Children and Parents' Understanding on Online Privacy and Its Relationship With the Internet Parental Strategies

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Abstract
This study examines children's and parents' understanding on online privacy and factors influencing their understanding and views. 10 focus group session were conducted with 57 Scottish pupils aged 9 to 11-years-old in one school in Edinburgh and out of that 26 pupils and 8 parents from those pupils were interviewed. The study found that the active mediation, restrictive mediation, and technical mediation strategies support children's privacy from parents. However, the restrictive, monitoring and technical monitoring strategies provide children with a limited ability to practice online autonomy. In addition, there are four (4) key factors influencing parents' internet mediation style identified by this study were: (1) media report on Internet harms and consequences, (2) parents' views on privacy, (3) children's maturity, and (4) children's ability to cope with upsetting material.
Keywords: Internet Parental Strategies, Internet Parental Mediation, Privacy, Online Environment, Child-Parents Privacy

Introduction
Children's involvement in online environments produces tensions and dilemmas between them and their parents (Lopez et al., 2020; Zhao, 2018). Parents worry about their children's safety online, such as meeting strangers who could be online predators or paedophiles (Schrock and Boyd, 2008). This is used to limit children's internet participation. Rapid Internet growth, media panics, and parents' lack of Internet expertise caused them to believe the Internet is harmful for children. Willett (2015) discovered that the media defines a 'good parent' as one who understands, assesses, guides, monitors, and supervises their children's online activities (p.1072), which is related with monitoring and surveillance. Parents worried about online threats use censorware and monitoring tools at home (Nolan et al., 2011). This censorware blocks sites and gives parents information on their children's online habits (which sites they visited, for how long, the frequency of visit, and other information). Marketers justify spying on children's online activity (covert surveillance) without their consent and awareness by citing children's safety and parental responsibility. Nolan and colleagues (2011),

Shmueli and Blencher-Prigat (2010) consider this as a privacy breach. Mathiesen (2013) argues that it's unethical for parents to watch their children online, even for safety, because children have a right to privacy. Surveillance makes people feel uneasy and changes their behaviour (Solove, 2006). Even if surveillance is a deterrent to misbehaviour, it can harm 'freedom, creativity, and self-development' (p.494). Here, monitoring and privacy undermine emotional, moral, and social well-being (Calo, 2011).

Literature Review

Meaning of Privacy

Most privacy theorists advocate that privacy be seen as an elastic concept, a concept in disarray, or one that cannot be articulated (Solove, 2006; Allen, 1988; Burgoon et al., 1989; Vedder, 2011; Westin, 1967). Despite the lack of agreement in privacy definitions, several aspects of privacy which are commonly discussed in privacy theories: (1) physical space or spatial privacy; (2) choice or autonomy; and (3) personal information (Burgoon et al., 1989; Vedder, 2011).

Autonomy is a key concept in relation to privacy, as argued by various scholars (Shmueli and Blencher-Prigat, 2010; Mathiesen, 2013). Individuals are entitled to their own time, space, and opportunity to experiment with behaviour, thoughts, and emotions (Westin, 1967). Nolan and colleagues (2011) claim that autonomy is vital for children's development:
"[…] becoming an autonomous individual is central to social development and socio-emotional development in the early years in many Western cultural contexts" (p.25).

Nolan and colleagues' (2011) stance on the importance of autonomy to children was highlighted by Haworth (1984) and Montgomery and colleagues (2017), who states that autonomy is needed to increase an individual's overall wellbeing. Children who do not acquire autonomy have problems as adults; they lack critical thinking skills and the motivation to own their life skills and learning (Howe, 2007). Eekelar (1989) says autonomy for a child is "the freedom to select his own lifestyle and establish social interactions according to his own inclinations uncontrolled by the authority of the adult world, whether parents or institutions" (p. 171). He further argues that children should have autonomy if it doesn't compromise their basic or developmental interests.

