

“Youth-focused” versus “whole-family” screen rules: Associations with social media difficulties and moderation by impulsivity

Skyler T. Hawk¹  | Ying Wang¹  | Natalie Wong¹  | Yang Xiao² | Yan Zhang³ 

¹Department of Educational Psychology, The Chinese University of Hong Kong, Ma Liu Shui, Hong Kong

²Shenzhen Arts School, Shenzhen, China

³School of Media and Communication, Shenzhen University, Shenzhen, China

Correspondence

Yan Zhang, School of Media and Communication, Shenzhen University, Shenzhen, China.
 Email: zhangyansmile@szu.edu.cn

Funding information

Research Fund for Junior Faculty in Human and Social Science, Shenzhen University, Grant/Award Number: QNFC1903

Abstract

Many parents attempt to limit adolescents' screen time without changing their own habits. We examined whether “whole-family” versus “youth-focused” restrictions differentially predict social media-related difficulties (procrastination and problematic use), and whether adolescents' impulsive social media behaviors moderated these relationships. Among 183 Chinese early adolescents (58.5% female), whole-family rules negatively predicted procrastination. Impulsivity moderated associations between rulemaking approaches and social media difficulties; youth-focused rules negatively predicted procrastination and problematic use for highly impulsive adolescents, while whole-family rules held no associations or predicted increased difficulties. For less impulsive adolescents, however, whole-family rules negatively predicted social media difficulties and youth-focused rules positively predicted problematic use. Results suggest that setting the implementation of screen rules should involve parental participation and consideration of individual differences.

KEYWORDS

impulsive social media behavior, screen rules, social media difficulties

INTRODUCTION

Smartphone-based social media use is a primary leisure activity for Chinese youth. A recent national survey of primary, secondary, and vocational schools showed that 94.9% of Chinese young people use the Internet, out of which 82.9% have their own Internet-connected devices (e.g., laptops, tablets), and 65.0% own a smartphone (CNNIC, 2021a). Among all smartphone-based activities, online chatting and social networking are the most common, particularly as adolescents enter junior high school and focus on forming closer peer relationships (CNNIC, 2021a). The prevalence of youth screen and social media use has generated concerns among parents, educators, and practitioners about its potentially harmful effects on psychosocial development, academic performance, and physical health (e.g., Zhang et al., 2022). Since early 2021, government regulations in mainland China also have been gradually imposed to severely restrict the amount of time that adolescents can play online games and engage with social media for leisure, indicating a strong focus on altering youth screen habits. These limits, however, do not address behaviors and regulatory efforts in the broader family context. Examining which family based regulatory strategies

promote healthier behaviors, and for whom, is currently a major focus of adolescent research.

Attempts to limit youth screen use do not always predict reductions in problematic behaviors or overall use, and can provoke family conflicts (Francis et al., 2021; Matthes et al., 2021). Youth also express irritation with technologically distracted parents and hold expectations for parents' appropriate screen use (Kildare & Middlemiss, 2017). These mutual frustrations suggest that “whole-family” rules for screen use, followed by both youth and their parents, might benefit healthy screen behaviors at the systemic level. To our knowledge, however, no research has directly compared “whole-family” rules for screen use to “youth-focused” rules that specifically target adolescents' behaviors. The present study examines the associations that these two strategies hold with two forms of youth social media difficulties, namely social media-related procrastination and the addiction-like symptoms comprising problematic social media use. Additionally, considering that individual differences in youth impulsivity predict a range of adjustment problems, we investigated adolescents' tendencies to engage in impulsive social media behavior as a potential moderator of links between rulemaking strategies and social media difficulties. This allows for

an understanding of whether particular rulemaking approaches might differently suit adolescents with different needs.

Parental approaches to regulating adolescents' screen use

Mobile platforms have substantially increased youth's exposure to social media. The handheld nature of modern devices, and their integration into teens' peer relationships, often impede parents' regulation attempts. Nevertheless, parents exert considerable effort to manage adolescents' screen habits. Driven by a *guan* parenting culture, where exercising control functions as a provision of support (Pomerantz & Wang, 2009), Chinese parents' regulation of children's screen use mostly consists of restrictive practices (CNNIC, 2021b). Parents might impose content restrictions (Lee & Chae, 2012) and context restrictions, including where (i.e., screen-free zones), when (i.e., screen-free times and screen curfews), or under what conditions (e.g., failing to complete homework) youth may not use screens for leisure (D'Angelo & Moreno, 2019; Moreno et al., 2021). To date, however, substantial debate remains as to whether such 'restrictive mediation' actually promotes healthier screen and social media habits for adolescents, which types of rules might predict these outcomes, and whether some youth might benefit more from particular approaches than other youth.

Across various studies, restrictive practices appear to have inconsistent associations with youth screen behaviors. Some studies show links between restrictive mediation and reductions in excessive Internet use (Collier et al., 2016; Kalmus et al., 2015) and less Internet-related school or sleep problems (Collier et al., 2016). However, a recent meta-analysis (Fam et al., 2022) indicated that these benefits might diminish with age, with the significant negative associations found among child samples becoming nonsignificant for adolescents. Both Chinese and North American studies even suggest a potential for restrictive practices to elicit youth's defensive responses and family conflicts (Liu, 2020; Padilla-Walker et al., 2016). Multiple studies have actually reported *positive* correlations between parents' screen restrictions and adolescents' problematic gaming (Benrazavi et al., 2015; Cui et al., 2018) and mobile phone involvement (Hefner et al., 2019). A recent meta-analysis (Lukavská et al., 2022) also reported that restrictive mediation held significant positive associations with problematic Internet use for older adolescents (<14 years), while also noting high overall heterogeneity in the results. These inconsistencies suggest that certain commonplace forms of restriction might be less effective, or even counter-productive, in promoting healthy adolescent screen habits and/or preventing related difficulties (Nielsen et al., 2019). In order to fully understand whether screen use restrictions can predict reduced difficulties among adolescents, and for whom, it is critical to examine different rulemaking approaches and the individual

differences that parents should consider when selecting such strategies.

'Youth-focused' versus 'Whole-family' rules for screen use

Several recent studies suggest that parents' efforts to engage in discussion and co-consumption of media with their children might buffer the negative effects of social media and screen use (e.g., Kang et al., 2021; Padilla-Walker et al., 2016; Wachs et al., 2021). Few studies to date, however, have directly examined parents' willingness to follow similar rules that they set for adolescents, on a 'whole-family' basis. Indeed, setting youth-focused rules might be more intuitive and common among parents. Particularly in China, stronger emphases on parental authority and academic achievement (Chen, 2016) might encourage parents' narrow focus on limiting youth screen and social media use, without considering their own behaviors. In other words, parents might fail to understand the impact of their own screen habits on their children, despite the fact that parents also turn to their smartphones for entertainment, stress relief, and escape from negative emotions (McDaniel, 2019). Recent research with Australian families also found that parents' and early adolescents' screen habits tended to cluster together into distinct behavioral groups; families reporting higher mobile screen use also showed elevated sleep disturbance and sedentary behavior (Arundell et al., 2020). These findings indicate that adolescents' screen habits are not easily separable from parents', and that considering both the shared home environment and families' individual needs might be crucial to minimizing screen-related difficulties.

Parents' screen use predicts youth screen habits and related adjustment (Geng et al., 2021; Son et al., 2021). This might occur through multiple processes, including behavioral modeling and effects on parent-child interactions (McDaniel, 2019). Indeed, practitioners advise parents to limit their own use of phones for stress relief and to model appropriate habits for children (Radesky & Moreno, 2018). Furthermore, disrupted family interactions resulting from parents' own screen use predict reduced parental warmth and sensitivity (Kildare & Middlemiss, 2017), as well as greater youth anxiety, depression, cyber-aggression (McDaniel, 2019), and problematic smartphone use (Geng et al., 2021; Liu et al., 2020). Additionally, Chinese parents exhibiting signs of problematic smartphone use tend to impose screen restrictions on adolescents without providing accompanying rationales, which could potentially negate any potential protective effects (Hwang & Jeong, 2015), make youth perceptions of parental hypocrisy more salient (Matthes et al., 2021), and reduce adolescents' acceptance of these limits (Francis et al., 2021). Overall, youth screen habits and related adjustment might be more optimal when both youth *and* parents regulate their screen and social media use (Capri et al., 2021). The extant literature suggests that

adopting at least some screen use rules at the “whole-family” level might predict fewer youth difficulties.

