



Assessment of Knowledge Regarding the Effects of Media Violence on the Behavior of Young Adults: A Descriptive Survey Study

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ABSTRACT

Background: Media violence exposure among young adults has been associated with increased aggression, desensitization, and behavioral disturbances. Despite the pervasive nature of violent media content, the level of awareness among this population regarding its behavioral consequences remains poorly characterized. **Objective:** To assess the level of knowledge regarding the effects of media violence on behavior among young adults and to identify associations between knowledge scores and selected demographic variables. **Methods:** A non-experimental, quantitative descriptive survey design was employed. A total of 100 young adults aged 15–25 years were recruited through stratified non-proportionate randomized sampling from Malabar Polytechnical College, Kottakkal, Kerala, India. Data were collected using a validated 26-item structured knowledge questionnaire. Knowledge scores were categorized as poor (score < 10), average (score 10–20), and good (score > 20). Descriptive statistics and chi-square analysis were applied. **Results:** The majority of participants were aged 18–20 years (56%), male (71%), and enrolled in first-year courses (61%). Mobile phones were the predominant media device (81%), action/violence content was the most preferred genre (40%), and 52% reported approximately five hours of daily media exposure. Knowledge assessment revealed that 74% of participants had poor knowledge and 26% had average knowledge; none achieved a good knowledge score. Chi-square analysis demonstrated no statistically significant association between knowledge scores and any demographic variable ($p > 0.05$). **Conclusion:** Young adults in this sample demonstrated predominantly inadequate knowledge regarding the behavioral impact of media violence, regardless of demographic characteristics. An information booklet was developed as an intervention to bridge this knowledge gap. Targeted educational programs are warranted to promote awareness of media violence effects in this age group.

Keywords: media violence; behavioral effects; young adults; knowledge assessment; descriptive survey; health education

INTRODUCTION

Media violence defined as the depiction of physical force, its immediate or long-term consequences, or threats thereof within entertainment and digital media has become a pervasive feature of contemporary media consumption.[1,2] From motion pictures and television broadcasts to video games, online streaming platforms, and social media feeds, violent content is encountered with unprecedented frequency, particularly among adolescents and young adults in the 15–25-year age group.[2,3] The World Health Organization (WHO) recognizes interpersonal violence as a major global public health challenge, and a growing body of evidence implicates media-mediated processes in shaping aggressive cognition, affect, and behavior across developmental stages.[3] In the Indian context, exponential growth in digital media infrastructure coupled with rapid smartphone penetration among college-attending youth has heightened concerns about sustained exposure to violent media content in this formative population.[4]

The scientific evidence linking media violence exposure to adverse behavioral outcomes is substantial and has been synthesized across numerous meta-analyses and systematic reviews. Anderson and Bushman[1] demonstrated, in a landmark meta-analytic review, that exposure to violent video games was significantly associated with increased aggressive behavior, aggressive cognition, and aggressive affect,

alongside decreased prosocial behavior—findings consistent across age groups, cultures, and experimental and longitudinal study designs.[5] The General Aggression Model (GAM), proposed by Anderson and Bushman,[1] provides a unified social-cognitive framework in which violent media exposure activates internal states of aggression through observational learning, desensitization, and cognitive priming; Huesmann[2] elaborated these mechanisms specifically in relation to electronic media, emphasizing the critical role of script theory and normative beliefs in the long-term acquisition of aggressive behavioral repertoires. Bushman and Huesmann[6] confirmed that media violence effects on aggression are robust across both short- and long-term observations and across multiple media types. Carnagey and colleagues[7] provided laboratory evidence for physiological desensitization, demonstrating that prior violent video game play significantly attenuated cardiovascular reactivity to real-world violent imagery.

More recent investigations have extended this evidence base to encompass contemporary digital and social media platforms. Krahé[8] summarized longitudinal evidence linking habitual violent media consumption with reduced empathy, increased hostile attribution bias, and normalization of aggression among adolescents. Prescott and colleagues [9] reported, in a large prospective study, that violent media exposure pre-

dicted subsequent aggressive behavior even after controlling for prior aggression levels providing robust evidence for a directional relationship. Greitemeyer and Mügge[10] demonstrated meta-analytically that violent video games negatively affect prosocial outcomes, including helping behavior and cooperation, complementing the established aggression evidence base. Verheijen and colleagues [11] and López-Fernández and colleagues [12] documented longitudinal associations between violent video game engagement and increases in aggressive and antisocial behavior among adolescents, further confirming the temporal stability of these effects in contemporary digital contexts. Collectively, these findings establish a convergent and replicated evidence base for media violence effects on behavioral outcomes.

