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Level Up! Refreshing Parental Mediation Theory for Our Digital Media Landscape

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This article argues that parental mediation theory is rooted in television studies and must be refined to accommodate the fast-changing media landscape that is populated by complex and intensively used media forms such as video games, social media, and mobile apps. Through a study of parental mediation of children's video game play, we identify the limitations of parental mediation theory as applied to current trends in children's media use and suggest how it can be enhanced. This study seeks to improve parental mediation theory's descriptive and explanatory strength by identifying and outlining the specific activities that parents undertake as they impose their media strategies. We explain how restrictive, co-use, and active mediation are constituted by gatekeeping, discursive, diversionary, and investigative activities.

Keywords: Video Games, Parental Mediation, Restrictive Mediation, Active Mediation, Coplaying.

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Children are keen media consumers and parents are primarily tasked with guiding their children's media use. Parental mediation theory has sought to understand and theorize about parental mediation efforts so as to better inform parents, educators, and policy makers. However, despite dramatic transformations in the media landscape over the past few decades, parental mediation theory remains stubbornly rooted in a paradigm that emerged when television viewing was a fresh and novel medium. This article proposes specific ways in which parental mediation theory can be refreshed and refined to better reflect the rich and intense media landscape that children inhabit today. We will begin with a comprehensive review of parental mediation theory and identify its key limitations in the face of change. We will then propose the refinement to the framework, drawing on evidence from our dyadic study of parental mediation of video games. In so doing, we aim to highlight the inadequacies of parental mediation theory in its current form and instead identify

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and outline the specific gatekeeping, discursive, diversionary, and investigative activities that parents undertake as they impose their mediation strategies. We then explain how restrictive, co-use, and active mediation are constituted by these four types of mediation activities that are used in dynamic combination with each other depending on the overarching mediation strategy parents choose to employ. By providing more detailed explication of the specific activities parents perform to enact and support parental mediation, and by uncovering parental motivations for engaging in these mediation activities, our study seeks to enhance the descriptive ability and explanatory power of parental mediation theory (Baran, 2009; Griffin, 2009). We believe that this four-activity framework supplements *and* complements parental mediation theory to offer a robust conceptual apparatus that can capture the complexities of the digital media landscape enveloping families today.

Parental mediation theory

Parental mediation is defined as the strategies that parents introduce to maximize the benefits and minimize the risks (potential negative impacts) of media influence (Kirwil, 2009; Shin & Huh, 2011; Zaman, Nouwen, Vanattenhoven, de Ferrerre, & Van Looy, 2016). The term first appeared "in the 1980s when deregulation was in effect [in the United States] and standards of children's television was low" (Mendoza, 2009, p. 30). Parental mediation theory therefore emerged from a media effects paradigm, and originally classified parental interventions into children's television consumption as restrictive, active, and co-use activities (Clark, 2011; Corder-Bolz, 1980; Horton & Santogrossi, 1978). Since then, parental mediation theory as originally conceived for children's television viewing has been intensively applied to a broad range of media that have emerged over time including Internet use and video games (Bybee, Robinson, & Turow, 1982; Livingstone & Helsper, 2008; Nathanson, 2008; Nikken & Jansz, 2003; Shin & Huh, 2011; Valkenburg, Krcmar, Peeters, & Marseille, 1999). For example, research on parental mediation of video gaming has primarily adopted the frameworks used for television viewing (Chakroff & Nathanson, 2009). This approach prima facie appears reasonable for two key reasons: First, parents' positive or negative views about television content seem to be congruent with their opinions of game content (Kutner, Olson, Warner, & Hertzog, 2008; Nathanson, 2008; Nikken & Jansz, 2003, 2006); and second, studies indicate that parents actually apply their mediation strategies for television viewing to video game playing (Funk, 2005; Kirsh, 2009; Entertainment Software Rating Board, n.d.).

Be that as it may, there are critical differences between watching television and playing video games or surfing the Internet that necessitate adaptations in parental mediation practices (Chakroff & Nathanson, 2009; Kutner et al., 2008; Nikken & Jansz, 2003, 2006; Shin & Huh, 2011). With the greater complexity of the current digital media landscape and its manifold affordances for interactivity, immersive virtual environments, augmented reality, mediated communication, social networking, and so on, parental mediation strategies that are grounded in television viewing are significantly stretched and challenged. For example, playing video games is more

interactive in nature and far more immersive than watching television (Nikken & Jansz, 2006). Consequently, violent effects of video gaming tend to be more salient than those of television watching, for which active mediation discussions alone may not mitigate any adverse effects (Anderson et al., 2010). Moreover, Internet-enabled video games provide the opportunity for socialization with strangers in cyberspace. Communication with unknown contacts presents particular risks that require more strategic parental involvement than merely restrictive mediation and/or coplaying (Jiow & Lim, 2012; Eklund & Bergmark, 2013; Kirwil, 2009; Kutner et al., 2008).