Moderation by impulsive social media behavior

Adolescents often see online social activities as private and outside the bounds of legitimate parental control (Cranor et al., 2014; Smetana et al., 2017). Although a recent focus group study found that early adolescents are willing to accept certain limits on their screen use, they also expect more privileges coinciding with evidence of increased independence and self-control (Moreno et al., 2019). Self-control consists of inhibiting impulsive acts, resisting immediate rewards, and adhering to long-term goals (Farley & Kim-Spoon, 2014; Gardner et al., 2008). Neurological transformations result in substantial individual differences in adolescents' ability to regulate impulsive behaviors (Foulkes & Blakemore, 2018; Williams et al., 1999), which is a key dimension of self-control in social media contexts (e.g., Cudo et al., 2019; Leng et al., 2019; Schnauber-Stockmann et al., 2018; Whelan et al., 2020). A recent systematic review (Zahrai et al., 2022) noted that studies on self-control and excessive social media use have gradually moved away from theories focused on intentional control, and toward a focus on impulsivity and non-planned behaviors. Impulsivity predicts both problematic social media use (see Hussain & Starcevic, 2020 for a review) and social media procrastination (e.g., Schnauber-Stockmann et al., 2018). Notably, experimental studies show that individuals with problematic social media and screen use have difficulty refraining from responding to social media cues; these do not appear to be general inhibitory control deficits but rather are specific to mobile phone-related cues (Gao et al., 2020; Wegmann et al., 2020). These results highlight the importance of studying impulsivity specifically related to social media use, as opposed to other aspects of self-control and/or in more general contexts. Based on such findings, we expected that individual differences in social media impulsivity not only directly predict youth procrastination and problematic use, but also may moderate associations that certain screen rules hold with these difficulties.

Indeed, it is unlikely that all types of screen rules are equally predictive of (un)healthy social media habits for all adolescents. For youth exhibiting higher levels of impulsivity, regulations targeting their specific challenges might be important to retain. For example, a study conducted in South Korea (Lee, 2013) showed that adolescents scoring lower in various aspects of self-regulation (including impulse control) reported less Internet use and online risk exposure when parents imposed youth-focused screen restrictions. Restrictive practices did not predict these behaviors among youth with higher self-regulation, however. The author of this study reasoned that the efficacy of these restrictions likely depends on children's level of development, with parents of youth with lower self-regulation abilities likely needing to apply more external pressure to protect them from

higher-risk behaviors and environments. In other words, highly impulsive adolescents might continue to benefit more from youth-focused rules specifically tailored to their own behaviors.

In contrast, parents of youth with higher levels of self-regulation abilities are likely able to adopt practices characterized by greater flexibility, value internalization and generalization, and egalitarian parent-child interactions (Grusec & Davidov, 2010; Lee, 2013). Constructing screen rules that apply to all family members, instead of only adolescents, represents this type of approach. To our knowledge, however, no research has examined whether adolescents' individual differences in self-control might also moderate associations between screen-related difficulties and these ‘whole-family’ rules. As various aspects of self-control improve (Williams et al., 1999), early adolescents' responsiveness to parental regulation might shift away from rules targeting their specific behaviors to a more generalized system of family norms. Compared to youth who struggle to control their impulsive social media and screen behaviors, those lower in impulsivity are likely more capable of applying broader, whole-family rules across different situations, and of internalizing these rules to regulate their own behaviors without explicit parental oversight (see Meeus et al., 2019; Sun et al., 2021). In fact, youth with higher levels of autonomous self-regulation might even react more negatively to extensive parental interference, because they assume they have already earned their parents' trust and demonstrated their competence (Padilla-Walker et al., 2016; Pomerantz & Eaton, 2001). Feelings of over-control predict heightened concealment from parents and lower internalization of parental values (Hawk, 2017; Son & Padilla-Walker, 2021), which can prompt rebounds in problematic behavior (Frijns et al., 2010; Keijsers et al., 2010). Accordingly, links between youth-focused versus whole-family screen rules and problematic screen and social media habits might vary along with differences in youth impulsivity; while highly impulsive adolescents likely benefit more from youth-focused rules specifically tailored to their own behaviors, less-impulsive youth might show fewer difficulties in conjunction with the application of whole-family rules.

Overview and hypotheses

We investigated Chinese early adolescents' reports of screen use rules in the family. We focused on three context-based restrictions (screen-free zones, screen-free times, and screen curfews) that have been recent foci of pediatric practitioner recommendations (D'Angelo & Moreno, 2019; Moreno et al., 2021), and that could conceivably be applied either specifically to youth behavior or to all members of the family. We first considered the assumption that parents often focus on restricting youth screen use without adopting similar standards for themselves (Kildare & Middlemiss, 2017; McDaniel, 2019), particularly in light of the emphasis on hierarchical parental authority and youth achievement in Chinese families (Chen, 2016). We

expected that adolescents would report youth-focused rules to be more prevalent than whole-family rules (H1). We then compared youth-focused versus whole-family screen rules as predictors of two forms of adolescent social media difficulties, expecting that whole-family rules would show stronger negative links than youth-focused rules with youth's social media procrastination and problematic social media use (H2). We also considered the potential interaction between these rule types, allowing us to explore issues such as whether (1) primarily utilizing either of the two rule types predicts less procrastination and/or problematic use than setting no rules at all, (2) combinations of youth-focused and whole-family rules predict fewer difficulties, or (3) if a broader set of whole-family rules is sufficient, and further including youth-focused rules has little added predictive value (or vice-versa). Considering a lack of literature on which to form clear predictions, we explored this interaction without a priori hypotheses (RQ1).

In addition to expecting that adolescents' greater social media impulsivity would directly predict higher levels of social media procrastination and problematic social media use (H3), we further hypothesized that impulsivity would moderate associations between screen rule types and youth social media difficulties (H4). We expected that youth higher in impulsivity would show fewer social media difficulties when parents applied more youth-focused rules (H4a), while youth lower in impulsivity would show fewer difficulties in the context of more whole-family rules (H4b). Finally, prior studies have reported inconsistent gender differences in links between parental mediation and youths' Internet use. For instance, a recent longitudinal study on Chinese parents' mediation, youth concealment, and problematic Internet use showed no gender differences (Liu, 2020). In contrast, another study (Koning et al., 2018) reported negative links between restrictive practices and problematic social media use only for girls. Considering these inconsistent results and no a priori hypotheses, we controlled for gender in our analyses.

METHOD

Participants

Participants were 181 seventh- and eighth-grade students (58% female) between the ages of 12 and 15 ($M_{\text{age}} = 13.27$, $SD = 0.70$), recruited from a public secondary school in Shenzhen, China's major technology hub located on the southern coast of Guangdong Province. The school was located in the financial district of the city, and on one of the wealthier streets of the district. As such, families had a relatively higher SES level and were more likely to have access to various digital products, providing a good context to examine different screen use rules for adolescents. All students were from the district, in line with local school admission policies, and lived at home with parents as opposed to school dormitories.

Most youths reported fathers to be college-educated (46.4%), followed by high school (17.1%), master's degree

(11.0%), technical school (11.0%), doctoral degree (3.3%), and middle school education (3.3%). The highest educational level for most mothers was college (48.6%), followed by high school (18.8%), technical school (12.7%), master's degree (7.2%), doctoral degree (1.1%), and primary school or lower (1.1%). Respectively, 7.7% and 7.2% of participants did not report father's or mother's educational level. The proportion of college-educated parents was slightly higher than that of other large cities in China (e.g., 42% in Beijing, 34% in Shanghai) and ranked second among all the 11 districts in Shenzhen according to data from the seventh national demographic census in 2020. Most participants (77.9%) reported living with both parents, whereas 7.7% and 1.1% lived only with their mothers or fathers, respectively. Some participants (12.4%) did not report their living situation. Most participants were either the only child (44.8%) or had one sibling (40.9%), whereas 10.5% had two siblings. A small number (3.9%) had three or more siblings. Of the youth with siblings, the majority reported being either first-born (63.9%) or second-born (32%). All participants reported owning a mobile device and being active on at least one social media platform.

Procedure

Data collection for this project occurred in October 2019, just prior to the onset of the COVID-19 pandemic. The project received ethics approval from the Institutional Review Board of the corresponding author's institution. Active informed consent was obtained from participating schools, parents, and our participants; following school approval, consent forms were sent to students' parents 1 week before the survey. Before completing the questionnaires, students read an explanation of the survey, were informed of their rights to confidentiality and withdrawal without penalty, and provided consent. Participants completed the questionnaires during homeroom and free-study periods. A research assistant was on hand to answer questions and to ensure all questionnaires were completed. The survey items for this study were combined with items for another study on adolescent materialism; the questionnaires took approximately 15 min to complete.

Measures

The scales were translated into Chinese and back-translated by bilingual speakers. All scale items are available in Appendix A.

Youth-focused and whole-family rules

Participants reported on the prevalence of youth-focused and whole-family screen rules. Participants read the prompt, "Many families have rules about where and when people can

use devices with screens, such as phones, computers, and TVs. Sometimes parents make rules specifically for their children, and sometimes there are rules that are made by/for the whole family. Please respond to each of the statements below..." Three types of screen rules were measured, based on a measure developed by Gower and Moreno (2019), including screen-free zones (i.e., where screen use is not allowed), screen-free times (i.e., when screen use is not allowed), and screen curfews (i.e., screen use before bedtime). Adaptations were made to the original items to make clear distinctions between youth-focused rules ("My parents make rules for me about...") and whole-family rules ("There are rules for my whole family about..."). Items were on a 5-point scale (1 = Definitely untrue, 2 = Mostly untrue, 3 = Neither true/untrue, 4 = Mostly true, 5 = Definitely true). Scores were averaged so that higher scores indicated greater focused rules ($\alpha=0.72$) and whole-family rules ($\alpha=0.80$) showed good reliability.

