

Parents' Views on Quality Programmes for Children and the Risks and Benefits They Bring to Preschool Children's Development and Learning

Sara Seršen¹, Martina Peštaj², and Urška Fekonja¹

¹University of Ljubljana, Faculty of Arts, Department of Psychology, Ljubljana, Slovenia

²RTV Slovenia, Department of the children and youth's programme, Ljubljana, Slovenia

Abstract

The aim of this study, which combines a qualitative and a quantitative approach, was to investigate by which standards Slovenian parents of preschool children define a high-quality children's programme that can be watched on different screens. In addition, we were interested in parents' views on the risks and benefits that programmes designed for children bring to the child's early development and learning. The sample included 239 parents of children aged 1 to 6 years. The results show that, on average, children were exposed to screens at the age of two, but individual differences in both the age of first exposure and the frequency of exposure to screen content were substantial. Parents mostly used restrictive mediation to regulate their children's screen exposure. Overall, parents attached great importance to the different aspects of quality children's programme and rated aesthetic quality, entertainment and involvement as three very important elements. The standards by which they judged the quality of children's programme were related to their education and the age of the child. They emphasised the positive effects of children's programmes on the child's emotional and language development, imagination and creativity, as well as on the development of social skills and play. On the other hand, the parents were most concerned about violent content, the modelling of inappropriate behaviour and the choice of words in children's programmes.

Keywords: media programme, preschool children, parental mediation, content quality, screen exposure

Urška Fekonja  <https://orcid.org/0000-0002-8535-6975>

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✉ Urška Fekonja, University of Ljubljana, Faculty of Arts, Department of Psychology, Aškerčeva 2, 1000 Ljubljana, Slovenia. E-mail: urska.fekonja@ff.uni-lj.si

Introduction

Devices with screens (hereinafter: screens) are more and more pervasive in all spheres of preschool children's lives. A rapid increase is documented in the amount of time spent by toddlers and children in early childhood in front of various screens (Collier et al., 2016; Rek & Milanovski-Brumat, 2016). At the same time, children are becoming screen users at an increasingly younger age (Dumuid, 2020) – some even in their infancy (Kulakci-Altinas, 2020). Excessive early exposure to various screens presents one of the higher risk factors for development and can lead to numerous negative outcomes for a child (Elias & Sulkin, 2019; Wolf et al., 2018). The risks studied most often include addiction to screen usage (Wolf et al., 2018); developmental difficulties, such as difficulties in language development, attention and executive functions (Cheng et al., 2010; Christakis et al., 2004; Li et al., 2020; Nathanson et al., 2014); sleep disorders (Cheung et al., 2017; Li et al., 2020; Wolf et al., 2018); obesity (de Jong et al., 2013; Li et al., 2020; Robinson, 2001; Wolf et al., 2018; Zhang et al., 2016); aggressive behaviour (Fitzpatrick et al., 2016; Peters & Blumberg, 2002) and development of gender stereotypes (Peštaj, 2010). However, it is important to distinguish between the effects of exposure to contents created specifically for young children and those intended for an adult audience (Guellai et al., 2022). Namely, watching quality content on screens can also bring benefits for children's development especially when viewing is accompanied by parents commenting on the content (Fitzpatrick et al., 2023; Nichols, 2022).

Parents co-shape children's screen habits as children are usually introduced to different screens by their family (Gentile & Walsh, 2002; Livingstone et al., 2017; Peštaj, 2009a). Apart from modelling the appropriate use of screens, parents can additionally prevent undesirable effects and encourage positive ones by choosing a quality content as well as by active mediation in the child's screen usage (Nathanson, 2001; Nichols, 2022; Skubic, 2018). Although the positive and negative effects of screen use on children's development have been established in several studies, there is a lack of research on the content children are exposed to on screens (Li et al., 2020), as well as on parents' perceptions of their children's screen exposure (Chong et al., 2023). As parents play a very important role in choosing the content viewed by young children, guiding them in the process of viewing and developing their healthy viewing habits (Ponti, 2023; Vintar Spreizter et al., 2021), our study focused on the perspective of parents. Namely, we explored parents' views on what constitutes a quality children's programme and how it can influence preschool children's development and learning.

Characteristics and Effects of a High-Quality Children's Programme on Children

A high-quality children's programme plays the most important role in positive outcomes of screens exposure (Ponti, 2023; Linebarger & Vaala, 2010; Thakkar et al., 2006). Researchers (Götz, 2007; Grewenig, 2009; Neuss, 2009; Peštaj, 2009a) define good quality children's programmes as contents which: a) are adapted to the development of children and their needs; b) include stories from children's everyday lives and environments which are familiar to them; c) include humour which children can understand and find entertaining; d) motivate and activate children, as well as stimulate their curiosity; e) include heroes and role models who enable the children to identify with them; f) are designed within a framework which offers children safety and does not include content or elements which could harm children; g) inform children; h) educate; i) show children the wide world and enthuse them; j) address children from an aesthetical point of view; k) provide special experiences for children; and l) are accessible to children.

