PARENTAL MONITORING, MEDIA LITERACY, AND MEDIA VIOLENCE: A PRELIMINARY EVALUATION OF THE *FOURTH R* PARENT MEDIA VIOLENCE WORKSHOP

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Abstract: As youth's lives have become increasingly infused with all types of media, debates regarding the effect of violent media on youth have emerged. Within this debate, parental monitoring has been identified as an important protective factor against some negative outcomes. Accordingly, the *Fourth R* Parent Media Violence Workshop was developed to educate parents about the importance of setting rules around media use and to encourage parents to monitor their children's media consumption. Two waves of data were collected six months apart ($n_{Time\ 1} = 226$, $n_{Time\ 2} = 52$) with parents who attended the workshop, and results indicate that parents engaged in enhanced, appropriately restrictive and active monitoring practices following the workshop. A significant decrease in children's media consumption was also reported between Time 1 and Time 2. The results provide preliminary evidence to suggest that even short, one-time intensive workshops for parents can move parents' behaviours in the intended direction and positively impact their monitoring strategies.

Keywords: parental monitoring, media violence, media consumption, parent education

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Young people's lives are becoming increasingly infused with all types of media content and the majority of North American children are growing up in media-saturated environments. The average child now consumes 7.5 hours of media per day, not including media accessed at school or time spent using cell phones (Rideout, Foehr, & Roberts, 2010). Amongst preschoolers, the average child spends about two hours every day exposed to media (Rideout & Hamel, 2006). The normative expectations of parents of preschoolers are that most media consumption will be educational and that parents will closely monitor their children's media use (Davies & Gentile, 2012). However, research finds that this is often not the case. For example, researchers have found that one-third of preschool-aged children in the United States have a television in their bedroom (Rideout & Hamel, 2006) and that up to half of the time preschoolers spend viewing television is unsupervised (Roberts, Foehr, Rideout, & Brodie, 1999).

Parents of elementary school-aged children face different normative pressures and parenting challenges. Specifically, parents of children in elementary school are expected to foster self-management and a sense of responsibility in their offspring (Collins, Madsen, & Susman-Stillman, 2002). According to Davies and Gentile (2012), these norms suggest that parents of elementary-school-aged children (i.e., children aged approximately 5 to 13) should gradually relax their monitoring of their children's media consumption and family rules around media use. Likewise, as children begin to interact more with others outside of the family, it can be expected that media consumption will increasingly shift in purpose from being education-oriented to being more entertainment-oriented (Davies & Gentile, 2012). These expectations are reflected in the media consumption of elementary-school-aged children: 6- to 8-year-olds view about two hours less educational content per week compared to preschoolers, and 9- to 12-year-olds view about half an hour less educational content per week than 6- to 8-year-olds (Wright et al., 2001).

During adolescence, youth's autonomy tends to increase. This shift includes having the autonomy to choose one's own entertainment and leisure activities (Davies & Gentile, 2012). As may be expected, adolescents' increased autonomy is reflected in their media consumption. Specifically, the number of hours spent viewing television – which may have previously been a family and educational activity – decrease markedly, whereas time spent listening to music – independently and with one's peers – increases (Rideout et al., 2010). Alongside adolescents' increased autonomy come parenting norms that encourage decreased monitoring of media consumption, fewer rules governing media use, and less consistency in the ways in which rules are applied (Davies & Gentile, 2012). Indeed, teenagers are much less likely than younger children to report having rules around media consumption. Adolescents are also more likely than younger children to have a television, video game console, or music player in their bedroom and they are more likely than elementary-school-aged children to have access to the Internet (Rideout et al., 2010).

Parental Monitoring

Parents who are aware of their children's activities and peer group, and who communicate to their children that they are concerned about their activities, are engaged in parental monitoring (Dishion & McMahon, 1998). A great deal of research in several fields

indicates that parental monitoring can have a positive impact on the social and health outcomes of children and youth. For example, high levels of parental monitoring are inversely related to children's substance use and abuse (Clark, Shamblen, Ringwalt, & Hanley, 2012; Griffin, Samuolis, & Williams, 2011; Huang, Murphy, & Hser, 2011; Martins, Storr, Alexandre, & Chilcoat, 2008), susceptibility to depressive symptoms (Hamza & Willoughby, 2011), engagement in delinquent and anti-social behaviours (Huang et al., 2011; Laird, Marrero, & Sentse, 2010; Willoughby & Hamza, 2011), gang affiliation (McDaniel, 2012), and dating victimization and relational aggression (Leadbeater, Banister, Ellis, & Yeung, 2008). Similarly, using discrete-time survival analysis to analyze data from a national sample of more than 5,000 youth, Huang and colleagues (2011) found that compared to youth reporting low parental monitoring, those who reported high parental monitoring delayed sexual initiation by 1.5 years. Likewise, Parkes, Henderson, Wight, and Nixon (2011) found that parental monitoring was associated with delayed sexual intercourse, lowered expectations of sex in a relationship, and increased condom use.

With respect to media, research has consistently shown that parents often do little to monitor their children's media use (Dorr & Rabin, 1995; Strasburger & Donnerstein, 1999) and that most families have few rules restricting the amount or types of media that can be consumed (Gentile, Lynch, Linder, & Walsh, 2004; Roberts et al., 1999). However, it does seem as though most parents set rules about newer forms of media, such as the Internet. For example, Lenhart and Madden (2007) found that most parents set rules about their children's Internet use and retrospectively monitor their children's online behaviour by reviewing their Internet browser's history. Even still, it seems as though parents' monitoring of their children's Internet use is initially high, such as when children first begin using the Internet or when the family first obtains Internet access, but that this vigilance decreases steadily over time (Bjornstad & Ellingsen, 2004; Wang, Bianchi, & Raley, 2005). Interestingly, and perhaps because it is a newer technology, about 50% of parents limit when their children can use a cell phone and almost two-thirds of parents monitor text messages and other content on their children's cell phone (Lenhart, Ling, Campbell, & Purcell, 2010). Researchers have yet to examine whether monitoring of cell phones wanes over time, as is the case with the monitoring of Internet usage.

