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# The role of sociodemographic factors in children's media preferences and their connection to violent content and physically aggressive behaviour

**Abstract:** The relation between children's exposure to violent media content and the display of physically aggressive behaviour has been extensively examined, frequently via Bandura's social learning theory. This study investigates media preferences among preschool and early elementary school children, focusing on sociodemographic differences and the association between exposure to violent media content and children's physically aggressive behaviour. The research was carried out in three stages: (1) parents completed a survey to provide sociodemographic data about their children; (2) children were interviewed about their favourite media and peer assessments of their physically aggressive behaviour were collected; and (3) children's preferred media content was analysed to evaluate the extent of the violent content it included. The findings indicate a significant association between exposure to violent media content and a higher incidence of physically aggressive behaviour on the part of children. Moreover, there are gender- and age-related differences in children's media preferences, with boys and older children more frequently preferring violent content. These findings highlight the importance of both media literacy and active parental mediation in shaping children's media habits and provide valuable insights for preventing the negative impacts of exposure to violent media on young children's social and behavioural development.

**Keywords:** children's media preferences, violent media content, physically aggressive behaviour

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## Introduction

As early as the mid-twentieth century, the public expressed concern about the effects of violent media content on children. For example, even before footage was available of the assassination of U.S. President John F. Kennedy in 1963 – a tragic event that drew further attention to the issue of violence in the media – researchers and concerned members of the general public were already warning about the violent elements of popular cartoons such as *Bugs Bunny* and *Tom & Jerry* (Storey 2025). While numerous empirical studies and a vast body of anecdotal evidence have accumulated over the decades, researchers are still seeking to understand how exposure to media violence at an early age may shape children's development in the long term, regardless of the media format via which the violence is presented.

Early concerns about violent media content were primarily directed towards comic books, radio programmes and cinemas. However, the rapid spread of television into households during the 1960s intensified both scientific and public debate about the potential link to children's physical aggression.<sup>1</sup> During the same decade, Bandura (1978) formulated social learning theory, which posits that individuals acquire social behaviours not only through direct experience but also by observing models, whether in everyday life or via media sources. Observational learning allows children to recognise which behaviours are rewarded and which are punished, and unpunished acts may be implicitly perceived as being rewarded (ibid.). Hence, when media sources portray aggressive behaviour without showing its consequences, children are more likely to adopt aggression as a strategy in their own social conflicts (Dill and Dill 1998).

Evidence also shows that both children and adults pay greater attention to, identify more strongly with and learn more effectively from attractive models than from less attractive ones (Bandura 1978). This is particularly significant because the main characters in television programmes and video games are al-

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<sup>1</sup> This paper distinguishes between physical violence and physical aggression. Violence, as defined by Warburton and Anderson (2015), is a narrower and more extreme form of aggression, marked by the intent to cause serious bodily harm that requires medical care or, potentially, results in death. As such forms of violence are uncommon in children, studies of children in preschool and early school years focus on physical aggression, which is described by Orpinas and Horne (2005) as intentional but less severe behaviours – such as pushing, hitting, pinching, hair-pulling or damaging clothing and property – that can still cause physical or psychological harm.

most always designed to appear attractive, whether in terms of their physical appearance or their social status (Meyers 2002). Given such issues, the impact of violent media content has been at the forefront of both scientific and public debate for decades, and the advent of digital media platforms – such as the internet and video games – has only intensified the scholarly interest. Unlike traditional forms of media, these new media sources offer interactive features and active user engagement, which may heighten the impact of violent content (Leburčić et al. 2008).

Children represent a particularly vulnerable social group (Livazović 2009). Indeed, during the formative phase of developing attitudes, values and social behaviours, they are highly susceptible to media influence, which conveys patterns and norms of seemingly desirable lifestyles (ibid.). Among the various topics related to children and the media, the association between violent content and physical aggression has attracted the most public attention. For instance, Lemish (2015) highlights how violence predominates in many commercial television programmes, films and video games, largely because viewers perceive violence as exciting and easy to understand, regardless of any linguistic or cultural barriers. While noting that it is nearly impossible to calculate the number of violent incidents to which the *average* child is exposed via the media, Lemish (ibid.) estimates that, by the age of twelve, children who primarily watch commercial television will have been exposed to approximately 20,000 homicides and around 100,000 other aggressive acts solely through the television. Although these numbers are only rough estimates, it is generally agreed that children worldwide witness far more violent incidents in the media than they will ever experience in real life.