Good quality children's programme can have a positive effect on various aspects of child's development and learning: it encourages language development (Linebarger & Vaala, 2010); improves general knowledge and the development of positive standpoints towards different cultures and races; and can enrich child's imagination, which is often reflected in his/her symbolic play (Thakkar et al., 2006). Furthermore, well-designed and good quality children's programme to which children are exposed to through different screens, can stimulate the development of social skills, pro-social behaviour, empathy, tolerance, respect and negative attitude towards violence (Christakis et al., 2013; Ponti, 2023).

However, the standards for a quality children's programme are not universal, but rather depend on the wider social context, therefore, it is necessary to examine the standards recognized by different groups who use screens, including parents and children (Nikken, 1999).

Parents' Views on the Quality of Children's Programmes and Their Impact on Children's Development

Research shows that the amount of time a child spends in front of screens is related to parents' opinions about possible risks and benefits that screens bring to children's development and learning (Beyens & Eggermont, 2014; Böcking & Böcking, 2009; Valkenburg et al., 1999). In their study, Jabbar and colleagues (2019) investigated how parents define the benefits and risks of technology use in toddlers and children under eight years of age in four developmental domains, namely physical, cognitive, emotional and social development. In terms of physical development, the most common risks cited by parents were pain in the neck, fingers, joints and spine, fatigue, visual impairment, laziness, obesity, lack of physical

activity and loss of interest in traditional games. In terms of the impact on the child's cognitive development, parents expressed concerns that the use of technology can cause concentration and attention problems, promote children's impatience, inhibit creativity and development of language and communication skills, and change the family values. They also expressed concern about the possibility of children being exposed to content involving pornography, violence, and real-life traffic accidents. Considering a child's emotional development, parents were concerned about the possibility of children developing addictions and becoming more aggressive. They also pointed out the experience of strong emotions that can change very quickly when viewing screen content, as well as the possible negative effects of screens on children's emotional well-being. In terms of social development, parents expressed concern about the lack of communication with parents and friends, social isolation, the development of anti-social behaviour, less interest in activities outside school and problems with social contacts. Regarding the benefits of screen use, parents reported that high-quality children's programmes can promote children's physical activity and strengthen hand-eye coordination. In terms of children's cognitive development, parents felt that quality educational content can teach them acceptable behaviour, and expand their general knowledge, vocabulary, and imagination. They also felt that use of screens can stimulate children's language development and curiosity and provide them with many opportunities for exploration.

In a study of an Australian parent sample, Hinkley and McCann (2018) also investigated parents' views on the risks and benefits of screen use in early childhood. They found that a third of parents were concerned that screen use would become habitual or that children would become addicted. Parents were also concerned about the impact of screens on children's physical health and exposure to inappropriate content that could negatively impact their emotional or cognitive development. They also pointed out the negative impact on cognitive, language and social development as well as brain development. In addition, Italian parents of infants, toddlers and children classified eye irritation, sleep problems, the development of obesity and the inability to distinguish between imaginary and real worlds as very high risks associated with their children's screen use (Covolo et al., 2021). On the other hand, Australian and Italian parents emphasised that a quality children's programme can provide the opportunity for children to acquire new knowledge and learning (e.g., new words) (Covolo et al., 2021; Hinkley & McCann, 2018). Parents also recognised the use of screens with an appropriate content as a way to relax the child and keep them occupied when they need to do something themselves (Hinkley & McCann, 2018).

As parents' views on the potential risks and benefits of screen use for their children's development depend on screen content, and parents are in most cases the ones who choose the content their children watch, it is crucial to understand what content they consider to be of high quality and suitable for preschool children (Nikken, 1999).

Based on interviews with mothers of children between the ages of three and twelve, Nikken et al. (1996) examined the standards by which mothers rate the quality of four types of children's television programmes, namely cartoons, children's news programmes, children's educational programmes, and children's dramatic programmes. They identified seven types of quality standards that children's programmes should meet in the eyes of the mothers. The three quality standards that the mothers found most important were comprehensibility, aesthetic quality and elicitation of involvement. Additional four standards were entertainment; harmlessness; credibility and presence of role models. According to the mothers included in their study, credibility was a standard that should be met primarily by news and educational programmes for children. For news programmes, aesthetic quality, entertainment, and the presence of role models were considered less important. The authors also found that mothers with a lower level of education were more concerned with the entertainment value of children's programmes compared to mothers with a higher level of education. Compared to mothers with older children, mothers with younger children were more likely to consider the harmlessness of children's programmes to be important and the credibility of children's programmes to be unimportant.