The overall lack of parental monitoring of children's media use and consumption – and parenting norms that suggest decreased monitoring as children mature – is troublesome because research has also shown that parental monitoring of children's media use can also have positive effects on youth. To date, most such research has focussed on television. Parents who view television with their children are able to effectively minimize many of the harmful effects of television viewing by reinforcing positive messages, rejecting negative messages, and teaching children media literacy skills (Huston et al., 1992; Strasburger & Donnerstein, 1999). Conversely, if parents simply co-view with their children and do not discuss problematic content, children may assume that their parents endorse the negative content (Nathanson, 2001). Nevertheless, the children of parents who restrict access to television by developing family rules around the amount or type of television viewed watch less television (Atkin, Greenberg, & Baldwin, 1991) and are less aggressive than other children (Nathanson, 1999).

When it comes to the Internet, several studies have suggested that passive monitoring techniques such as glancing at computer screens and reviewing browser histories are not

effective methods of minimizing risks associated with Internet use and the consumption of various types of online content (e.g., Kerr & Statin, 2000; Mitchell, Finkelhor, & Wolak, 2001). Instead, experts tend to recommend that parents openly communicate with their children about Internet use and actively participate in their children's decision-making online (Liau, Khoo, & Ang, 2008).

Media Violence and Youth

Of the many types and forms of media consumed by youth, perhaps none have been as hotly contested as the impact of consuming violent media. Debates around the impact of media violence on youth tend to become especially heated in the aftermath of extremely violent incidents committed by young people. Two such incidents occurred in the United States in 2012 further fuelling these debates. First, in July, a 24-year-old man opened fire in a crowded Aurora, Colorado movie theatre at the opening of a new Batman film, *The Dark Knight Rises,* killing 12 people and injuring 58 others. Six months later, in December, a 20-year-old man walked into Sandy Hook Elementary School in Newtown, Connecticut and began shooting. He ultimately killed 20 young children and six adults. The popular media linked both incidents, at least in part, to the shooters' consumption of violent media, including violent video games and movies (Common Sense Media, 2013).

Correlational studies have linked the consumption of violent media content to moderate aggression and serious violent behaviour into adulthood (Anderson et al., 2003; Funk, Bechtoldt Baldacci, Pasold, & Baumgardner, 2004). Exposure to violent video games is also correlated with desensitization to real-life violence (Bartholow, Bushman, & Sestir, 2006; Carnagey, Anderson, & Bushman, 2007; Engelhardt, Bartholow, Kerr, & Bushman, 2011; Funk et al., 2004). Further, Ybarra et al. (2008) found that youth exposure to violence in the media, both online and offline, is associated with an increased likelihood of perpetrating serious violence, including shooting or stabbing someone, aggravated assault, robbery, and sexual assault.

Although these findings are alarming, correlational studies can provide an oversimplified view of the debate. For example, Ferguson, San Miguel, Garza, and Jerabeck (2012) found that although video game violence was associated with dating violence in bivariate analyses, this relationship disappeared when other variables were controlled for. These authors suggest that "these results confirm expectations by other scholars that any links between video games and aggression are merely the by-product of other processes occurring in the life of the child" (Ferguson, San Miguel, Garza, & Jerabeck, 2012, p. 144). Others have similarly suggested that there is almost no relationship between media violence and criminal behaviours (Ferguson, 2007; Ferguson, San Miguel, & Hartley, 2009), and that effect sizes become smaller as the degree of seriousness of the offence increases (Anderson et al., 2003; Bavelier et al., 2011).

Although media is not likely the leading cause of pediatric health problems, it does contribute to many problems including violence stemming from learned behaviours developed through the media (Strasburger, 2009). Exposure to media violence is most likely one facet of a complex set of interacting variables that increase the probability of problem behaviours and related concerns. Modelling aggression through a risk and resilience framework in a study of third and fourth grade students, Gentile and Bushman (2012) found that six risk/protective

factors measured at Time 1 – media violence exposure, physical victimisation, sex, hostile attribution bias, parental monitoring, and prior aggression – all significantly predicted increased physical aggression at Time 2 six months later. Moreover, the authors found a cumulative effect whereby the combination of risk factors was a stronger predictor of aggression than any single risk factor. Therefore, Gentile and Bushman concluded that, "exposure to violent media is not the only risk factor for aggression, or even the most important risk factor, but it is one important risk factor" (p. 149). Gentile and Bushman liken this conclusion to public health debates about heart disease: Although scientists recognize that a number of risk factors contribute to heart disease, including smoking, alcohol consumption, characteristics of one's diet, exercise, and one's family history with heart disease, most statistical analyses concentrate on one factor independently of the others.

Stemming from research on the impacts of media violence on youth, the American Academy of Pediatrics (2009) issued a policy statement urging safer media consumption through, amongst other things, increased media literacy and parental regulation of children's media use. Clearly, exposure to violent media can be considered one risk factor for aggression and other negative outcomes and parental monitoring of children's media use can be considered a protective factor (Austin, 1993; Nathanson, 2001). Accordingly, a lack of parental monitoring can be considered an additional risk factor (Anderson, Gentile, & Buckley, 2007) for negative outcomes – that is, the effects of consuming violent media are greater when parents do not monitor their children's media consumption and discuss content with them (Anderson et al., 2007). Indeed, parental monitoring and media literacy have been found to positively balance the negative effects of violent media. For example, the effects of exposure to media violence are minimized when parents guide their children's exposure and discuss observed violence with their children (Corder-Bolz, 1982; Hicks, 1968; Nathanson, 1999; Strasburger & Donnerstein, 1999). Although most families may have no or few rules governing media use, parental monitoring and media literacy are variables that may be successfully targeted by intervention (Dishion & McMahon, 1998).