Individuals and society benefit from privacy, collectively. Westin (1967) identified four functions of privacy: personal autonomy, self-evaluation, limited and protected communication, and emotional release. Privacy allows individuals to be alone, appraise situations, and make their own judgments. Later, this experience can be analysed, assessed, and tested depending on others' reactions (self-evaluation). Creating personal boundaries can also provide privacy (limited communication). Boundaries are required in interpersonal relationships to offer people personal space. When personal space is invaded, people become frustrated, uncomfortable, or nervous. Individuals can self-disclose private information to trusted peers, knowing it won't be shared. Emotional release helps people escape daily tensions, cope with loss, shock, and sorrow.

This study uses the term 'online environment' to indicates states of connectivity or being in virtual or Internet space. Thus 'online privacy' refers to the state of privacy needed an individual has while connected to the Internet or being online.

Types of Internet Parental Strategies
The role of parents in children's online engagement is typically influenced as most activities happen at home. Parents' concern about their children's safety while being online has led parents employing various Internet parental mediation strategies. According to Warren (2001), parental mediation refers to 'any strategy parents use to control, supervise or interpret media content for children' (p.212).

The EU Kids Online findings identified five types of Internet parental mediation strategies, which also include the use of technical tools. They are active-co use, active mediation, restrictive mediation, monitoring, and technical restriction (Livingstone et al., 2012). Active mediation involves parents' initiatives in discussing online safety with children (how and what to do in any worrying situation that might happen). Active co-use mediation of a child's internet safety is similar to active mediation, but in this case, parents are present or sharing online activities with their children. In other words, parents' responsiveness to their children's needs and their involvement in their lives (as measured by the amount of time spent on shared activities) were both significant predictors of their children's use of active and active-co mediation, suggesting that active mediation reflects parents' warmth and support for their children (e.g., communication) (Shin and Li, 2017; Rutkowski et al., 2021). In restrictive mediation, parents set rules in terms of time, access, or type of online activities their children can engage in. Monitoring involves parents' close surveillance of what online activities their children undertake, such as checking children's social networking accounts or emails. Finally, with technical restriction, parents will use tools such as filtering software to limit or filter their children's online activities. In this study, the active and active co-use will be referred as fully supportive Internet mediation strategies while the other three mediation refers to less supportive Internet mediation strategies based on the description above.

Parents' concerns on children's online engagement
Kerr and Stattin (2000); Marx and Steeves (2010) suggest that covert parental surveillance does not lead children to self-disclose their actions. Failure to build positive communication between children and parents will affect their trust (Kerr and Stattin, 2000). Rooney (2010) claims that parents who spy on their children's online activity don't trust them. According to Mayer and colleagues (1995), trust involves the positive 'expectation' that the trustee (in this case children) will undertake an important action for the trustor (parents), regardless of the trustor's ability to manage or oversee the trustee. Trust eliminates the need for control or surveillance. Overall, while not denying the benefits surveillance tools bring to parents in terms of safety and reducing risks, the act of surveillance (especially covert) is argued to bring disadvantages in terms of children's long-term psychological well-being, to not improve communication between children and parents, and to invade children's privacy (Nolan et al., 2011; Shmueli and Blecher, 2010; Marx and Steeves, 2010; Rooney, 2010; Mathiesen, 2013).

Whilst the effectiveness of Internet parental mediation strategies is still being explored, studies carried out by Livingstone and Helsper (2008); Kirwil and colleagues (2009), and Garmendia and colleagues (2012) show that restrictive and monitoring mediation have a significant relationship to risk. For example, such mediation limits the act of disclosure of information and other potentially risky behaviours, such as meeting new online friends (Lwin et al., 2008). However, while these two strategies are effective in reducing risk, they also effect the opportunities available to children in terms of their involvement in various

potentially beneficial online activities and skills (Garmendia et al., 2012). Parental mediation varies with a child's age, as revealed by empirical studies. Some research has shown that as children become older, parents implement less stringent mediation and online monitoring strategies, instead asking their children for input and being physically present when they use the internet (active mediation) (Sonck et al., 2013; Glatz et al., 2018; Livingstone and Olafson, 2018).