Parental Mediation During Child's Screen Content Exposure

Parental presence and assistance with understanding and learning new content viewed on screens is essential for preschool children. With an appropriate mediation, parents can prevent negative effects of screen usage by children and promote positive ones (Linder & Werner, 2012; Nathanson, 2001). Parental mediation includes strategies allowing parents to monitor and limit screen time for their children as well as interpret the content which they are exposed to (Warren, 2001). Researchers mainly define three ways of parental mediation in the child's screen usage, namely instructive mediation, restrictive mediation, and social co-viewing (Bybee et al., 1982; Dorr et al., 1989; Nathanson, 2001; Valkenburg et al., 1999). Instructive mediation includes discussion between parents and the child about different aspect of the content viewed by the child on the screen. The discussion can be held during or after the viewing and is focused mainly on the explanation of the content (why are certain actions by the main character good or bad, for example) (Bybee et al., 1982; Valkenburg et al., 1999). Restrictive mediation includes parental rules about the time and duration of viewing per day or what content is banned (violent cartoons, for example) (Bybee et al., 1982; Nathanson, 2001; Valkenburg et al., 1999). Social co-viewing represents a shared viewing experience of the parent and the child, but without discussing the content itself (Bybee et al., 1982; Dorr et al., 1989). In their meta-analysis, Chen and Shi (2019) determined that restrictive mediation is more effective than instructive mediation in decreasing the amount of various screen usage by children, especially for younger children with a lesser ability for self-regulation. On the other hand, instructive mediation, which includes parental explanations of the

screen content, is more efficient in protecting children against different risks connected with screen usage, as parent-child discussions help to develop critical thinking and stimulate media competency in children.

The frequency of parental mediation increases throughout early childhood and peaks at the beginning of middle childhood (around the ages of 7 to 9), then slowly declines (Beyens et al., 2019). This trend may reflect the adaptation of parental intervention to the child's development and changing interests, as well as the degree of children's susceptibility to the effects of the content they are exposed to on screens. In both Slovenian (Skubic, 2018) and North American (Warren, 2003) samples, parents of preschool children most frequently used restrictive mediation, followed by instructive mediation and social co-viewing during children's television viewing. In their study, Beyens et al. (2019) found that Dutch parents generally reported that they used instructional mediation more often than restrictive mediation when their children watched TV or played video games. Chinese parents also reported using instructional strategies most frequently with their preschool children, followed by social co-viewing and restrictive mediation. However, most parents used a combination of all mediation strategies, as this allows them to best adapt to the complex challenges of raising children (Wu et al., 2014). Differences in parental use of mediation strategies are influenced by various demographic characteristics of parents and children (Beyens et al., 2019). Research has shown that mothers and fathers with higher education generally use mediation more frequently than parents with lower education (Nikken & Schols, 2015; Valkenburg et al., 1999). Parents with higher education also use restrictive (Beyens et al., 2019; Valkenburg et al., 1999) and instructive (Valkenburg et al., 1999) mediation more frequently than parents with lower education. The latter could indicate that parents with higher education are more concerned about the possible negative effects of screens on their child's development and therefore restrict screen use more and explain its content (Böcking & Böcking, 2009). Researchers (e.g., Nikken & Schols, 2015; Warren, 2003) also found that parents of girls were more likely to use restrictive strategies compared to parents of boys. In contrast, Beyens et al. (2019) reported that parents of boys used restrictive and negative instructive mediation in early childhood more often compared to parents of girls, which may also be the result of an adaptation to the interests of boys, who show more interest in content including violence and action during this period. On the other hand, Wu and colleagues (2014) found no significant differences in the use of parental mediation practices depending on the gender and age of the child, number of children in the family, gender, age and education of the parents and family's financial income.

Although several studies have been conducted on the amount of time Slovenian children spend in front of different screens, there is no data on how parents recognise the effects of screen exposure in preschool years as well as how they define quality screen content for children. Knowledge of parents' views will enable a better understanding of parental practices in relation to preschool children's screen use.

Research Questions

This study, which combines a quantitative and qualitative approach, focuses on parental views on the characteristics of a quality children's programme as well as its positive and negative effects on children's development and learning. The research questions which we aimed to address were:

1. What are the screen habits of Slovenian children aged 1 to 6?
2. What mediating practices do parents use in relation to their children's screen exposure, and how do they correlate with the child's age and gender and parental education?
3. What are the standards of a high-quality children's programme defined by Slovenian parents of preschool children?
4. What are the parents' views on the possible negative and positive effects of children's exposure to children's programme with regard to the child's development and learning?

Method

Sample

A sample of 239 Slovenian parents (211 mothers and 28 fathers) of preschool children (123 boys and 116 girls aged 1–6.5; $M = 3.9$, $SD = 1.3$) was included in the study. Parents were aged 22–52 ($M = 34.9$, $SD = 5.24$): 19% were from the age group from 20 to 30 years; 68% from the age group from 31 to 40 years; 31% from the age group from 41 to 50 years and one parent was above the age of 50. Parents differed in their educational level: 10% of parents finished vocational school, 19% finished grammar school, 66% held a bachelor's or master's degree and 6% had a postgraduate degree. Roughly half (51%) of participants lived in a larger town or a city, the other half (49%) in non-urban areas. Parents were invited to participate in the study via Facebook and through e-mails by a counsellor in the preschool where they had their children enrolled.

Materials

For collecting demographic data about a parent and a child we used a *demographic questionnaire*.

Additionally, we used the following questionnaires for parents. The instructions for parents included an explanation that the term *children's programme* encompassed all genres designed for children including cartoons or animations, documentaries, television shows and feature films.

Questionnaire About the Child's Screen Habits (adapted from Peštaj, 2009b) includes seven questions about screen habits of a child, namely: a) the age of the child when he/she started to watch children's programmes; b) how often he/she watches children's programmes; c) how much time per day is the child permitted to watch children's programmes; d) on which devices does the child watch the children's programmes; e) does the child own the device with a screen; f) how many of the last ten children's programmes were watched by their child by him/herself, and g) which is the most common way for parents to choose children's programmes for their child.

