual attention skills.²²

A possible reason for this discrepancy could be that video games are only linked to poorer sustained attention when there are no attentiongrabbing cues²⁰ (e.g., flashy bright colours or sound effects).

Increased prosocial behaviours





with increased helping behaviours among children, adolescents, and young adults.²⁸⁻³¹

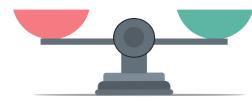
These effects were observed both immediately after the study, and at 3 to 4 months follow-up.²⁸

Better physical fitness and coordination

Exergames, such as Nintendo Wii, are video games that include physical activity. These exergames have been incorporated into interventions aimed at improving cardiovascular health.³⁰⁻³²

In these studies, adolescents who participated in exergames had demonstrated gains in cardiovascular fitness, coordination, and motor skills. In addition to physical fitness, they also showed improved self-esteem, self-efficacy to exercise, and better relationships with parents and peers. 30-31

Weighing **Risks with Benefits**



Given the increased engagement with gaming and the professionalisation of the gaming industry, a discussion on its effects on children and adolescents is timely and relevant. This article aimed to shed some light concerning the risks and benefits of online gaming based on existing research studies.

However, getting a coherent understanding of research findings can be challenging due to differences in methods used across research studies (see Box 2). More research will be needed to better integrate these inconsistent findings and inform our understanding of the impact that online gaming has on children.

Box 2. Methodological differences across research studies^{28-29, 33}

- Differences in how gaming is measured (excessive time spent on gaming vs. symptoms of gaming disorder)
- Differences in type of games studied (prosocial games versus violent games)
- Differences in study design (correlational study versus longitudinal study)

Parents play an important role in supporting their children to game responsibly (e.g., through setting of rules, understanding consequences of problem gaming etc.) to mitigate risks while reaping the benefits. Not all games are created equal; hence it is useful for parents to have some basic knowledge of online gaming so that they can monitor and influence the types of games their children engage with.



Ask the Experts: How Can Parents Support Their Children and Youth In Navigating The Digital World?

Feature by Research Officer Clarissa Choo



 $-\Box X$

The digital world is now an integral part of everyday life for most. This is even more so for the youths and children of today who are digital natives, having grown up with internet access, mobile devices and social media.

However, for all its benefits, the digital world comes with risks too. How can parents support their children and youths in navigating the digital world? How can parents and youths have good conversations about internet use and online engagement?

Join us as we explore these questions in conversation with our 4 experts – Dr Quah Saw Han and Clarisse, Daryl and Ezann from the Singapore Children's Forum 2021.

Launched in 2013, the Singapore Children's Forum (SCF) serves as a platform for child participation, giving children and youth the opportunity to express their views on issues that matter to them.

In 2021, we worked with 10 youths who journeyed alongside youth mentors to prepare projects on topics of their choice. The 3 youth featured in this article were members of Project Techmap. They created a podcast episode for Children's Society's ParenTIPS podcast discussing their experiences online, issues faced by youths surrounding the digital world, and tips for children and parents to navigate the online world safely.

Scan this QR code to listen to their podcast episode.

Daryl: Personally, one struggle that

Lhave is receiving

the digital world? What are some struggles you guys have faced online?

Clarisse: As someone who really enjoys Korean dramas, I point, and sometimes feel years affected by

one struggle that
I have is receiving
hateful comments.
Nowadays there are lots
of keyboard warriors out
there, and you see lots of
people "getting hate" or
negative comments. When
I first started posting my
music online, some people
said unacceptably horrible
things. I really struggled
with it initially. But over
time, I've learnt to cope
and just ignore it.

Clarisse: As someone who really enjoys Korean dramas, I sometimes feel very affected by the negative celebrity news that I see online. More generally, I think parents' excessive control of youths' online activities is one challenge for young people. Some of my friends' phones are very restricted throughout the school year as their parents block all apps other than SMS. When the controls are released during holidays, these friends end up spending up to 10 hours on their phones, because they feel like they've been deprived for so long that they go overboard.

What are some challenges and struggles you think youths have when navigating

Ezann: Linking to Clarisse's point, another possible challenge is the lack of communication between children and parents regarding the engagement with the digital world. When parents don't understand children's perspectives, the lack of effective communication can cause conflict. Additionally, parents being overly restrictive can cause youths to miss out on the benefits of the digital world such as making new friends, reading the news, or looking up educational materials.

Dr Quah: I am hearing from the 3 youths that it is important for parents to demonstrate balance: to assert some control and boundaries on the use of the internet. This is done through conversations with children from a young age on responsible use, and educating them on the risks and dangers.