Using video gaming as a media form that embodies the spectrum of complexities inherent in today's digital media landscape, we will further highlight other critical differences between television viewing and video gaming, so as to identify limitations in the prevailing restrictive, active and co-use framework of parental mediation. Video games, defined as "an electronic or computerised game played by manipulating images on a video display or television (TV) screen" (Prato, Feijoo, Nepelski, Bogdanowicz, & Simon, 2010, p. 17), have become one of the most popular leisure activities among young people (Funk, 2009). However, the fast-moving video game industry has consistently introduced new content genres, novel forms of game play, and fresh possibilities for player-to-player and player-to-game interaction. With the growing ubiquity of the Internet and cloud-enabled devices in the home that support video game play, new concerns have emerged and existing fears amplified with regard to the impact of video games on players, particularly children. Moreover, the enhanced affordances of portability, perpetuity (multitasking) and pervasiveness of video games have placed a strain on parental mediation efforts (Jiow & Lim, 2012). Yet, parental mediation studies have not deviated significantly from concepts developed during the television era, and have not adequately captured parental adaptations to variances and emergent practices within the video gaming space (Clark, 2011; Nikken & Jansz, 2014; Zaman et al., 2016). Hence, this article seeks to refine parental mediation so as to improve the theory's descriptive and explanatory strength in light of newer media genres.

Restrictive mediation is a strategy that involves parents setting the family's rules and boundaries for media consumption. Restrictive practices in video gaming have been identified as active monitoring, and using rules and regulations to manage the child's video gaming (Nikken & Jansz, 2003, 2006). Parents may impose rules relating to the duration and strategic times of usage, seeking parental approval, identifying permissible games, or setting conditions to be fulfilled before game play is permitted, for example, that the child has completed his/her school work or household chores (also known as behavior contingency; Hogan, 2001; Kutner et al., 2008; Nikken & Jansz, 2006). While restrictive mediation of television viewing is fairly straightforward because parents can take guidance from television programme classifications, watersheds, and safe harbors, video games come in a greater diversity of genres and are self-selected rather than viewed according to broadcasters' predetermined schedules. Restrictive mediation of video games therefore requires parents to undertake

fact-finding about game genres and game content before actually setting rules and regulations for their children as to which games are permissible and if so, for how long. As Nikken and Jansz (2003, 2006) argued, "acquiring information about a videogame and reading about game content before allowing children to play" (Nikken & Jansz, 2006, p. 191) should be included as part of the restrictive mediation construct. Hence, restrictive mediation as conceived for television viewing needs to be refined to take into account the relative complexity of newer media such as video games.

Co-use mediation refers to approaches where the parent and child engage in media use together, and this togetherness enhances the effect of media content on children (Nathanson, 2002, 2008). Specifically, coplaying is the term used to refer to playing video games with the child (Nikken & Jansz, 2003, 2006; Shin & Huh, 2011). However, in many previous studies, no clear distinction is made between coviewing/co-use and active mediation; and parents have been observed to slip in some opinions during co-use even though opinion sharing is meant to be a hallmark of active mediation (Chakroff & Nathanson, 2009; Mendoza, 2009). The definitional clarity of current constructs can therefore be improved. As well, unlike television viewing (which can be an impromptu, casual activity that parents and children engage in jointly), video gaming studies show that parents rarely engage in coplaying because it tends to be a more deliberate, planned activity (Eklund & Bergmark, 2013; Kutner et al., 2008; Nikken & Jansz, 2006; Oosting, IJsselsteijn, & de Kort, 2008). Indeed, given these typical situational contexts surrounding video game playing, prior studies have found that coplaying of video games by parents and children is difficult to execute and hardly practiced. The motivations for coplaying are also more complex than previously assumed. Kutner et al.'s study (2008) strongly points to the fact-finding intent of parents when playing video games with their children, instead of merely seeking to engage in a shared activity. This observation was also echoed by findings from the Nielsen Games study (2008). As a theoretical construct therefore, coplaying has inherent difficulties that constrain its descriptive abilities (Eklund & Bergmark, 2013; Kutner et al., 2008; Nikken & Jansz, 2006; Oosting et al., 2008).