Scientific interpretations of the effects of violent media content can be grouped into two main perspectives – namely, direct effects theory holds that violent media content has a strong and primarily negative impact on the audience, whereas limited effects theory highlights the selectivity of the impact, arguing that media content mainly reinforces previously formed attitudes, with the effects mediated by various social, situational and individual factors (Livazović 2009). Empirical findings mirror this theoretical divide. For instance, a substantial body of research has found a positive association between exposure to violent media content and physical aggression (Coker et al. 2015; Coyne et al. 2017; De Andrade Rocha et al. 2025; Eron 1987; Gentile et al. 2017; Huesmann et al. 2003; Meysamie et al. 2013; Pagani et al. 2025; Zhang et al. 2021). However, a smaller number of studies have found no such relationship, or even a negative one, between violent media exposure and aggression (DeCamp 2015; Jamnik and DiLalla 2018; Kovess-Masfety et al. 2016). Meta-analyses reflect this inconsistency. In fact, while some analyses report small to moderate, albeit consistent, correlations (Bender et al. 2018; Ferguson 2015; Furuya-Kanamori and Doi 2016), others point to the issue of publication bias and argue that the evidence concerning strong negative effects remains inconclusive (Ferguson and Kilburn 2009; Mößle et al. 2014).

These persistent contradictions have fostered a divide between *media pessimists*, who assert that violent media content significantly harms children, and *media sceptics*, who argue that conclusive evidence of such harm is lacking (Browne and Hamilton-Giachritsis 2005). Simultaneously, there is a growing consensus that individual differences – such as age, gender, social environment

and emotional development – are critical determinants of children's vulnerability to the effects of violent media content.

In this regard, research consistently shows that boys are more likely than girls to consume violent media, and they are more vulnerable to its negative effects. Gendered media preferences emerge as early as the age of two and become more pronounced over time (Hall 2020). More specifically, girls tend to choose calm or romance-themed content, whereas boys prefer action-oriented or frightening material. Boys also emphasise the importance of excitement and violence, whereas girls value comprehensibility and a lack of offensive content. These patterns are reflected in survey data, where boys are nearly twice as likely as girls to encounter violence in video games (Center for Innovative Public Health Research 2012), and they also report higher exposure to violence via television and film (Mößle et al. 2014). Both sexes identify more strongly with media characters of the same gender (Hall 2020). As a result, boys – who are more frequently exposed to violent male characters – show higher levels of physical aggression, while girls tend to express aggression in verbal or more subtle ways. Moreover, because violent acts in the media are often rewarded, boys may be encouraged to reproduce such behaviours even in non-threatening situations (Pagani et al. 2025). Beyond social expectations, personality traits also play a role in media preferences: boys' greater enjoyment of violent depictions, lower aversion to such content, higher levels of sensation-seeking and aggression and reduced empathy all predict stronger exposure to violent media content (Hartmann et al. 2015).

Age is a key developmental factor influencing children's media preferences and the impact of violent content on them. Research shows that older children are more likely to prefer violent media, with differences emerging during primary school and becoming more pronounced over time (Eron 1987; Milani et al. 2015; Mößle et al. 2014; Sheehan 1983). As children age, their cognitive abilities improve, allowing them to better grasp plot, motivation and consequences. By contrast, younger children struggle to connect violent acts with their outcomes, given that reasoning regarding causes and effects develops around ages nine to ten (Meyers 2002). Older children also spend more time viewing media content, access a broader range of content and receive less parental supervision, particularly during evening hours, which increases their autonomy in terms of content choices (Eron 1987; Hastings et al. 2009; Mann et al. 2025).

