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Parental Mediation of Digital Media Use Among Children Aged 3–8 from the Perspective of Parents' Media Competence

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Abstract

Based on an analysis of both quantitative and qualitative data collected in 2018 from the Žilina region in Slovakia, this paper intends to examine the relationship between parental mediation and parental digital media competence within households of children aged three to eight. Parent participants were recruited through schools that reflect the geographic representation of the entire region. In addition to 517 surveys, six onsite interviews with parents and observations of children interacting with digital media were collected. The research findings show that almost 50% of the children studied have access to tablets and laptops. The use of these digital devices increases with age. Qualitative data found that age and other contextual factors played a crucial role in the type of parental mediation implemented at home while quantitative data showed a significant positive correlation between parent's digital media competence and parental mediation behaviors such as enabling mediation, technical mediation, and monitoring.

Key words: young children, early childhood, parental media competence, media practices, parental mediation, digital media.

Introduction

Research related to parents' role in the digital media use of children ages 0–8 in central Europe is relatively scarce. Thus this study aims to contribute to the related academic discourse in the region. The strong presence of media in the lives of today's families is an undeniable fact. Children who fall into the early childhood stage at the time of this study were all born into the smartphone era (i.e., 2007). 2019 statistics show that 87% of the households in the cities of Slovakia and 78% in the rural areas have internet access (Eurostats, 2020). As manifested in the prevalence of internet and mobile services, digital media activities are easily observed in the daily lives of the youngest family members. A mobile phone or tablet with internet connection allows children to watch videos throughout the home, at the doctor's, while traveling, or in the restaurant. For interpersonal communication purposes, parents encourage children to use digital media as a means to communicate with remote family members through applications such as Skype and Whatsapp. Even without internet connection, children are still interacting with these devices by viewing saved videos, photos, and playing app-based games.

Research shows that children, regardless of their family's socio-economic status, have access to multiple digital devices. A study of Slovak students aged 8–10 found that 70% own a mobile phone and 48% own a tablet (Karasová, 2017). In addition, a report from the United States showed that children's mobile media usage has tripled from 15 minutes a day to 48 minutes from 2013 to 2017 (Common Sense Media, 2017). This trend of increased access and usage among children calls for the need for parents to manage the interaction between children and their digital devices so that they can take advantage of all the opportunities that digital media has to offer but also avoid any potential risks (Holdoš, 2016).

Parental Mediation

Over the years, in addition to research on television, the study of parental mediation has expanded in response to the growing interest and concern over the role of digital media in children's lives. Scholars have amassed literature on how parents interact with children in the context of digital media use (Clark, 2011; Mertens & d'Haenans, 2014; Holloway, Green, & Love, 2014).

Within parental mediation of the internet, Livingstone and Helsper (2008) found that parents use four types of mediation strategies. The first type is 'active co-use' which conceptualizes elements of active, restrictive mediation, and joint

monitoring into one. The second type is 'interaction restrictions' which involves limiting five activities that involve children to coming in contact with people online. The third strategy is 'technical restrictions' that refers to the use of filtering and monitoring software. The last type of mediation is 'monitoring' which refers to parents themselves checking the online activities and messages of their teenagers. Likewise, Nikken and Jansz (2014) identified five similar strategies: shared use, active mediation, restrictive mediation, supervision, and a strategy based on the use of filtering technology or application. When examining research using samples specifically from Slovak parents, Hacek (2012) adapted the scale of television mediation as means to study parental internet mediation.

Besides the conceptualization of parental internet mediation, scholars have also identified various factors that shape parents' selection and preference of mediation strategies. These factors range from the child's age (Böcking, S. & Böcking, T., 2009; Holdoš, 2018) to the socio-economic status of the family (Warren, 2005) and the family structure (Austin et al., 1997). At the parent-level, besides their attitude towards media, studies also found that mothers tend to implement mediation strategies more often than fathers (Valkenburg, 1999). Interestingly, parent education, despite legitimate assumptions, has little to do with mediation strategies (Livingstone et al., 2017). At the family structure level, single-parents were found to have fewer opportunities to apply mediation strategies with their children (Austin et al., 1997). Haines et al. (2013) suggest that single-parent families may use media as a time off from parenting which further decreases parent-child interaction and increases children's time spent with the media. At the same time, it is precisely families with a lower socioeconomic status where children spend more time with media, read less and have the media in their rooms (Cingel & Krcmar, 2013). Beside social economic factors, situational factors such as family schedule, social contacts of the family or internal factors such as health status and educational practices of parents were also found to be determinants of mediation use (Zaman et al., 2016).