Active mediation is in turn theorized to center around parent–child discussions on media use and content (Chakroff & Nathanson, 2009). Specifically, for video gaming, it refers to parents' active efforts to process, interpret, and translate video gaming content or activities for their children (Nikken & Jansz, 2003, 2006). However, the term active mediation fails to convey specifically the purpose of the conversational process and terms such as "instructive," "evaluative," and "interpretive" have been used to further sharpen the concept of active mediation (Eastin, Greenberg, & Hofschire, 2006; Kirwil, 2009). Even with these refinements though, there is insufficient specificity as to what parent–child discussions in active mediation involve. With the complexity of the fast-changing video game market, parents encounter significant challenges when they seek to understand the games their children are playing and they may not even have enough basic knowledge to undertake instructive, evaluative, and/or interpretive mediation. Hence, the concept of active mediation needs more

careful refinement before it can be usefully applied to newer and more complex media such as video games.

Limitations and inadequacies

As the preceding discussion shows, the existing parental mediation framework has fundamental inadequacies when applied to more interactive media such as websites, social media, mobile apps, and video games. Furthermore, previous research suggests that parents have adapted their mediation practices to keep up with changes in the media landscape. However, these adaptations are neither taken into account nor well-reflected in the current framework. Notably, prior research indicates that there is now a greater requirement for, and emphasis on, monitoring activities which have hitherto been classified under restrictive mediation (Eastin et al., 2006; Kirwil, 2009; Nikken & Jansz, 2003, 2006; Oosting et al., 2008). Yet, parental monitoring need not necessarily lead to restrictive mediation but may instead facilitate better parent–child discussions that should be considered a form of active mediation. For video gaming in particular, parents do not merely monitor their children but have been seen to apprise themselves actively of specific games. Indeed, extant research indicates that parents use game classification guides and content descriptors such as ESRB and PEGI ratings to decide on appropriate games for their children (Piotrowski, 2007; Entertainment Software Rating Board, n.d.; Pan European Game Information, n.d.)—an increasingly prevalent mediation practice termed "game rating checking" (Shin & Huh, 2011, p. 1). The current parental mediation framework also fails to capture other parental interventions that are not media-related, such as encouraging children to explore alternative activities (Eklund & Bergmark, 2013). For example, participation in extracurricular or religious activities is apparently effective ways in which parents can guide teens and decrease their engagement in potentially problematic behaviors (Skoien & Berthelsen, 1996), including perhaps excessive video game play.

Methodologically, the existing parental mediation framework also suffers from limitations when extended to video games. As discussed earlier, the rapid evolution of video games necessitates that parents adapt their mediation techniques accordingly. Such adaptations that fall outside the current conceptual framework are best investigated through more exploratory, qualitative techniques. However, parental mediation research has tended to use quantitative surveys that may not allow for a more nuanced understanding of mediation practices (Bybee et al., 1982; Eastin et al., 2006; Kirwil, 2009; Livingstone & Helsper, 2008; Nathanson, 2002; Nikken & Jansz, 2003, 2014; Shin & Huh, 2011; Valkenburg et al., 1999; Warren, 2001).

In a bid to address the existing parental mediation framework's conceptual and methodological inadequacies in light of the current digital media landscape, we focused on video games as the medium that best represents the complexity of the landscape, and sought to answer the following questions:

RQ1: How is parental mediation of video games practised?

RQ2: Besides restrictive mediation, coplaying and active mediation, what mediation practices do parents employ for video games?

Method

To obtain a more comprehensive perspective of parental mediation, we solicited the views of parents and children through interviews with parent–child dyads. Children aged 12 to 17, who play First Person Shooter (FPS) or Massively Multiplayer Online Role Playing games (MMORPG), were recruited together with their parent. Of the different video game genres available, FPS and MMORPGs elicit the greatest societal concerns (Elliott, Golub, Ream, & Dunlap, 2012; Jansz, 2005; Malliet & Meyer, 2005). We focused on youths aged 12 to 17, because video game playing among young people peaks during this age range—which also coincides with the developmental stage where adolescents begin to exhibit individuation through negotiating and asserting their rights (Funk, 2009; Griffiths, Davies, & Chappell, 2004; Rideout, Foehr, & Roberts, 2010; Smetana, 2011). Hence, parents of children fitting such criteria (age and game genre) are arguably more likely to exercise mediation. Singapore is an appropriate location for study, in part because of the pervasive use of video games among its adolescents (Baker, 2010; Choo et al., 2010; Khoo, Hawkins, & Voon, 2005), and the nation's aggressive push for Internet connectedness and the incentivizing of video gaming proficiency among its citizens (Infocomm Development Authority of Singapore, n.d.-a, n.d.-b; Loh, 2011; Oo, 2011; Seow, 2012; Tan, 2009; Ting, 2010), alongside evidence of parental concerns about the adverse impact of video games on children (Choo et al., 2010; Chua & Poon, 2010; Oo, 2007, 2009).