The Fourth R Parent Media Violence Workshop

The *Fourth R* consists of a comprehensive range of school-based programs designed to include and engage students, teachers, parents, and the community in reducing violence and related risk behaviours (Wolfe, Crooks, Hughes, & Jaffe, 2005; see also Crooks, Wolfe, Hughes, Jaffe, & Chiodo, 2008; Wolfe, Crooks, Hughes, & Chiodo, 2008; Wolfe, Crooks, Jaffe, Chiodo, Hughes, Ellis, et al., 2009; Wolfe, Jaffe, & Crooks, 2006). It is especially important for comprehensive approaches to violence prevention and healthy youth relationships to involve parents (Crooks et al., 2008). Given the centrality of media in the lives of youth, the many negative relationship models in media, and research indicating that parents' knowledge of media, rating systems, and media effects may have an important impact on how their children consume media (Gentile & Walsh, 2002), a workshop for parents on issues related to youth media consumption and media violence was developed to complement school-based lessons.

The *Fourth R* Parent Media Violence Workshop (hereafter "workshop") is a 90-minute intensive workshop that provides information to participants on a number of topics, including how children and youth use media, how violence is portrayed in the media, the messages

communicated by violent media, the impacts of media violence on youth, the importance of monitoring children's media use, how to set rules around media use, positive forms of media designed for youth, and the importance of maintaining privacy online. Participants are also provided with several additional resources, including suggestions for computer monitoring and parental control programs, a guide on how to appropriately set Facebook privacy and security settings, and a list of additional resources and websites from which parents may obtain more information about the topics covered in the workshop. Given widespread confusion over traditional ratings systems (Gentile & Walsh, 2002), participants are also informed about *Common Sense Media*[1]. *Common Sense Media* is a non-profit website that provides easy-to-understand reviews and ratings for movies, video games, television shows, apps, books, websites, and music. Rather than using traditional ratings systems, *Common Sense Media* rates media based on its age appropriateness and educational potential as determined by its team of experts. A simple, easy-to-understand ratings system (red, yellow, green) is used to indicate whether a given form of media (e.g., movie, television show, video game) is appropriate for a specific age. Their reviews also include information about positive messages and role models in a given movie, for example, as well as the level of violence, sexuality, consumerism, and offensive language. In particular, the workshop is designed to encourage parents to engage and monitor their children's engagement with new media environments, such as the Internet, where there are many possibilities for encountering violence.

Basic program feedback has been collected from workshop participants for several years. Parents have consistently rated the workshop favourably, reporting that they intend to make use of the tools provided to them and monitor their children's media consumption more closely. However, whether such behavioural changes occurred and were maintained over time was unknown. Furthermore, despite evidence suggesting that parental monitoring is inversely related to negative outcomes associated with consuming violent media, there are few programs aimed at parents to help them navigate monitoring their children's media use. Of those programs that do exist, no evaluations of any kind have been conducted, so it is unknown whether they have any positive impact on parental monitoring. The purpose of this study is to examine whether parents implement the strategies they learn during the workshop and, if so, to understand what specific strategies they use.

Method

Participants

This study used two waves of longitudinal panel data to assess whether an intensive, 90-minute parental monitoring and media violence workshop for parents can increase parents' monitoring of their children's media use, and to examine what strategies parents use when they do monitor their children's media use post-workshop. Participants at Time 1 included 337 individuals who attended the workshop as part of a large, professional development conference on issues related to media violence at the University of Western Ontario in October 2011. Of those individuals who attended the workshop, 101 participants were dropped from this study because they were not parents ($n = 236$). Of the 236 participants included in our final sample at

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[1] http://www.commonsensemedia.org

Time 1, 180 (76.3%) were female and 221 (93.6%) reported that their job requires them to work with youth. A relatively even distribution of children's ages was reported by the 236 parents in our final sample. Specifically, 54 (25.4%) had a child in senior kindergarten or younger, 82 (38.5%) had a child in Grades 1 through 5, 61 (28.6%) had a child in Grades 6 through 8, and 89 (41.8%) had a child in Grades 9 to 12.

At Time 1, we sought permission from all participants to contact them again six months later (in April 2012) to complete a follow-up interview (Time 2). Of the 236 parents who completed the first survey at Time 1, 98 (41.5%) gave us permission to contact them for the Time 2 survey. Amongst these 98 participants, 66 completed the follow-up survey at Time 2 (response rate = 67%). Twelve of the 66 participants at Time 2 did not consent to us linking their responses to their Time 1 survey; as a result, these 12 participants were dropped. Two additional participants were also dropped because we were unable to link their Time 1 and Time 2 surveys ($n = 52$)[2]. Of the 52 participants included in our final sample at Time 2, 40 (76.9%) were female. As with the Time 1 sample, a relatively even distribution of children's ages was reported by the 52 parents in our Time 2 sample: 14 (27.5%) had a child in senior kindergarten or younger, 23 (45.1%) had a child in Grades 1 through 5, 17 (33.3%) had a child in Grades 6 through 8, and 20 (39.2%) had a child in Grades 9 to 12. No significant differences in the sex of the participant or ages of their children were observed between the initial group who completed the Time 1 survey and the follow-up group who completed the Time 2 survey.

Measures

Both the Time 1 and Time 2 surveys were developed by the authors for the purposes of this study. The Time 1 survey was a brief (two pages) paper-and-pencil survey administered immediately following the workshop. The Time 1 survey comprised three sections. The first section sought background and basic demographic information from participants. Questions included the participants' sex, the gender and age of their children, and their fields of employment.

The second section measured participants' perceptions of what they learned in the workshop. Nine key learning objectives were measured on a four-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample questions included, "I learned more about how children and youth use media"; "I learned more about the messages being communicated by media violence"; "I learned more about the impacts of media violence on children and youth"; "I learned more about the importance of monitoring children's media use"; and "I learned more about how to set rules around children's media use". Participants' responses indicated high levels of perceived learning from the workshop – in excess of 90% of participants agreed or strongly agreed that they learned more about each of the learning objectives than they knew prior to the workshop (see Table 1).

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[2] We used e-mail addresses to link participants' Time 2 surveys that were completed online to their Time 1 surveys. These two participants provided a different e-mail address at Time 2 than we had on file.

