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Social Norms and Explanations in Family Technology Use Rules

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Abstract

As technology becomes ever more deeply embedded in daily life, how do families make decisions about responsible technology use? Here we examined how parents and children use social norms and explanations when deciding about technology use rules. In Study 1, we asked parents of 3- to 11-year-old children how they set and explain technology use rules for their children. In Study 2, we recorded asynchronous conversations between parents and 6- to 10-year-olds about technology rules. Across studies, parents and children used social comparisons to peers to set and justify rules. Parents' explanations scaffolded children's reasoning, but they rarely referred to structural factors like deceptive technology design that make rules necessary to keep kids safe. By gaining a more nuanced description of how families navigate decisions about children's technology use, we hope to inform strategies to help parents and children negotiate responsible home technology use to improve family harmony and flourishing.

Keywords: social norms; technology; explanation; parent-child conversation; social comparison; digital literacy

Introduction

A child looks up from their tablet and asks, "Can I just have a little more screen time?" In many households, this simple question exposes a source of tension in raising children in an increasingly digital world. Over the past two decades, digital devices have become interwoven into the lives of adults and children alike (Livingstone & Blum-Ross, 2020; Marsh et al., 2017; Rideout, 2021; Teichert, 2020). Nearly all U.S. households with young children own at least one smartphone, and more than three-quarters provide a tablet specifically for children's use (Mann et al., 2025; Rideout, 2021). Tablets are as familiar as traditional toys in many households, and laptops can be found alongside crayons and storybooks in children's classrooms. Yet many parents report being unsure how to teach their children to use technology responsibly and protect them from potential harms (Schmuecker et al., 2024). Families use a wide range of practices, from firm time limits to flexible negotiation, but these strategies are often guided more by intuition than evidence (Clark, 2013). Meanwhile, parents report increasing stress about screen time, online risks, and the broader effects of technology on children's mental health, without clear guidance on how to address conflicts with their children about technology use (U.S. Surgeon General, 2023).

In the current research, we examined how families use social norms and explanations when deciding about technology use rules. In Study 1, we asked parents of 3- to

11-year-old children how they set and explain technology use rules for their children. In Study 2, we recorded asynchronous conversations between parents and their 6- to 10-year-olds about technology and their family's rules. Across studies, both parents and children used social comparisons to set and justify rules, with differing effects. Parents' explanations scaffolded children's reasoning, but they rarely provided children with explanations about the potential harms caused by structural factors like deceptive technology design practices that make rules necessary to keep kids safe. By gaining a more nuanced description of how families navigate complex decisions about children's technology use, the current research can inform strategies to help build the foundations of responsible technology use at home to improve family harmony and children's flourishing.

Unlike in other domains of family life, technology is changing so quickly that families and educators have no established script for what responsible guidance should look like. But across contexts, people use the behavior of others in their communities and social groups as guideposts (Asch, 1956). From what we say (Wert & Salovey, 2004), to what we eat (Drivas et al., 2024), to how we play (Schmidt & Tomasello, 2012), people tend to conform to what they think others like them are doing (Agerström et al., 2016; Cialdini et al., 1999; Cialdini & Goldstein, 2004; Miller & Prentice, 2016). Especially as children get older, they look to peers to inform and evaluate behavior (Berndt, 1979; Capuano & Chekroun, 2024; Haun & Tomasello, 2011; Morgan et al., 2015; Wen et al., 2019). And many modern children view technology as central to play and belonging (Rideout, 2021).

One reason the behavior of others shapes what we do is because we tend to assume that how things *are* reflects how they *should be*, even in morally neutral domains. Our concepts often link *descriptive* norms, or ideas about what is normal or typical (Bless & Wänke, 2000; Foster-Hanson & Lombrozo, 2022; Roberts et al., 2017), with *prescriptive* norms, or what we think is ideal (Barsalou, 1985; Bear & Knobe, 2017; Deutchman et al., 2025; Foster-Hanson & Rhodes, 2019). For example, when children observe that members of a group regularly behave in a certain way, they often judge that members *should* behave that way (Roberts et al., 2017). Applied to technology use, this means that if a child perceives their peers as having more screen time, they may interpret this not simply as a fact about others' routines, but as evidence of what is normal. But perceived social norms are not always accurate. For example, people tend to assume that others privately endorse common social norms more than

they do (Miller, 2023; D. A. Prentice & Miller, 1996). When making family technology rules, parents often look to other families as benchmarks, sometimes assuming stricter or more lenient norms than truly exist (Livingstone & Blum-Ross, 2020). In this way, conflict around technology becomes a question of where a family positions itself relative to the real or imagined practices of others in their community.