Longitudinal research confirms that early exposure to violent media content has a lasting effect. Eron et al. (1972) shows that children's early preferences for violent television predict adolescent physical aggression more strongly than their later media habits, suggesting the cumulative impact of early media consumption. Moreover, a follow-up study by Eron et al. (1983) identifies a particularly sensitive window between the ages of six and ten, when children's limited ability to distinguish fiction from reality leaves them especially vulnerable to media violence. Similarly, Pagani et al. (2025) find that early exposure to violent content affects how children interpret social interactions. More specifically, it increases hostile attribution biases and encourages aggressive responses in ambiguous social situations, and these patterns may have long-term consequences when it comes to antisocial behaviour during adolescence.

The above-mentioned developmental differences explain why younger children are more sensitive to violent media content than older children or adults

(Meyers 2002). For instance, they often fail to connect a punishment to the preceding aggression, leading them to view violence as permissible or harmless. Developmental psychology also highlights how the preschool years represent a particularly sensitive period for shaping social, cognitive and behavioural patterns. During this developmental stage, children are especially receptive to environmental influences, meaning that violent media content is disproportionately impactful (Fitzpatrick et al. 2016). While supportive relationships and positive environments can both buffer negative outcomes, frequent early exposure to violent content can have enduring effects on children's ways of thinking and behaving (ibid.).

The current media landscape is complicated by children's continuous and repeated exposure to violent content across multiple platforms, ranging from television to digital applications on portable devices. It is estimated that, on average, children spend more than seven hours per day consuming various forms of media (Coker et al. 2015), which complicates the issue of parental supervision and raises both developmental and social concerns regarding the consequences of such consumption. This underscores the importance of researching media preferences among preschool and early elementary school children and determining their association with physically aggressive behaviour. Such an approach is crucial to better understand the mechanisms through which violent content influences the development of physical aggression in children. It is also relevant to the design of parental mediation strategies, media literacy initiatives, and preventive educational programmes.

Most existing studies rely on reports from parents and educators, while relatively few involve data collected directly from children (Anderson and Dill 2000; Leflot et al. 2011; Nelson et al. 2010). However, children spend much of their time in shared social environments, observing peer behaviours and interactions daily, and possess unique insights that are often inaccessible to adults. Their reports regarding media preferences and peer nominations in terms of physical aggression therefore provide valuable data that complement traditional measures and enable deeper analysis of the association between media violence and aggression. Consequently, this study contributes to a better understanding of the complex relation between media consumption and aggression, supporting further studies and greater consideration of appropriate educational and preventive approaches.

## **Methods**

### *Research objectives*

This study sought to examine media preferences among preschool and early elementary school children, with a particular focus on sociodemographic traits such as age and gender in relation to tendencies towards consumption of violent media content. A central objective was to investigate the association between children's consumption of violent media content and their physically aggressive behaviour.

### *Hypotheses*

Based on the stated research objectives and a review of the relevant literature, the following hypotheses were formulated:

- H1: There are statistically significant differences in the preference for violent media content with respect of age and gender, with boys and older children expected to show a higher preference for such content.
- H2: There is a statistically significant positive correlation between the consumption of violent media content and the display of physically aggressive behaviour among children.

### *Participants*

This study was conducted in three phases. During the first phase, 393 parents provided questionnaire data on 401 children. In the second phase, 365 of the children participated in interviews and provided complete data, and they were included in the analysis. The sample during the second phase comprised 189 boys (51.8%) and 176 girls (48.2%), with a mean age of 6.83 years. The age distribution of the sample was as follows: 10 children were 4 years old (2.7%), 29 were 5 years old (7.9%), 87 were 6 years old (23.8%), 132 were 7 years old (36.2%), 102 were 8 years old (27.9%) and 5 were 9 years old (1.4%).

### *Instruments*

In the first phase of the study, the questionnaire was designed to collect sociodemographic data about the children, including their age and gender. It consisted of eight closed-ended questions or statements, where the parents had to select one of the provided answers, and three open-ended questions, where they were required to write their own responses.