Table 1. *Participants' Self-reported Learning as a Result of the Workshop*

Learning objective	% agree or strongly agree	Mean	Std. deviation
I learned more about how children and youth use media	94.8	3.67	0.73
I learned more about violence itself and the different forms it can take	94.7	3.47	0.74
I learned more about how the media portrays violence	94.7	3.50	1.10
I learned more about the messages being communicated by media violence	95.2	3.59	0.73
I learned more about the impacts of media violence on children and youth	94.8	3.53	0.73
I learned more about the importance of monitoring children's media use	95.1	3.67	0.71
I learned more about how to set rules around children's media use	94.3	3.49	0.74
I learned more about positive forms of media designed for children and youth	90.4	3.24	1.61
I learned more about video games and their impact on children and youth	92.5	3.53	0.76

The third section of the survey included a series of questions related to parental perceptions of media consumption and parental monitoring in the participant's household. First, participants were asked about their perceptions of their children's daily media consumption (e.g., "Approximately how many hours of media do your children consume per day?"). Second, participants were asked to respond to the following statements regarding their monitoring behaviours: "Before this workshop I had visited *Common Sense Media*"; "Before this presentation I monitored my children's media use"; and "Before this presentation I had family rules about media use". Responses to these statements were recorded on a three-point scale (1 = no, 2 = sometimes, 3 = yes). Scores were summed to obtain a basic composite measure of pre-workshop parental monitoring where higher scores indicated greater monitoring (minimum = 3, maximum = 9, $X = 6.37$, $SD = 1.18$, $\alpha = .452$).

The Time 2 survey was administered approximately 6 months after the Time 1 survey and also comprised three sections. In the first section, participants were again asked to report their perceptions of their children's media consumption (e.g., "Approximately how many hours of media do your children consume per day?"). The second section of the survey measured restrictive forms of parental monitoring employed by participants in the six months since the workshop. There is evidence to suggest that restricting access to content is an effective method of mediating the harmful effects of television and that the children of parents who restrict access to media view less television (Atkin et al., 1991; Nathanson, 1999). We expected these same

processes to occur with respect to online media. Questions about restrictive parental monitoring practices centred around two themes. First, participants were asked about new rules developed since the workshop (e.g., "After the workshop, did you create new rules about media use?" and if so, "Have you noticed a change in media use since you implemented the new rules?"). Second, participants were asked about their use of the ratings and reviews website *Common Sense Media* (e.g., "Since the workshop have you visited *Common Sense Media*?" and if so, "How many times have you visited *Common Sense Media* since the workshop?"). Visiting *Common Sense Media* can be considered a form of restrictive parental monitoring because by reviewing ratings before youth engage with media, parents are able to more effectively restrict their children's access to harmful content.

The third section of the survey measured active monitoring strategies employed by parents since the workshop. The literature on parental monitoring of television indicates that active co-viewing by parents when their children watch television can mediate the harmful effects of media violence (Huston et al., 1992; Strasburger & Donnerstein, 1999). With respect to the Internet, research also suggests that passive monitoring, such as glancing at the computer screen or checking the Internet browser's history, are not effective methods of parental monitoring. Instead, active participation in children's online activities is recommended (Liau et al., 2008). First, participants were asked whether they have actively participated in their children's online activities since the workshop (e.g., "Did you ask your children to show you their favourite website?" and if so, "Approximately how many websites have your children shared with you since the workshop?"). The majority of participants (70.6%) reported that their children have shared 1 to 5 websites with them, although 26.5% have shared between 6 and 10 websites and 2.9% have shared more than 16 websites ($X = 1.35$, $SD = 0.65$). Second, because of the popularity of Facebook amongst North American youth (Common Sense Media, 2012), participants were asked specifically about the ways in which they monitor their children's Facebook account (e.g., "Do you monitor your children's Facebook account?" and if so, "How do you monitor your children's Facebook account?"). Descriptive statistics for questions related to active and restrictive monitoring are presented in Table 2 (dichotomous items were measured on a two-point scale where 1 = yes and 2 = no). Filtering questions were asked where relevant (e.g., if parents reported that their children do not use Facebook, we did not ask how they monitor their children's Facebook account).

Procedure

Time 1 data collection took place immediately following a workshop that took place as part of a larger professional development conference on media violence at the University of Western Ontario in October 2011. As noted, some workshop participants were not parents and these individuals were dropped from all analyses. Surveys were distributed to all those in attendance and the purpose of the survey was explained. An implied consent procedure was used and participants were informed that they could take time to relax or review other materials if they did not wish to complete the survey. Upon completing the survey, participants were asked if they wished to participate in a follow-up survey approximately six months later (i.e., in April 2012). Those who were willing to complete the follow-up survey provided their contact information. Six months later, these persons were contacted via phone or e-mail to remind them of the second survey and invite them to participate. All those contacted were informed that the second survey

could be completed by telephone or online (96% of participants completed the survey online). Again, an implied consent procedure was used. Participants who completed the second survey received a $10.00 gift certificate to a popular coffee shop as compensation for their time. The study protocol was approved by Centre for Addiction and Mental Health's Research Ethics Board.

Results

Parental Monitoring Before the Workshop

The Time 1 survey measured the parental monitoring habits of participants prior to them attending the workshop, and the results indicated that 66.0% of participants monitored their children's media use most of the time and 33.0% monitored it some of the time. Likewise, 74.0% of participants always had family rules about media use and 22.0% sometimes had family rules about media use. In contrast, 85.7% of participants had never visited the ratings and reviews website *Common Sense Media.* The results of a one-way ANOVA test on the composite parental monitoring score by the age of participants' children produced results that were highly statistically significant ($F_{(4)} = 6.019$, $p < .001$) – that is, consistent with other research findings, parents of older children were much less likely to monitor their children's media use than parents of younger children. ANOVA also revealed that parental monitoring prior to Time 1 was significantly and inversely related to the number of hours participants' children used media per day ($F_{(6)} = 6.618$, $p < .001$). Thus, the greater parental monitoring prior to the workshop, the lower the number of hours per day children spent with media.

