
Miscellaneous

Maisoon Osama Alsebaei

<https://orcid.org/0000-0003-0443-7499>

malsebaei@kau.edu.sa

Dept. of Journalism and Digital Media,
King Abdulaziz University, Jeddah

Shuaa Abdulrahman Aljasir

<https://orcid.org/0000-0002-1165-7900>

shaljasir@kau.edu.sa

Dept. of Journalism and Digital Media,
King Abdulaziz University, Jeddah

Submitted

November 9th, 2023

Approved

July 4th, 2024

© 2024

Communication & Society

ISSN 0214-0039

E ISSN 2386-7876

www.communication-society.com

2024 – Vol. 37(4)

pp. 143-162

How to cite this article:

Alsebaei, M. O. & Aljasir, Sh. A. (2024).

Parenting in the Digital Age: Mediation

Strategies as a Preventive Factor against

Cyberbullying on Social Media among Saudi

Parents, *Communication & Society*, 37(4), 143-

162.

<https://doi.org/10.15581/003.37.4.143-162>

Parenting in the Digital Age: Mediation Strategies as a Preventive Factor against Cyberbullying on Social Media among Saudi Parents

Abstract

This study investigated the role of parental mediation strategies employed by parents in Saudi Arabia as a preventive factor against adolescents' engagement in cyberbullying and cybervictimization within social media. It also examined the role of age, gender, and educational level of parents as moderators. Using an online survey, the sample consisted of 389 parent participants and their adolescent child, aged between 12 and 17. Results show that active, restrictive, and internet safety mediation strategies significantly predict a decrease in cyberbullying and cybervictimization, while a technical mediation strategy significantly predicts an increase. Results also show that parents' age moderates the relation between active and internet safety mediation and adolescents' engagement in cyberbullying. Parental gender also did not moderate the relation between parental mediation strategies and adolescents' engagement in cyberbullying and cybervictimization, whereas parents' educational level moderates the relation between restrictive, monitoring, and technical mediation strategies and adolescents' engagement in cyberbullying.

Keywords

Parental mediation, cyberbullying, cybervictimization, digital media, social media.

1. Introduction

Cyberbullying, sometimes called electronic bullying (Kowalski & Limber, 2007) or internet bullying (Aboujaoude *et al.*, 2015), is “an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself” (Smith *et al.*, 2008, p. 376). Previous literature has differentiated groups related to cyberbullying into perpetrators, who start the cyberbullying, victims, who are targeted by perpetrators, and bystanders, who observe the cyberbully (Wang, 2020). Cyberbully exploits the capability of the medium, the internet, in order to send messages, emails, private images, or videos to threaten one’s peers via computers and cell phones (Diamanduros *et al.*, 2008). For example, forms of cyberbullying may include victims being ignored, disrespected, threatened, called names, made fun of (Patchin & Hinduja, 2006), and sent malicious messages and/or embarrassing content (Lowry *et al.*, 2016). According to Wang, Iannotti and Nasel (2009), cyberbullying can be more insidious than traditional bullying –including physical, verbal, and relational bullying– because it can happen any time compared to traditional bullying (Tokunaga, 2010).

The proliferated use of social media among adolescents has augmented cyberbullying more than other media given the fact that these new platforms have become essential in adolescents’ social life (Kwan & Skoric, 2013; Smith *et al.*, 2008). Lowry *et al.* (2016) revealed that extensive use of social media eases the social learning process of cyberbullying on these platforms, which in turn stimulates cyberbullying perpetration (Johnson *et al.*, 2017). Moreover, anonymity on social media allows cyberbullies to send self-destructing messages, appear as unknown users, access friends of friends, and use IP-masking services. Adolescents may also lie about their age and create accounts under fake names on social media (Anderson & Sturm, 2007). The accessibility of social media apps on adolescents’ cell phones also makes it easier to get immersed in aggressive conversations (Byrne *et al.*, 2018).

Studies concerning cyberbullying have shown that this phenomenon is not limited to a specific part of the world but rather is increasing among adolescents around the globe (Slonje & Smith, 2008) in different countries and cultures, such as the United States (e.g., Wang *et al.*, 2009), Canada (e.g., Beran & Li, 2005), Australia (e.g., Price & Dalgleish, 2010), Sweden (e.g., Slonje & Smith, 2008), and Taiwan (Chang *et al.*, 2015). To be precise, in Western cultures, the Pew Research Center determined that 59% of teens have experienced cyberbullying in the United States (Anderson, 2018). Moreover, Price and Dalgleish (2010) surveyed 548 Australian students, and the results indicated that 49% of the students had been cybervictimised when aged between 10 and 12 years, 52% when aged between 13 and 14 years, and 29% when aged between 15 and 16 years. Equally important, 33% were currently dealing with a cyberbully at the time of the survey. Additionally, Hoff and Mitchell (2009) indicated that 56.1% of adolescent students in the United States experienced cyberbullying victimization, while 40% of them know a peer who had been a victim of cyberbullying. Patchin (2019) found that 36.5% of adolescents reported experiencing cyberbullying victimization in 2019 compared to 18.8% in 2007, while 15% of adolescents admitted to engaging in cyberbullying perpetration in their lifetimes. In Asian cultures, Huang and Chou (2010) conducted a study with 545 Taiwan junior high school students. The study showed that 34.9% of students had experienced cyberbullying victimization, while 20.4% of them had engaged in cyberbullying perpetration. In Indonesia, Safaria (2016) found that 80% of seventh grade students had encountered cyberbullying almost every day. Concerning the Arabic culture, Abaido (2020) surveyed 200 college students in the United Arab Emirates. The study found that 91% of participants were involved in cyberbullying. In addition, Al-Zahrani (2015) found that 27% of university students in Saudi Arabia have committed cyberbullying at least once in their lives.

According to the Communication, Space, and Technology Commission, internet usage in Saudi Arabia reached 99% of its population in 2023 (CST Issued the Saudi Internet Report 2023,

2024). Consequently, the prevalence of the internet has heightened concerns among parents in Saudi Arabia regarding children's safety and privacy, including the risk of cyberbullying. A survey conducted by Kaspersky indicated that 51% of Saudi parents are worried about cyberbullying (Al-Khudair, 2021). While parental mediation strategies have been introduced in Western cultures to regulate and reduce adolescents' exposure to cyberbullying (Chng *et al.*, 2014), there is limited research on the influence of these strategies on cyberbullying and cybervictimization among adolescents within the Arabic culture, particularly in Saudi Arabia.

In Saudi Arabia, the culture is collectivist (Hofstede, Hofstede & Minkov, 2010), where parental attitudes and behaviors significantly impact parenting practices and desired child outcomes (He *et al.*, 2021; Ogihara, 2017). For example, parents teach their children to be obedient and fulfill their duties to their families (Triandis, McCusker & Hui, 1990). Therefore, it is important to consider that Saudi parents might employ mediation strategies with their children differently than parents in other cultures. It is also significant to study the use of parental mediation strategies from the parents' point of view and cyberbullying and cybervictimization from adolescents' perspectives to obtain more reliable findings. Thus, this study aims to investigate the role of Saudi parental mediation strategies as a preventive factor against cyberbullying and cybervictimization within social media.