The interviews were conducted between September 2012 and September 2013 after ethical approval was granted by the National University of Singapore's Institutional Review Board following a comprehensive review of the research protocol including the consent process; interview guide; confidentiality safeguards; and procedures pertaining to data gathering, storage, and analysis. Interviews are ideal for exploring the full range of parental mediation techniques and capturing nuances, as they allow for probing and clarification (Lindlof, 2002; Wimmer & Dominick, 2011). The interview guide was developed from a comprehensive review of parental mediation literature, pooling together relevant questions used in previous studies, along with the inclusion of new questions that we pilot tested. We engaged a research company for participant recruitment (via purposive and snowball sampling procedures), while we conducted interviews by the authors themselves. The final sample comprised 41 parent–child dyads. Face-to-face interviews were conducted in the participants' homes, thereby allowing us to observe the physical settings in which video gaming took place within the home. We interviewed parents and children separately to avoid mutual influence of answers. As English is the lingua franca in Singapore, all interviews were conducted in English and digitally recorded before being transcribed into Microsoft Word documents. On average, each interview lasted between 60 to 90 minutes and generated 16 pages of transcripts. We then analyzed the transcripts

using NVivo software, adopting a concept coding approach, where themes were rigorously reviewed and refined (Bazeley, 2013). The data was coded by two independent researchers, and an interrater reliability test was performed on the earlier and later interviews that accounted for more than 30 percent of the respondents (Bazeley, 2013).

Findings and discussion

Our findings indicate that the parents' mediation activities did not fall into clearly demarcated categories that approximate restrictive, coplaying, and active mediation. Instead, we found that parents engage in a range of mediation activities that they used in a dynamic combination that varied according to several factors including, for the child: personality and behavior; gaming activity and preferences; and for the parent: parenting approach, lifestyle constraints, and prior experience with and knowledge of video games. Rather than viewing parental mediation as broad monolithic categories therefore, we propose that it is more productive to view mediation as a variable composite of activities that are undertaken in fluid combinations. We identified four dominant mediation activities: gatekeeping, diversionary, discursive, and investigative. These terms were developed after the first few interviews were completed and are defined in Table 1. While the overall intercoder reliability had a kappa coefficient of .89 and percentage agreement of 99.2%, it would be useful to observe intercoder reliability for each of the newly developed concepts (Creswell, 2011; Elliott & Woodward, 2007; McBurney, 2007; Wimmer & Dominick, 2011). The intercoder reliability is highlighted for newly developed concepts (see Table 1).

Our findings indicate that when parents exercise mediation, they tend not to utilize any one particular mediation activity in isolation but engage in a concurrent application of multiple mediation activities that are selectively applied depending on the circumstances. The four activities we identified are gatekeeping, discursive, investigative, and diversionary activities.

Gatekeeping activities

Gatekeeping activities refer to actions parents take to regulate their children's exposure to video gaming. Our interview findings show that these regulatory activities typically take the form of rules and restrictive practices. First, parents set rules for *when* the child can play video games. Typically, parents favor video gaming during school holidays or after school examinations. During the school term, they typically impose rules for children to play during weekends, or at specific times, and not too late into weekday nights. Second, these parents typically set limits on the duration of video game play, although these limits may be raised during holidays, after exams, or on weekends. Third, parents exercise access restrictions to control media consumption either through software, for example, installing passwords and filters, or even hiding physical game device components (e.g., power cables, Internet modems, etc.). Another avenue for access restriction was disallowing children from purchasing video

Table 1 Coding Results for Parental Mediation Activities

Mediation Process	Definition	Kappa Coefficient	Intercoder Agreement
Gatekeeping	• Activities parents undertake to regulate their children's exposure to video gaming • *For example, rules and regulations on time and duration of game play, permissible game content, and so on*	0.81	98.24
Discursive	• Discussions between parents and children about video gaming • *For example, imparting financial wisdom about video game and in-game purchases, sharing values that guide game play and selection*	0.81	98.42
Investigative	• Information-seeking and skill acquisition activities that parents undertake to better manage their parental mediation • *For example, consulting friends, relatives, game retailers about specific games and gaming in general, checking game rating databases and media sources such as newspapers and the Internet, attending public parenting talks, monitoring children's game play, and so on*	0.86	98.70
Diversionary	• Parents' active efforts to intentionally direct their children away from video gaming and encourage them to pursue alternative activities • *For example, encouraging children to engage in sports, musical, outdoor activities, and so on*	0.75	99.41

games and in-game equipment and accessories. Fourth, parents impose behavior contingency by insisting that obligations such as homework and chores be completed prior to video gaming. Fifth, parents introduce rules about parties with whom the child can interact during video gaming. Typically, playing with online strangers and friends who are known to be compulsive gamers is forbidden, but gaming with relatives and family members is encouraged:

> 15-year-old FPS gamer boy with 48-year-old father: If my friends are … kind of like more compulsive gamers, then they (my parents) won't allow me to play with them.