Children's engagement on the Internet includes how they deal with privacy in the online environment. The practice of autonomy can be seen in children's engagement with social media, where they create various strategies: for example, the use of privacy settings or employing online audience management strategies, and subsequently create their own boundaries to obtain privacy (Boyd and Marwick, 2011). Children exert their autonomy to have privacy particularly from their parents. To show the correlation between parents' active mediation strategy and levels of children's online disclosure of sensitive information, a study conducted by Lwin, and colleagues (2008) found that this mediation strategy limited the act of disclosure of sensitive information. However, a study by Garmendia and colleagues (2012) indicates otherwise: the active mediation strategies does not show significant differences in terms of children's exposure to online risks compared to the restrictive and monitoring mediation, which supports studies by (Kirwil and colleagues, 2009, 2009a).

Further reading on children and the Internet revealed various gaps that this study could filled: Clark (2011) commented that too much focus has been given to parents' responses to the negative effects of the media, compared to interventions to improve their relationships with children. This include determining which strategies helps to protect children's online privacy and exerts autonomy. Most previous studies in this area have been conducted in using quantitative methods with adults and teenagers or young people (aged 13 to 18); very few have focused on young children, (Shin and Li, 2017; Boyd and Marwick, 2011; Dias and Brito, 2020; Nikken and Jansz, 2014; Boyd and Hargittai, 2013; Ktoridou et al., 2012). As such, there is a lack of detailed understanding of the online privacy issues as seen from the perspective of children younger than 13 years old. In addition, Haddon (2014) is of the view that children's views are often excluded in the parental mediation research.

This study raises several questions regarding children's views on the Internet parental strategies, parents' views on privacy and what would be the 'ideal' Internet parental mediation strategy to be used that would protect children's privacy from their parents and encourage autonomy? To answer these questions, I have summarised them into three research questions

RQ 1: What are children's views of the Internet parental strategies?
RQ 2: What are parents' views of privacy? Do parents' views on privacy influence how they deal with their children's privacy?
RQ 3: What are the factors that influenced children and parents' views about the risks on the Internet?

Method
In this study, primary participants were selected from the primary six (P6) and primary seven (P7) pupils from one school in Edinburgh. They were between the ages of 9 and 11. Since

older children spend substantially more time on social networking sites like Facebook and Instagram than younger ones (Livingstone et al., 2015), this age group was selected. Having participants who were actively engaged in online social networking was critical to this study project's focus on participants' views of their privacy in relation to their online engagement.

School was chosen as the location to collect data and acquire access to child participants after the ethics proposal was accepted by the University of Edinburgh's School of Social and Political Science's Research and Ethics Committee. The study acknowledged the constraints and complexities of fieldwork and decided to focus in with a single school.

Other than children, the parents (one of the fathers, the mother, or the carer) of pupils from this school were also participants of this study. The study purposively sampled parents from the children in P6 and P7 and included parents from different social-economic statuses as participants. While accessing parents proved difficult, 8 parents agreed to participate in this study. Two of the parent participants were male and the rest were female; the participants were aged between 30 and 45 years old. As will be demonstrated in the findings section, the parent interviews yielded a plethora of data and a variety of parental mediation strategies.

10 focus group were conducted with 57 pupils. The sessions lasted between an hour and an hour and a half, ensuring in-depth data. During the focus group discussion, child participants were asked to work in group and to fill in the empty boxes in the mind map chart that comprised the questions, such as what is privacy? do we need privacy? and how can we achieve privacy? Individual interviews which were also conducted at school involved 26 pupils and did not last more than one hour. Unlike the interviews with children, which took place at school, because of difficulties in trying to arrange meetings in any other place, all the interviews with parents were conducted at the participants' house. With participants' permission, all interviews and focus group sessions were recorded. The focus group and interview protocol for participants is summarised in Table 1.