Did parents implement the monitoring strategies learned during the workshop?

As Whittaker and Cowley (2012) explain in their comprehensive review of the literature on parent educational program participation and engagement, "program availability alone does not guarantee positive outcomes" (p. 138). Therefore, although participants rated the workshop favourably and reported that they learned more about media violence and strategies to monitor their children's media use, it was previously unknown whether participants actually implemented any of these strategies once they went home and post-workshop excitement and motivation diminished. Descriptive data indicate that many parents did implement both the restrictive and active monitoring strategies learned during the workshop. For example, 44.2% of participants created new rules about media use following the workshop. Interestingly, open-ended responses to a follow-up question about rule setting suggest that, upon further reflection, many parents were satisfied with the rules they already had in place. In fact, many participants reported feeling validated by what they learned in the workshop. For example, one parent of teenage children stated, "I actually felt validated in what my teens previously considered 'draconian' rules. [It] turns out the rules were bang-on". Other parents reported that they already had strong rules in place and felt no need to adjust them or create new rules. As one parent explained, "we only allow computer/Internet use within our view and only on sites that we have approved. These are the only rules we feel we need at this time". It may be that an important role of the training was to validate parents who had already implemented effective monitoring strategies and to increase their confidence in maintaining those rules even when their children feel they are unreasonable. In contrast to the 7.2% of parents who had visited *Common Sense Media* prior to attending the

workshop, 71.2% visited the ratings and reviews website following the workshop. Visiting websites such as *Common Sense Media* allows parents to be more educated and effective when engaging in restrictive monitoring practices.

With respect to active forms of monitoring after the workshop, 65.4% of participants asked their children to show them their favourite website, 60.6% reported their children shared multiple websites with them, and 71.4% indicated that they monitor their children's Facebook account (see Table 2). These monitoring strategies are not dissimilar to co-viewing television programs with one's children, which can be an effective method of mitigating the harmful effects of media violence when problematic content is pointed out and discussed with children and youth. In contrast to parental monitoring prior to the workshop, ANOVA results indicated no significant age differences with respect to any of the methods of parental monitoring at Time 2. However, for all methods of monitoring except having been shown multiple websites, participants with children in Grades 9 to 12 (i.e., children in the oldest age category) reported the highest levels of engagement (see Figure 1). This suggests that the workshop led participants to re-evaluate potentially problematic parenting norms related to monitoring and children's ages.

Table 2. *Active and Restrictive Parental Monitoring at Time 2*

	% yes	Mean	Std. deviation
Restrictive parental monitoring			
After the workshop, did you create new rules about media use?	44.2	1.56	0.50
Since the workshop, have you visited *Common Sense Media?*	71.2	1.29	0.46
Active parental monitoring			
After the workshop did you ask your children to show you their favourite website?	65.4	1.35	0.48
Have your children shared other websites with you?	60.6	1.40	0.50
Do you monitor your children's Facebook account?	70.0	1.30	0.47

Figure 1. *Parental monitoring strategies post-workshop by grade of children*
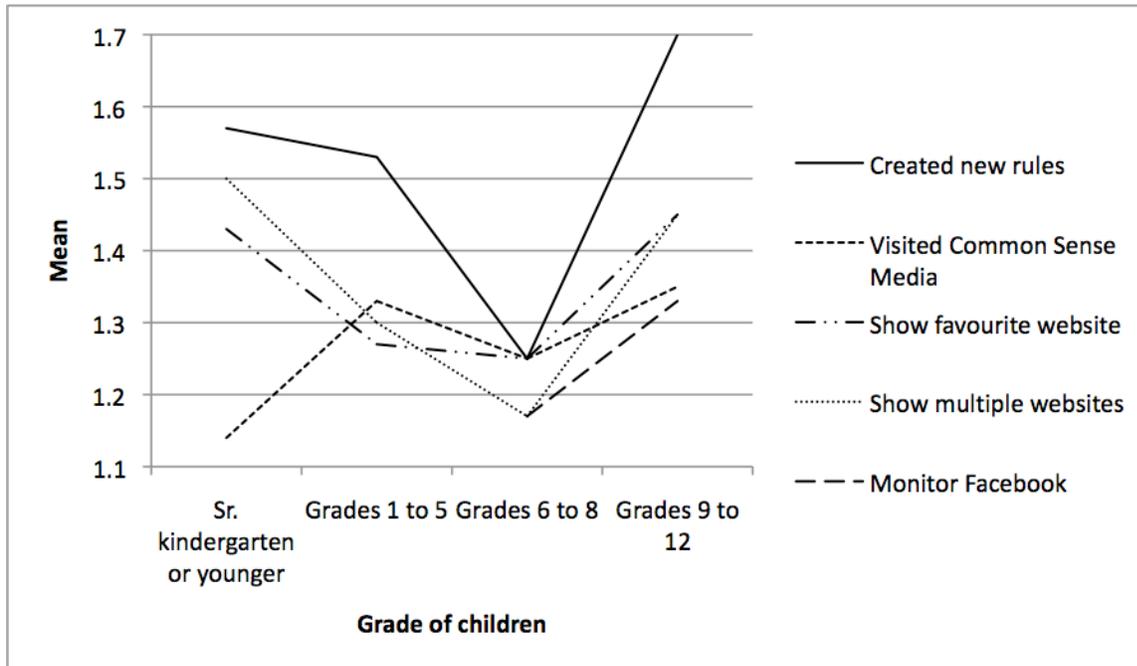
     The enhanced parental monitoring practices that participants engaged in following the workshop also coincide with a reduction in the perceived amount of media consumed by their children from Time 1 to Time 2. Specifically, 53.4% of participants reported that their children consumed 3 or more hours of media prior to the workshop, compared to only 32.7% of participants who reported the same at Time 2. As shown in Table 3, the results of a paired-samples *t*-test revealed that the overall perceived media consumption of participants' children at Time 2 was significantly lower than at Time 1 ($t_{(47)} = 3.411$, $p = .001$). This finding is consistent with other research in that parental monitoring tends to reduce the number of hours children spend with media (Atkin et al., 1991) and, therefore, exposure to violent media.