Regardless of how people go about *deciding* the rules, families can also use different explanatory strategies to *justify* them. For example, a parent might explain the same decision to restrict their child's video gaming by referring to concerns about their health (Nikken & Jansz, 2006; Robinson et al., 2017) or as punishment for disobedience (Wang et al., 2021). Crucially, although parents use multiple factors to make decisions about technology rules, the explanations they provide to their children scaffold learning by highlighting certain causal relationships while omitting others. Children are deeply motivated to explain and understand the world around them and they are sensitive to the quality of explanations they receive from a young age (Callanan & Jipson, 2001; Gopnik & Meltzoff, 1997; Legare, 2012; Mills et al., 2019). Children also comply more to rules they view as justified (Hickling & Wellman, 2001; Smetana, 2011), and informative explanations help to guide children's reasoning (Fender & Crowley, 2007; Lombrozo, 2016; McHugh et al., 2024). Parents' explanations about their family's technology rules are therefore a key opportunity to provide children with important information to help them build accurate causal models to support healthy, technology use habits.

We were particularly interested in explanations that teach children about structural factors like deceptive design of technology (Willis, 2020). Technology companies operate on an economy of attention that incentivizes the creation of addictive platforms (Bhargava & Velasquez, 2021), leading to deceptive practices like infinite scroll, autoplay, targeted advertising, and deceptive interface features, all intentionally engineered to operate outside of the user's awareness (Monge Roffarello et al., 2023; Radesky & Hiniker, 2022; Sousa & Oliveira, 2023). Given these challenges, recent research has focused on identifying strategies to build digital literacy in children and adolescents (Blinder et al., 2024; Kumar et al., 2020; Schmuecker et al., 2024) and to incorporate children's needs into technology design (Kumar et al., 2023).

Here, we asked whether parents of school-aged children spontaneously refer to these common deceptive design practices when explaining technology rules to their children. Developmental psychology research over the past decade has highlighted that children as young as age five can reason about structural, systemic causes (Vasilyeva et al., 2018). These structural explanations can motivate children to view social inequality as wrong and even to rectify it (Leshin & Rhodes, 2023; Peretz-Lange et al., 2021; Vasil et al., 2024).

Structural explanations about technology could help to mitigate family conflict by uniting children and parents against a common foe. For example, Bryan and colleagues (2016) showed that a "values-aligned" intervention revealing the structural mechanisms of food marketing (e.g.,

manipulative advertising tactics targeting youth) shifted adolescents' attitudes and choices toward healthier eating. Could these strategies be useful for building responsible technology use habits in childhood? In support of this possibility, a recent values-aligned intervention increased adolescents' motivation to limit social media use (Galla et al., 2021). Similarly, digital literacy education helped to build middle-schoolers' understanding of deceptive design practices (Khan et al., 2025). However, these interventions have primarily targeted adolescents, and none to our knowledge has examined whether families of younger children use these explanations in daily life. This is the focus of the current work.

Study 1

In the study 1, we asked parents of 3- to 11-year-old children to describe their own child's technology use. Then, we measured *descriptive* social norms by asking them to estimate normal technology use for children like theirs, and we measured *prescriptive* norms by asking parents to estimate ideal technology use habits for children like theirs. Finally, we asked parents how they explain their technology rules to their children using an open-ended question as well as frequency ratings for different explanation types. The study design and hypotheses were preregistered on the Open Science Framework: <https://osf.io/wvt7j/overview>.

Method

Participants We recruited 154 self-reported U.S. parents through Prolific to participate, based on a power analysis that indicated at least 130 participants needed. Four failed attention check questions, leaving 150 parents (116 women, 34 men). The sample was 66.67% white and 32% non-white.