2. Theoretical background

2.1. Cyberbullying and parental mediation strategies

The term parental mediation was originally coined for television media research. It is used to describe the different behavioral strategies that can be employed by parents to curtail their children's television behaviors (Valkenburg *et al.*, 1999). According to researchers, parental mediation refers to the parental strategies applied by parents to regulate their children's use of and their relation with electronic technology (Livingstone & Helsper, 2008). The relevant literature regarding parental mediation and television viewing has divided parental mediation into the following three strategies: restrictive mediation, coveiwng, and active mediation (Sasson & Mesch, 2019). In coveiwng, parents view content with their children without discussing the viewed content with their children, while restrictive mediation is employed when parents utilize specific strategies to prevent their children from having access to certain content. Active mediation occurs when parents engage in active discussions about such content with their children (Chen & Shi, 2019). The rapid growth of the internet has shifted parental concern to children's online screen use. Hence, researchers argue that parents have had to employ modified strategies to manage their children's exposure to internet content in a bid to protect them from internet hazards (Livingstone, 2007). According to Livingstone and Helsper (2008), restrictive mediation (including time limits, rules, and bans on certain content and activities) as well as technical control tools (such as parental tools and filters) have become quite popular, but it has become quite difficult in the internet age to distinguish between active mediation and coveiwng. Livingstone and Helsper (2008) indicate that social interaction is a likely consequence of close proximity, active decisions (what to select and where to click), and the focus on a shared screen required during coveiwng despite the lack of conversation. The EU Kids Online II project, a notable cross-national study aimed at informing social policies for children's internet use and protection, identified five different strategies to regulate internet use among children aged between 9 and 16 years (Livingstone *et al.*, 2011). These strategies are technical controls, monitoring, active mediation of internet safety, active mediation of internet use (which involves active discussion and/or sharing activities), and restrictive mediation.

However, literature review shows that previous studies have been unable to arrive at a definite result as to the effectiveness of these strategies in mitigating cyberbullying. On one hand, Navarro *et al.* (2012) investigated the benefits of restrictive parental mediation and discovered that the likelihood of cyberbullying was considerably lower when checking and

supervising software is installed for the children. Moreover, Chang *et al.* (2015) revealed that lower parental restrictive mediation often leads to cyberbullying. Wright and Wachs (2018) also posited that restrictive parental mediation has a positive effect on cyberbullying and victimization, while instructive parental mediation has a negative effect on cyberbullying. Wright (2017) added that coviewing and restrictive mediation are negatively correlated with cyberbullying. Based on their review of 23 different studies, Elsaesser *et al.* (2017) noted that strategies concentrated primarily on parental media control, such as restricting internet use, are significantly less effective in curtailing cyberbullying and cybervictimization, whereas collaborative strategies such as coviewing and evaluative mediation have proven to be more effective against cyberbullying. However, Katz *et al.* (2019) noted that inconsistent internet mediation techniques and a controlling parenting style can increase cyberbullying among adolescents and that cyberbullying became considerably more prevalent among kids whose parents employed controlling parenting styles or inconsistent mediation techniques. Such inconsistency in determining the most effective parental mediation strategies that could lessens cyberbullying could be because the studies have been conducted from only the adolescents' perspective without asking their parents about their mediation or vice versa, which could put the accuracy of the results at risk. The work of Feijoo, Sádaba and López-Martínez (2023) in Spain is particularly relevant to this study. They explored the role parents play in the digital context and found that children do include their parents in their social media routines, such as seeking security and critical guidance regarding certain content. However, this involvement is limited as children feel their parents have a low technical level and can be easily misled.

According to Symons *et al.* (2017), employing a multiactor approach would make the results more vigorous. A review of these studies has also revealed that they have been more focused on Western and East Asian cultures, while the Arabs and their collective culture have been severely neglected. Furthermore, previous research has investigated internet use in general and has not focused on parental mediation strategies that are distinctive to a particular online means, such as social media. Investigating a specific tool is essential as a considerable number of youths regularly use these platforms and are in danger of facing undesirable conduct due to their content-generating and interactive nature. Therefore, the current study intends to examine the following hypothesis:

H1. Parental mediation strategies according to the parents' perspective affect adolescents' involvement in cyberbullying and cybervictimization.

A review of the literature has also shown that few studies in the last decade have tried to discover the parental sociodemographic factors that can influence parental mediation style. For instance, Valcke *et al.* (2010) revealed the significant role played by gender as mothers are more likely to provide better control. In addition, Eklund and Helmersson Bergmark (2013) found that mothers employ more restrictive mediation strategies than fathers regarding internet access for their children. As to parents' age, while Symons *et al.*'s (2017) study showed that parents' age is not a significant predictor, Álvarez *et al.* (2013) and Valcke *et al.* (2010) revealed that younger parents are more likely to provide parental mediation strategies than their older counterparts. Educational level is also a factor as parents with a college or university degree are more likely to provide better regulatory control than those whose education stopped at the primary or secondary level, or perhaps lower (Valcke *et al.*, 2010). Feijoo *et al.* (2023) found that while controlling screen time and access to certain social media platforms are main concerns for parents, children from middle and high socioeconomic groups acknowledged the critical competencies of their parents, leading to more active mediation. Therefore, to add to the literature by focusing on Saudi adolescents using social media platforms, the present study aims to test the following hypotheses:

H2. Parents' age moderates the association between parental mediation strategy and adolescents' engagement in cyberbullying and cybervictimization within social media platforms.

- H3. Parents' gender moderates the association between parental mediation strategy and adolescents' engagement in cyberbullying and cybervictimization within social media platforms.
- H4. Parents' educational level moderates the association between parental mediation strategy and adolescents' engagement in cyberbullying and cybervictimization within social media platforms.

3. Methods

3.1. Research design and participants

This cross-sectional study examines parental mediation strategies and cyberbullying among Saudi adolescents using social media platforms. The sample consisted of 387 parent volunteers (68.2% of parent participants were female) aged 18 years or older from Saudi Arabia who have adolescent children. Parents' ages ranged between 34 and 70 years old ($M = 43.12$, $Std = 8.077$). The sample of this study is considered a purposive and snowball sample. An online questionnaire using Google Forms was circulated via various social media platforms between June and July 2021. Participants were asked to recirculate the questionnaire to others whom they believed might be interested in answering it. In administering the questionnaire, the researchers strictly adhered to the ethical rules and guidelines prescribed by their institution and obtained its approval. At the beginning of the questionnaire, parents were instructed to complete the first part. They were then directed to ask their child, aged between 12 and 17 years, to answer the last part alone and to leave the room to ensure the child could complete it confidentially, thereby minimizing parental influence. 61.2% of adolescent participants were female ($M = 14.09$, $Std = 2.11$).

3.2. Measures

3.2.1. Parental mediation strategies

The parent participants were requested to answer the five mediation scales of internet use surveyed within the EU Kids Online II project (Livingstone *et al.*, 2011). The five scales are as follows: 1. "Active mediation of internet use" (5 items) (e.g., "Which of the following things, if any, do you [or your partner/other carer] sometimes do with your child? Talk about what they do on the internet"); items were graded as "Yes/No/Sometimes." 2. "Restrictive mediation" (6 items) (e.g., "For each of these things, please tell me if your child is currently allowed to do them: Have their own social networking profile"); items were graded as "Yes/No/Only with my/my partner's permission/I do not know." 3. "Active mediation of internet safety" (6 items) (e.g., "Have you [or your partner/other career] ever done any of these things with your child? Suggested ways to behave toward other people online"); items were graded as "Yes/No/I do not know." 4. "Monitoring" (4 items) (e.g., "When your child uses the internet at home, do you [or your partner/other career] sometimes check any of the following things afterwards? Their profile on a social network"); items were graded as "Yes/No/I do not know." 5. "Technical mediation" (4 items) (e.g., "Do you [or your partner/other career] make use of any of the following for the device that your child uses most often at home? A service or contract that limits the time they spend on the internet"); items were graded as "Yes/No/I do not know." In addition, participants were asked about their gender, age, and educational level.