Social media procrastination

Participants responded to eight items from Meier et al.'s (2016) measure of social media procrastination and Tuckman's (1991) procrastination scale. The scale measures how much adolescents use social media to procrastinate on important tasks. A sample item is "I use social media although I have more important things to do." Participants responded on a 5-point Likert scale (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very Often). Scores were averaged so that higher scores indicated greater procrastination. The scale showed good reliability ($\alpha=0.93$).

Problematic social media use

A nine-item measure (Du et al., 2018; LaRose & Eastin, 2004) was adapted to measure adolescents' problematic social media use. It assesses five dimensions of symptoms outlined in Griffiths' (2005) General Addiction Theory, namely salience (i.e., preoccupation; "I often think about social media even when I am not online."), craving (i.e., increasing use of social media to obtain the same level of pleasure; "I have to keep using social media more and more to feel stimulated."),

relapse (i.e., failure to limit the use of social media; "I have tried unsuccessfully to cut down on the amount of time I spend online."), withdrawal (i.e., feeling distressed when not using social media; "I get tense, moody, or irritable if I can't get online when I want."), and conflict (i.e., using social media at the expense of other important aspects of life; "I would go out of my way to satisfy my social media urges."). Participants reported on a 5-point Likert scale (1 = Strongly disagree, 2 = Somewhat disagree, 3 = Not sure, 4 = Somewhat agree, 5 = Strongly agree). Scores were averaged so that higher scores indicated greater problematic use. The scale showed good reliability ($\alpha=0.92$).

Impulsive social media behavior

Eight items from the Ego Under-Control Scale (Letzring et al., 2005) were adapted to measure adolescents' impulsive behaviors when using social media. The original scale was developed to measure general levels of behavioral activation and impulsivity among undergraduate students. Items were adapted to measure impulsivity regarding social media-specific behavioral activation (e.g., When I get bored, I like to stir up some excitement on social media) and impulses (e.g., "I often say and do things on social media without stopping to think."). The scale was arranged on a 4-point Likert scale (1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree). Scores were averaged so that higher scores indicated greater impulsivity. The scale showed good reliability ($\alpha=0.86$).

RESULTS

Prevalence of youth-focused and whole-family screen rules

Observed mean scores and bivariate correlations are in Table 1. Preliminary analyses showed that the prevalence of youth-focused rules did not differ between only children, first-born children, and children with one or more older siblings, $p=.373$, nor did whole-family rules, $p=.365$. The prevalence of youth-focused rules also did not differ between families whose fathers were college-educated or higher

TABLE 1 Means, correlations.

	M (SD)	Bivariate correlations			
		1	2	3	4
(1) Social media procrastination	2.76 (0.98)	—			
(2) Problematic social media use	2.57 (0.94)	0.63***	—		
(3) Impulsivity	1.81 (0.61)	0.39***	0.43***	—	
(4) Youth-focused rules	2.38 (1.14)	-0.24***	-0.04	0.02	—
(5) Whole-family rules	2.02 (1.04)	-0.19**	0.04	0.10	0.63***

** $p \leq .01$; *** $p \leq .001$ (two-tailed).

and those who were not, $p = .634$, nor did the prevalence of whole-family rules, $p = .780$. Similar results were obtained when comparing mothers with and without tertiary education, $ps \geq .336$.

In total, 75.1% of youths reported at least some form of youth-focused screen use rules (i.e., $M > 1.00$), and 67.6% of youths reported at least some form of whole-family screen use rules (i.e., $M > 1.00$). Youth-focused rules and whole-family rules were positively correlated ($r = .62$, $p < .01$). A multivariate ANOVA was used to test the hypothesized difference in the prevalence of youth-focused and whole-family rules. Supporting H1, a significant main effect of the rule target existed, $F(1, 180) = 25.58$, $p < .001$, $\eta_p^2 = 0.12$, indicating that participants generally reported more youth-focused screen rules than whole-family screen rules.

Path analysis

Our hypothesized moderation model¹ was tested using path analysis with z -transformed values. To test H2 and H3, whole-family and youth-focused rules and impulsivity were included as predictors of social media procrastination and problematic social media use. We also included the two-way interaction between whole-family rules and youth-focused rules in order to examine RQ1. To test H4, two-way interactions between impulsivity and screen use rules (i.e., impulsivity \times whole-family rules and impulsivity \times youth-focused rules) were included to test the moderating effect of impulsivity on the paths between screen use rules and the two social media difficulties. In this way, associations that each main predictor (or interaction) held with each dependent variable were controlled for all other associations, allowing examination of the unique variance in procrastination and problematic use accounted for by each path in the model. We also controlled for adolescent gender by including it as a predictor of social media procrastination and problematic social media use. The model was fully saturated. Social media procrastination and

problematic social media use were positively associated ($\beta = 0.53$, $SE = 0.05$, $p < .001$).

Predicting social media difficulties from whole-family rules versus youth-focused rules

Our results partially supported predictions (H2) that, compared to youth-focused rules, whole-family rules would show stronger negative associations with youth social media difficulties. Whole-family rules were negatively associated with social media procrastination ($\beta = -0.21$, $SE = 0.10$, $p = .029$), whereas no significant association existed for youth-focused rules ($\beta = -0.14$, $p = .096$). Not supporting H2, associations between both rule types and problematic social media use were not significant. Addressing RQ1, the interaction effect between whole-family rules and youth-focused rules on social media procrastination was significant ($\beta = 0.17$, $SE = 0.08$, $p = .034$). To disentangle this interaction, we conducted a simple slope analysis (Aiken & West, 1991), with values for youth-focused rules and whole-family rules set at ± 1 SD from the mean. As seen in Figure 1, youth-focused rules negatively predicted social media procrastination only in the context of lower whole-family rules ($\beta = -0.28$, $SE = 0.09$, $t = -3.18$, $p = .001$), but not in the context of higher whole-family rules ($\beta = -0.01$, $SE = 0.12$, $t = -0.06$, $p = .956$).

Moderation by social media impulsivity

Supporting H3, social media impulsivity showed direct, positive associations with both social media procrastination ($\beta = 0.38$, $SE = 0.06$, $p < .001$) and problematic social media use ($\beta = 0.39$, $SE = 0.06$, $p < .001$). As hypothesized (H4), impulsivity also moderated links between both rule types and social media difficulties. Specifically, there was a positive interaction between self-control and whole-family rules (procrastination: $\beta = 0.32$, $SE = 0.09$, $p < .001$; problematic social media use: $\beta = 0.33$, $SE = 0.09$, $p < .001$), but a negative interaction between self-control and youth-focused rules

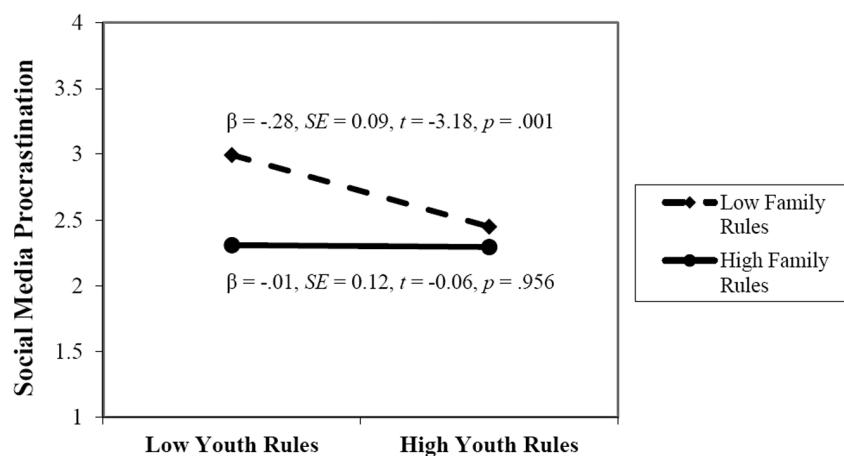


FIGURE 1 Social media procrastination at ± 1 SD of youth-focused and whole-family rules.

(procrastination: $\beta = -0.29$, $SE = 0.09$, $p = .001$; problematic social media use: $\beta = -0.33$, $SE = 0.09$, $p < .001$). We conducted simple slope analyses at ± 1 SD of self-control to decompose these interactions.