Table 1
Interview and Focus Group Protocol

Data collection approach	Topics
Interview Parents	Parents Engagement on the Internet Parents' View on Privacy Internet Mediation Style Children Engagement on the Internet
Interview Children	Children Engagement on the Internet Children's View on Privacy (online vs offline) Parents Internet Mediation Style
Focus Group Children	Views on Privacy (online vs offline) Internet: Who knows about you? Participants' view on the benefits of having privacy

The UNICEF's Ethical and Research Guidelines for Children's Participation in Research were consulted to ensure that the study was ethically sound (Graham et al., 2013). Prior to the start of every data collection session, participants were given a brief introduction about the

researcher, what the research was about, matters regarding confidentiality, safety, anonymity, consent, permission to audio record the discussion, and the use of pseudonyms. The names used in this paper is not the participants' real names, rather it is the pseudonyms chosen by the participants.

Thematic analysis was chosen when analysing the data collected during focus groups and interviews performed. This study included interviews, focus group audio, and mind maps. Transcribing interview audio helped analyse the data. Other than Quirkos analytic software, data from the vignettes (Emily's predicament) were loaded into Microsoft Excel sheets to better evaluate data frequency. The comparison of data was made between: (1) child participants' data from focus groups and individual interviews; (2) child-parent dyad interview data; and (3) parent participants with different Internet parental mediation strategies.

Findings
Children's views on the various Internet mediating style
A vignette or a short story was used in the focus group as a stimulating material to foster discussion between participants. The vignette involved children's Internet use and privacy. Emily, 11, wants a Facebook account. The story describes how Emily handled privacy while engaging online. The researcher asked the children if Emily's mother should know all her internet activity, including her Facebook posts. James Bond (P7) supplied the most extensive explanation for why Emily's mother can monitor her online activities.
"I think that's perfect and normal. I think that it is really good that Emily's mother wants to know what Emily is doing. That's means Emily's mother wants her to keep safe. Emily's mother wants nothing to happen to her."

James Bond's excerpt demonstrated Emily and her mother using social media to interact, illustrating that internet communications are interwoven in the child-parent relationship to keep children safe online and offline. He feels Emily's mother can be her Facebook friend based on his own experience; his mother was the first to 'friend' him when she started his account. James Bond said children want their parents to keep them secure and are willing to give up privacy for safety. More than half of the child participants perceived 'parental supervision' online as a social norm.

However, not all of the child participants had the same view as James Bond. Among the dissenters was Christiano. The below excerpt from Christiano's mother reaffirms that there was an element of monitoring in Christiano's online activities.

> "Well, he (Christiano) doesn't use the Internet very much without us being there.
> So we would be there with him most of the time."

She added that even when she allowed Christiano to choose the websites that he would like to see, she or Christiano's father had to approve them. I further asked Christiano's mother whether her son was aware of this practice and had ever complained. She replied, 'Not that he has told me. It's just always been like that', suggesting that she assumes that this practice has been accepted by her son. However, this was not in fact the case, as is evident in the conversation below

Me: What about you Christiano, if you have Facebook or Twitter, do you want to add your parents as your friends?
Christiano: Yes, but it is really annoying after a while. I don't think it is a good idea having that, cause they know what you're up to.
Me: I see. So, you don't really want your parents to know all your activities on the Internet?
Christiano: (Nodded).

Christiano said he would like his parents not know about his online actions and called having them as 'annoying,' indicating he gets angry when they know about his online activities. Christiano's dissatisfaction was evident during the focus group discussion, when the children were asked who shouldn't know about their online activity. Christiano was the only contestant to mention his mother

> "I put (write down) my mother, because my mother always freaks out, but my dad
> is alright, because he understands me a little."

Christiano expressed dismay when he shared his opinion with the group that his mother should not be privy to his online activities. Christiano's dissatisfaction with his mother's internet supervision shows she broke his regulations. Regulating children's internet use may be a kind of oppression that undermines their autonomy. Autonomy improves an individual's well-being, research shows (19). Christiano's ability to develop critical thinking abilities is key to his autonomy (17).

More than half of the child participants considered it is normal for parents to monitor their time spent online with their children. When asked this question during the focus group session, most of the children said Emily should consult with her mother so that she could help her open the account. 19 of the 22 children who responded to the question of whether Emily should add her mother as a Facebook friend strongly agreed. Both findings indicate that children think being 'protected' online is easier if a parent has a Facebook account, too.