3.2.2. Cyberbullying and cybervictimization

Adolescent participants were asked to complete questions about cyberbullying and cybervictimization using scales adapted from the following two cyberbullying and cybervictimization scales (Chang *et al.*, 2015): 1. "Cyberbullying" (4 items) (e.g., "How often have you made rude comments to anyone online?"). 2. "Cybervictimization" (e.g., "How often has someone spread

rumors about you online?”). Items were graded as “Never/Happened a year ago/A few times within a year/A few times a month/A few times a week.”

The reliability measures were calculated for each of the scales applied to adolescents, along with cyberbullying and cybervictimization measures (Table 1).

Table 1. Reliability measures for each of the scales used in the study.

| | A |
|----------------------|-------|
| Active | 0.868 |
| Restrictive | 0.825 |
| Internet Safety | 0.857 |
| Monitoring | 0.787 |
| Technical | 0.748 |
| Cyberbullying others | 0.814 |
| Cybervictimization | 0.856 |

Source: Own elaboration.

3.3. Analysis plan

To test the hypotheses of this study, several statistical analyses were conducted. First, the variables were examined using descriptive statistics. To address the first hypothesis, which aims to investigate whether parental mediation strategies –according to the parents’ perspective– affect adolescents’ involvement in cyberbullying and cybervictimization, a series of simple regression analyses were performed. To examine the moderating effect of parents’ age, gender, and educational level on the correlation between mediation strategies and cyberbullying and cybervictimization (H2, H3 and H4), ten moderation analyses were conducted for each of these three demographic variables separately. The moderating variables were either age, gender, or the parent’s education level. The independent variables used in the analysis were the five mediation strategies: active, restrictive, internet safety, monitoring, and technical mediation. The analyses were first carried out with cyberbullying as the dependent variable. Subsequently, the analyses were rerun with cybervictimization as the dependent variable.

3.4. Descriptive statistics

Before the models were tested, the variables were inspected using descriptive statistics (Table 2). Even after a log transform had been performed, cybervictimization demonstrated a high kurtosis value (6.96). All other variables fell within the acceptable range except for minor deviations on a few variables. Interestingly, statistics of the current study show that cyberbullying (M = 5.0362, Std = 2.18775) and cybervictimization (M = 4.6047, Std = 1.71439) among adolescents are generally low.

Table 2. Descriptive statistics for variables used investigating the influence of parental mediation strategies on adolescents' engagement in cyberbullying and cybervictimization.

| | <i>N</i> | <i>Mean</i> | | <i>Kurtosis</i> | |
|---------------------------|------------------|------------------|-----------------------|------------------|-------------------|
| | <i>Statistic</i> | <i>Statistic</i> | <i>Std. Deviation</i> | <i>Statistic</i> | <i>Std. Error</i> |
| Parents educational level | 387 | 4.8088 | .98414 | 2.882 | .247 |
| Active | 387 | 4.0362 | 1.39901 | .535 | .247 |
| Restrictive | 387 | 5.0491 | 1.39769 | 2.106 | .247 |
| Internet Safety | 387 | 4.8630 | 1.78490 | .707 | .247 |
| Monitoring | 387 | 1.9587 | 1.69832 | -1.692 | .247 |
| Technical | 387 | .9561 | 1.40526 | .037 | .247 |
| Cyberbullying others | 387 | 5.0362 | 2.18775 | 2.178 | .247 |
| Cybervictimization | 387 | 4.6047 | 1.71439 | 6.964 | .247 |

Source: Own elaboration.

4. Results

4.1. Parental mediation strategies according to the parents' perspective affect adolescents' involvement in cyberbullying and cybervictimization (H1)

To explore the effect of the five parental mediation strategies as perceived by the parents in relation to cyberbullying and cybervictimization, a series of simple regression analyses was carried out (see Table 2 for coefficients). Testing for assumptions was carried out for all analyses by producing a histogram of standardized residuals, a normal P-P plot, and a scatterplot of standardized residuals (Appendix I). With the exception of monitoring strategy in both cyberbullying and cybervictimizations, the histogram of standardized residuals and the P-P plot indicated that the data contained approximately normally distributed errors with good homogeneity of variance and linearity demonstrated by the scatterplot of standardized predicted values. There was a significant proportion of variance explained for bullying scores for active mediation ($R^2 = .079$, $F(1, 385) = 33.120$, $p < .001$), restrictive mediation ($R^2 = .047$, $F(1, 385) = 19.113$, $p < .001$), internet safety mediation ($R^2 = .097$, $F(1, 385) = 38.057$, $p < .001$), and technical mediation ($R^2 = .027$, $F(1, 385) = 10.641$, $p < .01$). The results for monitoring were not significant ($R^2 = .003$, $F(1, 385) = 1.339$, $p = .248$). For victimization, there was a significant proportion of variance explained for active mediation ($R^2 = .036$, $F(1, 385) = 14.176$, $p < .001$), restrictive mediation ($R^2 = .054$, $F(1, 385) = 21.880$, $p < .001$), internet safety mediation ($R^2 = .093$, $F(1, 385) = 39.415$, $p < .001$), and technical mediation ($R^2 = .019$, $F(1, 385) = 7.587$, $p < .01$). As with bullying, the results for monitoring were not significant ($R^2 = .001$, $F(1, 385) = 0.339$, $p = .561$). Beta values (Table 2) suggest that for the active, restrictive, and internet safety mediation strategies, decreases in each of the mediation strategies significantly predicts increases in cyberbullying and *vice versa*. However, technical mediation strategy is significantly associated with increases in cyberbullying. Moreover, Beta values (Table 3) suggest that for the active, restrictive, and internet safety mediation strategies, decreases in each mediation strategy significantly predict increases in cybervictimization and *vice versa*. However, technical mediation strategy is significantly associated with increases in cybervictimization.

Table 3. Coefficients for each analysis of the relationship between internet mediation strategies perceived by parents and adolescent internet cyberbullying and cybervictimization.

| | <i>Model/Mediation</i> | <i>Unstandardised</i> | | <i>Standardised</i> | <i>t</i> | <i>Sig.</i> |
|---------------------------|------------------------|-----------------------|-------------------|---------------------|----------|-------------|
| | | <i>B</i> | <i>Std. Error</i> | <i>Beta</i> | | |
| <i>Cyberbullying</i> | Active | -.440 | .327 | -.281 | -5.755 | <.001 |
| | Restrictive | -.340 | .078 | -.217 | -4.372 | <.001 |
| | Internet Safety | -.368 | .060 | -.300 | -6.169 | <.001 |
| | Monitoring | -.076 | .066 | -.059 | -1.157 | .248 |
| | Technical | .255 | .078 | .164 | 3.262 | <.01 |
| <i>Cybervictimization</i> | Active | -.231 | .061 | -.188 | -3.765 | <.001 |
| | Restrictive | -.284 | .061 | .232 | -4.678 | <.001 |
| | Internet Safety | -.293 | .047 | -.305 | -6.278 | <.001 |
| | Monitoring | -.030 | .051 | -.030 | -.582 | <.001 |
| | Technical | .170 | .062 | .139 | 2.754 | <.01 |

Source: Own elaboration.