During the second phase of the study, a peer assessment scale was applied. The participating children were asked the following question: »Who hits/bites/pulls/pinches/throws things at other children?«. They responded by placing each peer's name into one of three boxes representing different emotional reactions (happy, neutral and sad faces). A child whose name was placed in the box with a happy face received one point, placement with a neutral face resulted in two points and placement with a sad face led to three points. A higher total score indicated more frequent physically aggressive behaviour. To minimise the potential negative effects of participation, the children were instructed not to discuss their responses with their peers, although they could talk about them with their parents. Moreover, the interviews were conducted individually, eliminating the possibility of children reacting publicly or influencing each other's responses, and they were scheduled during period not adjacent to break time to prevent an immediate impact on free social interactions. To ensure the comparability of the results, the nomination scores were standardised to neutralise the influence of class or preschool group size. While proportion-based standardisation is simple, it does not account for variability in the number of nominations at the group level. Therefore, the final scores were converted into z-scores, allowing for more precise comparisons of aggressive behaviour among groups of different structures and sizes.

The children were also asked to indicate the titles of their favourite cartoons, films, television programmes and/or video games, with no limit on the number they could list. The media content listed was evaluated during the third part of the study using the Physical Aggression in Media Content Scale, as applied by

Jamnik and DiLalla (2018). This scale ranges from 0 to 12 and was used without modification. A score of 0 indicates the absence of physical aggression (e.g. the animated series *Pocoyo*), whereas a score of 12 represents frequent and realistic depictions of physical aggression (e.g. the film *The Avengers*). In line with social learning theory, the analysis also considered who committed the aggression. Here, aggression by human characters was rated as more severe because children are expected to identify more closely and easily with human characters than with non-human ones (Jamnik and DiLalla 2018). The frequency and regularity of physically aggressive behaviour in the viewed media content also affected the content rating, as did the intensity of the aggression (e.g. minor aggression in physical comedy versus major aggression in intentional fights). The Physical Aggression in Media Content Scale has previously been applied in related studies, including those by Busching et al. (2015) and Jamnik and DiLalla (2018).

### *Procedure*

This study was conducted as part of a broader doctoral research project. Data collection took place from November 2022 to March 2023. Prior to the researcher contacting schools and kindergartens, the study protocol was reviewed and approved by the Ethics Committee of the Faculty of Humanities and Social Sciences, University of Osijek (Class: 602-04/22-04/191; Registration No.: 2158-83-02-22-3; approved on 28 October 2022), which confirmed its compliance with the University's Ethical Code. Approval to conduct the research was then requested from the principals of three elementary schools and three kindergartens. These educational institutions were selected via purposive sampling based on prior professional contacts, ensuring feasibility and staff cooperation. Subsequently, meetings were held with staff members, during which the objectives, purpose and methodology of the study were explained in detail. The staff then organised meetings with parents, during which the parents completed the questionnaire and provided written consent for their child's participation. Alternatively, the parents could take the questionnaire home and return the completed version later. All of the parents were informed about the purpose of the study and assured that participation was voluntary and that any responses would be anonymised and kept confidential.

After parental consent was obtained, staff members conducted interviews with the children in their everyday educational environment. At the start of the interviews, the purpose of the study was explained to the children using age-appropriate language and concrete examples, which ensured that even the very young children could understand what participation involved. The children's assent to participate was requested, and their willingness to do so was monitored throughout the interviews, with attention paid to both verbal and non-verbal cues; the children were allowed to pause or withdraw at any time. Only one child chose to stop the interview, reporting that they felt bored. The interviews were conducted individually by pedagogical staff employed in the kindergartens and schools where the study took place. These professionals had received training in conducting interviews and collecting data with young children, and preparatory

meetings were held with them to explain the specific methodology and procedures. Being familiar with the children and their environment, these staff members were able to provide appropriate support and assistance throughout the study period. Each interview took place in a separate room, and the data collection procedures were adapted to the individual children's age and developmental level.

Following the interviews, a media content analysis was conducted. In total, the children reported 190 different media items. The listed films were fully analysed in terms of their content; for the mentioned television series, three to four episodes were examined; and for the listed video games, a minimum of two hours of gameplay or content was analysed. Some games were analysed for considerably longer periods, given that certain features could only be unlocked after extended playtimes (e.g. the strategy game *Dragon City Mobile*). The content analysis was conducted by a single coder using the Physical Aggression in Media Content Scale (Jamnik and DiLalla 2018). Throughout the analysis, a detailed coding log was maintained for each media item, where every instance of aggressive behaviour was recorded with precise temporal information (hour, minute and second), including the onset and duration of the act, the agent, the target and whether the aggression was classified as minor or major. In cases of uncertainty, the coding decisions were revisited by consulting the coding log and comparing the content with previously analysed media items to ensure internal coding consistency. The collected data were analysed using the statistical software SPSS (version 25.0).