The meaning of privacy to parents
This discussion is separated into two subsections to clarify the link between parents' privacy values and their Internet parental mediation method.

(a)   Views on privacy from fully supportive parents
As there were limited number of parents participated in this study, it is noted that only Lion's father used active mediation to deal with his son's online activity. Lion's father exhibited a totally supportive Internet parenting style by not installing the Internet Parenting software to monitor his son's Internet use. Lion's father said he had no limitations for his son's Internet use other than to be careful what he downloads or installs on their computer. Lion's father said numerous reasons inspired his Internet parenting style:

> "I would say the experience of exploring. I found it very interesting to explore
> cyberspace myself. As you know the Internet is much wider and bigger than
> before. The context is more complex than before, but I think it is better for them
> to explore […] I think if they do not know how to explore the Internet that would

be big trouble [...] it [the Internet] is used in their daily lives. So, if they do not know how to use the Internet, it will be difficult for them."

Lion's father said his 'openness' to his children's Internet use was due to his own experience in cyberspace exploration. He noted that even if the Internet is increasingly complex, he would still encourage his children to explore it. Lion's father adds that not knowing the Internet's benefits would be a loss for his children, who utilise it daily.

Lion's father's understanding of privacy is related to the notion of 'privacy-as-control' of information resonated, as he said:

> "I think individuals should still have some control [over personal information]. When I say control, it means that he/she can decide to share what I want to share, shouldn't be pushed to share too much."

Here hangs the suggestion that having the choice to make decisions about what to share and to whom is related to the notion of 'privacy-as-control' over personal information, which is in line with Westin (1967) (p.7)

> "Privacy is the claims of individuals, groups or institutions to determine for themselves when, how, and to what extent information about them is communicated to others".

Along these lines, 'privacy-as-control' over information reflects autonomy. Note that personal autonomy is one of Westin's (1967) four privacy functions. Lion's father's attitude on privacy as 'control' revealed he realised his son has the right to govern his own personal information and to make his own decisions. Lion's father supports his Internet parental mediation technique because he values privacy.

Lion's father elaborated on his views on privacy, which are different from the other parents' participants:

> "My view [about online privacy] is it is a trading off. It should be made clear before user want to use it. Say before you use Facebook, I think it should be made clear that you're trading off your personal information. Your consuming habit, for example, what you buy, what you're interested in because they use cookies to record in this thing. Then they can use that information. [...] I think this part should be made clear before we apply for any service."

Lion's father said that privacy is a trade-off between the online service provider and the user. Lion's father expected the online service provider to be upfront with the obtained data. Steijn and Vedder (2015) argued that an individual's perspective on privacy is related to how they view privacy risks and their social requirements. They argue that adults associate the privacy harm were related to unwanted observation from banks, future employers, marketing companies to obtain their personal information.

Overall, it is showed in Lion's father case that positive and knowledgeable parents tend to co-use media with their children thus supporting their children's online activities, according to (Dias et al., 2020; Nikken et al., 2014; Sonck et al., 2013). Shin (2017) argues that parents who

are confident that their influence have positive impact are more likely to support actively and directly, whether by talking to their children about technology as they use it.

(b)   Views on privacy from less supportive parents
Richie's mother also holds a similar opinion to Lion's father that privacy is about controlling personal information:

> "Privacy is what one individually chooses. I mean that privacy for your life from others. I think everyone has different levels of privacy on different days. […] Levels of privacy are different. Unless it is very a close person, you don't tell everyone everything that is going on. I think it depends on who, what, when, and how."

Richie's mother believes individuals can share whatever they want with whoever they wish. She stated privacy levels change through time and with human relationships. Monitoring and managing her son's internet activities is a privacy breach, although she may not realise it. This below excerpt shows her monitoring and controlling:

> "We have a computer in the living room. They will get an hour each on the computer, so that they can play games […] The computer stays in the living room, so that I can see what they are watching."