Materials and Procedure Parents first completed a short warmup describing their child's morning routine to bring a specific 3- to 11-year-old child to mind. Then they answered questions throughout the study about that child, with the child's age and gender embedded in later questions about social comparisons. Parents estimated the number of hours their child spends using screen-based technologies at home, separately for weekdays and weekends, which we combined into a weighted daily screen time average for each child to account for variations in how families use technology across the week. Next, participants answered questions about social norms. First, to measure *descriptive* norms, parents were asked to think of other families like theirs and estimate screen time for typical other children who share their child's age and gender. To measure *prescriptive* norms, parents answered a set of similar questions about what they think is best for children like theirs.

Parents then answered an open-ended question about how they explain their household's technology rules to their children. Explanations were coded *a priori* and emergent themes by two independent coders who resolved discrepancies through discussion. Parents also rated how often they use different explanation types with their children,

including explanations referring to health and structural explanations (see Table 1 for the full set of explanation types and ratings). In the current paper, we report data testing our first preregistered hypothesis regarding descriptive and prescriptive norms and exploratory analyses of explanations; additional measures of parents' attitudes, habits, children's behavior are not reported here for the sake of brevity.

Results

Analyses were conducted in R, with children's age in years included as a covariate in all models. We compared parents' descriptive and prescriptive social norms about screen time as predictors of their children's habits, averaged across weekdays and weekends as described above, using a multiple linear regression. Our first preregistered hypothesis was that parents' descriptive and prescriptive norms would both predict reported screen time habits (Bear & Knobe, 2017). However, we found that only prescriptive norms were a significant predictor ($\beta = .887, p < .001$); descriptive norms were not ($\beta = .081, p = .169$). The effect of child age was also not significant ($\beta = .074, p = .302$). In a subsequent exploratory analysis, we tested whether these patterns varied based on whether the screen time estimates were for weekdays or weekends. Prescriptive norms were still the stronger predictor for weekday screen time ($\beta = .792, p < .001$; child age, $\beta = .049, p = .508$), but descriptive norms emerged as the stronger predictor for weekend time ($\beta = .369, p < .001$; prescriptive, $\beta = .322, p < .001$; child age, $\beta = .223, p = .03$). Parents' estimates of their children's daily screen time, which were in line with average child screen time in national survey data (Mann et al., 2025; Rideout et al., 2022), were slightly higher on average than their prescriptive norms, but lower by about an hour than their descriptive norms.

The most common theme in parents' open-ended explanations was health concerns: 29% of parents described specific or general concerns for their child's health (e.g., "I typically have to resort to enforcing that it is not healthy to stare at a screen without a break"). The next most common was general overuse, with 23% of parental explanations only referring to the general need to impose limits on their children's technology use (e.g., "I tell her it's time for a break"). These explanations often were circular, providing no causal explanatory content about the rule itself (Baum et al., 2008; Mills et al., 2019; Rips, 2002). The remaining types were all less common: 7% of parents linked screen time to completing chores (e.g., "We can have screen time after we finish our homework and chores"), 7% used screen time as a reward (e.g., "the tablet is a privilege, not a right"), 6% used screens as punishment (e.g., "If he is bad I take them away"), 6% referred to the need to socialize (e.g., "I say it's better for her to socialize, play, and experience to world directly"), and 5% referred to parental authority (another type of circular explanation, e.g., "We choose when they use screens"). Only 3% of parents' open-ended explanations mentioned their child's safety on the internet (e.g., "Be aware that there are bad people and bad information on the internet"), and none

spontaneously mentioned to deceptive design practices or other structural factors necessitating rules.

Parents' ratings of how often they used different kinds of explanations showed a similar pattern. Again, concerns about health were rated most frequent, and structural explanations were least frequent (see Table 1). In an exploratory analysis, we analyzed self-rated frequency of different of explanation types using a linear mixed model in the lme4 package (Bates et al., 2003), testing for the main and interactive effects of explanation type and child age and including random intercepts per participant. Parents reported using explanation types differently depending on child age (two-way type by age interaction, $F(1, 1036) = 6.14, p < .001$). Simple slopes analysis revealed that parents of older children referred less to convenience ($b = -0.08, p = .03$) but more to chores ($b = 0.150, p < .001$) and socializing ($b = 0.07, p = .04$). Thus, parents' explanations reflect developmental shifts in competing priorities in how families use technology.