Sixth, the parent respondents impose content restrictions for video games, often prohibiting games that are too violent or not age appropriate.

While these different activities have restrictive effect, we prefer to employ the term "gatekeeping activities" instead of restrictive mediation because parents recognize that children want to play video games and do not wish to ban the medium wholesale. Hence, through gatekeeping activities, parents can actively manage their children's relationship with video gaming by dynamically opening and closing the "gate" to regulate access as circumstances allow. Notably, however, and consistent with prior literature, this study found no evidence of parents proactively encouraging their children to play video games (Kutner et al., 2008; Nikken & Jansz, 2006; Oosting et al., 2008). Indeed, none of the parents in this study encouraged their children to play more, or to pick up video games in the first instance. Rather, the prevailing situation is one of allowing the child to play by relaxing the rules on when and for how long they are allowed to play. Such relaxation of restrictions was also motivated by an appreciation that their children would be disadvantaged in peer socialization if they were completely in the dark about video games.

However, the practice of gatekeeping is highly nuanced. While the more *laissez faire* parents would simply have guidelines for the child, stricter parents would use corporal punishment or written parent–child contracts pertaining to video gaming to ensure adherence.

> 42-year-old mother of 17-year-old FPS gamer boy: You have a copy, I have a copy, both of us sign, my husband signs, three persons sign, everybody signs. Then, it's just like a contract between us.

Discursive activities

Discursive activities refer to the discussions between parents and children about video gaming. Our findings reveal that such discussions typically center around several salient issues. First, the content of the video game is frequently discussed. These discussions typically occur when parents notice unhealthy content elements in the video game. Parents also highlight to their children the negative values that some games promote:

> 36-year-old mother of 15-year-old FPS gamer boy: I said that one [*Grand Theft Auto*] is not a very good game 'cos it teaches you all the wrong ideas and the language is bad.

Some parents were proactive about broaching discussions about video games with their children, seeking to inculcate in their children values that they felt could serve as a bulwark against the adverse influence of video games:

> 48-year-old father of 15-year-old FPS gamer boy: Of course, not sure whether there are games that are, become sexually explicit, or those type of games that encourage you to pick up all the bad values, like greed, self-centred whatever all those bad values … or being disrespectful to parents … Then we will tell the

> child, you know, not to get exposed to those games … But once in a while we do ask, "hey, what games are you playing?", "can we take a look?", "can we see what you are playing?", you know … but we do ask him what is he playing, and can we take a look, more or less take a look at the game, and sometimes we do see and observe and we will give him our appropriate advice.

Parents would also use high-profile, headline-grabbing incidents to teach their children to be more discerning and to distinguish between the virtual and the real:

> 45-year-old mother of 17-year-old MMORPG gamer girl: I'll tell them the stories from the newspaper … sometimes I understand they slowly pick up from my stories … [I] just tell them … the game I say, is fake … real life is totally different.

Second, parents also discuss issues related to interactions with other online video game players and the gaming community, often advising their children not to meet with or trust strangers they encounter online. Third, parents would discuss with their children concerns about time displacement and possible addiction:

> 48-year-old father of 15-year-old FPS gamer boy: Yes. We will discuss with him … obviously we will ask him "why the deviation [from the rule]? Why [do] you want to play more? What is the reason?"

> 42-year-old mother of 13-year-old FPS gamer girl: Ask them [the children] to discuss video game play with you? Sometimes, they will discuss with me … after that I will check.

> 13-year-old FPS gamer girl with 42-year-old mother (paired with the quote above): Yes [I discuss with my parent about the rules].

Fourth, parent–child discussions that are usually initiated by the child tend to be about whether to buy video games or in-game items that require financial expense. Some parents would then take the opportunity to impart lessons about financial prudence.