4.2. Parents' age moderates the association between parental mediation strategy and adolescents' engagement in cyberbullying and cybervictimization within social media platforms (H2)

To explore the moderating effect of parents' age on the correlation between mediation strategies and cyberbullying and cybervictimization, 10 moderation analyses were performed. In all cases, the moderating variable was parents' age. The independent variables used in the analyses were the five mediation strategies of active, restrictive, internet safety, monitoring, and technical mediation. The analyses were carried out with cyberbullying as the dependent variable, and then the analyses were rerun with cybervictimization as the dependent variable. Testing for assumptions was carried out for all analyses by producing a histogram of standardized residuals, a normal P-P plot, and a scatterplot of standardized residuals (Appendix II). For all analyses, the histogram of standardized residuals and the P-P plot indicated that the data contained approximately normally distributed errors with reasonable homogeneity of variance and linearity demonstrated by the scatterplot of standardized predicted values. The results of the 10 moderation analyses demonstrated that parents' age was a significant moderator for active ($Beta = .20, t(383) = -2.198, p < .05$) and internet safety ($Beta = -.0171, t(383) = -2.433, p < .05$; Table 4) mediation with regard to the relationship between those mediation strategies and cyberbullying. No significant interactions were found with regard to victimizations as the dependent variable. These results demonstrate that parents' age makes a difference with regard to the correlation between active/internet safety mediation strategies and cyberbullying. For example, the association between active mediation and cyberbullying appears different with younger parents than with older ones.

Table 4. Results of all moderation analysis in which parents' age was the moderator between mediation strategies and both cyberbullying and cybervictimization. Also shown are the conditional effects at 16th, 50th and 84th percentiles of the moderator variable.

| | <i>Mediation /model</i> | <i>Interaction with parental age</i> | | | <i>Conditional effects at levels of moderator</i> | | | | | | | | |
|---------------------------|-------------------------|--------------------------------------|-------------|-------------|---|---------------------|-------------|--|---------------------|-------------|---|---------------------|-------------|
| | | <i>Beta</i> | <i>C.I</i> | <i>Sig.</i> | <i>Low (-8.072; 16th percentile)</i> | | | <i>Medium (.927; 50th percentile)</i> | | | <i>High (8.928; 84th percentile)</i> | | |
| | | | | | <i>Effect</i> | <i>C.I (LL, UL)</i> | <i>Sig.</i> | <i>Effect</i> | <i>C.I.(LL, UL)</i> | <i>Sig.</i> | <i>Effect</i> | <i>C.I.(LL, UL)</i> | <i>Sig.</i> |
| <i>Cyberbullying</i> | Active | 5.054 | 4.85,5.26 | <.05 | -.268 | -.476,-.060 | <.01 | -.447 | -.597,-.296 | <.001 | -.606 | -.824,-.388 | <.001 |
| | Restrictive | -.007 | -.025,0.112 | .452 | -.270 | -.469,-.076 | <.01 | -.335 | -.497,-.172 | <.001 | -.390 | -.637,-.144 | <.01 |
| | Internet Safety | -.017 | -.031,-.003 | <.05 | -.229 | -.386,-.073 | <.01 | -.384 | -.502,-.265 | <.001 | -.521 | -.696,-.345 | <.001 |
| | Monitoring | .003 | -.014,-020 | .766 | -.138 | -.333,-058 | .166 | -.115 | -.264,0.18 | .089 | -.094 | -.289,-.101 | .344 |
| | Technical | -.006 | -.024,.013 | .546 | .265 | .062,.468 | <.05 | .214 | .051,.378 | <.05 | .1688 | -.075,.413 | .175 |
| <i>Cybervictimisation</i> | Active | .006 | -.008,.021 | .384 | -.270 | -.436,-.103 | <.01 | -.213 | -.333,-.092 | <.001 | -.162 | -.337,.013 | <.069 |
| | Restrictive | -.013 | -.027,.001 | .068 | -.172 | -.324,-.019 | <.05 | -.290 | -.416,-.019 | <.001 | -.395 | -.586,-.204 | <.001 |
| | Internet Safety | -.007 | -.004,.018 | .205 | -.336 | -.458,-.213 | <.001 | -.273 | -.365,-.180 | <.001 | -.216 | -.354,-.079 | <.01 |
| | Monitoring | .004 | -.009,-.017 | .566 | -.101 | -.254,.051 | .192 | -.067 | -.170,.037 | .205 | -.036 | -.188,.117 | .645 |
| | Technical | .001 | -.014,.015 | .918 | .128 | -.031,.287 | .115 | .135 | .007,.263 | <.05 | .141 | -.051,.332 | .149 |

Source: Own elaboration.

4.3. Parents' gender moderates the association between parental mediation strategy and adolescents' engagement in cyberbullying and cybervictimization within social media platforms (H3)

To explore the moderating effect of parent's gender on the correlation between mediation strategies and cyberbullying and cybervictimization, 10 moderation analyses were performed. In all cases, the moderating variable was parents' gender. The independent variables used in the analyses were the five mediation strategies of active, restrictive, internet safety, monitoring, and technical mediation. The analyses were carried out with cyberbullying as the dependent variable, and then the analyses were rerun with cybervictimization as the dependent variable (Table 5). Testing for assumptions was carried out for all analyses by producing a histogram of standardized residuals, a normal P-P plot, and a scatterplot of standardized residuals (Appendix III). Except for monitoring strategies, the histogram of standardized residuals and the P-P plot indicated that the data contained approximately normally distributed errors with reasonable homogeneity of variance and linearity demonstrated by the scatterplot of standardized predicted values. Given this, the results for the monitoring strategies for analyses with both cyberbullying and cybervictimization should be interpreted with caution. The results of the 10 moderation analyses demonstrated that parental gender was not a significant moderator for the association between any of the mediation strategies and both cyberbullying and cybervictimization.

Table 5. Results of all moderation analysis in which parents' gender was the moderator between mediation strategies and both cyberbullying and cybervictimization.

| | <i>Mediation /model</i> | <i>Interactionwith parental gender</i> | | | <i>Conditional effects at levels of moderator</i> | | | | | |
|---------------------------|-------------------------|--|------------|-------------|---|---------------------|-------------|---------------|---------------------|-------------|
| | | | | | <i>Male</i> | | | <i>Female</i> | | |
| | | <i>Beta</i> | <i>C.I</i> | <i>Sig.</i> | <i>Effect</i> | <i>C.I (LL, UL)</i> | <i>Sig.</i> | <i>Effect</i> | <i>C.I.(LL, UL)</i> | <i>Sig.</i> |
| <i>Cyberbullying</i> | Active | .004 | -.307,.316 | .979 | -.434 | -.681,-.187 | <.01 | -.430 | -.620,-.240 | <.001 |
| | Restrictive | -.001 | -.311,.310 | .996 | -.332 | -.569,-.095 | <.01 | -.333 | -.534,-.133 | <.01 |
| | Internet Safety | -.050 | -.299,.200 | .696 | -.32 | -.531,-.124 | <.05 | -.377 | -.521,-.233 | <.001 |
| | Monitoring | -.066 | -.345,.214 | .766 | -.027 | -.230,.207 | .823 | -.092 | -.246,.062 | .241 |
| | Technical | -.001 | -.328,.327 | .998 | .243 | -.025,.510 | .075 | .242 | .053,.432 | <.05 |
| <i>Cybervictimization</i> | Active | .129 | -.121,.379 | .311 | -.307 | -.505,-.109 | <.01 | -.178 | -.331,-.026 | <.05 |
| | Restrictive | -.105 | -.348,.138 | .396 | -.219 | -.405,-.034 | <.05 | -.324 | -.481,-.168 | <.001 |
| | Internet Safety | .071 | -.125,.266 | .478 | -.336 | -.496,-.177 | <.001 | -.266 | -.378,-.153 | <.001 |
| | Monitoring | -.053 | -.272,.112 | .369 | .009 | -.175,.192 | .093 | -.044 | -.165,.077 | .477 |
| | Technical | .053 | -.205,.311 | .687 | .128 | -.083,.338 | .234 | .181 | .032,.330 | <.05 |

Source: Own elaboration.