For instance, when my son was 13 years old, he decided that he was not ready to have a social media account after he witnessed a classmate getting cyberbullied. It is important for parents to be having these conversations with children, and it's not just about the digital world! In all aspects of life, it comes down to how parents are able to stay in touch with their children, how they keep up and understand what's happening in their children's lives.

Dr Quah Saw Han

Clinical psychologist working with children, youth and families



Clarisse

15 years old ♥ Korean dramas



Daryl

17 years old Music



Ezanı

15 years old ♥ Durian Ice Cream

Clarisse, Daryl, Ezann, tell us a bit more about your SCF project and your interest in the digital world as a social issue.

Ezann: Well, we chose the topic of digital world because we think that it is a very relevant topic, it's something all of us experience now with digitalisation and use of devices.

Clarisse: We noticed youths being very affected by the things they saw online, whether it was difficult news or negative comments. So we came up with a podcast and infographic about how youths can care for themselves in the digital world, and how parents can support their children when interacting with the digital world.

Daryl: This is a topic I love talking about because I think it is not discussed about enough. I think that the digital world has very clear and real effects on mental health, and the two topics come hand in hand. It is really important for us as youths to voice out our thoughts and discuss how parents can support their children because a lot of times parents might not understand where we're coming from, or how we feel when they do things like take away our devices as a means of trying to help.

You all have talked a bit about how parents' control of youths' devices use could be a point of conflict. What are some other sources of conflict between parents and youths when it comes to the digital world? How do we better navigate that?

Ezann: Honestly, I think one of the biggest source of conflict stems from there not being enough understanding between parents and children that might be caused by the generation gap? I feel like children now live in very different times from their parents when they were growing up, and parents may not understand what children are going through. The newness of the digital world might also mean that parents don't have enough experience to deal with what the child is going through. Moreover, if they don't understand each other well enough, both sides could come across as being insensitive and disrespectful to each other's feelings. And at that point, sometimes it feels like communication is not enough because it becomes very hard to talk things out, without a strong sense of understanding.



Daryl: The age gap or generation gap can indeed be hard, parents not understanding what youths are doing online. For instance, parents seeing their child learning TikTok dances all day might just be like "What is this?" But I think if parents tried to find out more, to understand what their children are doing and involve themselves in their children's online lives, it could really help.

6

Clarisse: Between parents and children, sometimes there might also be a clash of values when parents see what their children put on social media. With society growing more liberal in some ways, youths might think that their posts are fine, but parents might disagree. For example, differing opinions regarding dressing in photos, language use, or about song lyrics of today's music. With these things, I find that it is harder to reason it out because youths might say that society is just like that now, but parents remain unconvinced.

Dr Quah: My opinion is that by the time we're talking about problems, it's a bit too late. Communication starts from day 1, and it's crucial that parents are connecting and communicating with their children from a young age. When my children were as young as 3, I had already started articulating to them that as a parent, my job is to keep them safe and impart values. And that communication is based on a strong relationship with my kids. When Ezann says that communication is not enough, she's not wrong! Because the connection and the relationship come first, and in order to do that, parents need to take an interest in their children's lives, understand their interests, and share your own! For example, I am an anime fan, so now my daughter also watches anime, and it's something we can do together!

Of course, safety in the online world is still important. Scams, sexual grooming, there are real dangers to the very ugly side of the internet. And as a parent, by the time you find out that your child is a victim, it is too late. So, the more important question is how can we start earlier in having these conversations that will teach our children to protect themselves online?

How can parents support their youths well in navigating the digital world?

Clarisse: I think it is important for there to be mutual understanding between youths and parents. It is not just for parents to understand youths but for both sides to listen, communicate and come to a common consensus. Moreover, when one side does not understand the other, it is important for them to take the time to ask and learn, to reach an understanding. It is not helpful for adults to just scold without first understanding.

Ezann: I agree with Clarisse, it is really important to try to understand each other's perspectives. If you don't understand, ask and have a meaningful conversation about it. Don't jump to conclusions or make assumptions. If parents are restricting the child's digital use and the child feels like it's unfair, try to start a discussion and maybe come to a compromise? And trust your child more. Yes, there are dangers which need to be explained, but it's also important to give us space to develop and grow.