Discursive activities are therefore dialogues that enable parents and children to share perspectives on various aspects of video games, where parents air their concerns while inculcating values and proffering advice on managing the negative aspects of video games. While such activities were previously labeled as active mediation, we prefer the term "discursive" for two reasons. First, as new media platforms are interactive and constantly evolving, parents' mediation efforts cannot be cast in stone but must be an ongoing process of rationalizing with the child the changing nature of media and the consequent response. Furthermore, in light of parents' ignorance about video games, consultations with the child may help parents to understand the medium better and apply more appropriate mediation strategies. Hence, "discursive" captures the dynamic nature of the mediation process, as well as the dyadic parent–child engagement that underpins it. Such a conceptualization would be consistent with Clark's (2011) and Zaman et al.'s (2016) assertions that the collaborative nature of parent–child interactions over media use should be more

prominently highlighted in parental mediation literature. Second, "discursive" helps distinguish these dialogic discussions from gatekeeping activities, where parents simply remind or inform their children of their restrictions without drawing out the views of the child (Nikken & Jansz, 2014). Consistent with many parenting studies, discussions and negotiations on parental requirements demonstrate responsiveness on the part of parents, and parental responsiveness is widely known to be associated with favorable child outcomes, thereby potentially contributing to the effectiveness of parental mediation (Baumrind, 1971; Grolnick, 2003; Parker, Tupling, & Brown, 1979; Sclafani, 2004). In other words, discursive mediation may be considered a productive mediation strategy given the opportunity for parents to display responsiveness and mutual respect between parent and child. Earlier attempts were previously made at further refining the concept of active mediation so as to better capture the dimension of parent–child interaction (see Eastin et al., 2006; Kirwil, 2009; Mendoza, 2009; Nathanson, 2008; Valkenburg et al., 1999) and we feel that our conceptualization of "discursive" mediation activities can help to advance that effort.

Investigative activities

Investigative activities refer to information-seeking and skill acquisition activities that give parents the tools to effectively mediate their children's video gaming activities. Investigative activities typically comprise several activities. First, parents engage in visual inspections to check on video gaming content, the time spent on gaming, and the extent to which the computer is used for video gaming versus doing homework or other activities. These checks may be at planned or unplanned intervals, or covertly undertaken:

> 42-year-old mother of 17-year-old FPS gamer boy: Usually we will, on [and] off, go inside and take a look … Stand there (gesturing to a spot inside the room which faces the computer screen) and see.

> 53-year-old father of 17-year-old FPS gamer boy: Most of the time it's me doing the watching. I just sit next to him and watch him play.

At times, checks that reveal violations in video gaming rules may not result in any further restrictions, but can translate into further discussions with the child, geared towards convincing the child to play appropriately:

> 48-year-old father of 15-year-old FPS gamer boy: When we spot him playing, so we will ask him " … have you completed your homework?" No. "Have you, you know, finished your homework?" No. "Then why are you playing?" … So he felt guilty, so he said "Oh, you know … " and gave some not very good reasons … So I said "No, you should not be doing this, you know, especially you know you have not finished your homework. Then tomorrow the teacher asks you for it, then what are you going to do?" You can't say you have been playing video games and you didn't finish your homework … So he, he kind of stops.

To facilitate such monitoring of video game play, many parents ensure that video gaming devices are situated at highly visible locations within the home, or insist that if the game is played in a separate room, the child is to leave the door open.

> 45-year-old mother of 15-year-old FPS gamer boy: Because it's [the computer] in a very visible area, it's hard to ignore … So when I feel he's been there way too long, I'll just say, "David it's time to get off [the computer]" That's my definition of monitoring.

> 42-year-old mother of 13-year-old FPS gamer girl: Because we want them to play within the vicinity. So, they are not supposed to close the door (pointing to the door of the bedroom). So we actually put some [computers] in the sitting room (which facilitates visual inspection), some here, so that it's all over the place, so that when we walk pass, we can take a look on what they are playing. So that's very visible.

Having devices placed in visible areas of the house also enables parents to hear what is going on while their children are video gaming.

> 45-year-old mother of 15-year-old FPS gamer boy: I know who he plays with, because sometimes he'll talk on the mic [microphone], mention someone's name.

Through such efforts, parents can gain a more intimate understanding of their children's video gaming experience.

Previous studies have subsumed monitoring activities under restrictive mediation because these activities are seen as informing parents as to whether the rules they set are obeyed. However, our findings indicate that parents undertake monitoring activities not merely to ensure the children's adherence to restrictions but also serve to inform the rulemaking discussion process. Hence, we assert that it is too limiting to subsume monitoring activities under restrictive mediation. Instead, we posit that monitoring is a key component of investigative mediation because parents can thereby assess the effectiveness of their regulations.