4.4. Parents' educational level moderates the association between parental mediation strategy and adolescents' engagement in cyberbullying and cybervictimization within social media platforms (H4)

To explore the moderating effect of parent's education level on the relationship between mediation strategies and cyberbullying and cybervictimization, 10 moderation analyses were performed. In all cases, the moderating variable was parent's education level. The independent variables used in the analysis were the five mediation strategies of active, restrictive, internet safety, monitoring, and technical mediation. The analyses were carried out with cyberbullying as the dependent variable, and then the analyses were rerun with cybervictimization as the dependent variable (Table 6). Testing for assumptions was carried out for all analyses by producing a histogram of standardized residuals, a normal P-P plot, and a scatterplot of standardized residuals (Appendix IV). Except for the monitoring and technical strategies in both bullying and victimizations models, the histogram of standardized residuals and the P-P plot indicated that the data contained approximately normally distributed errors with reasonable homogeneity of variance and linearity demonstrated by the scatterplot of standardized predicted values. Given this, the results for monitoring and technical mediation strategies for the analyses with both cyberbullying and cybervictimization should be interpreted with caution. The results of the 10 moderation analyses demonstrated that parents' education level was a significant moderator for restrictive ($Beta = -.214, t(383) = -3.182, p < .01$), monitoring ($Beta = .222, t(383) = 3.383, p < .001$), and technical ($Beta = .161, t(383) = 2.408, p < .05$) mediation strategies with regard to the relationship between those mediation strategies and cyberbullying. With regard to the moderation of parental education on the relationship between mediation strategies and cybervictimization, parental education was a significant moderator of the correlation between active ($Beta = -.126, t(383) = -2.099, p < .05$) and restrictive ($Beta = -.144, t(383) = -2.735, p < .01$) mediation strategies. Referring to Table 5, we can see that there is an increasingly large negative effect as parents' educational level increases. Therefore, as the parental education level increases, there is a stronger negative relationship between all of the mediation strategies and cyberbullying. Thus, the more educated the parent is, the more successful the strategy. Regarding cybervictimization, the results are the same for active mediation, but for restrictive mediation, as education level increases, restrictive mediation has a stronger effect upon cybervictimization.

Table 6. Results of all moderation analysis in which parents' education level was the moderator between mediation strategies and both cyberbullying and cybervictimization. Also shown are the conditional effects at 16th, 50th and 84th percentiles of the moderator variable.

| | <i>Mediation /model</i> | <i>Interaction with Parents education</i> | | | <i>Conditional effects at levels of moderator</i> | | | | | | | | |
|---------------------------|-------------------------|---|-------------|-------------|---|--------------------|-------------|--|--------------------|-------------|--|--------------------|-------------|
| | | <i>Beta</i> | <i>C.I</i> | <i>Sig.</i> | <i>Low (-.089; 16th percentile)</i> | | | <i>Medium (.191; 50th percentile)</i> | | | <i>High (1.191;84th percentile)</i> | | |
| | | | | | <i>Effect</i> | <i>C.I (LL,UL)</i> | <i>Sig.</i> | <i>Effect</i> | <i>C.I.(LL,UL)</i> | <i>Sig.</i> | <i>Effect</i> | <i>C.I.(LL,UL)</i> | <i>Sig.</i> |
| <i>Cyberbullying</i> | Active | -.131 | -.278,-.016 | .081 | -.330 | -.517,-.143 | <.001 | -.461 | -.614,-.307 | <.001 | -.592 | -.827,-.357 | <.001 |
| | Restrictive | -.214 | -.346,-.082 | <.01 | -.809 | -.353,-.002q | <.05 | -.391 | -.551,-.231 | <.001 | -.605 | -.839,-.370 | <.001 |
| | Internet Safety | .017 | -.086,.119 | .751 | -.371 | -.510,-.231 | <.001 | -.354 | -.474,-.234 | <.001 | -.338 | -.512,-.163 | <.001 |
| | Monitoring | -.222 | -.093,.351 | <.001 | -.253 | -.416,-.091 | <.01 | -.031 | -.160,.098 | .636 | .191 | -.010,.392 | .062 |
| | Technical | .161 | .030,.293 | <.05 | .117 | -.063,.297 | .202 | .278 | .119,.437 | <.001 | .439 | .209,.669 | <.001 |
| <i>Cybervictimization</i> | Active | -.126 | -.244,-.008 | <.05 | -.130 | -.280,.020 | .090 | -.256 | -.380,-.133 | <.001 | -.382 | -.572,-.193 | <.001 |
| | Restrictive | -.144 | -.248,-.041 | <.01 | -.183 | -.321,-.046 | <.01 | -.328 | -.453,-.202 | <.001 | -.472 | -.657,-.288 | <.001 |
| | Internet Safety | -.018 | -.063,.099 | .660 | -.303 | -.412,-.193 | <.001 | -.285 | -.379,-.190 | <.001 | -.267 | -.404,-.129 | <.001 |
| | Monitoring | .053 | -.050,.156 | .314 | -.073 | -.202,.057 | .272 | -.020 | -.123,-.084 | .701 | .033 | -.127,194 | .685 |
| | Technical | .047 | -.058,.151 | .382 | .127 | -.016,.270 | .081 | .174 | .047,.300 | <.01 | .220 | .037,403 | <.05 |

Source: Own elaboration.

5. Discussion

The current study assesses the role of parental mediation strategies (i.e., active, restrictive, internet safety, monitoring, and technical) from the parents' perspective as a preventive factor against adolescents' engagement in cyberbullying and cybervictimization within social media. The moderating effects of parents' age, gender, and educational level on the association between the parental mediation strategies and adolescents' engagement in cyberbullying and cybervictimization within social media were also examined.