## Results

The children identified a total of 190 different media titles as their favourites, including 61 cartoons, 46 video games, 32 animated films, 28 films, 14 television series, 7 YouTube channels and 2 shows. Regarding physical aggression in the media content, the largest number of titles ( $N = 32$ ) received a score of 7, indicating continuous minor aggression among the animated characters (e.g. *Bugs Bunny*). Twenty titles (11%) were assessed as featuring no aggression. The category of media content featuring infrequent minor aggression was the most prevalent in the sample ( $N = 57$ , 30%), and it was typically observed in interactions among animated characters, animated humans or real people. By contrast, content depicting continuous major aggression was least common, comprising 28 titles (15%). This distribution suggests that the children most frequently nominated media featuring occasional minor aggression, while the media involving continuous major aggression were least represented.

The largest proportion of children ( $N = 65$ , 17.81%) preferred content rated 7, reflecting minor but consistent aggression among animated characters. The next most preferred category was content rated 2 ( $N = 62$ , 16.99%), depicting infrequent minor aggression among animated humans, exemplified by titles such as *Sofia the First*. Detailed data regarding the children's media preferences are presented in Table 1.

Assessment of physical aggression in media content	Description of physically aggressive behaviour	Type of character exhibiting physical aggression	Media content	Children
0	No aggression	/	20	9
1	Minor aggression * (infrequent)	AC (e.g. animal, alien, monster) vs AC or AH	24	54
2		AH vs AH	20	62
3		H vs H	13	18
4	Major aggression ** (infrequent)	AC vs AC/AH	9	8
5		AH vs AH	10	29
6		H vs H	17	30
7	Minor aggression (continuous)	AC vs AC/AH	32	65
8		AH vs AH	15	29
9		H vs H	2	4
10	Major aggression (continuous)	AC vs AC/AH	9	7
11		AH vs AH	10	37
12		H vs H	9	13
$\Sigma$			190	365

Note: \*Minor aggression: rough and tumble; playful; slapstick/physical comedy (e.g. slipping on a banana peel); \*\*Major aggression: deliberate, purposeful; depiction of blood, gore and death; fighting with the intent to cause harm. AC = animated character; AH = animated human; H = human.

Table 1: Distribution of Media Content and Children According to the Physical Aggression in Media Content Scale

Regarding the specific media titles, the highest number of children preferred the animated series *SpongeBob SquarePants* (N = 61) and the video games *Roblox* (N = 58) and *Minecraft* (N = 41). These were followed by the game *Stumble Guys* (N = 35) and the cartoon *Paw Patrol* (N = 25), while other titles (e.g. *Frozen*, *Zig & Sharko*, *Tom & Jerry*) were considerably less represented, with each receiving fewer than 20 nominations. This distribution clearly reflects the dominance of cartoons and video games in the children's preferences, including the particular popularity of a few key titles, whereas films, television series and other specific content were chosen much less frequently. This pattern highlights the pronounced trend towards interactive and animated content among children. Frequency data concerning the most favoured media titles among the children are presented in Figure 1.