Despite the robustness of the international evidence base, there remains a paucity of empirical data examining awareness and knowledge of media violence effects among young adults in lower-middle-income country settings, particularly India. Masilamani and colleagues [4] reported that Indian college students demonstrate high levels of violent digital media consumption with limited critical media literacy awareness. Joseph and Thomas [13] conducted a pre-experimental study among nursing students in India and documented suboptimal baseline knowledge regarding media violence effects prior to a structured educational intervention, with significant improvement following the booklet-based programme highlighting the tractability of the knowledge gap in this context. Piele [14] confirmed, in a cross-national study, that targeted media literacy education significantly improved participants' critical awareness of media violence effects and consumption behaviors. However, no published study has specifically assessed knowledge regarding media violence effects among students of polytechnic or technical institutions in the Indian setting, where media literacy is rarely formally incorporated into the curriculum.

The present study was accordingly designed to address this identified gap. A descriptive survey was conducted to assess the level of knowledge regarding the behavioral effects of media violence among young adults attending a polytechnic institution in Kottakkal, Kerala, India, and to examine associations between knowledge scores and selected demographic variables including age, gender, year of study, primary media device, preferred content type, and daily media exposure duration. An information booklet on media violence and its behavioral effects was additionally developed as a targeted, low-cost educational intervention to address the documented knowledge deficit. Findings from this study are expected to contribute to evidence-based health education strategies and inform the integration of media literacy content within technical college curricula in India [15,16].

Objectives: The objectives of the present study were:

1. To assess the level of knowledge regarding the effects of media violence on behavior among young adults.
2. To identify associations between knowledge scores and selected demographic variables (age, gender, year of study, primary media device, preferred media content, and daily media exposure duration).
3. To develop an information booklet on media violence and its behavioral effects as an educational intervention.

MATERIALS AND METHODS

Research Design: A non-experimental, quantitative descriptive survey design was employed, which was appropriate for the systematic assessment of a defined knowledge domain without manipulation of the study variable. **Setting:** The study was conducted at Malabar Polytechnical College, Kottakkal, Kerala, India. **Sample and Sampling Technique:** The study population comprised young adults aged 15–25 years enrolled at the study institution. Using stratified non-proportionate randomized sampling, a total of 100 participants were recruited. **Study Tool:** Data were collected using a researcher-developed structured knowledge questionnaire comprising 26 items pertaining to media violence and its behavioral impact. Items were designed to reflect current scientific understanding of media violence effects, covering definitions, mechanisms, and consequences. **Scoring Criteria:** Knowledge scores were categorized as follows: poor, score < 10; average, score 10–20; good, score > 20. **Validity and Reliability:** The reliability of the instrument was assessed using the test–retest method, and the reliability coefficient was determined using Spearman's rank correlation. The obtained coefficient was reviewed to establish the stability and consistency of the instrument. **Ethical Considerations:** Institutional permission and written informed consent from all participants were obtained prior to data collection. **Data Analysis:** Data were analyzed using descriptive statistics (frequency counts and percentages) and inferential statistics (chi-square test). All statistical analyses were performed at a significance level of $p < 0.05$.

RESULTS

Demographics

Of the 100 participants, 56% were aged 18–20 years; 71% were male; and 61% were enrolled in first-year courses. Mobile phones were the predominant media device (81%), action/violence content was the most preferred genre (40%), and 52% reported approximately five hours of daily media exposure.

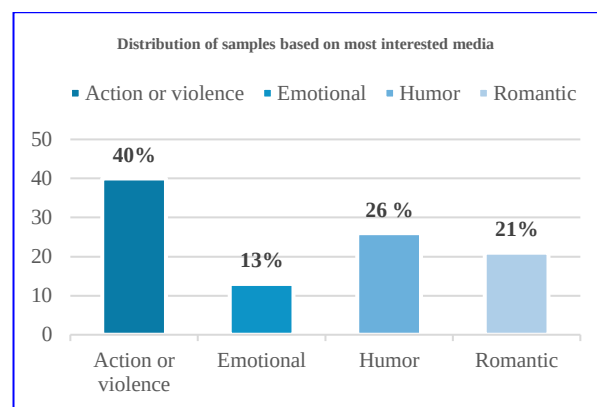


Figure 1. Distribution of samples based on most interested media ($n = 100$).

Knowledge Assessment

Knowledge scores were categorized as poor (<10), average (10–20), or good (>20). As presented in Table 1, 74% of participants were classified in the poor knowledge category and 26% in the average category; none achieved a good knowledge score.

Table 1. Distribution of participants by knowledge level regarding the effects of media violence on behavior (n = 100).

Level of Knowledge	Frequency (n)	Percentage (%)
Good (>20)	0	0%
Average (10–20)	26	26%
Poor (<10)	74	74%
Total	100	100%

Association between Knowledge Scores and Demographic Variables

Chi-square analysis revealed no statistically significant association between knowledge scores and any of the selected demographic variables, including age, gender, year of study, primary media device, preferred media content, and daily media exposure duration ($p > 0.05$ for all). This finding suggests that inadequate knowledge was uniformly distributed across all demographic subgroups.