The results show that with the exception of the monitoring strategy, parental mediation strategies, namely active, restrictive, and internet safety, significantly predict a decrease in cyberbullying and cybervictimization, while the technical mediation strategy significantly predicts an increase in cyberbullying and cybervictimization. These results are partially consistent with the results of Wright's (2017) study and consistent with other studies (e.g., Elsaesser *et al.*, 2017; Wright & Wachs, 2018) in which some parental mediation strategies have a negative effect on cyberbullying and cybervictimization but the technical mediation strategy (i.e., controlling the time spent on social media) has a positive effect on cyberbullying and cybervictimization. Navarro *et al.* (2012) indicated that the restrictive parental mediation strategy is negatively correlated with cyberbullying. Nevertheless, the measurement of the restrictive parental mediation strategy in Navarro *et al.*'s (2012) study involves parents checking adolescents' accessed websites and/or using software to prevent adolescents from going to specific websites, which is different from the restrictive strategy and similar to the monitoring and technical strategies used in the current study, wherein the latter two strategies were shown to be ineffective in preventing cyberbullying and cybervictimization in Saudi adolescents. In addition, Navarro *et al.*'s (2012) study, conducted almost ten years ago and in a different cultural context, suggests that adolescents' responses may vary because strategies applied then could be harder to apply today, especially with the cultural openness to and ubiquity of social media in Saudi Arabia. Technology, urbanization, globalization, and other dynamic social forces have all influenced parenting (Bray & Dawes, 2016). 21st-century parents have access to a wide variety of global perspectives through the internet and social media, influencing a blend of individualist and collectivist orientations and a move away from more authoritarian parenting attitudes (Lansford *et al.*, 2021).

Monitoring adolescents on social media, such as checking visited websites and social media accounts and reading private messages exchanged with friends, is ineffective for preventing both cyberbullying and cybervictimization among Saudi adolescents. This finding is similar to that of Feijoo *et al.* (2023), which found that although children still need some protection from their parents, they have concerns about their parents monitoring social media. As a result, some children have two social media accounts on the same platform: a public account to add their parents and friends and a private one for close friends. Moreover, technical parental mediation strategies, such as controlling adolescents' time on social media platforms and/or tracking and filtering visited websites, can generate an opposite reaction in adolescents. It could increase the gap between parents and adolescents and the fact that adolescents can access social media platforms from anywhere, thereby increasing the perpetration of cyberbullying and exposure to cybervictimization.

Alternatively, it can be said that in an Arab culture, such as Saudi Arabia, parental mediation strategies, including active, internet safety, and even restrictive mediation, create trust between parents and adolescents as well as augment adolescents' knowledge on self-monitoring and how to prevent and react in cases of cybervictimization. It also shows that communicative and supportive strategies used with Saudi adolescents are efficient as opposed to what is known about non-Western cultures' adolescents being exposed to punitive parenting methods and applying these strategies on them (Chen *et al.*, 2017).

The present study also found that parental age moderates the association between active and internet safety mediation strategies (but not restrictive, monitoring, and technical) and adolescents' engagement in cyberbullying within social media. Older parents use more active and internet safety mediation strategies than younger parents, which in turn predicts a decrease in cyberbullying. However, Valcke *et al.* (2010) indicated that younger parents provide more effective regulatory control than older parents. It is possible that the older parents in the current study are aware and use suitable parental mediation strategies to communicate effectively with adolescents about their use of social media and the consequences of cyberbullying. For cybervictimization, parental age did not moderate the relation between parental mediation strategies and adolescents' engagement in cybervictimization within social media, which shows that parental age does not strengthen or hinder parents' use of parental mediation strategies with adolescents.

The results also revealed that parental gender did not moderate the relationship between parental mediation strategies and adolescents' engagement in cyberbullying and cybervictimization within social media. This result differs from that of Valcke *et al.* (2010) in Flanders, Belgium, and that of Eklund and Helmersson Bergmark (2013), which revealed that mothers provide more parental control on the internet than fathers for adolescents. However, over time, parental behaviors in several countries have changed, with a greater emphasis on encouraging children's autonomy (Bray & Dawes, 2016), showing a decline in authoritarian attitudes, particularly in those where corporal punishment is prohibited (Alampay *et al.*, 2021). Thus, the current study's findings are important and show that the conventional notion of the roles of fathers and mothers in parenting has changed in Saudi Arabia. Although fathers in Saudi culture tend to be less involved in helping their children because they are responsible for the primary income and spend most of their time outside the house (Mahmoud, 2018), the parenting style in Saudi culture has shifted with economic growth and women's empowerment granted by the Saudi Government, enabling women to be more involved in society ("Saudi Arabian Culture," 2021). Fathers now spend more time with their children and provide caregiving roles (Dotti Sani & Treas, 2016). Therefore, it could be argued that more fathers are becoming active in making decisions related to parental strategies with their adolescents on social media.

Moreover, the results showed that parents' educational level moderates the relation between restrictive, monitoring, and technical mediation strategies (but not active and internet safety) and adolescents' engagement in cyberbullying within social media. In other words, educated parents use more restrictive, monitoring, and technical mediation strategies than less educated parents. This result is partially consistent with Valcke *et al.*'s (2010) finding, which showed that educated parents use effective regularity control than less educated parents. In fact, when parents are educated, the level of restrictive and monitoring mediation strategies appears to be a major deterrent in decreasing cyberbullying. One explanation could be that more educated parents are cognizant of how to use restrictive and monitoring strategies properly without driving adolescents away from listening to them. In addition, because educated parents have the technological literacy, a technical mediation strategy would be easier to implement with adolescents than for less educated parents, which, however, at the same time, makes adolescents stubborn, and they tend to find other ways to access social media platforms and become a cyberbully. At the same time, education is not a major deterrent to the relation between active/internet safety mediation and cyberbullying. This result is interesting since it shows that parents—regardless of their educational level—co-view with adolescents and talk with them about how to use social media safely.

As to cybervictimization, the results show that parents' educational level moderates the correlation between active and restrictive (but not internet safety, monitoring, and technical) mediation strategies and adolescents' engagement in cybervictimization within social media. This means that educated parents are better able to provide adolescents with active/restrictive mediation strategies than less educated parents and thus to have an effect on mitigating the

level of cybervictimization. The result could be attributed to the fact that educated parents understand how to employ active and even restrictive strategies in the necessary way to help adolescents prevent becoming cybervictims. The Kingdom of Saudi Arabia highly values education ("Education and Training," 2023), improving parents' awareness and interactions with their children. At the same time, less education might not stimulate parents to use active and restrictive strategies with adolescents but will not hamper them from using these strategies with adolescents. Therefore, choosing a suitable parental mediation strategy is crucial for alleviating the excessive use of social media among adolescents (Albeladi & Palmer, 2020) and mitigating the chance of adolescents committing cyberbullying and/or being exposed to cybervictimization.

6. Limitations, implications, and future studies

Although this study revealed interesting findings, it should be noted that it has some limitations. First, the study used a cross-sectional method, making it difficult to imply causation. Second, the study cannot be generalized to other cultures since the sample was restricted to adolescents and parents in the Saudi culture. Future studies can compare the use of parental mediation strategies as a protective factor against cyberbullying on social media in two different cultures. Third, the number of females in the study was higher than that of males. Fourth, the adolescents in this study were asked to take the survey confidentially after their parents, and hence some of them might have been hesitant to answer truthfully, which could have influenced their responses. Future studies could use pre-existing platforms such as school mailing lists to recruit adolescents and ensure the sample is representative of the country's population.