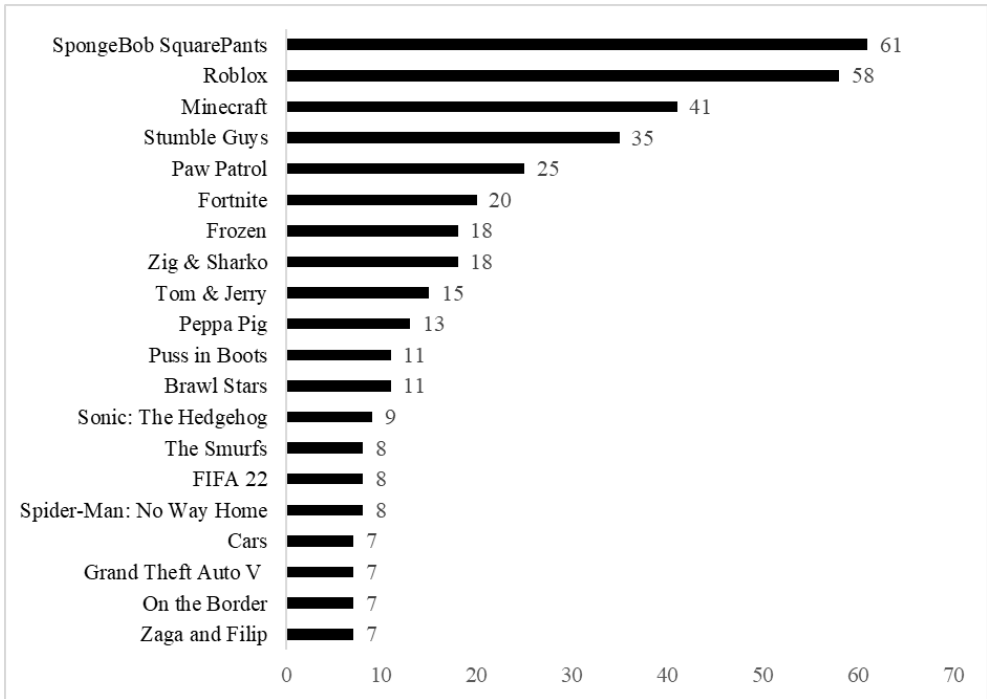


Figure 1: Most Favourite Media Content Among the Children by Number of Nominations

The t-test revealed significant gender-based differences in terms of the preference for violent media content among the children, with the boys showing a stronger preference than the girls ( $p < 0.001$ ).

Variable	Sex	N	M	SD	t
Consumption of violent media content	Male	189	6.01	3.84	3.91***
	Female	176	4.60	2.92	

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Table 2: T-Test for Gender Differences in the Consumption of Violent Media Content

The analysis of variance (ANOVA) indicated there to also be significant age-related differences in the consumption of violent media content ( $F(3, 361) = 7.39, p < 0.001$ ). The post-hoc Bonferroni tests indicated that the children aged 8 and 9 years showed significantly higher preference for violent media when compared with those aged 4–5 years ( $p < 0.05$ ), 6 years ( $p < 0.001$ ) and 7 years ( $p < 0.05$ ). No significant differences were found among the other age groups. These findings suggest the preference for violent media content to increase with age.

Children's Age	N	M	Bonferroni	SD	Min	Max	F
4 and 5 years	39	4.59	< 9	3.67	0	12	7.39***
6 years	87	4.38	< 9	3.09	0	12	
7 years	132	5.20	< 9	3.49	0	12	
8 and 9 years	107	6.53*	> 4 and 5, 6, 7	3.45	0	12	
Σ	365	5.33		3.49	0	12	

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Table 3: ANOVA for Age Differences in the Consumption of Violent Media Content

A correlation analysis was conducted to examine the relation between children's physically aggressive behaviour and their consumption of violent media content. The children's consumption of violent media was operationalised as the highest aggression score (ranging from 0 to 12 on the Physical Aggression in Media Content Scale) among all of the favourite media items each child reported, reflecting the child's exposure to the most aggressive content they regularly engage with. The Pearson correlation coefficient revealed a small but significant positive correlation between the two variables of interest ( $r = 0.16$ ,  $N = 365$ ,  $p < 0.01$ ). This suggests that children who consume more violent media tend to exhibit higher levels of physical aggression, although the effect size indicates that violent media is just one of several contributing factors.

## Discussion

The findings of this research provide important insights into the association between children's media preferences and the development of physically aggressive behaviour during early childhood. The results confirm the findings of previous literature that highlights the high prevalence of aggressive elements in children's preferred media (Lemish 2015; Mößle et al. 2014). In the present sample, the children most frequently nominated media content that displays minor but continuous aggression, particularly among animated characters. This pattern is consistent with earlier observations that aggression is often used as a source of humour and engagement in children's programming, rendering it highly accessible and appealing to younger audiences (Meyers 2002).