Social media procrastination

As seen in Figure 2a, youth-focused rules were negatively associated with social media procrastination when social media impulsivity was high ($\beta = -0.45$, $SE = 0.13$, $t = -3.51$, $p < .001$), but not when impulsivity was low ($\beta = 0.17$, $SE = 0.12$, $t = 1.37$, $p = .172$). As seen in Figure 2b, whole-family rules were negatively associated with social media procrastination when impulsivity was low ($\beta = -0.53$, $SE = 0.14$, $t = -3.87$, $p < .001$), but not when impulsivity was high ($\beta = 0.10$, $SE = 0.12$, $t = 0.81$, $p = .416$). Together, results supported H4 by indicating that youth-focused and whole-family screen use rules were differently associated with social media procrastination, depending on adolescents' impulsive tendencies. Generally, youth-focused rules predicted lower procrastination for youth with higher social media impulsivity (supporting H4a), whereas whole-family rules predicted lower procrastination for youth with lower impulsivity (supporting H4b).

Problematic social media use

As shown in Figure 3a, youth-focused rules negatively predicted problematic social media use when impulsivity was high ($\beta = -0.39$, $SE = 0.13$, $t = 2.96$, $p = .003$). However, this relationship was positive when impulsivity was low ($\beta = 0.30$, $SE = 0.12$, $t = 2.44$, $p = .015$). As shown in Figure 3b, whole-family rules negatively predicted problematic social media use when impulsivity was low ($\beta = -0.37$, $SE = 0.14$, $t = -2.64$, $p = .008$). However, this relationship was positive when impulsivity was high ($\beta = 0.27$, $SE = 0.13$, $t = 2.16$, $p = .031$). Thus, in line with H4, whole-family rules and youth-focused differentially predicted problematic social media use, depending on adolescents' tendencies to engage in impulsive social media behavior. As with social media procrastination, higher levels of youth-focused rules generally predicted less problematic use for youth with higher impulsivity (supporting H4a), whereas higher levels of whole-family rules predicted less problematic social media use for youth lower in impulsivity (supporting H4b). Unexpectedly, however, we also found that the alternate rule type actually predicted *higher* problematic use for high- and low-impulsivity adolescents, respectively, instead of merely showing no association. Specifically, youth-focused rules positively predicted

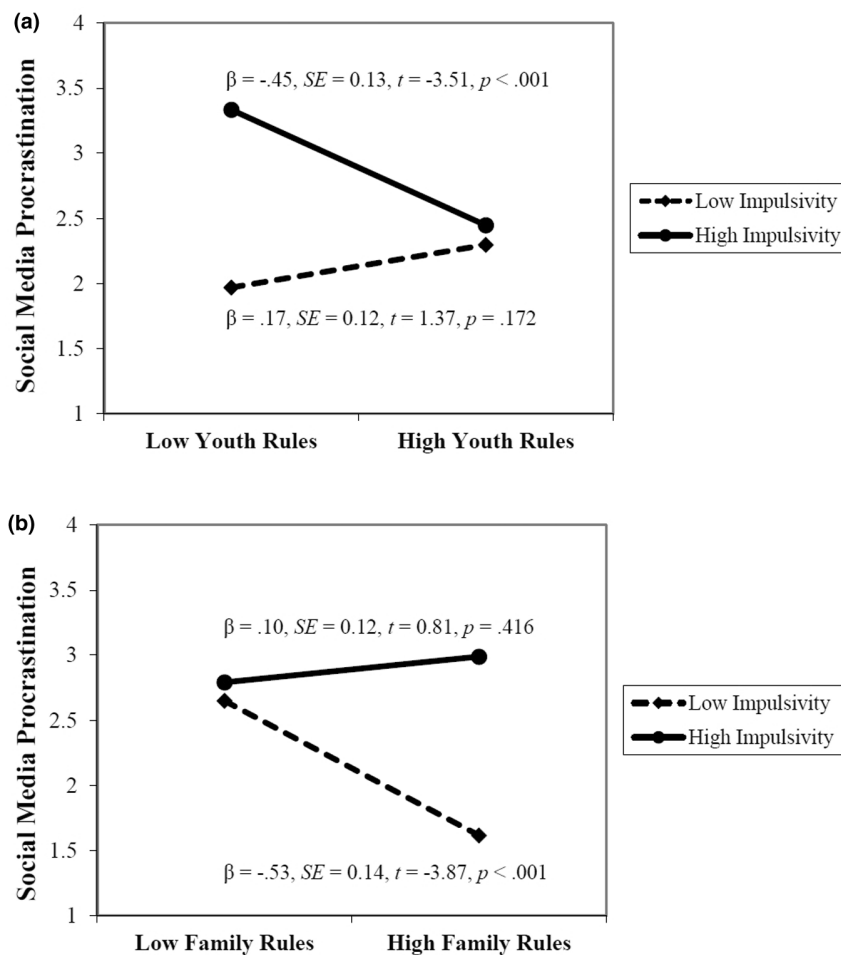


FIGURE 2 (a) Social Media Procrastination at ± 1 SD of Youth-Focused Rules and Impulsivity. (b) Social Media Procrastination at ± 1 SD of whole-family rules and impulsivity.

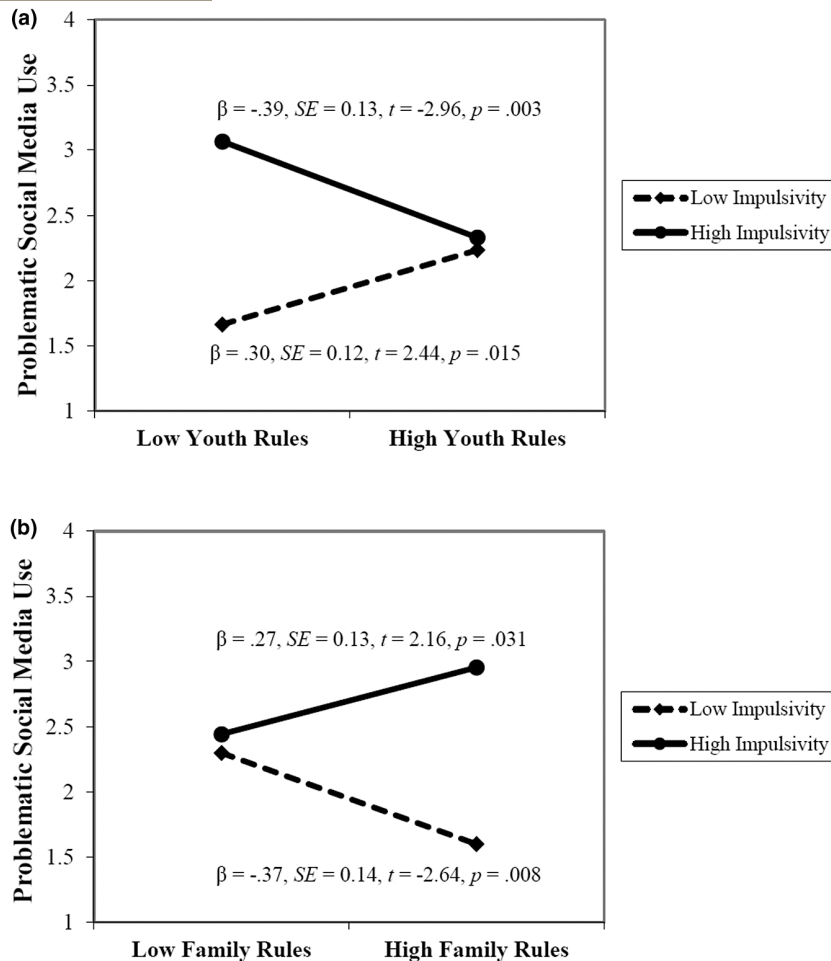


FIGURE 3 (a) Problematic social media use at ± 1 SD of youth-focused rules and impulsivity. (b) Problematic social media use at ± 1 SD of whole-family rules and impulsivity.

problematic social media use for youth with lower impulsivity, and whole-family rules positively predicted problematic use for youth with higher impulsivity.

DISCUSSION

Research on examining parental restrictions on adolescents' screen and social media use is inconsistent as to whether such limits predict reduced difficulties (e.g., less dependency symptoms or academic/social difficulties). Several prior studies indicate that complications might arise when parents focus exclusively on limiting youth screen use, without modulating their own behavior. The present research offers a deeper understanding of screen regulation for adolescents by considering various approaches to rulemaking (i.e., youth-focused rules and whole-family rules), individual differences in impulsivity, and their respective interactions. To our knowledge, no study has directly contrasted “youth-focused” rules with rules that are applied to the “whole family,” nor examined whether the associations that these strategies hold with screen and social media difficulties depend on adolescents' individual differences. In this novel

comparison, we examined youth-focused and whole-family rules for screen use as reported by Chinese early adolescents, and the respective associations that these strategies held with social media procrastination and problematic social media use. Finally, we examined whether adolescents' tendencies to engage in impulsive social media behaviors moderated these associations. The results offer insights into how families can set limits on screen use that might promote healthy habits, and how parents can tailor their approaches to their children's specific needs and characteristics.