Richie's mother controls their Internet use. Her views on privacy and information management may be why she monitors her children's online activity. Richie's mother is unaware that he may have the right to regulate his personal information. When questioned further, she said:

> "I mean you can't sit down telling your children you can do this; you can't do this [on the Internet]. You must have such a massive list and that is unreasonable. The hardest and how easily things can shift. That is one of the reasons that I prefer to have the computer in the living room. Things like that, that you maybe didn't notice."

Richie's mother explains her monitoring method by citing the difficulty of regulating her children's Internet use. She remarked how easily things may change, which pertains to Boyd's (2010) four affordances – they make controlling information online difficult. Richie's mother's realisation that it's hard to manage information has made her attentive about his online activity, causing her to choose protection over privacy.

Lion's father and Richie's mother have similar views on 'privacy-as-control' and autonomy, but Lion's father believes his child has the right to privacy and to make autonomous decisions regarding his online activity. Richie's mother had differing ideas about her son's privacy, as shown below:

> "I think the potential for danger is too big for it. I mean, I'd rather have my kids shouting at me than have them crying or have something happened to them. I'd rather they are annoyed at me for not having that privacy rather than have something happen."

For Richie's mother, being vigilant and protecting her children in the online environment is more important rather than giving her sons privacy.

Christiano's mother is another example of how parents' privacy views affect their monitoring behaviour. Her scenario shows how monitoring can affect children's privacy. Christiano's mother said privacy is an innate human trait. She also emphasised that privacy is crucial, and that each person must choose whether to disclose information, similar to Lion's father's attitude, implying she appreciate her privacy. Christiano's mother ensures his online safety for another reason:

> "As they grow up you give them more control and responsibility. The measure is that different for everybody. Certainly, with Christiano's age now, we would be testing the water with all types of responsibilities. The more he can do with that, the more responsibilities he will be given. So that would be one thing. The way that you use the Internet, you give him incremental responsibilities."

Christiano's mother gave him incremental responsibilities, indicating she expects and trusts him. Christiano and his mother have different expectations about his Internet use. Christiano's mother previously said he used the Internet under their supervision. Christiano showed unhappiness over his constraints, suggesting he may feel trapped by his parents' standards. It seems that Christiano and his mother fail to convey their Internet usage expectations. Christiano's case shows how privacy norms and values can conflict.

Overall, this section shows parents' privacy views affect how they handle their children's privacy. Despite comparable privacy attitudes, parents' Internet mediation strategies for their children differed. Parents with less supportive Internet mediation strategies believed protecting children was most essential and were willing to violate their privacy rights.

Factors influencing children and parents' views.
This section will discuss the factors that may have influenced the participants' views about the risks on the Internet.

(a)   Factors influencing children.
The first factors that influenced participants' perceptions of Internet risks were parental influences. Numerous studies have demonstrated that parental worries and fears have a significant impact on children's Internet experiences (Zhao, 2018; Boyd, 2010; Ktoridou et al., 2012). This was also obvious in this study's data collection.

Elsa's opinion of the Internet was repeated during her individual interview:
> "There are loads of people on the Internet, some people are bad on the Internet, and they want to look at others' profiles on the Internet to find out information about them."

Elsa's view that Internet is not a safe place is based on her view that there are a 'number of people' that exist on the Internet. Elsa mentioned the existence of strangers on the Internet, demonstrating that she possessed broad knowledge of issues related to the online environment. Elsa was unusual in mentioning this, and below was Elsa's mother response when the researcher asked about her approach in educating Elsa about online safety:

> "I speak to her obviously about things like paedophiles on the Internet; they pretend that they are kids and your best friends, [I told her] don't trust anybody."

Elsa's mother acknowledged that she had a conversation with her children about being safe on the Internet, and that she advised Elsa not to trust who she met online, suggesting that Elsa's knowledge about online strangers was influenced by her mother's advice.

Data from the interviews also reveal that parents' influence is not limited just to children's opinions about the Internet but is also evident in children's engagement with the Internet. This can be seen in the case of Lion and his father. According to Lion's father:

> "Yes, I like animation. I will tell them the animation I liked. We use the Internet to watch animations."