Daryl: As an example, my parents were not supportive when I first started posting music videos online, but I was very sure that I wanted to use my platform for good. They had many worries, but I proved myself to my parents by working hard and demonstrating that I am responsible and trustworthy. But that took time. I think parents need to understand that youths need time, to learn, to explore and grow. We may not get things right every time and we need time to learn how to use the platforms well. As parents, have some patience with your child, trust them, give them the time and space to explore these platforms. You can also learn more about what your children are doing on these platforms and show interest in your children's

Dr Quah: I just want to say that I think Daryl is so brave! And I think this raises another point which is that all youths have their own distinct personalities, different traits, and different levels of tolerance for anxiety. Different youths are comfortable with different things on the internet. For instance, while my son was not ready for social media for the fear of cyberbullying, Daryl is comfortable putting out his music despite the potential for negative comments. And it's important for parents to realise that each child is unique. You can't compare between children when it comes to internet use, and the more important thing is to make time to communicate, to understand your children and their

Communication is built on connection, and that can be supported by being naturally curious about what your children are doing. Moreover, while it is important to set limits, it is less about controlling children and more about problem-solving together. As a parent, you will not always be there with your child! If parents insist that your children have to do it your way, how are youths going to develop the skills to problem-solve and manage their time on their own? Parents may need to manage some anxiety too, of letting youths try and giving them space to learn, while of course maintaining their safety. And by problem-solving together, you involve yourself in your child's world and learn more about what they're up to in a less intrusive manner.

> To the 3 youths, what is one thing you want parents to take away from this article about supporting their youths in navigating the digital world?

> > Daryl: The digital world is not inherently harmful, and while it can have negative sides, there are positive aspects to it as well. As Saw Han has said, do build connections with your children early and talk to them about the online world. The digital world is here to stay and all children will have to encounter it at some point. The earlier you support and teach them, the better they will be at coping with potential issues.

Ezann: I think to sum it up in 3 words, "Strike a balance". And this applies to everything! Be balanced in your limits and control of children while giving them space to explore. Have a balanced relationship

between parent and child where both sides get to communicate openly.

Clarisse: It is important for parents and youths to have open conversations. And it is also important for parents to not only talk about the better side of the digital world, but it is also necessary for parents to point out the dangers of it so that youths know what to be aware of.





The digital world is both a place of great potential and opportunity for learning, as well as possible danger and harm. It is thus crucial for adults to support children in navigating the digital world, so that they can experience its benefits safely. Moreover, as the youths have raised, communication and understanding form the necessary foundation of such support.

Through this article, we hope that you have gained a glimpse into youths' perspectives on the issue of the digital world. By anchoring this article around youths' voices and opinions, we hoped to present their thoughts on this topic and give voice to their perspectives. We thank the three youths for their candid sharing, as well as Dr Quah Saw Han for her thoughtful contributions to this conversation.





Research Grant Spotlight Stranger versus Friend: What do young children understand about protecting their personal information online?

Feature by Grant Recipient Tan Su Kee and Research Officer Toh Sze Min

Ms Tan Su Kee was a recipient of the Singapore Children's Society John M. Elliott Memorial Research Grant in 2020. She majored in Psychology at the National University of Singapore (NUS) and conducted this study as part of her Honours Thesis.



Access to technological devices, the internet, and social media has increased dramatically among young children in the recent years.¹ While this has brought children many benefits in social connection and development, it has also increased their exposure to online privacy risks.

Young children are particularly vulnerable and may unknowingly disclose their personal information (e.g., address, full name, school) to malicious persons online, due to their limited understanding of the internet. Given the current rapid increase in internet access among young children, it is important to examine young children's understanding of privacy risks and self-disclosure on online platforms.



Some common ways young children respond to online privacy risks:

- Consulting or telling their parents about what had happened.
- Withholding the truth, i.e., closing the website or web chat when they are asked for their personal information.
- Telling a lie (or a privacy lie), i.e., giving false information or telling a lie (e.g., "I forgot my address") to protect their personal information and privacy.
- Telling the truth, i.e., giving personal information such as their password or address to someone. This might happen if or when children are unaware of the risk of truthful disclosure.

Previous studies have shown that children tend to be less aware of privacy risks on online platforms, as compared to offline platforms.^{2,3} For example, most children between ages 7 and 11 perceived speaking to strangers offline as dangerous, yet only a few perceived speaking to strangers online as dangerous.³ Furthermore, most children described strangers as people who are "mean" or "not nice", and children would share personal information online (e.g., photos) with those whom they perceive as friends.³

About the study

This study considered if children would view responses to online and offline privacy risks differently, depending on Study 2 whether this interaction was with a stranger or a friend.

Children between ages 6 and 8 were recruited for the study Study 1

• Most studies on online privacy risks focus on children older

due to the following reasons:

Friend

Stranger

conducted with children between 6 and 8 years old.4 • Children between ages 6 and 8 are more aware of the complexity of relationships and self-disclosure risks as compared to even younger children.⁵

than 8 years old, but there is a lack of research studies

• Parents tend to start allowing unsupervised internet access and device use when their children are between 6 and 8 years old.6

Methodology

Participants were presented with vignettes (hypothetical stories of a fictional character) on privacy dilemmas in both online and offline contexts.