Table 3. *Participants' Perceptions of their Children's Media Consumption Pre- and Post-workshop*

Daily media consumption	% (Time 1)	% (Time 2)	$t_{(df)}$	95% CI	*p*
Less than 1 hour	12.7	13.5			
1-2 hours	33.8	53.8			
3-4 hours	28.4	32.7	$3.411_{(47)}$	[.171, .662]	.001
5-6 hours	16.2	0.0			
7+ hours	8.8	0.0			

Discussion

As youth's lives increasingly revolve around media, debates as to the effect of media on young people have heightened. One of the more prolific and hotly debated topics has centred on the impact of media violence on youth, with some research linking the consumption of media violence to desensitization to real-life violence and increased aggression (Anderson et al., 2003; Bartholow et al., 2006; Carnagey et al., 2007; Common Sense Media, 2013; Engelhardt et al., 2011; Funk et al., 2004; Ybarra et al., 2008). Others have more cautiously reported that media violence is, at minimum, one contributing factor to aggressive and risky behaviour in youth (Gentile & Bushman, 2012; Strasburger, 2009). Given the potential problems associated with consuming particularly violent media, appropriately regulating and monitoring youth's media consumption is of great importance.

Parental monitoring has long been identified as a protective factor against a number of negative outcomes, including children's substance use (Clark et al., 2012; Griffin et al., 2011; Huang et al., 2011; Martins et al., 2008), poor mental health (Hamza & Willoughby, 2011), gang involvement (McDaniel, 2012), early engagement in sexual behaviours (Huang et al., 2011; Parkes et al., 2011), and delinquent and aggressive conduct (Huang et al., 2011; Laird et al., 2010; Leadbeater et al., 2008; Willoughby & Hamza, 2011). Research has also shown that parental monitoring can minimize the negative effects of consuming certain types of media, such as violence (Atkin et al., 1991; Huston et al., 1992; Liau et al., 2008; Nathanson, 1999; Strasburger & Donnerstein, 1999). Unfortunately, few families have rules around media consumption and most parents do not seem to monitor their children's media use (Dorr & Rabin, 1995; Gentile et al., 2004; Roberts et al., 1999; Strasburger & Donnerstein, 1999; Wang et al., 2005).

Accordingly, [blinded for review] Parent Media Violence Workshop was developed to teach parents about the impact of media violence on youth and the importance of setting rules around media use. The workshop also endeavours to encourage parents to become more actively involved in monitoring and regulating their children's media consumption. Although program feedback has consistently indicated that parents are satisfied with the workshop, whether they feel they learned something from the workshop and whether they implemented the strategies they learned was previously unknown. The purpose of this study was to examine whether parents implement the strategies they learn during the workshop and, if so, to understand what parental monitoring strategies they use.

Participants were surveyed immediately following the workshop to gauge their monitoring strategies and perceptions of their children's media consumption prior to the workshop. These same participants were then surveyed six months later to identify changes in their monitoring strategies that had occurred following the workshop as well as changes in their children's media consumption. The results indicated that, following the workshop, many participants re-evaluated their monitoring strategies and made some changes to the ways in which they regulate their children's media use. For example, almost half of all participants created new rules about media use and almost three-quarters made use of *Common Sense Media* post-workshop. Likewise, many parents engaged in more active forms of monitoring after the workshop: 65% asked their children to see their favourite website (61% reported that their

children shared multiple websites) and 71% reported monitoring their children's Facebook accounts. As opposed to Time 1, age was not a significant predictor of monitoring behaviours at Time 2, suggesting that following the workshop parents re-evaluated potentially problematic parenting norms that encourage decreased monitoring as children mature (Davies & Gentile, 2012). Thus, the workshop may have countered prevailing notions that adolescents are capable of navigating the media world on their own. Participants also reported a statistically significant decrease in the amount of media consumed by their children per day from the Time 1 survey to the Time 2 survey. This finding is consistent with other research in that enhanced parental monitoring tends to reduce the number of hours children spend with media (Atkin et al., 1991).

Limitations

Three limitations to this study should be noted. First, as a group, parents tend to underreport the amount of time their children spend with media and the amount of violence they see (Gentile & Walsh, 2002; Strasburger & Donnerstein, 1999). Thus, reports of media consumption should be considered conservative estimates. Second, the sample was not randomly selected and results may not be widely generalizable. For example, 89% of those represented in the Time 1 sample were educators who may reasonably be expected to be more knowledgeable on issues affecting youth than the average parent. In contrast to the literature, many of the participants in our sample already had rules in place and may, therefore, have been more "ready" for the intervention than others. Furthermore, it is unlikely that those who found the workshop to be of little use for them or who are relatively uninvolved parents would have agreed to participate in the follow-up survey. Third, our measurement of children's ages may mask the identification of age-variation effects. Many of the parent behaviours measured, including monitoring, rule setting, and media literacy, are more difficult tasks with teenage children.

Although there has been much research on parental monitoring as a mediating factor in the relationship between media consumption and undesirable outcomes, there are few programs aimed at parents that are intended to help them navigate their children's media use. Of those programs that do exist, none have been formally evaluated. This study makes an important contribution to the literature by demonstrating that even short workshops for parents can have a positive impact on parental monitoring of children's media use and can encourage parents to foster their children's media literacy skills. There is preliminary evidence that the brief intervention presented in this paper had a positive impact in changing behaviours and enhancing parental monitoring. Certainly, given the potential negative effects of unsafe media use and consumption, providing parents with the necessary resources and motivation to effectively monitor and protect their children is becoming increasingly important.

References

American Academy of Pediatrics. (2009). Policy statement – media violence. *Pediatrics, 124*(5), 1495–1503.

Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L. R., Johnson, J. D., Linz, D., et al. (2003). The influence of media violence on youth. *Psychological Science in the Public Interest, 4*(3), 81–110.