Maternal Quality Standards for Children's Television Programmes Questionnaire (Nikken et al., 1996) includes 38 items in total. They relate to seven different aspects or attributes of the children's programmes: 1. Entertainment (8 items) (e.g., "A children's programme should be entertaining."); 2. Credibility (8 items) (e.g., "A children's programme should present an objective picture of reality."); 3. Innocuousness (6 items) (e.g., "A children's programme should not contain things that scare children."); 4. Involvement (7 items) (e.g., "A children's programme is supposed to encourage curiosity."); 5. Aesthetic quality (3 items) (e.g., "A children's programme should be visually pleasing."); 6. Presence of role models (2 items) (e.g., "A children's programme should portray people whom the child wants to identify with."); and 7. Comprehensibility (4 items) (e.g., "A children's programme should contain words which a child understands."). Parents use a three-point evaluation scale (from 1 = *I entirely disagree* to 3 = *I entirely agree*) for each individual aspect in order to state their opinion as to whether a good quality children's programme should include a certain attribute. A higher score on a separate scale thus indicates a higher importance of a certain aspect. Since children can watch children's content on different screens, in Slovenian version of the questionnaire we did not limit parents' answers to television only, but to all screens that children can be exposed to.

Cronbach's alpha for individual aspects of a good quality children's programme ranged between .70 to .88, except for the Comprehensibility, where the coefficient was .51. The authors of the questionnaire quoted that the lower coefficient of internal consistency can be attributed to the small variability in the answers, as the great majority of parents agreed with all four statements within this aspect (Nikken et al., 1996).

Television Mediation Scale (Valkenburg et al., 1999) consists of 15 items and encompasses three ways of parental mediation in a child's watching of the children's programmes. *Instructive mediation* (5 items) includes a discussion between a parent and the child about different aspects of a children's programme during or after the viewing (e.g., "How often do you explain to a child why some character's actions are bad?"). *Restrictive mediation* (5 items) includes parental rules about when and for how long per day can the child watch the children's programmes and what type of content is allowed (e.g., "How often do you set specific hours when the child can

watch children's programme?"). *Social co-viewing* (5 items) represents shared watching, but without a discussion between parents and the child about the viewed children's programme (e.g., "How often do you watch children's programme together with your child, as this represents a fun activity?"). Parents evaluated the frequency of their use of each form of mediation with a four-point evaluation scale (from 1 = *never* to 4 = *often*). A higher score on a separate scale indicates that a particular form of mediation is used more often.

In the Slovenian version of the questionnaire, parents also assessed their mediation strategies when their child was exposed to children's content on different screens, not just television. Cronbach's alpha for instructive mediation was .80, and .79 for both restrictive mediation and social co-viewing.

We added two more open questions asking parents about their opinion on how children's programmes positively and negatively impact the development and learning of their child, namely:

1. Are you concerned about the possible negative effects of watching children's programmes on your child's development and learning? If answering "yes", name three aspects of children's programmes that you most fear could harm your child.

2. Do you believe that children's programmes can have a positive effect on your child's development and learning? If answering "yes", name three most positive aspects of watching children's programmes.

Procedure

The invitation to participate in the study was forwarded to parents via Facebook and e-mail which was sent to 40 public preschools. Data was collected through online questionnaires. The total number of parents opening the questionnaire was 1 049. The number of parents answering the questionnaire was 499. The number of parents, who have in addition to the demographic questionnaire completed at least one other questionnaire and have thus provided useful data, was 239. The analysis of the data regarding demographic questions, questions about child's screen habits and open questions on the positive and negative effects of children's programmes took into account all relevant answers. The analysis of the answers from the Parental Quality Standards for Children's Television Programmes Questionnaire and the Television Mediation Scale took into account the data of the parents who answered all items. For calculating the correlations between certain pairs of variables, we have used the pairwise method (Komidar, 2021). For open questions, we have performed a content analysis, where we arranged the answers in the appropriate categories and analysed the frequency of occurrence for individual questions. Two raters independently rated the parents' responses and, in case of disagreement, reached a common consensus on the categorization of each response.

Results

Children's Screen Habits and Parental Mediation Strategies

According to parents' reports, the great majority of children (88%) started to watch children's programmes in their first or second year of life. The average age when children started watching children's programmes was 23 months ($SD = 9.20$), with the answers ranging between 1 and 48 months. When asked how frequently their child watches children's programmes, 51% parents replied every day, 17% replied 5 to 6 days a week, 16% replied 3 to 4 days a week, 10% 1 or 2 days a week, 4% replied several times a month and 2% replied that their child watches children's programmes once a month. Roughly half of the children watch children's programmes between 30 and 90 minutes per day (55%); 12% of children watch children's programmes less than 30 minutes and 17% watch children's programmes more than two hours per day. On average, children watch children's programmes 67.23 minutes per day ($SD = 43.87$). The average time that children spent watching children's programmes increased with age, but the individual differences were substantial: on average, 12-month-old toddlers watch children's programmes 40 minutes per day ($M = 40.42$; $SD = 39.17$); two-year-old toddlers 43 minutes ($M = 43.21$, $SD = 28.91$); three-year-old children 61 minutes ($M = 61.02$, $SD = 39.22$); four-year-old children 66 minutes ($M = 66.10$, $SD = 34.14$); five-year-old children 83 minutes ($M = 83.58$, $SD = 52.56$); and six-year-old children 90 minutes ($M = 90.62$, $SD = 51.57$). Parents' answers to the question about where the child can watch children's programme showed that most children have the opportunity to watch on one ($n = 95$) or two ($n = 82$) devices.