Second, consistent with previous parental mediation studies (e.g., Eklund & Bergmark, 2013; Kirwil, 2009; Livingstone & Helsper, 2008; Nathanson, 2002; Nikken & Jansz, 2003, 2014; Shin & Huh, 2011) our findings affirm that parents utilize a range of resources to seek more information about video games. This includes consulting friends, relatives, and even game retailers about specific games; checking game rating databases; educating themselves through various media sources, such as newspapers and the Internet; and attending parenting talks:

> 45-year-old mother of 15-year-old FPS gamer boy: What other information? I think once … I Googled to find out the reviews from other parents. I don't know [more details] about the website, it's some parenting website … That's one avenue. Then … I've attended one cyber wellness talk that's organised by the school. So that's more general information … whatever I read in the newspapers. These are the places I get information [about video games].

Third, a small minority of parents reported playing video games so as to better understand them. When coplaying with children did occur, it was by parents who actually played video games or, more accurately, attempted to play with their children. These parents engaged in coplaying not with the intention of introducing educational or beneficial games to their children, but to find out more about the game so as to inform their mediation.

> 45-year-old father of 13-year-old FPS gamer boy: At least I can play with him, at least I know what he is doing.

Notably too, the interview findings do not suggest that coplaying is employed by parents as a mediation approach because many lack the competency to play games to begin with:

> 45-year-old mother of 15-year-old FPS gamer boy: It's just too fiddly, like controlling the characters with the backward forward, it's just too much for me.

Moreover, children expressed resistance to their parents playing with them:

> 49-year-old father of 13-year-old MMORPG gamer boy: No, he doesn't [play with me]. Usually he says, "You don't know how to play. You're too slow. You caused me to lose. You are too antique."

Such perspectives indicate that it is misplaced to view the coplaying of video games as evidence of parent–child sharing of media content. Instead, coplaying can be undertaken by parents as a means of informing their supervision and/or mediation efforts, fundamentally an exercise in investigative fact-finding. Overall, we propose that investigative activities such as monitoring, information-seeking, and coplaying reflect intent on the part of parents to apprise themselves of the games their children play, so as to guide and fortify their mediation efforts.

Diversionary activities

Diversionary activities refer to parents' active and intentional efforts to divert their children from video gaming. Through this approach, parents encourage their children to pursue alternative activities, typically those that are deemed healthier, more wholesome, prosocial, or beneficial. These activities include engaging in sporting and outdoor activities, participating in cocurricular activities (CCA), attending after school tuition classes, reading books, playing musical instruments, and bonding activities with family members. Primarily, parents believe that such activities are superior to video game playing which is predominantly sedentary.

> 48-year-old father of 15-year-old FPS gamer boy: Yes. I mean it [being involved in the school's drama activities] is something he likes, and it is something we think that is … healthy curriculum, it is a healthy CCA … It is not looking at the screen and playing these types of games.

> 17-year-old FPS gamer boy with 53-year-old father: They [parents] will prefer for me to go out and exercise than to stay at home and use the computer.

> 48-year-old mother of 16-year-old MMORPG gamer boy: Maybe you play for a while, you stop and do your own leisure thing like cycling, or go out with friends … You go and form a music group. It's better for you [than playing video games]!
>
> 37-year-old mother of 15-year-old MMORPG gamer girl: Yes, and she can exercise [hip-hop dancing] at the same time and I would think that's a healthy exercise, and it also brings her away from the computer.

Hence, parents seek to divert their children's attention from video games by encouraging substitute activities that they regard as more positive and edifying. In parenting literature, nonacademic pursuits such as sports and religious activities are recommended as alternatives to steer children away from harmful behaviors, but such a construct is surprisingly absent in parental mediation literature (Holden, 2009; Sclafani, 2004). Yet our interview findings show that parents do employ this approach in their mediation of video gaming, by directing their children towards other activities that they consider a better use of recreational time. Although diversionary activities do not involve parental mediation of video gaming specifically, the ultimate motivation is to guide the child away from video games by broadening their slate of recreational pursuits. Parents who practise diversionary activities shared that they see it as an important part of their overall strategy for managing their children's video gaming. Hence, we feel that parental mediation theory should go beyond parenting efforts that are media centered and propose that diversionary activities constitute another critical pillar in the theoretical framework.

Refining parental mediation theory

In summary, this study has identified the limitations associated with the prevailing concepts of parental mediation (restrictive, active, and co-use mediation) and asserts that refining parental mediation as comprising gatekeeping, investigative, discursive, and diversionary activities more effectively captures the adaptations in parental mediation strategies as applied to the fast-evolving and increasingly complex media landscape that young people currently inhabit. However, we are not arguing for a dismantling of the prevailing restrictive, active and co-use/coplay framework. Instead, the four mediation activities we identified and fleshed out are used to advance the three mediation strategies, albeit for slightly different purposes and assuming different timbres depending on situational circumstances, the child's behavior and personality and a parents' lifestyle and parenting approach.