In a separate interview, the researcher asked Lion about this matter:
Researcher: Does your father influence you to do this? Like origami and animation stuff?"
   Lion: Yes.
   Researcher: Does your dad have Google + as well?
   Lion: Yes.
   Do you communicate with him in Google +? Lion: Yes. He sends the links for animation stuff.

Lion affirmed that his father's interest in origami and animation had influenced his interest in such activities, and that technology, in this case Google Plus, was used to share and gain more information about their interests.

Considering what has been said so far, there seems to be some evidence that parents have influence on their children about Internet usage, since children inclined to follow or listen to what they had been told - especially what their parents had told them. According to Livingstone and Borber (2004), for children to maximise online potential and minimise online harms, parents must guide them.

The second factors that influenced participants' perceptions of Internet risks were the roles that the school plays. During the interview, children were asked about their sources of Internet safety information, and most said school was their main source besides parents. Most child participants said Internet Safety Day was enough to learn about online safety. However, Almaaz reacted differently:
"I don't know why they are doing it once a year. I think they should do it a bit more, especially for the little kids like P4 and stuff because when I was in P4 that is when I got a little bit interested in social media."

While it is clear that parents' views, at least in part, shape how their children see the Internet. The following subsections will discover what influences the parents themselves.

(b)   Factors influencing parents.
The media report has a great influence on people's opinions about the Internet (Steijn et al., 2015). This view was echoed by Minion's father, Christiano's mother, and Elsa's mother, who

during individual interviews, expound upon their sources of information about the Internet, which could influence their views about it.

Minion father: "You hear stories here and there all the time in the media, TV, and that. Of course, in the newspaper as well. We are aware of that, through mainly the TV, and the Internet itself. Of course, I studied computers. People get through the security stuff. Not mainly on the kids, but yeah. In the media you hear stories here and there. 128 People get abused online and that stuff nowadays."

Christiano's mother: "If you look at the BBC news, it [the Internet] can be quite upsetting sometimes. So, you've got to keep a close eye on it."

Media coverage shapes public perceptions of issues. Minion's father and Christiano's mother had negative views of media effects. Various studies have showed that parents' Internet attitudes affect their parenting practises online (Steijn et al., 2015; Nikken and Schols, 2015; Nikken and de Haan, 2015).

Beside their negative view about the Internet, parents' perception that their child is still young thus unable to deal with any risky situation online resonates in interviews with them. According to Becca's mother:

> "Well, all I would say is that I think that the Internet is an adult world and I think that Becca is a child and her ability to process the things. She doesn't have the emotional skills. She is not fully ready to be in adult's world, so therefore I think that must be controlled. As a parent I think I must put some controls."

Becca's mother's remark that the 'Internet is an adult world' revealed she thought the content on the Internet was unsuitable for her young daughter, who, according to her, has the emotional control to handle such content. Becca's mother said in an interview that Becca was easily disturbed and scared by unsettling images, which justified her restricting her online activity.

Majority of parents (6 out of 8 parents) in this study expressed concern about their children's maturity and capacity to cope with violent/gory imagery, unpleasant content, and potentially hazardous people. This finding is congruent with those of Boyd and Hargittai (2013); Sorbring and colleagues (2012), who found that parents worry more about young children using the Internet than older ones (aged 14 and above).

Based on the interviews with the above parents, it clear that their views affect their mediation strategies with their children. While parents in this study expressed concerns about their children encountering strangers online, none had direct experience with online strangers disturbing their child. The parent participants' views on the Internet were based on media reports on Internet harms and consequences, their perceptions of children's online safety, and their child's school.

Discussion

The literature review above has theoretically discussed why privacy is important in one's life by focusing on the meaning of autonomy, and why autonomy is critically associated with

children's development. Subsequently, as understood from the data that autonomy is indeed important in privacy - in the sense that privacy without autonomy is meaningless. Recall the finding that both child and parent participants' views of online privacy related to having control or having autonomy. However, what remains unanalysed is how these different types of parental mediation strategies affect children's autonomy and privacy. Table 2 below summarises the overall benefits and disadvantages of each of the Internet parenting mediation strategies in terms of the autonomy they allow regarding children's privacy.