Children most often watch children's programme on television ($n = 199$), followed by smartphone ($n = 12$), tablets ($n = 12$) and computer ($n = 11$). Furthermore, parents reported that the vast majority ($n = 214$) of children did not own any screen devices. Seven children owned a smartphone, ten owned a tablet and two owned a television. One of the parents reported that the child owned four devices with screens (television, smartphone, computer and tablet), two children also owned a tablet and television, two owned a smartphone and a tablet, and one owned a smartphone and television. We asked parents how many of the last ten children's programmes were watched by their child by him/herself. Around one third of the parents (28%) replied that their child has never watched a show by him/herself, while half of them were present in at least half of the occasions (51%). We also asked parents of their most common way of choosing children's programmes. The results have shown the lowest percentage of those parents who allow their child to watch whatever is available at any given time (9%). Slightly less than a half of parents (42%) allow their child to choose the programme by him/herself, while 48% of parents said that they choose the programme themselves.

Table 1

Descriptive Statistics, Cronbach's Alpha and Shapiro-Wilk Test of Normality of Distribution for Summative Scores on Mediation Scales

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	Min	Max	Skewness	Kurtosis	<i>SE</i>	α	<i>W</i>	<i>p</i>
Instructive	214	15.26	2.92	15	5	20	-0.36	0.01	0.20	.88	.964	< .001
Restrictive	214	16.57	2.84	17	5	20	-1.04	1.14	0.19	.68	.910	< .001
Social co-viewing	214	14.64	2.80	15	5	20	-0.43	0.19	0.19	.85	.963	< .001

As presented in Table 1, parents on average most often used mediation strategies, which qualify as restrictive, and most rarely used social co-viewing strategy.

Table 2

Correlations Between Parental Mediation Strategies, Child's Age and Gender, and Parental Education

Strategy	Child's gender	Child's age	Parental education
Instructive	.01	-.02	-.17*
Restrictive	-.02	-.08	.07
Social co-viewing	.01	-.04	-.19**

Note. For calculating the correlation with child's gender, the Kendall's tau was used, while Spearman's rho was used for the child's age and parental education. For gender coding, we used code 1 for the boys and code 2 for the girls.

* $p < .05$. ** $p < .01$.

In addition, we investigated whether parental education, child's gender and age are related to parents' use of different mediation strategies. As can be seen in Table 2, the use of different mediation strategies was not related to child's gender and age. However, parents with a lower level of education stated that they more often used instructive mediation and social co-viewing, but all correlations were low.

Parents' Views on Quality Standards for Children's Programmes

Table 3

Descriptive Statistics and Shapiro-Wilk Test of Normality of Distribution for Summative Scores on Maternal Quality Standards for Children's Television Programmes Questionnaire

	<i>N</i>	<i>M</i>	<i>SD</i>	Min	Max	Skewness	Kurtosis	<i>SE</i>	<i>W</i>	<i>p</i>
Entertainment	215	21.14	2.44	12	24	-1.20	1.45	0.17	.887	< .001
Credibility	215	20.14	2.32	12	24	-0.61	0.13	0.16	.954	< .001
Innocuousness	215	15.18	1.83	8	18	-0.91	1.00	0.12	.925	< .001
Involvement	215	18.11	2.09	11	21	-0.95	0.77	0.14	.917	< .001
Aesthetic quality	215	8.37	0.86	5	9	-1.35	1.52	0.06	.731	< .001
Role models	215	4.73	1.25	2	6	-0.63	-0.61	0.09	.848	< .001
Comprehensibility	215	9.88	1.52	5	12	-0.59	0.12	0.10	.918	< .001

As can be seen in Table 3, parents on average attributed great significance to all the aspects of the quality of children's programme, but rated aesthetic quality, entertainment and involvement as very important elements, while role models were indicated as a less important aspect. In the next step, we calculated correlations (Spearman rho) between parents' standards for a high-quality children's programme, child's age and parental education. The results showed several significant correlations, namely the Credibility ($\rho = -.17, p < .01$) and the Comprehensibility ($\rho = -.21, p < .01$) scales were negatively correlated with parents' educational level, suggesting that these two aspects of quality were assessed as more important by parents with lower education. Furthermore, child's age was positively correlated with the Involvement ($\rho = .14, p < .05$) and the Comprehensibility ($\rho = .18, p < .01$) scales indicating that these two aspects are more important for parents with older children.