As can be seen from Table 2, these activities we identified help to provide some clarity on why parents undertake particular mediation activities and how they serve the larger mediation strategy. Hence, parents who are inclined towards *restrictive mediation* may be more avid in using gatekeeping and diversionary activities to limit their children's video game play but they may very well also engage in discursive activities to explain why they have imposed particular rules. Similarly, they would

also use investigative activities to gather more information on how they need to introduce new rules or recalibrate existing ones. As for parents who primarily practise *active mediation*, they would center their efforts around the discursive activities that can help with relationship building, but nonetheless also use investigative activities to learn more about video games so that they can have more meaningful discussions with their children. At the same time, this does not foreclose the possibility of such parents undertaking gatekeeping and diversionary activities that can help them moderate the amount of gaming the child engages in and his/her exposure to a broader range of recreational pursuits. By the same token, parents who are inclined to engage in co-use/coplaying will use gatekeeping and diversionary mediation to control the amount of time the child spends on video games, but nevertheless use investigative activities to enhance their knowledge for coplaying and discursive activities to impart values to their children during game play. The prevailing parental mediation theory emerged when the television-dominated media landscape was far more predictable, and the largely monolithic and mutually exclusive categories of restrictive, active and coviewing mediation were sufficient. In the rapidly shifting digital media environment, these pre-existing mediation categories are far too "black box" to have practical applicability or analytical utility. Indeed, our findings demonstrate that parents utilize a range of mediation activities and also toggle from one mediation strategy to another so it is unproductive to view mediation strategies as absolute categories. By identifying and explaining how the four types of mediation activities are employed in furtherance of different parental mediation strategies, we can have a more nuanced appreciation of which mediation activities are more effective and appropriate for particular kinds of media. Although our study focused specifically on video games, we found evidence that parents in the respondent pool apply mediation strategies consistently across all media platforms, be it the Internet, video gaming, television viewing, or the use of mobile devices. We believe our proposed framework of gatekeeping, discursive, investigative, and diversionary mediation activities can be applied to all prevailing media and need not be confined to the realm of video gaming. Even with television and the Internet, parents can reasonably be expected to discuss their perceptions of media with the child; to apply some gatekeeping strategies, diversionary tactics; and to investigate their consumption. We believe that our four-activity framework has helped to augment parental mediation theory in two distinct ways: first, enhancing its descriptive ability through a detailed explication of specific mediation activities; and second, raising its explanatory value by identifying parental motivations for these mediation activities. Given the contextual, cultural, and situational circumstances of our fieldwork, we urge future research to apply and further refine this framework for a broader range of research contexts.

Every study has its limitations and this one is no exception. Principally, our sampling of FPS and MMORPG players may have dampened the prominence of coplaying by parents. Future studies with console gamers may yield more coplay mediation by parents, as console games are easier to play. Additionally, we encourage caution when making external validity claims, as our sample is situated in Singapore, which

Table 2 Parental Mediation Framework and Purposes of Mediation Activities

	Restrictive	Active	Coviewing/ Coplaying
Gatekeeping	*Parents exercise authority to dynamically limit and permit game play through imposing rules and regulations*		
Discursive	*Discussions between parents and children about video gaming*		
	Discussions used to inform rules and regulations imposed on the child	Discussions are meant to inculcate values and discernment, and also to enable more dialogic relationship building between parent and child	
Investigative	*Parents find out more about games through monitoring children's game play and seeking information from a range of sources, for example, game classifications, parenting advice websites*		
	Investigative activities help parents understand what kinds of media content should be restricted or permitted and whether rules on game play are effective	Investigative activities facilitate further discussions with the child, geared towards convincing the child to play appropriately	Investigative activities help parents engage in coplaying so that they can understand the games and connect with children
Diversionary	*Parents introduce children to alternative activities so as to steer child away from video game play and broaden their slate of recreational activities*		

has a high technology adoption rate and where the typical parenting style is more authoritarian than authoritative (Stright & Yeo, 2014). We suggest that our proposed framework can be further tested with parental mediation of other forms of media, how they relate to different parenting styles, and comparative research with other samples. Such findings can yield even greater refinement of parental mediation theory. Overall however, we strongly believe that the parental mediation framework with its origins in television needs to be urgently updated in view of our current media landscape that is characterized by multiple platforms and a plethora of media that offers interactivity, immersiveness, and online social interaction.

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