While plenty of studies have identified the many parent and family-level determinants of parental mediation, with the rapid technological innovation and the short life cycle of digital devices, one area worth additional research is the relationship between parents' digital media competence (i.e., digital media literacy) and parental mediation (Mendoza, 2009). According to Livingstone and Bryne (2018), parents' insufficient knowledge of the online world prevents them from successfully managing their children's internet use. A recent study found that advanced media proficiency is positively associated with restrictive and technical mediation (Nikken & Oprea, 2018).

Clearly, parents play a crucial role in helping their children navigate through the digital landscape. Given the existing research on young children's digital media use and parental mediation and the need for relevant study among Slovak parents, this study proposes the following research questions and hypothesis:

RQ1: What are the digital media practices of children aged 3–8 years in Slovakia?

RQ2: What mediation strategies do Slovak parents use with children aged 3–8 concerning digital media use?

H1: Parental digital media competence is positively correlated with parental mediation strategies.

Methodology

Sample

The data were drawn from a 2018 survey of parents from the Žilina region in Slovakia with a focus on parents of children within the 3- to 8-year-old bracket. Parents were approached via kindergartens and schools that were chosen so that they would geographically represent the entire region. Altogether 572 parents (N = 572) completed the questionnaire. The instructions in the questionnaire requested that it only be filled out by the parent who primarily sets rules for and discusses digital media use with the child. Besides the questionnaire, parents in six selected families were interviewed and their children's interactions with digital media were observed at home to collect additional qualitative data.

Instrument and procedures

Parental digital media competence. Parental digital media competence was measured with a typology used in Global Kids Online research project (globalkidsonline.net) supervised by Dr. Sonia Livingstone. The instrument consists of 5 scales: operational skills, information/browsing skills, social skills, creative skills, mobile skills. For each item, parents indicated their degree of agreement regarding their digital media ability on a 4-point scale (coded 1–4; not true for me, a bit true for me, fairly true for me, very true for me).

Parental mediation strategies. Parental mediation strategies were measured by the instrument used both in the EU Kids Online and Global Kids Online research projects. It includes sub-scales for enabling mediation, restrictive mediation, parental technical mediation, and parental monitoring. For each item, parents indicated on a 5-point scale how often they engage in each of the activities (coded 1–5; never, hardly ever, sometimes, often, very often). Parents could also choose the

not applicable option if the activity does not apply to them. For example, if a child is too young to use a certain digital device or activity.

Results

Descriptive statistics were generated to answer the first research question. As shown in Table 1, almost half of 3–5 year olds have access to a tablet and laptop, one third to a smart TV, and almost two thirds to a mobile phone. For the 6 to 8 age group, a slightly larger group of children have access to tablets and laptops. In addition to having access to these devices, about one in five children in both age groups have their own tablets (see Table 2).

Table 1. Children’s access to technological equipment

| Age of children | Tablet | Mobile phone | Laptop | Computer | Smart TV | Game console |
|--|--------|--------------|--------|----------|----------|--------------|
| 3–5 years | 44.0 % | 64.4 % | 46.6 % | 23.6 % | 29.3 % | 10.5 % |
| 6–8 years | 51.5 % | 77.4 % | 54.1 % | 35.6 % | 36.7 % | 19.6 % |
| N = 572 | | | | | | |
| <i>Which devices does your child have access to?</i> | | | | | | |

Table 2. Children’s ownership of technological device

| Age of children | Tablet | Mobile phone | Laptop | Computer | Other device |
|---|--------|--------------|--------|----------|--------------|
| 3–5 years | 21.6 % | 9.5 % | 3.2 % | 1.6 % | 6.3 % |
| 6–8 years | 23.0 % | 23.7 % | 5.6 % | 3.7 % | 10.0 % |
| N = 572 | | | | | |
| <i>Which devices does your child have as their own?</i> | | | | | |

In terms of digital media use, parents report that their children are active users on a daily basis (see Table 3) and they most often use media for entertainment (see Table 4). Among the activities, watching videos and cartoons on YouTube occur the most frequently. Children also play educational games, but this is mainly among children aged 6–8 years old (see Table 4).