Table 1. Parents' self-rated frequency of explanation types.

Type	Rated Frequency
Health	4.43
Chores	3.91
Punishment	3.74
Social	3.57
Overuse	3.11
Convenience	2.37
Authority	2.26
Structural	0.74

Discussion

In Study 1, parents' prescriptive norms about ideal technology use habits for children like theirs were a stronger predictor of their own child's reported habits than descriptive norms about what children like theirs do normally. Most parents acknowledged that their own children had more screen time than they thought was ideal, but they assumed that other children like theirs had significantly more. This finding is in line with evidence from other domains that people tend to think that they are better than average (Alicke & Govorun, 2005; Bergquist, 2020; Taylor & Brown, 1988; Zell et al., 2020). Parents may also use social comparisons to explain away their own child's non-ideal technology habits.

Parents' perceptions are also likely inaccurate, because it is impossible for all children to have more screen time than the actual population average, echoing patterns of pluralistic ignorance in other domains (Lewis & Neighbors, 2006; Miller, 2023; Perkins & Berkowitz, 1986; D. A. Prentice & Miller, 1993). One reason other people's behavior has such a large influence over what we do is that we tend to explain what is common by assuming that it must also be good (Eidelman et al., 2009; Foster-Hanson & Lombrozo, 2022;

Kay et al., 2009; Tworek & Cimpian, 2016). Challenging mistaken perceptions about widespread endorsement of norms can weaken their power over people's behavior. For example, correcting inaccurate perceptions that one's college peers endorse binge drinking can help to limit the harmful behavior (Lewis & Neighbors, 2006; Miller & Prentice, 2016; D. Prentice & Paluck, 2020; Schroeder & Prentice, 1998). The dissonance between descriptive and prescriptive norms could arise from parents' dissatisfaction with the perceived status quo. Thus, one possible strategy to support more responsible technology use practices at home and improve family harmony is to provide parents with more accurate information about the concerns of other parents like them. Future research should test this possibility.

Might similar patterns of social comparison shape children's views of technology use? Children are even more likely than adults to infer prescriptive norms from descriptive regularities (Foster-Hanson et al., 2021; Gelfand et al., 2024; Roberts et al., 2017; Schmidt & Tomasello, 2012). In the absence of information to the contrary, children may be particularly inclined to assume that the technology use behavior they observe in their peers reflects how kids like them ought to behave. Do children assume that their peers have fewer restrictions than they do at home? If so, do these comparisons have similar impacts on children and parents? We ask these questions in Study 2.

One powerful tool for undermining assumptions that what is common must also be good, therefore, may be providing clear alternative explanations about why things are the way they are. Specifically, structural explanations about deceptive design might offer a powerful strategy to help children learn about safety and privacy concerns (Blinder et al., 2024; Kumar et al., 2020). Yet no parents spontaneously provided structural explanations, and few reported using structural explanations to justify their screen time rules to their children. Instead, concerns about health dominated parents' explanations, followed by circular references to limits. These results point to a missed opportunity to teach kids about the structural forces that make rules necessary to keep them safe.

Study 1 relied on parent self-report, however, so it is possible that is the results could have been impacted by social desirability bias (Clark, 2013) and may not reflect how parents explain technology use rules to their children in daily life. To address this possibility, we recorded parents and their children discussing their technology rules in Study 2.

Study 2

Study 2 examined the role of social norms and explanations about family technology rules in naturalistic conversations between parents and children. Across domains, children rely on adult explanations to scaffold learning (Csibra & Gergely, 2009; Danovitch et al., 2021; Harris & Koenig, 2006; Jaswal et al., 2010; Mills et al., 2019, 2022), and conversations about technology between parents and children can provide crucial insight into the development of digital literacy (Koniski, 2018; Turner et al., 2022). Families (mostly from the U.S.) were recruited and participated online via Children Helping

Science (Scott & Schulz, 2017). The study was conducted asynchronously, without a researcher present, to minimize response bias (Clark, 2013) and maximize the validity of conversations as a proxy for children's daily experiences.