Anderson, C. A., Gentile, D. A., & Buckley, K. E. (2007). *Violent video game effects on children and adolescents: Theory, research, and public policy.* New York: Oxford.

Atkin, C., Greenberg, B., & Baldwin, T. (1991). The home ecology of children's television viewing: Parental mediation and the new video environment. *Journal of Communication, 41*(3), 40–52.

Austin, E. W. (1993). Exploring the effects of active parental mediation of television content. *Journal of Broadcasting & Electronic Media, 37*(2), 147–158.

Bartholow, B. D., Bushman, B. J., & Sestir, M. A. (2006). Chronic violent video game exposure and desensitization to violence: Behavioural and event-related brain potential data. *Journal of Experimental Social Psychology, 42*, 532–539.

Bavelier, D., Green, C. S., Han, D. H., Renshaw, P. F., Merzenich, M. M., & Gentile, D. A. (2011). Brains on video games. *Nature Reviews Neuroscience, 12*(12), 763–768.

Bjornstad, T. L., & Ellingsen, T. (2004). *Onliners: A report about youth and the Internet.* SAFT. Retrieved October 19, 2008 from http://www.saftonline.org/On-Liners

Carnagey, N. L., Anderson, C. A., & Bushman, B. J. (2007). The effect of video game violence on physiological desensitization to real-life violence. *Journal of Experimental Social Psychology, 43*, 489–496.

Clark, H. K., Shamblen, S. R., Ringwalt, C. L., & Hanley, S. (2012). Predicting high risk adolescents' substance use over time: The role of parental monitoring. *Journal of Primary Prevention, 33*(2-3), 67–77.

Collins, W. A., Madsen, S. D., & Susman-Stillman, A. (2002). Parenting during middle childhood. In M. Bornstein (Ed.), *Handbook of parenting* (2nd ed., Vol. 1, pp. 73–101). Mahwah, NJ: Erlbaum.

Common Sense Media. (2012). *Social media, social life: How teens view their digital lives.* Retrieved February 21, 2013 from http://www.commonsensemedia.org/sites/default/files/research/ socialmediasociallife-final-061812.pdf

Common Sense Media. (2013). *Media and violence: An analysis of current research.* Common Sense Media Research Brief. Retrieved February 21, 2013 from http://www.commonsensemedia.org/ sites/default/files/research/media-and-violence-research-brief-2013.pdf

Corder-Bolz, C. R. (1982). Television literacy and critical television viewing skills. In D. Pearl, L. Bouthilet, & J. Lazer (Eds.), *Television and behaviour: Ten years of scientific progress and implications for the eighties: Vol. 2* (pp. 91–103). Washington, DC: US Government Printing Office.

Crooks, C. V., Wolfe, D. A., Hughes, R., Jaffe, P. G., & Chiodo, D. (2008). Development, evaluation, and national implementation of a school-based program to reduce violence and related risk behaviours: Lessons learned from the *Fourth R. IPC Review, 2,* 109-135.

Davies, J. J., & Gentile, D. A. (2012). Responses to children's media use in families with and without siblings: A family development perspective. *Family Relations, 61*(3), 410–425.

Dishion, T. J., & McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behaviour: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review, 1*(1), 61–75.

Dorr, A., & Rabin, B. E. (1995). Parents, children, and television. In M. Bornstein (Ed.), *Handbook of parenting* (Vol. 4, pp. 323–351). Mahwah, NJ: Erlbaum.

Engelhardt, C. R., Bartholow, B. D., Kerr, G. T., & Bushman, B. J. (2011). This is your brain on violent video games: Neural desensitization to violence predicts increased aggression following violent video game exposure. *Journal of Experimental Social Psychology, 47,* 1033–1036.

Ferguson, C. J. (2007). The good, the bad, and the ugly: A meta-analytic review of positive and negative effects of violent video games. *Psychiatric Quarterly, 78*(4), 309–316.

Ferguson, C. J., San Miguel, C., Garza, A., & Jerabeck, J. M. (2012). A longitudinal test of video game violence influences on dating and aggression: A 3-year longitudinal study of adolescents. *Journal of Psychiatric Research, 46*(2), 141–146.

Ferguson, C. J., San Miguel, C., & Hartley, R. D. (2009). A multivariate analysis of youth violence and aggression: The influence of family, peers, depression, and media violence. *Journal of Pediatrics, 155*(6), 904–908.

Funk, J. B., Bechtoldt Baldacci, H., Pasold, T., & Baumgardner, J. (2004). Violence exposure in real-life, video games, television, movies, and the Internet: Is there desensitization? *Journal of Adolescence, 27,* 23–39.

Gentile, D. A., & Bushman, B. J. (2012). Reassessing media violence effects using a risk and resilience approach to understanding aggression. *Psychology of Popular Media Culture, 1*(3), 138–151.

Gentile, D. A., & Walsh, D. A. (2002). A normative study of family media habits. *Applied Developmental Psychology, 23*(2), 157–178.

Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of video game habits on adolescent hostility, aggressive behaviors, and school performance. *Journal of Adolescence, 27,* 5–22.

Griffin, K. W., Samuolis, J., & Williams, C. (2011). Efficacy of a self-administered home-based parent intervention on parenting behaviours for preventing adolescent substance use. *Journal of Child and Family Studies, 20*(3), 319–325.

Hamza, C. A., & Willoughby, T. (2011). Perceived parental monitoring, adolescent disclosure, and adolescent depressive symptoms: A longitudinal examination. *Journal of Youth &Adolescence, 40*(7), 902–915.

Hicks, D. J. (1968). Effects of co-observer's sanctions and adult presence on imitative aggression. *Child Development, 39,* 303–309.

Huang, D. Y. C., Murphy, D. A., & Hser, Y. (2011). Parental monitoring during early adolescence deters adolescent sexual initiation: Discrete-time survival mixture analysis. *Journal of Child and Family Studies, 20*(4), 511–520.

Huston, A. C., Donnerstein, E., Fairchild, H., Feshback, N. D., Katz, P. A., Murray, J. P., et al. (1992). *Big world, small screen: The role of television in American society.* Lincoln, NE: University of Nebraska Press.