Prevalence of youth-focused rules and whole-family rules

Consistent with predictions (H1), adolescents reported youth-focused rules to be more common than whole-family rules, suggesting that Chinese parents sometimes attempt to regulate children's screen use without considering their own behaviors. This finding aligns with the traditional emphasis on parental authority in Chinese families (Chen, 2016), which obliges parents to supervise and regulate children's behaviors, while children are expected to show obedience (Yeh & Bedford, 2003).

In light of prior literature suggesting that parents' own problematic screen habits predict a range of youth psychosocial and screen-related adjustment difficulties (e.g., Geng et al., 2021; Kildare & Middlemiss, 2017; Liu et al., 2020; McDaniel, 2019), the favoritism toward youth-focused rules identified here suggests that educators and practitioners might begin conversations with concerned parents by assessing not only which kinds of screen rules exist, but also to whom those rules apply.

Youth-focused rules, whole-family rules, and social media difficulties

Partially supporting predictions (H2), whole-family rules negatively predicted social media procrastination, whereas youth-focused rules did not. Moreover, youth-focused and whole-family rules interacted to predict social media procrastination (RQ1). While the highest levels of procrastination occurred when both rule types were low, higher youth-focused rules only predicted lower procrastination when whole-family rules were low. In the presence of whole-family rules, there did not appear to be any additional benefit of youth-focused rules. While this seems to imply that youth-focused rules might be “better than nothing,” it also suggests that a whole-family approach could be more parsimonious for communicating expectations, with additional youth-focused rules holding little extra utility.

Together, the results provide evidence that whole-family rules might, in some cases, be a better fit for the Chinese context than restrictive practices focused only on regulating adolescents' behavior. When parents follow the same screen rules set for adolescents, they also have to execute appropriate self-regulation strategies (Radesky & Moreno, 2018); parents' modulation of their screen use to relieve stress or boredom likely provides important opportunities to model healthy habits, including avoiding the use of screens as a means of procrastination. Chinese youth also tend to incorporate parents into their own self-concepts (Pomerantz & Wang, 2009), which could promote their internalization of general family rules that parents also follow. Furthermore, when all family members agree to modulate their screen habits, they might communicate about existing expectations more freely and engage in healthier offline interactions that predict a range of positive psychosocial outcomes (McDaniel, 2019). Our measure of social media procrastination also indexed concrete behaviors that might be more easily subjected to parental supervision and regulation; limits on screen-based leisure at certain times and places might push adolescents to focus on necessary tasks (e.g., homework). In contrast, the lack of significant associations for problematic social media use could be because this scale focused on general difficulties and emotional responses that are more dependent on individual traits. Hence, instead of parental efforts, individual differences in characteristics such as impulsivity might be the predominant drivers of problematic social media use (Boer et al., 2021; Wartberg et al., 2021).

The role of impulsivity

As expected, tendencies toward impulsive social media behavior showed positive associations with both social media procrastination and problematic social media use (H3). This result echoes prior evidence that impulsivity might intensify adolescents' excessive screen use and social media-related risks (see Hussain & Starcevic, 2020 for a review). Adolescents with impulse control difficulties are more prone to distraction by negative emotions and experiences, and sometimes struggle with following through on original plans (Steel, 2007); when encountering more challenging activities, such as difficult homework, adolescents with weaker impulse control might attempt to escape this stress by procrastinating via social media (Meier et al., 2016; Wartberg et al., 2021). Additionally, highly impulsive youth check social media more often, post more frequently (Boer et al., 2021), and become more distressed when unable to use social media, all of which are symptoms of problematic social media use (Jelenchick et al., 2016).

Also in line with predictions (H4), impulsivity interacted with youth-focused and whole-family rules to predict social media difficulties. For adolescents reporting higher levels of social media impulsivity, youth-focused rules negatively predicted procrastination and problematic use (supporting H4a), whereas whole-family rules even predicted increased problematic use. This is similar to findings from South Korea suggesting that parents' youth-focused, restrictive practices were more beneficial for reducing online risks, but only for adolescents lower in self-control (Lee, 2013). These results imply that adolescents with greater difficulties in autonomously regulating online behavior might require screen limits that are tailored to their individual needs. Accordingly, youth-focused rules specifying when and where they can access screens, as well as conditions such as fulfillment of homework or chores, might motivate them to put digital devices aside. In contrast, whole-family rules, which are likely both more general and flexible, might fail to scaffold healthy habits for highly impulsive youth. Whole-family rules likely also provide more space for young people to make independent choices, but some might not be ready for this level of self-direction. Compared with youth-focused rules, whole-family rules might be less helpful for adolescents who struggle with autonomously regulating their screen and digital media behaviors.

Conversely, whole-family rules were negatively associated with social media difficulties among youth with lower impulsivity (supporting H4b). We also observed that adolescents lower in impulsivity actually reported *greater* problematic use in the context of more youth-focused rules. These findings imply that less-impulsive adolescents might benefit from egalitarian rule systems and a communal, whole-family approach to healthier screen habits. Youth who perceive themselves to be less impulsive online likely believe that they already have the capacity to manage their screen use, and hence deserve parental confidence and autonomy affordances (Moreno et al., 2019;

Padilla-Walker et al., 2016). Screen rules that apply equally to all family members can satisfy these adolescents' increasing demands for egalitarian relationships, whereas too many restrictions targeted at them might backfire. According to prior studies, Chinese adolescents might interpret specific youth-focused rules as a lack of parental trust, and as intrusive and over-controlling (Pomerantz & Eaton, 2000; Wang et al., 2007; Wang & Faldowski, 2014). This potentially interferes with the internalization of related values (Son & Padilla-Walker, 2021) and leads Chinese adolescents to conceal their behavior (e.g., Hawk, 2017; Liu, 2020), both of which might allow social media difficulties to metastasize. Taken together, communal screen rules applied to all family members might be more suitable for youth who exhibit lower levels of impulsive social media behavior.

Limitations and future research directions

There are some important limitations to this study. First, the design was cross-sectional, meaning that associations between screen rules and adolescents' social media difficulties cannot be interpreted as causal. Although our results suggest promising directions for future research on youth responses to different rulemaking approaches, intervention and longitudinal studies are needed to test the efficacy of these strategies in reducing problematic screen behaviors. Second, we considered the association between screen rules and social media difficulties only for adolescents. However, these approaches to rulemaking might also have different effects on parents' psychological well-being, as well as the larger family system. Further research that assesses parents' own screen habits and related adjustments is required to fill this gap. We also relied solely on youth self-reports of screen use rules. Although others have suggested that social desirability might color parents' reports of their regulatory efforts more than youth reports (D'Angelo & Moreno, 2019), a multi-informant approach would provide information about whether particular perspectives on rulemaking (or discrepancies between them) are more predictive of related screen and social media habits.

The present study utilized a measure of impulsivity specific to youth social media behavior, as opposed to a more general and context-free assessment of trait-level impulsivity. This choice was motivated by recent research showing that impulse-control deficits can be specific to screen-based cues (Gao et al., 2020; Wegmann et al., 2020). We also reasoned that youth perceptions of their impulsivity in the same domain as the parental restrictions of interest would be most relevant to their acceptance of those rules. While our results regarding youth-focused restrictions were highly similar to past research that utilized broader, multidimensional assessments of self-control (Lee, 2013), additional research should examine whether the differences between youth-focused

and whole-family rules found in the present study depend on adolescents' views of their abilities in the specific realm of social media. It is also important to assess the ways in which parents' views on their children's general versus social media-specific impulse control abilities, as well as other dimensions of self-control, predict when and which types of restrictions they set for youth.

We have argued that stronger orientations toward interdependence in Chinese culture might make adolescents particularly amenable to whole-family approaches to rulemaking, even as greater emphases on hierarchical parental authority and youth academic achievement might predispose parents to narrowly focus on regulating youth behavior. The present findings should be replicated in other cultural contexts, particularly those with stronger orientations toward youth autonomy support and democratic styles of family interaction. Along with these aspects of family relationships, culture-specific elements of the Chinese social media landscape might affect family members' patterns of screen use (Hawk, 2014). For example, Chinese adolescents' inability to easily access several of the major global social media platforms (e.g., Facebook, Twitter, Instagram) has led to a strong reliance on local alternatives; Weixin (WeChat), the largest contemporary mobile social media app in China, is a multi-functional platform that is relatively indispensable to most citizens' daily lives. In addition to entertainment components such as feeds of individual friends' posts, it serves messaging, translation, and contactless payment functions that might blur the boundaries between socializing, leisure, and (school)work activities for both youth and adults. Compared to using multiple apps that each fulfill particular entertainment and communication niches, this ubiquity and multi-functionality could potentially affect both the types of screen rules that parents implement and family members' abilities to align their expectations. While Chinese youth's hedonic and social motives for screen use are similar to those found among Western adolescents, they also report relatively high instrumental motives (i.e., schoolwork) that do not predict problematic behavior (Meng et al., 2020). Future studies should more closely examine rules that might exist around particular screen use motivations and whether these finer distinctions offer additional insights into associations with screen use difficulties.