While not among the most favoured media titles, violent video games such as *Grand Theft Auto V*, *Fortnite* and *Brawl Stars* ranked among the 20 most frequently nominated titles in this study, raising concerns about their particular impact on children. These games allow active participation in aggressive acts, unlike passive viewing of television violence, and each aggressive action is directly rewarded. This interaction intensifies and increases the modelling of aggressive behaviour. Moreover, players choose and embody characters, enhancing their identification with violent figures and amplifying the modelling effect (ibid.). Neuropsychological research shows that virtual violence elicits both brain and physiological responses similar to real violence, as players perceive the characters as social beings they intentionally harm (Hartmann et al. 2015). Addition-

ally, these games often implicitly justify violence by masking its consequences and normalising aggression, potentially leading to desensitisation and tolerance of aggression in real life (Funk et al. 2004).

The central aim of this research was to explore two issues – namely, the role of sociodemographic factors (i.e. gender and age) in children's media preferences regarding violent content and the relation between exposure to violent media content and physically aggressive behaviour. The results confirmed both hypotheses stated above. More specifically, with regard to H1, boys more frequently preferred violent media content than girls, which aligns with prior findings showing that boys are not only more exposed to but also more inclined towards violent or action-oriented media (De Andrade Rocha et al. 2025; Hall 2020; Hastings et al. 2009; Mößle et al. 2014; Van Der Wal et al. 2020). These results can be explained by Bandura's (1978) social learning theory, which emphasises the importance of observing and imitating models with whom children identify. As boys are more prone to physical aggression, both in real life and in the media, viewing media violence better aligns with their self-identity concept. Furthermore, violent male characters in the media are often rewarded for aggressive acts, providing boys with a positive sense of belonging and encouraging the adoption of such behaviours (Van Der Wal et al. 2020). In addition, violent media content serves as a means by which boys learn and internalise gender-stereotypes, such as the *tough guy* who displays strength and dominance (Pagani et al. 2025; Van Der Wal et al. 2020). Research by Hartmann et al. (2015) confirms that boys exhibit a greater need for aggressive expression, motivating them to choose violent media content that enables the performance of aggression and the enactment of related social roles. This phenomenon demonstrates how gender-based differences in media preferences are deeply rooted in both social norms and individual needs to reaffirm gender roles through aggressive behaviour patterns, potentially leading to more frequent occurrences of aggression in real life (ibid.; Pagani et al. 2025).

Regarding age, the results of this study show that older children significantly more prefer violent media content when compared with younger children. These findings are consistent with research by Eron (1987), Milani et al. (2015) and Mößle et al. (2014), and they can be explained by the decreased parental supervision and increased media exposure as children age (Mann et al. 2025). Parents tend to monitor their children's media use less frequently as they grow older, allowing children greater autonomy in terms of content selection (Paus-Hasebrink et al. 2013; Poulain et al. 2023). Furthermore, older children's media consumption during evening hours is subject to even less parental control, enabling more unrestricted choices that align with their interests (Hastings et al. 2009). These conditions facilitate older children's selection of more aggressive content, which may reinforce their preference for violent media.

In line with H2, the analysis revealed a statistically significant positive correlation between children's consumption of violent media content and physically aggressive behaviour. These results are consistent with findings from studies by Coker et al. (2015), Collier et al. (2016), Daly and Perez (2009), Gentile et al. (2017), Pagani et al. (2025) and Zhang et al. (2021). The observed correlation

can also be explained by social learning theory (Bandura 1978), which posits that children learn behaviours by observing models, including media characters, who often portray violence as acceptable and reward-worthy behaviour. When aggressive behaviour is either unpunished or implicitly rewarded, children become more likely to adopt aggressive methods of conflict resolution (Dill and Dill 1998). Fitzpatrick et al. (2016) clarify that two key factors amplify children's aggressive behaviour: the appeal of violent protagonists, who are often depicted as heroes or positive role models, and heightened physiological arousal during exposure to violent content, which enhances attention, encoding and the imitation of such behaviours. However, it is important to emphasise that correlation does not imply causation; therefore, it is possible that aggressive children are simply more drawn to violent media content because it makes them feel happier and helps to justify their own aggressive behaviour by portraying it as normative (Hastings et al. 2009; Huesmann et al. 2003).