As the authors had previously focused on investigating adolescents' perspectives on the role of mediation strategies in affecting cyberbullying and cybervictimization (Aljasir & Alsebaei, 2022), this study focused on parents. Thus, it would be interesting if future studies combine parents' and adolescents' points of view to study the differences in the use of mediation strategies or cyberbullying and cybervictimization. It would also be interesting to study both parents (father and mother) within the same household to compare their use of parental mediation strategies in a specific culture. An experimental study is another scope of research in which researchers can design a study by applying different parental mediation strategies and examining the best strategy followed by a longitudinal study to ensure that the results are stable. The findings of this research contribute to the literature on parental mediation strategies in non-Western cultures through showing the importance of studying Arabic cultures regarding how to mitigate cyberbullying using proper parental strategies for adolescents. Whereas gender did not play a significant role, the age and educational level of Saudi parents are major determinants of the correlation between parental mediation strategies and cyberbullying and cybervictimization. The findings of the study also indicated that tracking Saudi adolescents' social media platforms without engaging them in the process of supervision can have negative consequences. A study found that weak relationships between adolescents and their parents was strongly associated with bullying or physical violence (Albuhairan *et al.*, 2017). Thus, strengthening communication between parents and adolescents would increase affection and boost children's self-confidence in order to help them face such cyberthreats. Parents are advised to apply appropriate communication strategies depending on their children's needs in order to build a more robust and inclusive parent-child relationship. Finally, because cyberbullying is a serious issue, further attention is needed from schools to work with parents in establishing open discussions and cultivating values to prevent adolescents from the hazards of social media.

References

- Abaido, G. M. (2020). Cyberbullying on social media platforms among university students in the United Arab Emirates. *International Journal of Adolescence and Youth*, 25(1), 407-420. <https://doi.org/10.1080/02673843.2019.1669059>

- Aboujaoude, E., Savage, M. W., Starcevic, V. & Salame, W. O. (2015). Cyberbullying: Review of an old problem gone viral. *Journal of Adolescent Health, 57*(1), 10-18.
<https://doi.org/10.1016/j.jadohealth.2015.04.011>.
- Al-Khudair, D. (2021). *47% of children in Saudi Arabia have come across cyberbullying*. Arab News. Retrieved from <https://www.arabnews.com/node/1827856/saudi-arabia>
- Al-Zahrani, A. M. (2015). Cyberbullying among Saudi's higher-education students: Implications for educators and policymakers. *World Journal of Education, 5*(3), 15-26.
<https://doi.org/10.5430/wje.v5n3p15>
- Alampay, L. P., Godwin, J., Lansford, J. E., Oburu, P., Bornstein, M. H., Chang, L., ... & Gurdal, S. (2022). Change in caregivers' attitudes and use of corporal punishment following a legal ban: A multi-country longitudinal comparison. *Child maltreatment, 27*(4), 561-571.
<https://doi.org/10.1177/10775595211036401>
- Albeladi, N. & Palmer, E. (2020). The role of parental mediation in the relationship between adolescents' use of social media and family relationships in Saudi Arabia. *Journal of Information Technology Management, 12*(2), 163-183.
- Albuhairan, F., Abou Abbas, O., El Sayed, D., Badri, M., Alshahri, S. & de Vries, N. (2017). The relationship of bullying and physical violence to mental health and academic performance: A cross-sectional study among adolescents in Kingdom of Saudi Arabia. *International Journal of Pediatrics and Adolescent Medicine, 4*(2), 61-65.
<https://doi.org/10.1016/j.ijpam.2016.12.005>
- Aljasir, S. A. & Alsebaei, M. O. (2022). Cyberbullying and cybervictimization on digital media platforms: the role of demographic variables and parental mediation strategies. *Humanities and Social Sciences Communications, 9*(1), 1-9.
- Álvarez M., Torres A., Rodríguez E., Padilla S. & Rodrigo M. J. (2013). Attitudes and parenting dimensions in parents' regulation of Internet use by primary and secondary school children. *Computers & Education, 2013*(67), 69-78.
<https://doi.org/10.1016/j.compedu.2013.03.005>
- Anderson, M. (2018). *A majority of teens have experienced some form of cyberbullying*. Pew Research Center. Retrieved from <https://www.pewresearch.org/internet/2018/09/27/a-majority-of-teens-have-experienced-some-form-of-cyberbullying/>
- Anderson, T. & Sturm, B. (2007). Cyberbullying: From playground to computer. *Young Adult Library Services, 5*(2), 24.
- Beran, T. & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research, 32*(3), 265-277. <https://doi.org/10.2190/8YQM-Bo4H-PG4D-BLLH>
- Bray, R. & Dawes, A. (2016). *Parenting, family care and adolescence in East and Southern Africa: An evidence-focused literature review*. New York: UNICEF.
- Byrne, E., Vessey, J. A. & Pfeifer, L. (2018). Cyberbullying and social media: Information and interventions for school nurses working with victims, students, and families. *The Journal of School Nursing, 34*(1), 38-50. <https://doi.org/10.1177/1059840517740191>
- Chang, F. C., Chiu, C. H., Miao, N. F., Chen, P. H., Lee, C. M., Chiang, J. T. & Pan, Y. C. (2015). The relationship between parental mediation and Internet addiction among adolescents and the association with cyberbullying and depression. *Comprehensive Psychiatry, 57*, 21-28.
<https://doi.org/10.1016/j.comppsy.2014.11.013>
- Chen, L. & Shi, J. (2019). Reducing harm from media: A meta-analysis of parental mediation. *Journalism & Mass Communication Quarterly, 96*(1), 173-193.
<https://doi.org/10.1177/1077699018754908>
- Chen, L., Ho, S. S. & Lwin, M. O. (2017). A meta-analysis of factors predicting cyberbullying perpetration and victimization: From the social cognitive and media effects approach. *New Media & Society, 19*(8). <https://doi.org/10.1177/1461444816634037>