Given variation in explanations across age in Study 1, in Study 2 we focused on elementary school-aged children (6- to 10-years-old). Children in this age range are often exposed to technology at school and are actively seeking explanations for rules (Chouinard et al., 2007), but they still typically depend on parental mediation (Helsper et al., 2024; Nikken & Schols, 2015). The study design and hypotheses were preregistered on OSF: <https://osf.io/tme5j/overview>.

Method

Participants A power analysis indicated a minimum of 67 parent-child dyads needed; of our 115 dyads initially recruited, 45 were excluded due to low data quality (e.g., inaudible audio; parents who were absent for most of the study), leaving 68 parent-child dyads (children aged 6.08–11.01 years old; $M_{\text{age}} = 8.14$ years, $SD = 1.29$). Families received a \$10 Giftogram gift card for participating.

Materials and Procedure After parents provided consent and children provided assent, dyads were prompted to describe their technology rules and why they have them. The study consisted of both open-ended discussion prompts and forced-choice questions that were animated so that children and parents could respond by clicking on picture “buttons,” with response options counterbalanced between participants. Forced-choice questions asked about screen time, comparison to peers, feelings about technology, and internet safety. Dyads were prompted throughout to discuss perceived risks and benefits of technology. Since parents and children responded while together, some forced-choice questions were designed to prompt further conversation. For instance, children were asked how they thought their parents felt about technology, then parents rated their own feelings, then we asked an open-ended question about feelings. The entire study session lasted about 15 minutes and was recorded via the family's webcam. Video recordings of full study sessions were transcribed then coded independently by two trained researchers, with discrepancies resolved via discussion.

Results

Forced-choice Measures Children and parents both rated their own family's screen time habits using a visual three-item scale showing cups filled with different amounts of juice (“a little” = 1; “some” = 2; “a lot” = 3). We analyzed responses on this and all three-item scales using ordinal logistic regression mixed models (Christensen, 2019), with random intercepts for each parent-child dyad. Most parents and children chose the middle of the scale, and these responses did not differ between children and their parents (children: $M = 2.06$; $CI [1.94, 2.19]$; parents: $M = 2.05$; $CI [1.97, 2.18]$) or vary across child age (both $ps > .05$). Parents and children also rated on an animated visual scale whether they thought the child's friends had less (1), the same (2), or

more (3) screen time as the child. Replicating and extending the patterns in parental report from Study 1, and in line with our first preregistered hypothesis, parents and children generally expected the child's friends had more screen time (children: $M = 2.33$; CI [2.15, 2.52]; parents: $M = 2.50$; CI [2.33, 2.68]) similarly across child age (main effects of responder and child age, both $ps > .05$). However, these social comparisons had different effects on parents and children, who both rated their feelings about technology on a visual 1-5 scale (analyzed using a linear mixed model). Children who believed their friends had more screen time than they reported more negative feelings about technology ($b = -0.47$, $p < .001$), but parents felt lukewarm about screen time overall ($b = 0.25$, $p = .10$; two-way interaction between responder and social comparison rating, $F(1, 105) = 14.35$, $p < .001$; Fig. 2). Children reported feeling more positive about technology overall than their parents, consistent with the idea that technology is a source of entertainment for children but can be a stressor for their caregivers. Older children also reported feeling worse about technology ($b = -0.47$, $p < .001$) but parents' feelings did not vary by child age ($b = -0.02$, $p = .75$; two-way interaction between responder and child age, $F(1, 65) = 6.47$, $p = .013$).

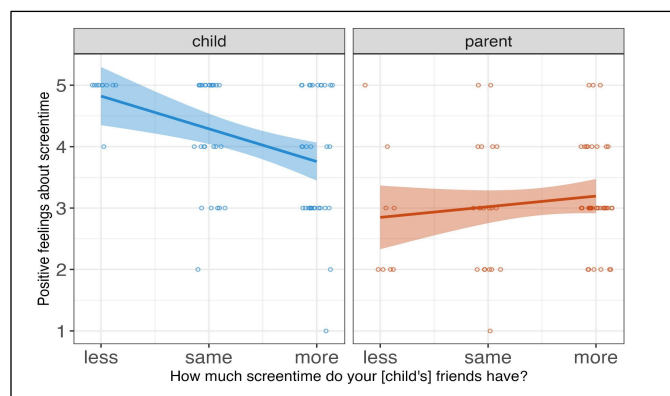


Figure 2: Children's (left panel) and their parents' (right panel) feelings about screen time by perceived screen time among (child's) peers. Small circles show individual participant responses; lines are group means with 95% confidence intervals bands.