Study 1 participants

48 Singaporean children (6- to 8-year-olds)

Study 2 participants

47 Singaporean children (6- to 8-year-olds)



Disclosure Platform

Online Context

The character was using his/her phone in bedroom. While the character was using Facebook, someone (the disclosure target) who had never chatted with the character before, texted the character.

Offline Context

The character just finished class in school. While the character was walking to the library, he/she was approached by someone (the disclosure target).

Note: "Character" refers to the person who was asked to give his/her personal information in the vignette; "Disclosure target" refers to the person who asked the character for his/her personal information in the vignette.

Disclosure Target: Stranger

"Hi, I am your daddy's friend! I need to pass him something that is very important. But I forgot where he stays. Can you tell me where you are staying so that I can pass him the thing?"



Disclosure Target: Friend

"Hi! My mum baked some cookies and wants to share with you and your family! Can you tell me where you are staying so that we can bring the cookies to your house?"



Character's Response

Participants were presented with three responses that the character gave to the disclosure target.

- Withholding the truth: The character did not respond to the disclosure target, and walked away (in the offline story)/ closed the chat (in the online story)
- Telling a lie: The character told the disclosure target that he/she does not remember
- Telling the truth: The character told the disclosure target that he/she remembers the address, and gave the disclosure target his/her address.



For each vignette, participants were asked to rate each of the following responses.

- Withholding the truth
- Telling a lie
- Telling the truth







Not good





Very

Good



After that, participants rated how safe or dangerous each of the following behaviours were.

- Putting their real names on internet
- Putting their addresses on internet
- Putting their photographs on internet
- Speaking with strangers on the internet



Very













Study findings

6- to 8-year olds were aware that speaking to strangers and putting their addresses on the internet were highly dangerous.

- They perceived speaking to strangers and putting their addresses on the internet as more dangerous than putting their real names and photographs on the internet.
- 6- to 8-year olds had a good understanding of "stranger danger". All of them understood that it was important to protect their own privacy on both online and offline platforms when talking to a stranger.
- When the disclosure target was a stranger, children rated telling a lie and withholding the truth as better responses than telling the truth (on both offline and online platforms).

8-year-olds understood the importance of protecting their privacy when chatting online with someone whom they perceive as a friend. However, 6- and 7-year-olds children tended to be less wary of privacy risks on online platforms, and may still disclose their personal information to someone whom they perceive as a friend.

- When the disclosure target was a friend on an offline platform, all children rated telling the truth (disclosing address) as the best response, which may be due to the possibility of being able to verify the friend's identity in-person.
- When the disclosure target was a friend on an online platform, older children (8-year-olds) rated telling a lie and withholding the truth as better responses than telling the truth. However, younger children (6- and 7-year-olds) still rated telling the truth (disclosing address) as the best response.

What can we do to educate 6- and 7-year-olds about online safety?

- Explain to them that the internet can be complex (e.g., people can use fake names or photos online, people can pretend to be a friend online) so that younger children will be more wary of the people they meet online.
- Encourage children to keep appropriate boundaries in online interactions, even with those identified as friends, by helping them to understand what personal information they should or should not be sharing with someone online.
- Emphasise the importance of verifying a person's identity before allowing anyone to access their information online (e.g., accepting friend requests on Facebook).
- Teach children ways to protect their privacy when they are asked for their personal information, such as leaving the chat or the website, blocking the stranger/friend online, or saying a privacy lie (e.g., pretending that they do not know the personal information rather than giving out their personal information).

Research Committee

Research Committee Members

Tan Seok Hui Cheung Hoi Shan Daniel Fung Justin Lee Quah Saw Han Tan Geok Eng Selina Tang Cuthbert Teo

Research Staff Members

Sue Cheng (Chief Service Officer)
Lin Xiaoling (Deputy Director)
Charlene Fu (Head of Research)
Chew Kuo Min, Kate (Research Officer)
Jace Chia (Research Officer)
Clarissa Choo (Research Officer)
Janet Joe (Research Officer)
Nabilah Mohammad (Research Officer)
Toh Sze Min (Research Officer)

Please send your feedback and requests to: researchbites@childrensociety.org.sg.

Research Bites is a biannual publication by the Singapore Children's Society. The articles, opinions and comments are those of the contributors and are not necessarily those of the Singapore Children's Society or its management. All rights reserved. Reproduction in whole or in part without permission is prohibited. All information is correct at time of printing.