Finally, the data utilized in this study were collected just prior to the COVID-19 pandemic, a global event that forced families to recalibrate the balance between online and offline life. The use of mobile devices for youth education, parents' work, and socializing increased sharply from 2020 to 2022 (Madigan et al., 2022; Pandya & Lodha, 2021). Even after lockdowns in various countries have ended, norms and expectations around family members' screen and social media use may have undergone fundamental alterations (e.g., hybrid learning and more flexible work-from-home arrangements) that necessitate further study in the postpandemic era. China's "zero-COVID" strategy, in particular, resulted in repeated and

unpredictable neighborhood- and city-wide isolation measures until the policy was discontinued in early 2023; the youth and parental screen habits that might have become entrenched over this period likely require novel intervention approaches that can encourage healthy behavior at the household level. In this context, additional research should examine whether COVID-related changes in screen use have altered the tendency to set (or relax) certain rules, acceptance, and motivation to enforce those rules, and the outcomes associated with youth-focused or whole-family expectations for screen use.

CONCLUSION

Despite these limitations, the present study is one of the first to look beyond general parental restrictions on adolescents' screen time to examine the different ways that they might apply these regulatory efforts. I comparing youth-focused screen rules that parents tailor specifically to adolescents with “whole-family” rules that parents also agree to follow, our study suggests that parental rule participation might be crucial to understanding adolescents' screen-related adjustment. Furthermore, the consideration of individual differences (i.e., youth impulsive social media behavior) in the current study allows novel insights into the associations between different types of parenting approaches and adolescent screen and social media habits. Our results demonstrate that while adolescents generally benefit from whole-family approaches, adolescents with higher levels of impulsive social media behavior may still require rules that address their individual challenges. Findings in the current study can help to resolve inconsistent findings in prior literature regarding the utility of restrictive screen rules for adolescents. Distinguishing between the ability of these two approaches to predict youth screen and social media habits, and how adolescents' individual differences might qualify these associations, can serve as the foundation for future intervention studies that help families to construct screen use rules to meet their specific needs.

ACKNOWLEDGEMENTS

The work described in this paper was partially supported by the Research Fund for Junior Faculty in Human and Social Science, Shenzhen University (Project No. QNFC1903) and a fellowship award from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No. CUHK PDFS2122-4H05). The authors wish to thank Anthony R. Abordo for assistance with scale translations.

CONFLICTS OF INTEREST

We have no conflicts of interest to disclose.

DATA AVAILABILITY STATEMENT

The data set used in this study is available on request.

ORCID

Skyler T. Hawk  <https://orcid.org/0000-0002-9010-5556>

Ying Wang  <https://orcid.org/0000-0003-3524-8674>

Natalie Wong  <https://orcid.org/0000-0002-5903-4219>

Yan Zhang  <https://orcid.org/0000-0002-2398-0369>

ENDNOTE

¹ To address one Reviewer's concerns that social media procrastination, problematic social media use, and impulsive social media behavior might contain overlapping features, we examined the distinctiveness of these constructs via Confirmatory Factor Analysis. Some specific errors of individual items within each construct were allowed to correlate, based on modification indices. The model achieved satisfactory fit, $\chi^2(260) = 418.76$, $\chi^2/df = 1.61$, CFI = .95, TLI = .94, RMSEA = .06, SRMR = .06. All items achieved satisfactory loadings (β s ranging from .51–.83). We therefore included these three separate constructs in our analysis.

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Arundell, L., Parker, K., Timperio, A., Salmon, J., & Veitch, J. (2020). Home-based screen time behaviors amongst youth and their parents: Familial typologies and their modifiable correlates. *BMC Public Health*, 20, 1–11. <https://doi.org/10.1186/s12889-020-09581-w>
- Benrazavi, R., Teimouri, M., & Griffiths, M. D. (2015). Utility of parental mediation model on youth's problematic online gaming. *International Journal of Mental Health and Addiction*, 13, 712–727. <https://doi.org/10.1007/s11469-015-9561-2>
- Boer, M., Stevens, G. W. J. M., Finkenauer, C., & Eijnden, R. J. J. M. (2021). The course of problematic social media use in young adolescents: A latent class growth analysis. *Child Development*, 93, e168–e187. <https://doi.org/10.1111/cdev.13712>
- Capri, T., Gugliandolo, M. C., Iannizzotto, G., Nucita, A., & Fabio, R. A. (2021). The influence of media usage on family functioning. *Current Psychology*, 40, 2644–2653. <https://doi.org/10.1007/s12144-019-00204-1>
- Chen, W. W. (2016). The relations between filial piety, goal orientations and academic achievement in Hong Kong. *Educational Psychology*, 36, 898–915. <https://doi.org/10.1080/01443410.2015.1008404>
- CNNIC. (2021a). *The 2020 China report on juveniles' use of internet*. <http://www.cnnic.net.cn/hlwfzyj/hlwxzbg/qsnbg/202107/P020210720571098696248.pdf>
- CNNIC. (2021b). *The 47th China statistical report on internet development*. <http://www.cnnic.net.cn/hlwfzyj/hlwxzbg/hlwtjbg/202109/P020210915523670981527.pdf>
- Collier, K. M., Coyne, S. M., Rasmussen, E. E., Hawkins, A. J., Padilla-Walker, L. M., Erickson, S. E., & Memmott-Elison, M. K. (2016). Does parental mediation of media influence child outcomes? A meta-analysis on media time, aggression, substance use, and sexual behavior. *Developmental Psychology*, 52, 798–812. <https://doi.org/10.1037/dev0000108>
- Cranor, L. F., Durity, A. L., Marsh, A., & Ur, B. (2014). Parents' and teens' perspectives on privacy in a technology-filled world. In *Proceedings of the tenth USENIX conference on usable privacy and security*. (pp. 19–35).
- Cudo, A., Torój, M., Demczuk, M., & Francuz, P. (2019). Dysfunction of self-control in Facebook addiction: Impulsivity is the key. *Psychiatric Quarterly*, 91, 91–101. <https://doi.org/10.1007/s1126-019-09683-8>
- Cui, J., Lee, C., & Bax, T. (2018). A comparison of 'psychosocially problematic gaming' among middle and high school students in China and South Korea. *Computers in Human Behavior*, 85, 86–94. <https://doi.org/10.1016/j.chb.2018.03.040>
- D'Angelo, J. D., & Moreno, M. A. (2019). Not at the dinner table—take it to your room: Adolescent reports of parental screen time rules. *Communication Research Reports*, 36, 426–436. <https://doi.org/10.1080/08824096.2019.1683528>