Parental Views on Possible Risks and Benefits of Children's Programme for Child's Development and Learning

Among 207 parents who answered the question "Do you have any concerns regarding any possible negative effects of children's programmes on your child?" 87 parents (42%) responded that they don't have any concerns, while 120 parents (58%) expressed concern. Parents who expressed their concern about possible negative effects of children's programmes were asked to state three aspects of children's programmes, which they see as most threatening to their child. First, we have reviewed all the individual answers given by parents. In the next step, we grouped the same or similar answers together, thus creating the broader first-order categories referring to the similar content, and recorded the frequency of their appearance. In the next step, the first-order categories were grouped in second-order categories. These categories were partially based on the findings of some previous studies (Covolo et al., 2021; Hinkley & McCann, 2018; Jabbar et al., 2019). As the analysis of answers has shown that, while some parents focused on different *aspects* of children's programmes, others listed *effects* which children's programmes have on the child, we arranged second-order categories in these two broader categories. Answers expressed by at least 5% of parents are summarised in Table 4.

Table 4

Summary of Answers (First-Order and Second-Order Categories) Regarding Different Aspects and Effects of Children's Programmes Where Parents Have Been Concerned That They May Be Harmful to Their Child

Negative aspect	<i>f</i>
Content	
Violent content (too much violence, excessive violence, arms display, aggressive behaviour, violence shown as something positive)	56
Improper words and expressions (bad words, cursing, derogatory words, insults, bullying, improper communication)	12
Improper content (such as terrible things, events, actions)	7
Reckless message (meaningless or senseless message)	6
Characters' attributes	
Improper behaviour of characters (bad behaviour, rudeness, too many pranks and too much rampage, disrespect, treacherousness)	21
Negative effect on the child	<i>f</i>
Emotional development	
Concern about the development of screen addiction	20
Emotional and behavioural issues (stubbornness, disobedience, impudence, being spoiled, unruliness, excessive blackmail, fear of sleep)	11
Cognitive development	
Attention deficiency	7
Social development	
Copying improper behaviour, bad habits (such as the child has/would become rude, aggressive, violent) or unreal images	12

Among 209 parents, who answered the question “Do you think that children’s programmes can have a positive effect on your child’s development and learning?” only 13 parents (6%) stated that children’s programmes have no positive effects, while the majority of parents (94%) answered that children’s programmes can have a positive contribution in their child’s development and learning. We asked them to name three of the most positive aspects of children’s programmes. The answers were analysed and categorised in the same way as the answers about possible negative effects of children’s programmes. Similarly, some parents focused on the positive *aspects*, while others emphasised positive *effects* of children’s programmes. The answers given by at least 5% of parents are summarised in Table 5.

Table 5

Summary of Parents' Answers Regarding Aspects and Effects of Children's Programmes, Which May Have a Positive Contribution in the Child's Development and Learning

Positive aspect	<i>f</i>
Content	
Educational content	21
Content encouraging cooperation and help for others	13
Content about friendship and empathy	13
Learning in a fun and interesting way and through play	6
Positive effects on the child	<i>f</i>
Emotional development	
Fun and happiness while watching	35
Relaxation and comfort before going to bed	22
Getting acquainted with emotions, expressing emotions and empathy	18
Learning and acquiring new knowledge	
Learning and obtaining new knowledge (in general)	62
Learning foreign languages	26
Learning numbers, counting and alphabet	15
Learning about animals' attributes and care for animals	11
Developing general wisdom	11
Learning colours	8
Learning about the world, different cultures, ways of life and habits	7
Broadening horizons (programme showing other aspects of life for example)	6
Language development	
Expanding vocabulary	40
Encouraging language development (the child talks more and more fluently, learns how to pronounce words properly)	15
Learning the Slovenian language	8
Imagination, creativity and thinking	
Development and stimulation of the imagination	32
Encouraging curiosity and exploration	21
Development and encouragement of creativity	8
Stimulating thinking (the child for example deliberates how he/she could help a character in the story or thinks about the message of a certain cartoon) and logical thinking	8
Social development	
Learning how to solve conflicts and problems	7
Learning what is good and what is bad	6
Learning about interpersonal relationships and developing social skills	8
Play	
Encouraging independent play	8

Discussion

The two main objectives of this study were to define the standards that parents of preschool children believe constitute a high-quality children's programme and to explore parents' views on the potential positive and negative effects of children's programmes on children's early development and learning. In addition, we were interested in the viewing habits of preschool children aged one to six and the mediation practices parents use during child's screen exposure.

Children's Screen Habits and Parental Mediation Strategies

Analysis of parents' reports on their children's screen habits between the ages of one and six revealed that the vast majority of children started watching children's programmes in their first or second year of life. On average, children were introduced to children's programmes at around the age of two, however, the differences in age were rather large (between one and 48 months) and roughly 40% of children were exposed to the screens before the age of two, which is in line with the findings that the children are exposed to screens at a lower age than recommended by experts (McArthur et al., 2022). Around half of children in our sample watched between 30 and 90 minutes of children's programmes every day, an average of 67.23 minutes per day. The amount of time spent in front of the screens ranged from 5 to 300 minutes per day, indicating substantial individual differences among children. Inequalities in screen exposure among preschool children are reported by several other researchers, for instance for Australian (Brushe et al., 2023), French (Akbayin et al., 2023) and North American (Zimmerman et al., 2007) children. The findings also showed that the average time children spent watching children's programmes increased with age, for instance two-year-old toddlers watched 40 minutes of children's programmes per day, while six-year-old children watched 90 minutes of children's programmes per day. This suggests a lower exposure compared to Australian two-year-old toddlers who are exposed to screens 148 minutes per day (Brushe et al., 2023). Our findings are more similar to those obtained in a sample of French children, showing that the average daily screen time of toddlers under the age of two was 26 minutes, while children aged from two to six were exposed to screen on average 66 minutes on weekdays and 103 minutes on weekends (Akbayin et al., 2023).