Table 2
Comparison between types of Internet Parental Strategies and children's privacy and autonomy

Types of Internet Parental Strategies	Description of the Internet Parental Strategies	Privacy from parents	Autonomy
Active	Parents' initiatives in discussing online safety with children	Yes	Full
Active Co-Use	Parents are present and sharing online activities with their children.	No	Full
Restrictive	Parents set rules in terms of time, access, or type of online activities their children can engage in	Yes	Limited
Monitoring	Parents' close surveillance of what online activities their children undertake.	No	Limited
Technical restriction	Parents will use tools such as filtering software to limit or filter their children's online activities.	Yes	Limited

The active mediation and active co-use mediation strategies could be categorised as fully supportive Internet parental mediation strategies, as they encourage children to make their own decisions based on the guidance that parents provide. Note that children's engagement on the Internet requires them to exert their autonomy. Boyd (45) contends that necessary knowledge and skills are required, and individuals need to comprehend the situation to enable them to make informed decisions on what is to be shared and how, to whom and when, in the online environment. This is where fully supportive parents could play a role in explaining to their children the options and possible consequences of any actions taken while on the Internet. The other three mediation strategies (restrictive, monitoring, and technical monitoring) are categorised as limited or less supportive Internet parental mediation strategies, as they deprive children's opportunities to make their own decisions about the contents of the Internet they would like to access, social media with which they would like to participate or with whom they would like to communicate in the online environment.

Moving on to the aspect of privacy, it is clear that the active mediation, restrictive mediation and technical mediation strategies support children's online privacy from parents. Children

are able to have their privacy from their parents with these three strategies as parents' access or exposure to children's personal information is low compared to the monitoring and active co-use mediation strategies.

In contrast, while parents use monitoring mediation to protect their children, this type of mediation style infringes upon a child's privacy. This is because parents tend to keep an eye on what their children do on the computer, sometimes only allowing the child to use the computer when a parent is present. This is like the active co-use strategy, where parents will sit or stay nearby when their child is online, allowing them to watch what the child does.

Overall, comparison of these five types of Internet parental mediation strategies suggest that active mediation is best able to balance children's safety, privacy, their opportunities to develop digital competency skills and their autonomy.

This study findings supports previous studies by Mathiesen (2013); Nolan and colleagues (2011); Shmueli and Blecher-Prigat (2010); Rooney (2010), that monitoring children's online activities clearly invades their privacy. Findings showed that most parents in this study used less supportive Internet parenting mediation strategy. Among the reasons given by parents were the perceived vulnerability of their children if exposed to challenges of the online environment. In other words, it is related to their children's 'protection'. Moreover, data showed that parents' knowledge of the Internet and their view about of its potential for children's development influences their Internet mediation strategy. Again, parents' knowledge of the Internet is the core issue, and any strategies with regards to increasing children's online participation should consider efforts to also help parents to increase their knowledge about the Internet, thus preparing them to mediate their children's online usage actively. This study suggests that the Internet parental mediation strategies should be seen as a continuum, from the less autonomy-supported strategies to autonomy-supportive strategies; the active mediation strategy should be seen as an ongoing process that will keep changing as children get older and technologies changed.

Conclusion

This research adds to the body of knowledge that shows indeed, children's participation in online environments creates difficulties and dilemmas between them and their parents when it comes to protecting their privacy. Even though most children in this study viewed 'being supervised by their parents' online as a social norm, putting too much control on their online activities strips them of their agency. As a result, strategies to encourage parents to be more open and to consider allowing children "greater space" in terms of their online activities should be examined to aid in the development of children's autonomy. However, the topic of how to get parents to be open and more supportive of their children's online activities arises. One of the ways is to instil trust in child-parents relationship (Kostromina, 2016). This study has consolidated the discussion of the strengths and deficiencies of each of the five strategies in the children's privacy, and autonomy. In addition, it contributes to children's insights about parental mediation which was done by framing questions to understand how children view their privacy in relation to their parents.

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