- Du, J., van Koningsbruggen, G. M., & Kerkhof, P. (2018). A brief measure of social media self-control failure. *Computers in Human Behavior, 84*, 68–75. <https://doi.org/10.1016/j.chb.2018.02.002>
- Fam, J. Y., Männikkö, N., Juhari, R., & Kääriäinen, M. (2022). Is parental mediation negatively associated with problematic media use among children and adolescents? A systematic review and meta-analysis. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences du Comportement.*, 55, 89–99. <https://doi.org/10.1037/cbs0000320>
- Farley, J. P., & Kim-Spoon, J. (2014). The development of adolescent self-regulation: Reviewing the role of parent, peer, friend, and romantic relationships. *Journal of Adolescence, 37*, 433–440. <https://doi.org/10.1016/j.adolescence.2014.03.009>
- Foulkes, L., & Blakemore, S.-J. (2018). Studying individual differences in human adolescent brain development. *Nature Neuroscience, 21*, 315–323. <https://doi.org/10.1038/s41593-018-0078-4>
- Francis, K., Scholten, H., Granic, I., Lougheed, J., & Hollenstein, T. (2021). Insights about screen-use conflict from discussions between mothers and pre-adolescents: A thematic analysis. *International Journal of Environmental Research and Public Health, 18*, 4686. <https://doi.org/10.3390/ijerph18094686>
- Frijns, T., Keijsers, L., Branje, S., & Meeus, W. (2010). What parents don't know and how it may affect their children: Qualifying the disclosure-adjustment link. *Journal of Adolescence, 33*, 261–270. <https://doi.org/10.1016/j.adolescence.2009.05.010>
- Gao, L., Zhang, J., Xie, H., Nie, Y., Zhao, Q., & Zhou, Z. (2020). Effect of the mobile phone-related background on inhibitory control of problematic mobile phone use: An event-related potentials study. *Addictive Behaviors, 108*, 106363. <https://doi.org/10.1016/j.addbeh.2020.106363>
- Gardner, T. W., Dishion, T. J., & Connell, A. M. (2008). Adolescent self-regulation as resilience: Resistance to antisocial behavior within the deviant peer context. *Journal of Abnormal Child Psychology, 36*, 273–284. <https://doi.org/10.1007/s10802-007-9176-6>
- Geng, J., Lei, L., Ouyang, M., Nie, J., & Wang, P. (2021). The influence of perceived parental phubbing on adolescents' problematic smartphone use: A two-wave multiple mediation model. *Addictive Behaviors, 121*, 106995. <https://doi.org/10.1016/j.addbeh.2021.106995>
- Gower, A. D., & Moreno, M. A. (2019). A pilot online intervention for problematic internet use symptoms among early adolescents. Poster for *Society for Research in child development*, Baltimore, MD USA.
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use, 10*, 191–197. <https://doi.org/10.1080/14659890500114359>
- Grusec, J. E., & Davidov, M. (2010). Integrating different perspectives on socialization theory and research: A domain-specific approach. *Child Development, 81*, 687–709. <https://doi.org/10.1111/j.1467-8624.2010.01426.x>
- Hawk, S. T. (2014). Cross-cultural and cross-platform differences in youths' social networking site behavior. *Adolescent Medicine: State of the Art Reviews, 25*, 533–541.
- Hawk, S. T. (2017). Chinese adolescents' reports of covert parental monitoring: Comparisons with overt monitoring and links with information management. *Journal of Adolescence, 55*, 24–35. <https://doi.org/10.1016/j.adolescence.2016.12.006>
- Hefner, D., Knop, K., Schmitt, S., & Vorderer, P. (2019). Rules? Role model? Relationship? The impact of parents on their children's problematic mobile phone involvement. *Media Psychology, 22*, 82–108. <https://doi.org/10.1080/15213269.2018.1433544>
- Hussain, Z., & Starcevic, V. (2020). Problematic social networking site use: A brief review of recent research methods and the way forward. *Current Opinion in Psychology, 36*, 89–95. <https://doi.org/10.1016/j.copsyc.2020.05.007>
- Hwang, Y., & Jeong, S. H. (2015). Predictors of parental mediation regarding children's smartphone use. *Cyberpsychology, Behavior and Social Networking, 18*, 737–743. <https://doi.org/10.1089/cyber.2015.0286>
- Jelenchick, L. A., Hawk, S. T., & Moreno, M. A. (2016). Problematic internet use and social networking site use among Dutch adolescents. *International Journal of Adolescent Medicine and Health, 28*, 119–121. <https://doi.org/10.1515/ijamh-2014-0068>
- Kalmus, V., Blinka, L., & Ólafsson, K. (2015). Does it matter what mama says: Evaluating the role of parental mediation in European adolescents' excessive internet use. *Children & Society, 29*, 122–133. <https://doi.org/10.1111/chso.12020>
- Kang, H., Shin, W., & Huang, J. (2021). Teens' privacy management on video-sharing social media: The roles of perceived privacy risk and parental mediation. *Internet Research, 32*, 312–334. <https://doi.org/10.1108/intr-01-2021-0005>
- Keijsers, L., Branje, S. J. T., Vandervalk, I. E., & Meeus, W. (2010). Reciprocal effects between parental solicitation, parental control, adolescent disclosure, and adolescent delinquency. *Journal of Research on Adolescence, 20*, 88–113. <https://doi.org/10.1111/j.1532-7795.2009.00631.x>
- Kildare, C. A., & Middlemiss, W. (2017). Impact of parents mobile device use on parent-child interaction: A literature review. *Computers in Human Behavior, 75*, 579–593. <https://doi.org/10.1016/j.chb.2017.06.003>
- Koning, I. M., Peeters, M., Finkenauer, C., & Van Den Eijnden, R. J. J. M. (2018). Bidirectional effects of internet-specific parenting practices and compulsive social media and internet game use. *Journal of Behavioral Addictions, 7*, 624–632. <https://doi.org/10.1556/2006.7.2018.68>
- Larose, R., & Eastin, M. S. (2004). A social cognitive theory of internet uses and gratifications: Toward a new model of media attendance. *Journal of Broadcasting & Electronic Media, 48*, 358–377. https://doi.org/10.1207/s15506878jobjem4803_2
- Lee, S. J. (2013). Parental restrictive mediation of children's internet use: Effective for what and for whom? *New Media & Society, 15*, 466–481. <https://doi.org/10.1177/1461444812452412>
- Lee, S. J., & Chae, Y. G. (2012). Balancing participation and risks in children's internet use: The role of internet literacy and parental mediation. *Cyberpsychology, Behavior and Social Networking, 15*, 257–262. <https://doi.org/10.1089/cyber.2011.0552>
- Leng, Y., He, X., Zhu, B., Li, P., Xiao, C., & He, W. (2019). The craving and excitement of social networking sites addicts: Based on cue-reactivity. *Frontiers in Psychology, 10*, 1717. <https://doi.org/10.3389/fpsyg.2019.01717>
- Letzring, T. D., Block, J., & Funder, D. C. (2005). Ego-control and ego-resiliency: Generalization of self-report scales based on personality descriptions from acquaintances, clinicians, and the self. *Journal of Research in Personality, 39*, 395–422. <https://doi.org/10.1016/j.jrp.2004.06.003>
- Liu, Q., Wu, J., Zhou, Z., & Wang, W. (2020). Parental technofence and smartphone addiction in Chinese adolescents: The mediating role of social sensitivity and loneliness. *Children and Youth Services Review, 118*, 105434. <https://doi.org/10.1016/j.childyouth.2020.105434>
- Liu, Y. L. (2020). Maternal mediation as an act of privacy invasion: The association with internet addiction. *Computers in Human Behavior, 112*, 106474. <https://doi.org/10.1016/j.chb.2020.106474>
- Lukavská, K., Hrabec, O., Lukavský, J., Demetrovics, Z., & Király, O. (2022). The associations of adolescent problematic internet use with parenting: A meta-analysis. *Addictive Behaviors, 135*, 107423. <https://doi.org/10.1016/j.addbeh.2022.107423>
- Madigan, S., Eirich, R., Pador, P., McArthur, B. A., & Neville, R. D. (2022). Assessment of changes in child and adolescent screen time during the COVID-19 pandemic: A systematic review and meta-analysis. *JAMA Pediatrics, 176*, 1188–1198. <https://doi.org/10.1001/jamapediatrics.2022.4116>
- Matthes, J., Thomas, M. F., Stevic, A., & Schmuck, D. (2021). Fighting over smartphones? Parents' excessive smartphone use, lack of control over children's use, and conflict. *Computers in Human Behavior, 116*, 106618. <https://doi.org/10.1016/j.chb.2020.106618>
- McDaniel, B. T. (2019). Parent distraction with phones, reasons for use, and impacts on parenting and child outcomes: A review of the emerging research. *Human Behavior and Emerging Technologies, 1*, 72–80. <https://doi.org/10.1002/hbe2.139>
- Meeus, A., Eggermont, S., & Beullens, K. (2019). Constantly connected: The role of parental mediation styles and self-regulation in pre- and early