The present study has several limitations. First, the relatively small, purposive sample limits the generalisability of the findings to a broader population. Second, the data collection relied on children's self-reports and peer assessments, which may have introduced subjectivity due to varying interpretations of behaviours and situations. Third, the media content analysis was conducted by a single coder, which may have introduced a degree of subjective bias, given that perceptions of what constitutes aggressive content can vary among individuals. Still, the use of a standardised coding instrument and systematic coding procedures likely reduced the extent of such bias. Finally, the correlational design prevents the drawing of conclusions about the causal relations among the examined variables.

## **Conclusion**

The findings of this study contribute to the growing body of knowledge on how sociodemographic factors influence children's media preferences, particularly when it comes to violent content, and how such exposure relates to physically aggressive behaviour on the part of children. The confirmed associations between increased consumption of violent media and higher levels of physical aggression, especially among boys and older children, underscore the need for targeted efforts in relation to media literacy and parental guidance.

In today's digital environment, violent content is easily accessible via streaming platforms and mobile devices, exposing children to material that may be inappropriate for their age and developmental stage. Parents and caregivers should monitor children's media exposure with the same care they apply to managing other household risks. This is important because failure to do so, especially in terms of intense violent content, can be regarded as a form of neglect. Traditional approaches such as censorship and restricted viewing times exhibit only limited effectiveness in the digital era, rendering an educational approach essential. Parents and educators should engage children in critical discussions about the media content they consume, helping them to assess its realism, intent

and consequences in an effort to promote media literacy and resilience.

Furthermore, it is important to remember that parental media habits significantly influence children's media preferences and behaviours, with parents serving as the primary role models whose attitudes and actions children observe and imitate. In light of this, future research should explore parental media patterns to better understand their impact on children's exposure to violent media content. This broader perspective will deepen insight into the family media environment and support the development of more effective prevention and intervention strategies.

### Statement on access to research data

*Data are accessible with restrictions (legal/ethical restrictions)*

The research data used in this article are not publicly available due to restrictions related to personal data protection and/or copyright (in accordance with ZVOP-2 and/or ZASP). Access to anonymized or restricted versions of the data is possible upon reasonable request to the authors of the article.

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### **VLOGA SOCIODEMOGRAFSKIH DEJAVNIKOV PRI OBLIKOVANJU MEDIJSKIH PREFERENC OTROK TER POVEZANOST MED IZPOSTAVLJENOSTJO NASILNIM VSEBINAM IN FIZIČNO AGRESIVNIM VEDENJEM**

**Povzetek:** Razmerje med izpostavljenostjo otrok nasilnim medijskim vsebinam in izražanjem fizično agresivnega vedenja je predmet obširnega proučevanja, pogosto prek Bandurove teorije socialnega učenja. Prispevek proučuje medijske preference predšolskih in osnovnošolskih otrok, s poudarkom na sociodemografskih razlikah in povezavi med izpostavljenostjo nasilnim medijskim vsebinam in fizično agresivnim vedenjem otrok. Raziskava je potekala v treh fazah: (1) starši so izpolnili vprašalnik, v katerem so navedli sociodemografske podatke o svojih otrocih; (2) otroke smo vprašali o njihovih najljubših medijih in zbrali vrstniške ocene o fizično agresivnem vedenju; (3) analizirali smo najljubše medijske vsebine otrok iz raziskave in ocenili nasilnost njihovih vsebin. Ugotovitve kažejo na pomembno povezavo med izpostavljenostjo nasilnim medijskim vsebinam in pogostejšim fizično agresivnim vedenjem otrok. Poleg tega obstajajo razlike v medijskih preferencah otrok glede na spol in starost, pri čemer se fantje in starejši otroci pogosteje odločajo za nasilne vsebine. Naše ugotovitve poudarjajo pomen medijske pismenosti in aktivnega posredovanja staršev pri oblikovanju medijskih navad otrok ter prinašajo pomembna spoznanja za preprečevanje negativnih vplivov izpostavljenosti nasilnim medijem na socialni in vedenjski razvoj mlajših otrok.

**Ključne besede:** medijske preference otrok, nasilne medijske vsebine, fizično agresivno vedenje

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