Table 3. Media use

| Age of children | | Tablet | Mobile phone | Laptop | Computer | Game console | Other device |
|-----------------|----------------------|--------|--------------|--------|----------|--------------|--------------|
| 3–5 years | Daily | 18.4 % | 28.5 % | 11.5 % | 5.4 % | 2.2 % | 2.5 % |
| | At least once a week | 17.8 % | 28.5 % | 17.9 % | 7.6 % | 3.8 % | 2.6 % |
| 6–8 years | Daily | 17.2 % | 38.6 % | 12.2 % | 6.8 % | 2.8 % | 1.6 % |
| | At least once a week | 23.8 % | 33.7 % | 27.6 % | 15.2 % | 8.0 % | 3.6 % |

N = 572

*How often does your child use these media?***Table 4.** Activities

| Age of children | | Photographs and personal videos | Videos and cartoons via YouTube | Entertainment games | Educational games | Offline apps |
|-----------------|----------------------|---------------------------------|---------------------------------|---------------------|-------------------|--------------|
| 3–5 years | Daily | 8.4 % | 45.0 % | 12.7 % | 8.5 % | 6.4 % |
| | At least once a week | 26.8 % | 33.3 % | 22.2 % | 25.4 % | 18.6 % |
| 6–8 years | daily | 6.6 % | 38.5 % | 21.9 % | 12.8 % | 9.8 % |
| | At least once a week | 31.7 % | 38.1 % | 33.8 % | 31.6 % | 21.4 % |

N = 572

How often does your child do the following activities using digital media?

Parental mediation

The second research question asked about the occurrence of parental mediation among Slovak parents. The most common activity is the “proximity of parent” item used to measure enabling mediation (60%). This suggests that parents are often nearby when children are using their digital devices. More detailed data show that less than half of the parents sit next to the children. Almost half of the parents report that they either often or very often communicate with their child about what they are doing with digital media. Almost one-third of the parents are actively designing ways to use the Internet safely and 27% of the parents often do activities on the Internet or with digital media together with their children.

As for restricting media use, parents favor blanket bans rather than restricting a specific activity. Among the items used to measure technical mediation, parents

report setting time rules the most (60%). Almost one third of them apply parental control for blocking and tracking websites and applications used. As for restricting online activities, visiting social networks is the most strictly regulated activity. Only 3% of parents allow children to go on social networking sites at any time. Overall, it can be argued that the limitation of individual activities is associated with supervision by most parents. The least frequent mediation strategy is monitoring. Forty percent of parents monitor videos their child watched and 30% monitor applications their child used. As shown in Table 5, our research confirms previous findings that mediation strategies correlate with each other (Böcking & Böcking, 2009; Valkenburg et al., 1999).

Table 5. Correlations between mediation strategies

| | Enabling mediation | Restrictive mediation | Technical mediation | Parental monitoring |
|-----------------------|--------------------|-----------------------|---------------------|---------------------|
| Enabling mediation | 1 | .37 | .33 | .53 |
| Restrictive mediation | | 1 | .14 | .42 |
| Technical mediation | | | 1 | .40 |
| Parental monitoring | | | | 1 |

N = 572, $p < .001$

Parental mediation and digital media competence

Pearson correlation analysis was used to verify the hypothesis about the relationship between parental mediation and digital media competence. Data shows weak but significant correlations between the different mediation types and parental digital media competence (See Table 6).