Kerr, M., & Statin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology, 36*(3), 366–380.

Laird, R. D., Marrero, M. D., & Sentse, M. (2010). Revisiting parental monitoring: Evidence that parental solicitation can be effective when needed most. *Journal of Youth & Adolescence, 39*(12), 1431–1441.

Leadbeater, B. J., Banister, E. M., Ellis, W. E., & Yeung, R. (2008). Victimization and relational aggression in adolescent romantic relationships: The influence of parental and peer behaviors, and individual adjustment. *Journal of Youth & Adolescence, 37*(3), 359–372.

Lenhart, A., & Madden, M. (2007). *Teens, privacy & online social networks: How teens manage their online identities and personal information in the age of MySpace.* Washington, DC: Pew Internet & American Life Project. Retrieved February 27, 2013 from http://www.pewinternet.org/~/ media//Files/ Reports/2007/PIP_Teens_Privacy_SNS_Report_Final.pdf.pdf

Lenhart, A., Ling, R., Campbell, S., & Purcell, K. (2010). *Teens and mobile phones.* Washington, DC: Pew Internet & American Life Project. Retrieved March 1, 2013 from http://www.pewinternet.org/~/ media//Files/ Reports/2010/PIP-Teens-and-Mobile-2010-with-topline.pdf

Liau, A. K., Khoo, A., & Ang, P. H. (2008). Parental awareness and monitoring of adolescent Internet use. *Current Psychology, 27*(4), 217–233.

Martins, S. S., Storr, C. L., Alexandre, P. K., & Chilcoat, H. D. (2008). Adolescent ecstasy and other drug use in the National Survey of Parents and Youth: The role of sensation-seeking, parental monitoring and peer's drug use. *Addictive Behaviors, 33*(7), 919–933.

McDaniel, D. D. (2012). Risk and protective factors associated with gang affiliation among high-risk youth: A public health approach. *Injury Prevention, 18*(4), 253–258.

Mitchell, K. J., Finkelhor, D., & Wolak, J. (2001). Risk factors for an impact of online sexual solicitation of youth. *Journal of the American Medical Association, 285*(23), 3011–3014.

Nathanson, A. I. (1999). Identifying and explaining the relationship between parental mediation and children's aggression. *Communication Research, 26*(2), 124–143.

Nathanson, A. I. (2001). Parent and child perspectives on the presence and meaning of parental television mediation. *Journal of Broadcasting & Electronic Media, 45*(2), 210–220.

Parkes, A., Henderson, M., Wight, D., & Nixon, C. (2011). Is parenting associated with teenagers' early sexual risk-taking, autonomy, and relationship with sexual partners? *Perspectives on Sexual and Reproductive Health, 43*(1), 30–40.

Rideout, V. J. & Hamel, E. (2006). *The media family: Electronic media in the lives of infants, toddlers, preschoolers, and their parents.* Kaiser Family Foundation (Publication 7500). Retrieved from http://www.kff.org/entmedia/7500.cfm

Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). *Generation M2: Media in the lives of 8-18 year olds.* Kaiser Family Foundation (Publication 8010). Retrieved June 29, 2012 from http://www.kff.org/ entmedia/upload/8010.pdf

Roberts, D. F., Foehr, U., Rideout, V., & Brodie, M. (1999). *Kids, media, and the new millennium: A comprehensive national analysis of children's media use.* Kaiser Family Foundation (Publication 1535). Retrieved from http://www.kff.org/entmedia/1535-index.cfm

Strasburger, V. C., & Donnerstein, E. (1999). Children, adolescents, and the media: Issues and solutions. *Pediatrics, 103*(1), 129–139.

Strasburger, V. C. (2009). Media and children: What needs to happen now. *Journal of the American Medical Association, 301*(21), 2265–2266.

Wang, R., Bianchi, S. M., & Raley, S. B. (2005). Teenagers' Internet use and family rules: A research note. *Journal of Marriage and Family, 67*(5), 1249–1258.

Whittaker, K. A., & Cowley, S. (2012). An effective program is not enough: A review of factors associated with poor attendance and engagement with parenting support programmes. *Children & Society, 26*(2), 138–149.

Willoughby, T., & Hamza, C. A. (2011). A longitudinal examination of the bidirectional associations among perceived parenting behaviours, adolescent disclosure, and problem behaviour across the high school years. *Journal of Youth and Adolescence, 40*(4), 463–478.

Wolfe, D. A., Crooks, C. V., Hughes, R., & Chiodo, C. (2008). The Fourth R: A school-based program to reduce violence and risk behaviours among youth. In D. Pepler & W. Craig (Eds.), *Understanding and addressing bullying: An international perspective* (pp. 184–197). Bloomington, IN: AuthorHouse.

Wolfe, D. A., Crooks, C. V., Hughes, R., & Jaffe, P. G. (2005). *Building healthy relationships among children and youth: Comprehensive and integrated violence prevention programs and strategies for school communities.* London, ON: CAMH Centre for Prevention Science.

Wolfe, D. A., Crooks, C. V., Jaffe, P. G., Chiodo, D., Hughes, R., Ellis, W., et al. (2009). A school-based program to prevent adolescent dating violence: A cluster randomized trial. *Archives of Paediatric and Adolescent Medicine, 163*(8), 692–699.

Wolfe, D. A., Jaffe, P. G., & Crooks, C. V. (2006). *Adolescent risk behaviours: Why teens experiment and strategies to keep them safe.* New Haven, CT: Yale University Press.

Wright, J. C., Huston, A. C., Vandewater, E., Bickham, D. S., Scantlin, R. M., Kotler, J. A., et al. (2001). American children's use of electronic media in 1997: A national survey. *Journal of Applied Developmental Psychology, 22,* 31–47.

Ybarra, M. L., Diener-West, M., Markow, D., Leaf, P. J., Hamburger, M., & Boxer, P. (2008). Linkages between Internet and other media violence with seriously violent behavior by youth. *Pediatrics, 122*(5), 929–937.