Finally, dyads rated how safe the internet is on a visual scale ("not safe" = 1; "sort of safe" = 2; "really safe" = 3). Children's (but not parents') ratings declined with age ($b = -0.13$, $p = .005$; two-way responder x child age interaction, $\chi^2(1) = 6.63$, $p = .010$), with even older children rating the internet as safer than their parents did ($M = 1.65$; CI [1.52, 1.77]; main effect of responder, $\chi^2(1) = 10.76$, $p < .001$).

Speech-coded Results Transcribed conversations between parents and children were coded for explanation types used in Study 1 as well as emergent themes (codes were non-exclusive). In exploratory analyses, we used zero-inflated negative binomial mixed models to examine how children's explanations varied by the main and interactive effects of

type, their parent's use, and their age, with random intercepts for each child. Children's explanations mirrored their parents' overall (main effect of parental use, $\chi^2(1) = 28.33$, $p < .001$), but more for some types than others (type x parental use interaction, $\chi^2(1) = 21.15$, $p = .048$). In particular, children talked more about addiction ($b = 0.64$, $p = .02$), safety ($b = 0.36$, $p < .001$), and parental authority ($b = 1.92$, $p < .001$) when their parents did as well (all other $ps > .05$). Children's explanations also varied across age ($\chi^2(1) = 5.79$, $p = .016$), with older children explaining more overall. The three-way type by parental use by age interaction was not significant.

In contrast, parents' use of different types of explanations did not vary with child age (type x child age interaction, $\chi^2(12) = 10.51$, $p = .571$), nor did parents provide more explanations overall to children of different ages (main effect of age, $\chi^2(1) = 2.05$, $p = .153$). Both parents and children used some types of explanations more than others (both $ps < .001$). As in Study 1, health and circular references to overuse were most common among parents, but overuse was mentioned less often than safety by children. Again, parents rarely used structural explanations about deceptive design practices, and children never used these explanations (see Table 2).

Table 2. Parents' and children's explanation type frequency in transcribed conversations.

Type	Caregivers	Children
	<i>N</i> (%)	<i>N</i> (%)
Health	87 (20%)	46 (26%)
Overuse	76 (18%)	27 (15%)
Safety	61 (14%)	48 (27%)
Social	57 (13%)	8 (5%)
Education	53 (12%)	21 (12%)
Addiction	42 (10%)	11 (6%)
Reward	14 (3%)	2 (1%)
Structural	13 (3%)	0 (0%)
Comparisons	12 (3%)	0 (0%)
Convenience	9 (2%)	0 (0%)
Authority	4 (1%)	7 (4%)
Punishment	3 (1%)	5 (3%)

Discussion

Study 2 examined how children and their caregivers talk about technology, how they evaluate norms and risks surrounding technology use, and how these beliefs and explanations intersect with their feelings about technology. Forced-choice responses from parents and children replicated and extended the patterns in Study 1, with both assuming that the child's peers used technology more than the child. The impact of these social comparisons differed for parents and children, however. Children who thought their friends used technology more reported feeling worse, in line with evidence that children evaluate rules and privileges relative

to peers, not in isolation (Köymen et al., 2014). Parents, in contrast, felt worse than kids about technology overall, and they judged the internet as less safe than their children did. Together, these results suggest that inaccurate perceptions of social norms among both parents and children may contribute to parents' dissatisfaction with the status quo about childhood technology use (Schmuecker et al., 2024), fomenting family conflict and stress (U.S. Surgeon General, 2023).

Children's explanations mirrored those used by their parents, in line with evidence that children use explanations to scaffold their understanding (Csibra & Gergely, 2009; Jaswal et al., 2010; McHugh et al., 2024; Mills et al., 2022). In particular, when caregivers highlighted themes like addiction or safety, children adopted similar frameworks. However, unlike parents, children were more likely to talk about safety than to use circular references to overuse. Children also often asked "why?" during conversations, indicating a desire to understand the reasons behind the rules. In this way, children's understanding is supported both by explanations their parents use to justify rules and their own motivation to understand and explain (Keil, 2024; Legare, 2012; Lombrozo, 2016; McHugh et al., 2024).