Table 6. Correlations between mediation strategies and digital competence

| | Information navigation competence | Operational competence | Social interaction competence | Creative competence | Mobile competence |
|-----------------------|-----------------------------------|------------------------|-------------------------------|---------------------|-------------------|
| Enabling mediation | .16** | .15** | | .21** | .16** |
| Restrictive mediation | .09* | | .11* | | |
| Technical mediation | .17** | .12* | .10* | .25** | .19** |

| | Information navigation competence | Operational competence | Social interaction competence | Creative competence | Mobile competence |
|-----------------------------------|-----------------------------------|------------------------|-------------------------------|---------------------|-------------------|
| Parental monitoring | .10* | | | .17* | .16* |
| Information navigation competence | 1 | .76** | .78** | .52** | .66** |
| Operational competence | | 1 | .77** | .56** | .66** |
| Social interaction competence | | | 1 | .52** | .68** |
| Creative competence | | | | 1 | .63** |
| Mobile competence | | | | | 1 |

N = 572, ** p < .001, *p < .05

Qualitative data reveals that parental mediation practices and parental attitudes toward children's digital media use vary across families. While all families have the intention to manage their children's use of digital devices, parents with younger children (1–3 year olds) have more idealistic attitudes and thoughts around mediation, whereas parents with older children are more realistic and accept being laissez-faire at times. Specifically, parents of younger children tend to share successful experiences with restrictive mediation over other mediation styles. For example, one mother said her one-year-old is not allowed to access any digital devices except Facetiming the grandparents. Another mother expressed her intention to keep her one-year-old away from screens until the child turns six.

As for parents of older children (5–8 year olds), the interview data suggest their more complex use of mediation that are often inconsistently implemented due to contextual factors such as spousal availability and existence of older siblings. First, the lack of availability from one parent can lead to incongruence between both parents' use of mediation strategies. For example, due to working abroad, one father's lack of presence often leads him to compensate for his absence by allowing more media use around the home than the rules his wife had established. Other families with the lack of presence from one parent, either due to working non-traditional hours or alcohol addiction, also showed the use of a more laissez-faire mediation approach, or low compliance from the child. Second, parental mediation strategies

can be compromised or shaped by the presence of older siblings, who are usually given more freedom to use the media and who often introduce new media content and functions that may or may not be age appropriate to their younger siblings.

Discussion

The advantage of most digital media, among other things, is that it offers children both offline and online activities, but data suggest that children tend to be more online. The findings demonstrate that Slovak parents of children under the age of 8 most frequently apply enabling mediation, but restrictive and technical mediation are also frequently used. A strong correlation between mediation strategies suggests that if a parent applies one strategy s/he tends to apply other strategies as well. Similarly, the correlation between types of digital media competence can be interpreted in a way that these types are interrelated and developed simultaneously. Despite theoretical assumptions, the findings did not suggest a strong correlation between mediation strategies and parents' digital media competence. However, multiple weak yet statistically significant correlations are present to help confirm our proposed hypothesis which predicts a relationship between the two concepts. Interestingly, creative competence is the strongest correlate out of five types of digital media competence, yet this relationship is difficult to interpret. However, it must be noted that when compared with operational, information navigation and social interaction competence, parents reported low levels of creative competence. This might imply that parents who score more on creative competence belong to a smaller group of "content producers" who logically need to master other types of digital media competence (indicated by the correlations between types of digital media competence) thus contributing to a stronger correlation with mediation strategies. Similarly, it may be also a case of mobile competence (mastering using smartphones and applications).

The fact that technical mediation is correlated with all five items used to measure digital media competence (see Table 6) suggests that this mediation requires the most direct knowledge and understanding of the online environment in order to be implemented. Another interesting finding is that parents who are equipped with four out of the five digital skills are also more likely to exercise enabling mediation, which means the higher the digital media competence, the more likely parents are to spend time talking, facilitating, and processing their children's digital media encounters. Besides the correlation data, the interviews and observations also provided evidence to suggest that parents' digital media competence plays

a role in their engagement of enabling mediation. Specifically, children whose parents said that they assisted them to interact with digital media tend to be more skilled in manipulating the devices and have a wider knowledge of the various functions these devices offer.

Conclusions

The research offers promising results that indicate digital media competence to be a predictor of desirable mediation strategies such as technical and enabling mediation. This underscores the importance of increasing parental digital media literacy. Future research could consider examining how community-based programs, or governmental policies that support parental media literacy, can improve and increase the use of enabling and technical mediation strategies.

As demonstrated by both the quantitative and qualitative data, parental mediation is a dynamic process between parents and children within the context of digital media use. It has to be studied by taking into account the child's universal development and wellbeing on top of parental and familial factors. Future research should consider taking child-related and contextual factors into account to better understand how Slovak parents mediate their children's digital media use.

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