Most children in our sample had the opportunity to watch children's programmes on one or two devices; most commonly this was television, while some of the children also used a smartphone, tablet, or computer. In addition, the vast majority of children did not own any screen devices. We also found that parents in our sample were often present while their child was watching a children's programme, as the majority of them were present in at least half of the occasions. This finding suggests that children are often engaged in shared viewing of screen content which represents a positive screen experience as having a parent who

participates and comments on television programme content is proved to have a positive effect on various aspects of child development (Guellai et al., 2022). The obtained results, on the other hand, may also indicate the socially desirable response of parents. For instance, a study including North American sample of parents indicated that only 32% of parents said that they watched television with their toddlers (Zimmerman et al., 2007). It is also possible that the parents are only present in the common room with the child and supervise him/her but do not actually watch the screen content with the child. As for their active role in selecting a programme for their child, most parents indicated that they selected the screen content themselves, while slightly less than half of the parents allowed their child to select the programme themselves, which can be worrying with regard to the quality of content that children are exposed to.

By using different mediation strategies, parents can contribute to the development of appropriate screen habits in children as well as encourage positive and prevent unwanted effects of watching children's programmes (Linder & Werner, 2012; Nathanson, 2001). Parents from our sample stated that they mostly used restrictive mediation, e.g., by specifying the exact time and duration allowed for watching children's programmes or by specifying the content which can be watched. This was followed by instructive mediation, which includes conversations about the characters' actions and motifs and assisting the child to better understand the content. The least used was the social co-viewing strategy, namely that a parent watches a children's programme with the child because they both enjoy it. These results are in line with the findings of several other studies (e.g., Skubic, 2018; Warren, 2003). According to Chen and Shi (2019), the most efficient strategy for decreasing child's use of various types of screens is restriction, as it enables the parents to limit the use and at the same time conveys their disapproval of the excessive use of the screens. The latter applies particularly for preschool children whose self-regulating abilities are still not well developed. However, most parents generally use all mediation strategies in various combinations (Wu et al., 2014) and our study also found no major differences in parental use of the individual mediation strategies, although the frequency of use differed according to the parents' level of education. Namely, parents with a lower educational level stated that they used more strategies of instructive mediation and social co-viewing than parents with a higher educational level. This is not in line with studies where parents with a higher education stated using more restrictive (Beyens et al., 2019; Valkenburg et al., 1999) and instructive strategies (Valkenburg et al., 1999) than parents with a lower education. Our findings might reflect a certain sense of subjectivity or social desirability towards the answers given by parents with various levels of education. However, it should be noted that the parents in our sample generally had a high level of education and only 10% of parents had vocational education. Further research should be conducted to better understand the practices of parents with low levels of education with regard to their children's early screen use.

Furthermore, child's gender and age were not related to the parents' use of different mediation strategies, which supports the findings by Wu et al. (2014). On the other hand, some other studies have shown that the child's gender is related to parental mediation during the child's screen use (Beyens et al., 2019; Nikken & Schols, 2015). One possible reason for these contradictory findings may be that the frequency of parents' use of mediation strategies is not only related to demographic variables, but to a broader social context as well (Beyens et al., 2019). Thus, parents can use individual forms of mediation with differing frequency according to the intensity of concern that the children might develop fear of copy aggressive behaviour due to watching screen content (Valkenburg et al., 1999).

Parental Standards of a Good Quality Children's Programme and Their Views on Its Risks and Benefits for Child's Development and Learning

This study delved into what the attributes or standards of a good quality children's programme are and what the positive and negative effects of watching children's programmes are as perceived by parents. Overall, parents attributed great significance to all the aspects of a good quality children's programmes that have been highlighted as important in several studies (Götz, 2007; Grewenig, 2009; Neuss, 2009; Peštaj 2009a); they rated aesthetic quality, entertainment and involvement as three very important elements, while the presence of role models seemed somewhat less important. The presence of role models was also perceived as a less important criterion of a high-quality children's programme by mothers in the Netherlands, while they perceived comprehensibility, aesthetic quality and involvement of children as more important aspects (Nikken et al., 1996). The parents in our study therefore particularly pointed out that a good quality children's programme should be aesthetically pleasing, which refers to being visually pleasing, including beautiful images and being professionally made. It should also be entertaining, namely it should make children happy, include a lot of humour, relax and excite. Additionally, the entertaining aspect refers to comprehensibility, activities that the children can experience themselves as well as to the children taking on the main roles. Another very important aspect of a quality children's programmes noted by the parents was that they encourage curiosity, imagination, and discussion amongst children; involve them emotionally and retain their attention.