- Chng, G. S., Liau, A., Khoo, A. & Li, D. (2014). Parental mediation and cyberbullying –A longitudinal study. *Studies in Health Technology and Informatics*, 199, 98–102.
<https://doi.org/10.3233/978-1-61499-401-5-98>
- CST Issued the Saudi Internet Report 2023. (2024). *Communications, Space & Technology Commission*. Retrieved from
<https://www.cst.gov.sa/en/mediacenter/pressreleases/Pages/2024042402.aspx>
- Diamanduros, T., Downs, E. & Jenkins, S. J. (2008). The role of school psychologists in the assessment, prevention, and intervention of cyberbullying. *Psychology in the Schools*, 45(8), 693–704. <https://doi.org/10.1002/pits.20335>
- Dotti Sani, G. M. & Treas, J. (2016). Educational gradients in parents' child-care time across countries, 1965–2012. *Journal of marriage and Family*, 78(4), 1083–1096.
<https://doi.org/10.1111/jomf.12305>
- Education and Training. (2023). *National Unified Portal (GOV.SA)*.
- Eklund, L. & Helmersson Bergmark, K. (2013). Parental mediation of digital gaming and internet use. *FDG 2013 –The 8th International Conference on the Foundations of Digital Games* (pp. 63–70). FDG.
- Elsaesser, C., Russell, B., Ohannessian, C. M. & Patton, D. (2017). Parenting in a digital age: A review of parents' role in preventing adolescent cyberbullying. *Aggression and Violent Behavior*, 35, 62–72.
- Feijoo, B., Sádaba, C. & López-Martínez, A. (2023). Percepción de los menores españoles sobre el papel de sus padres en su uso de redes sociales. *International and Multidisciplinary Journal of Social Sciences*, 12(2), 157–182. <https://doi.org/10.17583/rimcis.11017>
- He, H., Usami, S., Rikimaru, Y. & Jiang, L. (2021). Cultural roots of parenting: Mothers' parental social cognitions and practices from western US and Shanghai/China. *Frontiers in psychology*, 12, 565040. <https://doi.org/10.3389/fpsyg.2021.565040>
- Hoff, D. L. & Mitchell, S. N. (2009). Cyberbullying: Causes, effects, and remedies. *Journal of Educational Administration*, 47(5), 652–665. <https://doi.org/10.1108/0957823091098110>
- Hofstede, G., Hofstede, G. J. & Minkov, M. (2010). *Cultures and Organizations – Software of the Mind: Inter-cultural Cooperation and its Importance for Survival*. New York: McGraw-Hill.
- Huang, Y. & Chou, C. (2010). *An analysis of multiple factors of cyberbullying among junior high school students in Taiwan*. *Computers in Human Behavior*, 26(6), 1581–1590.
<https://doi.org/10.1016/j.chb.2010.06.005>
- Johnson, L. D., Haralson, A., Batts, S., Brown, E., Collins, C., van Buren-Travis, A. & Spencer, M. (2017). Cyberbullying on social media among college students. *The American Counseling Association*. Retrieved from https://www.counseling.org/docs/default-source/vistas/article_03b0bf24f16116603abcacff000bee5e7.pdf?sfvrsn=4;Cyberbullying
- Katz, I., Lemish, D., Cohen, R. & Arden, A. (2019). When parents are inconsistent: Parenting style and adolescents' involvement in cyberbullying. *Journal of Adolescence*, 74, 1–12.
- Kowalski, R. M. & Limber, S. P. (2007). Electronic bullying among middle school students. *Journal of adolescent health*, 41(6), S22–S30. <https://doi.org/10.1016/j.jadohealth.2007.08.017>
- Kwan, G. C. E. & Skoric, M. M. (2013). Facebook bullying: An extension of battles in school. *Computers in Human Behavior*, 29(1), 16–25. <https://doi.org/10.1016/j.chb.2012.07.014>
- Lansford, J. E., Zietz, S., Al-Hassan, S. M., Bacchini, D., Bornstein, M. H., Chang, L. ... & Alampay, L. P. (2021). Culture and social change in mothers' and fathers' individualism, collectivism and parenting attitudes. *Social Sciences*, 10(12), 459. <https://doi.org/10.3390/socsci10120459>
- Livingstone, S. (2007). Strategies of parental regulation in the media-rich home. *Computers in Human Behavior*, 23(2), 920–941. <https://doi.org/10.1016/j.chb.2005.08.002>
- Livingstone, S. & Helsper, E. J. (2008). Parental mediation of children's internet use. *Journal of Broadcasting & Electronic Media*, 52(4), 581–599. <https://doi.org/10.1080/08838150802437396>
- Livingstone, S., Haddon, L., Görzig, A. & Ólafsson, K. (2011). Risks and safety on the internet: The perspective of European children: Full findings and policy implications from the EU Kids

- Online survey of 9–16-years-old and their parents in 25 countries. *LSE Research Online*. Retrieved from <http://eprints.lse.ac.uk/33731/1/Risks%20and%20safety%20on%20the%20internet%28lsero%29.pdf>
- Lowry, P. B., Zhang, J., Wang, C. & Siponen, M. (2016). Why do adults engage in cyberbullying on social media? An integration of online disinhibition and deindividuation effects with the social structure and social learning model. *Information Systems Research*, 27(4), 962–986. <https://doi.org/10.1287/isre.2016.0671>
- Mahmoud, S. S. (2018). Saudi Parents' perceptions of the kind of help they offer to their primary school kids. *English Language Teaching*, 11(3), 102–112.
- Navarro, R., Serna, C., Martínez, V. & Ruiz-Oliva, R. (2013). The role of Internet use and parental mediation on cyberbullying victimization among Spanish children from rural public schools. *European Journal of Psychology of Education*, 28(3), 725–745. <https://doi.org/10.1007/s10212-012-0137-2>
- Ogihara, Y. (2017). Temporal changes in individualism and their ramification in Japan: Rising individualism and conflicts with persisting collectivism. *Frontiers in Psychology*, 8, 695. <https://doi.org/10.3389/fpsyg.2017.00695>
- Patchin, J. W. (2019). Cyberbullying Data. *Cyberbullying Research Center*. Retrieved from <https://cyberbullying.org/2019-cyberbullying-data>
- Patchin, J. W. & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice*, 4(2), 148–169. <https://doi.org/10.1177/1541204006286288>
- Price, M. & Dalgleish, J. (2010). Cyberbullying: Experiences, impacts and coping strategies as described by Australian young people. *Youth Studies Australia*, 29(2), 51–59.
- Safaria, T. (2016). Prevalence and impact of cyberbullying in a sample of Indonesian junior high school students. *Turkish Online Journal of Educational Technology-TOJET*, 15(1), 82–91.
- Sasson, H. & Mesch, G. S. (2019). Parental mediation. *The international encyclopedia of media literacy*, 1–6.
- Saudi Arabian Culture. (2021). *Cultural atlas*. Retrieved from <https://culturalatlas.sbs.com.au/saudi-arabian-culture/saudi-arabian-culture-family#saudi-arabian-culture-family>
- Slonje, R. & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian journal of psychology*, 49(2), 147–154. <https://doi.org/10.1111/j.1467-9450.2007.00611.x>
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S. & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376–385. <https://doi.org/10.1111/j.1469-7610.2007.01846>
- Symons, K., Ponnet, K., Emmery, K., Walrave, M. & Heirman, W. (2017). A factorial validation of parental mediation strategies with regard to internet use. *Psychologica Belgica*, 57(2), 93. <https://doi.org/10.5334/pb.372>
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26(3), 277–287. <https://doi.org/10.1016/j.chb.2009.11.014>
- Triandis, H. C., McCusker, C. & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of personality and social psychology*, 59(5), 1006.
- Valcke, M., Bonte, S., de Wever, B. & Rots, I. (2010). Internet parenting styles and the impact on Internet use of primary school children. *Computers & Education*, 55(2), 454–464. <https://doi.org/10.1016/j.compedu.2010.02.009>
- Valkenburg, P. M., Krcmar, M., Peeters, A. L. & Marseille, N. M. (1999). Developing a scale to assess three styles of television mediation: “Instructive mediation,” “restrictive mediation,” and “social coviewing.” *Journal of Broadcasting & Electronic Media*, 43(1), 52–66. <https://doi.org/10.1080/08838159909364474>

- Wang, J., Iannotti, R. J. & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45*(4), 368-375. <https://doi.org/10.1016/j.jadohealth.2009.03.021>
- Wang, J., Nansel, T. R. & Iannotti, R. J. (2011). Cyber and traditional bullying: Differential association with depression. *Journal of Adolescent Health, 48*(4), 415-417. <https://doi.org/10.1016/j.jadohealth.2010.07.012>
- Wang, S. (2020). Standing up or standing by: Bystander intervention in cyberbullying on social media. *New Media & Society, 23*(6), 1379-1397.
- Wright, M. F. (2017). Parental mediation, cyberbullying, and cybertrouling: The role of gender. *Computers in Human Behavior, 71*, 189-195. <https://doi.org/10.1016/j.chb.2017.01.059>
- Wright, M. F. & Wachs, S. (2018). Does parental mediation moderate the longitudinal association among bystanders and perpetrators and victims of cyberbullying? *Social Sciences, 7*(11), 231. <https://doi.org/10.3390/socsci7110231>