- adolescents' problematic mobile device use. *Human Communication Research*, 45, 119–147. <https://doi.org/10.1093/hcr/hqy015>
- Meier, A., Reinecke, L., & Meltzer, C. E. (2016). “Facebocrastination”? Predictors of using Facebook for procrastination and its effects on students' well-being. *Computers in Human Behavior*, 64, 65–76. <https://doi.org/10.1016/j.chb.2016.06.011>
- Meng, H., Cao, H., Hao, R., Zhou, N., Liang, Y., Wu, L., ... Zhang, J. (2020). Smartphone use motivation and problematic smartphone use in a national representative sample of Chinese adolescents: The mediating roles of smartphone use time for various activities. *Journal of Behavioral Addictions*, 9, 163–174. <https://doi.org/10.1556/2006.2020.00004>
- Moreno, M. A., Binger, K. S., Zhao, Q., & Eickhoff, J. C. (2021). Effect of a family media use plan on media rule engagement among adolescents: A randomized clinical trial. *JAMA Pediatrics*, 175, 351–358. <https://doi.org/10.1001/jamapediatrics.2020.5629>
- Moreno, M. A., Kerr, B. R., Jenkins, M., Lam, E., & Malik, F. S. (2019). Perspectives on smartphone ownership and use by early adolescents. *Journal of Adolescent Health*, 64, 437–442. <https://doi.org/10.1016/j.jadohealth.2018.08.017>
- Nielsen, P., Favez, N., Liddle, H., & Rigter, H. (2019). Linking parental mediation practices to adolescents' problematic online screen use: A systematic literature review. *Journal of Behavioral Addictions*, 8, 649–663. <https://doi.org/10.1556/2006.8.2019.61>
- Padilla-Walker, L. M., Coyne, S. M., & Collier, K. M. (2016). Longitudinal relations between parental media monitoring and adolescent aggression, prosocial behavior, and externalizing problems. *Journal of Adolescence*, 46, 86–97. <https://doi.org/10.1016/j.adolescence.2015.11.002>
- Pandya, A., & Lodha, P. (2021). Social connectedness, excessive screen time during COVID-19 and mental health: A review of current evidence. *Frontiers in Human Dynamics*, 3, 684137. <https://doi.org/10.3389/fhumd.2021.684137>
- Pomerantz, E. M., & Eaton, M. M. (2000). Developmental differences in children's conceptions of parental control: “they love me, but they make me feel incompetent”. *Merrill-Palmer Quarterly*, 46(1), 140–167. <http://www.jstor.org/stable/23093346>
- Pomerantz, E. M., & Eaton, M. M. (2001). Maternal intrusive support in the academic context: Transactional socialization processes. *Developmental Psychology*, 37, 174–186. <https://doi.org/10.1037//0012-1649.37.2.174>
- Pomerantz, E. M., & Wang, Q. (2009). The role of parental control in children's development in Western and east Asian countries. *Current Directions in Psychological Science*, 18, 285–289. <https://doi.org/10.1111/j.1467-8721.2009.01653.x>
- Radesky, J., & Moreno, M. A. (2018). How to consider screen time limits... for parents. *JAMA Pediatrics*, 172, 996. <https://doi.org/10.1001/jamapediatrics.2018.2550>
- Schnauber-Stockmann, A., Meier, A., & Reinecke, L. (2018). Procrastination out of habit? The role of impulsive versus reflective media selection in procrastinatory media use. *Media Psychology*, 21, 640–668. <https://doi.org/10.1080/15213269.2018.1476156>
- Smetana, J. G., Ball, C., Yau, J., & Wong, M. (2017). Effect of type of maternal control on American and Chinese children's evaluations of personal domain events. *Social Development*, 26, 146–164. <https://doi.org/10.1111/sode.12178>
- Son, D., & Padilla-Walker, L. M. (2021). Longitudinal associations among perceived intrusive parental monitoring, adolescent internalization of values, and adolescent information management. *Journal of Child and Family Studies*, 31, 48–60. <https://doi.org/10.1007/s10826-021-02114-y>
- Son, H. G., Cho, H. J., & Jeong, K. H. (2021). The effects of Korean parents' smartphone addiction on Korean children's smartphone addiction: Moderating effects of children's gender and age. *International Journal of Environmental Research and Public Health*, 18, 6685. <https://doi.org/10.3390/ijerph18136685>
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133, 65–94. <https://doi.org/10.1037/0033-2909.133.1.65>
- Sun, Y., Li, J. B., Oktaufik, M. P. M., & Vazsonyi, A. T. (2021). Parental attachment and externalizing behaviors among Chinese adolescents: The mediating role of self-control. *Journal of Child and Family Studies*, 31, 923–933. <https://doi.org/10.1007/s10826-021-02071-6>
- Tuckman, B. W. (1991). The development and concurrent validity of the procrastination scale. *Educational and Psychological Measurement*, 51, 473–480. <https://doi.org/10.1177/0013164491512022>
- Wachs, S., Costello, M., Wright, M. F., Flora, K., Daskalou, V., Maziridou, E., Kwon, Y., Na, E. Y., Sittichai, R., Biswal, R., Singh, R., Almendros, C., Gamez-Guadix, M., Gorzig, A., & Hong, J. S. (2021). “DNT LET ‘EM H8 U!’: Applying the routine activity framework to understand cyberhate victimization among adolescents across eight countries. *Computers & Education*, 160, 104026. <https://doi.org/10.1016/j.compedu.2020.104026>
- Wang, Q., Pomerantz, E. M., & Chen, H. (2007). The role of parents? Control in early adolescents? Psychological functioning: A longitudinal investigation in the United States and China. *Child Development*, 78, 1592–1610. <https://doi.org/10.1111/j.1467-8624.2007.01085.x>
- Wang, Y. C., & Faldowski, R. A. (2014). Beliefs in the legitimacy of decision authority among Chinese adolescents and parents: A person-centered approach. *Journal of Adolescence*, 37, 1121–1132. <https://doi.org/10.1016/j.adolescence.2014.07.019>
- Wartberg, L., Thomasius, R., & Paschke, K. (2021). The relevance of emotion regulation, procrastination, and perceived stress for problematic social media use in a representative sample of children and adolescents. *Computers in Human Behavior*, 121, 106788. <https://doi.org/10.1016/j.chb.2021.106788>
- Wegmann, E., Müller, S. M., Turel, O., & Brand, M. (2020). Interactions of impulsivity, general executive functions, and specific inhibitory control explain symptoms of social-networks-use disorder: An experimental study. *Scientific Reports*, 10, 1–12. <https://doi.org/10.1038/s41598-020-60819-4>
- Whelan, E., Najmul Islam, A. K. M., & Brooks, S. (2020). Applying the SOBC paradigm to explain how social media overload affects academic performance. *Computers & Education*, 143, 103692. <https://doi.org/10.1016/j.compedu.2019.103692>
- Williams, B. R., Ponesse, J. S., Schachar, R. J., Logan, G. D., & Tannock, R. (1999). Development of inhibitory control across the life span. *Developmental Psychology*, 35, 205–213. <https://doi.org/10.1037/0012-1649.35.1.205>
- Yeh, K. H., & Bedford, O. (2003). A test of the dual filial piety model. *Asian Journal of Social Psychology*, 6(3), 215–228. <https://doi.org/10.1046/j.1467-839x.2003.00122.x>
- Zahrai, K., Veer, E., Ballantine, P. W., & Peter de Vries, H. (2022). Conceptualizing self-control on problematic social media use. *Australasian Marketing Journal*, 30, 74–89. <https://doi.org/10.1177/1839334921998>
- Zhang, Y., Tian, S., Zou, D., Zhang, H., & Pan, C. W. (2022). Screen time and health issues in Chinese school-aged children and adolescents: A systematic review and meta-analysis. *BMC Public Health*, 22, 1–12. <https://doi.org/10.1186/s12889-022-13155-3>

How to cite this article: Hawk, S. T., Wang, Y., Wong, N., Xiao, Y., & Zhang, Y. (2023). “Youth-focused” versus “whole-family” screen rules: Associations with social media difficulties and moderation by impulsivity. *Journal of Research on Adolescence*, 00, 1–14. <https://doi.org/10.1111/jora.12873>

APPENDIX Full scales

A.1 | Youth-focused and whole-family rules

Many families have rules about where and when people can use devices with screens, such as phones, computers, and TVs. Sometimes parents make rules specifically for *their children*, and sometimes there are rules that are made by/for *the whole family*. Please respond to each of the statements below:

1. My parents make rules for *me* about “screen-free zones” where I am not allowed to use screens including TV, computers, and smartphones.
2. There are rules for *the whole family* about “screen-free zones,” where no one is allowed to use screens including TV, computers, and smartphones.
3. My parents make rules for *me* about *screen-free times* when I am not allowed to use screens including TV, computers, and smartphones.
4. There are rules for *the whole family* about *screen-free times* when no one is allowed to use screens including TV, computers, and smartphones.
5. My parents make rules for *me* about not interacting with screens at least 1 h before bedtime.
6. There are rules for *my whole family* about not interacting with screens at least 1 h before bedtime.

1 = *Definitely untrue*, 2 = *Mostly untrue*, 3 = *Neither true/untrue*, 4 = *Mostly true*, 5 = *Definitely true*.

A.2 | SOCIAL MEDIA PROCRASTINATION

1. I use social media although I have more important things to do.
2. I use social media although I know that I have an important task to complete.
3. I use social media although I had planned to get something done.
4. I use social media when I am procrastinating the upcoming work.
5. I use social media as a way of wasting time.
6. I use social media when I feel frustrated with other tasks or assignments.
7. Using social media often results in me postponing tasks that I do not want to do.
8. I promise myself I will start an important task/assignment and then end up using social media instead.

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Very Often*.

A.3 | PROBLEMATIC SOCIAL MEDIA USE

1. I have a hard time keeping my social media use under control.
2. I sometimes have to struggle with myself to limit my time online.
3. I have to keep using social media more and more to get my thrill.
4. I have tried unsuccessfully to cut down on the amount of time I spend online.
5. I feel my social media use is out of control.
6. I get tense, moody, or irritable if I cannot get on the Web when I want.
7. I often think about social media even when I am not online.
8. I sometimes try to conceal how much time I spend online from my family or friends.
9. I would go out of my way to satisfy my social media urges.

1 = *Strongly disagree*, 2 = *Somewhat disagree*, 3 = *Not sure*, 4 = *Somewhat agree*, 5 = *Strongly agree*.

A.4 | IMPULSIVE SOCIAL MEDIA BEHAVIOR

1. I tend to use social media on impulse.
2. I often say and do things on social media without stopping to think.
3. When I get bored, I like to stir up some excitement on social media.
4. I often get involved in things on social media I later wish I could get out of.
5. My behavior on social media can be misunderstood by others.
6. Sometimes I rather enjoy going against the rules and doing things on social media that I am not supposed to.
7. At times, I am tempted to do or say something on social media that others would think inappropriate.
8. Sometimes I cannot stop myself from doing or saying certain things on social media, even if I know they might be bad.

1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Agree*, 4 = *Strongly agree*.