However, few parents and no children mentioned structural forces like deceptive design practices that make rules necessary to keep kids safe. One possible interpretation of this result is that parents assumed that structural explanations would be too complex for their children to understand, which may be true especially for the youngest children in our sample. Future research should directly test how and when structural explanations about deceptive design can be leveraged to build digital literacy in children. Parents may also be unaware of deceptive design practices themselves. For these reasons, digital literacy interventions targeting children may benefit from involving caregivers directly, rather than relying solely on child-focused messaging.

General Discussion

Across two studies, the current results highlight several factors contributing to growing family stress about childhood technology use. Specifically, parents in Study 1 and parents and children in Study 2 generally overestimated peer technology use. These social comparisons may have helped parents to justify their child's non-ideal technology habits, but these social comparisons may also reflect perceived social pressure (from peers as well as the tech industry) to use technology more. These results thus echo patterns of pluralistic ignorance, when people assume that others privately endorse common social norms more than they do (Miller, 2023; D. A. Prentice & Miller, 1996). Openly questioning these norms could be a useful strategy to correct mistaken assumptions and pave the way for healthier behavior and greater family harmony.

A major barrier to open conversations about technology use, however, is the current heightened focus on parents as arbiters of children's tech use (Hwang & Jeong, 2015). Throughout parent-child conversations in Study 2, many parents expressed guilt, shame, or regret about their

children's technology use. Struggles to manage tech use are often framed as issues with self-control in common discourse (Hagger et al., 2022), and public debate around children and technology frequently focuses on screen time limits or app restrictions, leaving parents stressed and guilty while their children view the rules as arbitrary restrictions on having fun (Coyne et al., 2025; Wolfers et al., 2025). Shifting the locus of responsibility away from individuals and families to the systemic and structural forces that shape children's digital content could help mitigate tension and family conflict by uniting parents and children against a common foe.

Structural explanations about deceptive design are also crucial to help children build accurate causal models of the technology systems they interact with in their daily lives (Cabrera & Cabrera, 2023; Gopnik et al., 2004; Kuhn, 2012). For example, these explanations could highlight the many ways in which technology is not currently designed to support human flourishing (Bhargava & Velasquez, 2021). Some studies and forms of participatory design seek to learn about how children interact with technology to help inform new strategies to keep them safe (Girouard-Hallam & Danovitch, 2025; Kumar et al., 2023; Schmuecker et al., 2024). The current results highlight that parents have an important role to play in this conversation. Research on parental mediation should be situated within the broader context of influences from peers and media, including how families incorporate technology into competing priorities and social interactions (Hassinger-Das et al., 2020; Zosh & Hassinger-Das, 2023).

This suggestion aligns with research on values-aligned interventions that frame behaviors as responses to systems rather than as personal failings, activating identity-relevant motivations (Bryan, 2021; Bryan et al., 2019). However, given that previous research has focused on adolescents (Galla et al., 2021; Khan et al., 2025), it is unclear how effective these interventions may be with younger children. For example, caregivers and educators may avoid talking about deceptive design because they view structural explanations as developmentally inappropriate for young children (although parents' explanations in Study 2 did not vary by age). Similar reasoning was long a barrier to discussing structural racism with children (Spears Brown & Bigler, 2005). However, more recent research suggests that these concerns are unfounded (Williams et al., 2025; Zhang et al., 2024), and children as young as age five can understand structural explanations when framed appropriately (Amemiya & Bian, 2024; Leshin & Rhodes, 2023; Vasil et al., 2024). Nevertheless, future research is needed to determine how best to explain deceptive technology design so that it is accessible even to young children.

Despite the challenges, gaining a more accurate description of how families navigate complex decisions about children's technology use at home is an important next step for developing strategies to support social connectedness and well-being (Hirsh-Pasek et al., 2025). And the stakes are high: By intervening when children are actively forming healthy technology use habits in childhood, the impact of these intervention strategies could last a lifetime.

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