Our findings also suggest that the definition of a quality children's programme is influenced by the parents' education and child's age. For parents with lower education, credibility and comprehensibility were noted as more important aspects of quality while parents with younger children assessed involvement and comprehensibility as more important aspects. The findings are not in line with the results reported by Nikken et al. (1996) that mothers with a lower level of education were more concerned with the entertainment value of children's programmes. In fact, lower educated parents in our sample emphasised that the children's programme should show the reality of life and be educational as well as allow children to easily

follow and understand the main message. The latter was also more important for parents of younger children than to parents with older children, as well as the fact that the programme easily attracts children's attention and encourages creative thinking, which probably reflects the shorter attention span of younger children and their lower ability to understand a more complex screen content. Dutch mothers with younger children on the other hand were more likely to consider the harmlessness of children's programmes to be important (Nikken et al., 1996).

When asked about possible risks that children's programmes pose to the child's development, parents indicated that violent content (e.g., display of arms) and inappropriate behaviour and language (e.g., rudeness, too many pranks and tantrums, use of derogatory words, insults) are their biggest concerns regarding the child's exposure to screen content. Namely, parents were concerned that the children would copy the displayed improper behaviour and bad habits. The second most frequent concern expressed by parents was the development of screen addiction. They also expressed concerns that improper contents could incite emotional, behavioural (e.g., stubbornness, disobedience) and attention problems. Parents thus reported most of the negative effects of screen use most frequently studied in the scientific literature, such as screen addiction, developmental delays and aggressive behaviour (Cheng et al., 2010; Li et al., 2020; Peters & Blumberg, 2002; Wolf et al., 2018), from which we can conclude that they are aware of the various possible negative effects of (excessive) viewing of children's programmes. Parents participating in some other studies (e.g., Hinkley & McCann, 2018; Jabbar et al., 2019) have expressed similar concerns, but in addition, have also expressed concerns related to the physical (e.g., development of obesity, eye irritation, aches in the neck and the spine) and social development (e.g., lack of communication with parents and peers), which were stated by Slovenian parents less frequently.

Well-designed and high-quality children's programmes, on the other hand, can stimulate children's language development, prosocial behaviour, empathy, curiosity, and imagination; children can acquire a great deal of knowledge about various topics; and programmes that address individual differences can promote the development of positive attitudes toward other cultures and races (Linberger & Vaala, 2010; Ponti, 2023; Thakkar et al., 2006). When asked about the benefits that children's programmes can bring to preschool children, the vast majority of parents participating in our study indicated that children's programmes can contribute positively to their child's development and learning. They most emphasised learning and acquiring new knowledge, expanding vocabulary and learning foreign languages. In other words, they recognise educational content as an important aspect of children's programmes. Very often they stated that children's programmes promoted the development of imagination and curiosity. Many parents also recognised entertainment and relaxation as another positive aspect of children's programmes. These results are consistent with the findings of Australian and Italian parents of preschool children, who also perceived the acquisition of new knowledge

and learning (e.g., new words), relaxation, stimulation of imagination and curiosity as positive aspects of viewing children's programmes (Covolo et al., 2021; Hinkley & McCann, 2018).

However, some limitations should also be considered when interpreting the results of this study. One is the possible social desirability of the parents' self-reports and the relatively small sample of parents, particularly with regard to the number of parents who opened the questionnaire but did not complete it. In this context, it should be noted that this is a convenient sample of parents who are, on average, highly educated. Therefore, future research should be conducted on samples of parents with lower levels of education to better understand their attitudes towards their children's early screen use. In addition, we were interested in parents' views on children's programmes in general, while there might be differences in their views on the quality as well as the benefits and risks of different genres, which should be further investigated. Future research should also aim to investigate the decisions that parents make based on their opinions about children's programmes. We could expect that parents' opinions about the quality of children's programmes will also affect their choices of screen contents for their children, but this relation should be further analysed.

Conclusions

This study was the first in Slovenia to investigate parents' views on what constitutes quality screen content for children, as well as their views on positive and negative aspects of children's programmes for child development. The results of our study show some favourable, but also some less suitable screen habits of a sample of Slovenian preschool children, suggesting that children are exposed to screen content at a very young age and differ significantly in the amount of time they spend watching children's programmes. According to parents' self-reports, they used different mediation strategies during their children's viewing of screens, but on average they used restrictive mediation most often, which proved to be the most effective strategy for reducing children's screen use. In addition, parents placed a high value on all aspects of quality children's programmes highlighted by several authors, but considered aesthetic quality, entertainment, and involvement to be the three most important aspects. Parents' standards for quality children's programme were also found to be related to their education and the age of the child. The risks and benefits of watching the children's programmes identified by parents are largely consistent with those demonstrated in many studies, suggesting that parents in our sample are well informed and educated about the positive and negative effects of exposure to screen content in preschool children. Our findings highlight the importance of further raising awareness and supporting parents in developing healthy screen habits for their children, as well as educating them on how to choose quality children's programmes for their children. Knowing what parents consider to be quality screen content for children and how exposure to different content affects their

child can provide a good basis for developing prevention programmes for parents and children in the early years of life.

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