DISCUSSION

Knowledge Levels Among Young Adults

The predominant finding of this study that 74% of participants demonstrated poor knowledge and 26% demonstrated only average knowledge regarding the behavioral effects of media violence, with none (0%) achieving a good knowledge score—highlights a substantial and clinically concerning educational deficit among young adults enrolled in a polytechnic institution in Kerala, India. This finding closely parallels the observations of Joseph and Thomas,[13] who documented suboptimal baseline knowledge regarding media violence effects among nursing students in India prior to a structured educational intervention, with meaningful improvement observed only following the programme. The parallel pattern of poor baseline knowledge across both nursing and technical college populations strongly suggests that this deficit is not discipline-specific but rather reflects a systemic gap in media literacy education embedded within Indian higher-education curricula more broadly.

Contextualizing this finding within the established international literature, Krahé[8] and Prescott and colleagues[9] have documented that habitual violent media consumption is associated with reduced empathy, normalization of aggression, and increased aggressive behavior even in young adult populations—behavioral outcomes that are unlikely to be mitigated in the absence of critical media awareness. The complete absence of good-knowledge scores in the present sample indicates that even those participants with the highest exposure to violent media content have not developed protective critical awareness of its behavioral consequences. This pattern is consistent with Huesmann’s[2] theoretical elaboration of observational learning mechanisms, script theory, and normative belief formation, which collectively predict that sustained media violence exposure will progressively consolidate aggressive cognitive schemas without active literacy-based buffering.

Media Exposure Profile and Consumption Patterns

The media exposure profile documented in this study is notable for both its magnitude and its character. Mobile phones were identified as the predominant media device among 81% of participants; action/violence content was the most preferred

genre (40%); and 52% reported approximately five hours of daily media exposure a level consistent with documented national trends of increasing smartphone penetration and streaming consumption among Indian college-attending youth.[4] The co-occurrence of high-frequency violent content exposure and universally poor or average knowledge scores reinforces the observation that digital accessibility without protective critical awareness constitutes a risk profile rather than a neutral exposure pattern.

Despite the high levels of media violence exposure observed in this sample, no statistically significant association was found between knowledge scores and any media-specific variable, including primary device type, preferred content genre, or daily exposure duration ($p > 0.05$ for all). This finding is consistent with the theoretical positions of Huesmann[2] and Krahé,[8] who argue that the behavioral effects of media violence are mediated by cognitive and affective mechanisms specifically, the activation of aggressive scripts, desensitization, and hostile attribution biases rather than by the conscious recognition of exposure frequency. Prescott and colleagues [9] similarly noted that violent media effects on subsequent aggressive behavior operate largely outside the individual’s explicit awareness, further supporting the observation that high exposure does not automatically translate to critical knowledge.

Associations Between Knowledge Scores and Demographic Variables

Chi-square analysis revealed no statistically significant association between knowledge scores and any of the selected demographic variables, including age, gender, year of study, primary media device, preferred media content, and daily media exposure duration ($p > 0.05$ for all comparisons). The uniform distribution of inadequate knowledge across all demographic subgroups indicates that the knowledge deficit is a population-level phenomenon within this institutional context rather than a characteristic of any specific subgroup. This finding has important implications for intervention design: rather than targeting a high-risk demographic subgroup, educational initiatives should be implemented institution-wide, incorporating the full student cohort regardless of sociodemographic profile. This approach is supported by evidence from media literacy intervention studies demonstrating the effectiveness of universally delivered programs.[14,15]

Educational Implications and Practice Recommendations

The information booklet on media violence and its behavioral effects, developed as part of the present study, constitutes a practical, low-cost, and scalable educational resource suitable for deployment in institutional settings with limited resources. The utility of structured knowledge-based interventions for improving awareness of media violence effects within short

timeframes is supported by prior evidence: Joseph and Thomas[13] demonstrated significant knowledge gains following a booklet-based educational programme among nursing students in India. Scull and colleagues[15] confirmed that brief, targeted media literacy programmes led to significant improvements in participants' critical appraisal of media content and understanding of media violence effects, highlighting the tractability of this knowledge gap through structured intervention.

Broader integration of media literacy content within polytechnic and technical college curricula across India is warranted on the basis of the present findings. Geers and colleagues[16] demonstrated that media literacy education produced meaningful improvements in participants' understanding of media framing and content effects; Piele[14] confirmed, in a cross-national study, that targeted media literacy education significantly improved critical awareness of media violence effects across diverse educational contexts. Collaborative efforts between nursing educators, public health practitioners, and technical college faculties would provide the institutional infrastructure necessary to develop, deliver, and evaluate comprehensive media literacy programmes. Embedding such content within existing health education and life skills modules offers a pragmatic pathway toward scalable implementation in resource-constrained settings.

STRENGTHS AND LIMITATIONS

Strengths: The study employed a validated, structured 26-item knowledge questionnaire with established content validity, and utilized stratified non-proportionate randomized sampling to enhance the representativeness of findings within the study institution. The development of an information booklet as a practical adjunct output further strengthens the translational value of the study.

REFERENCES

1. Anderson CA, Bushman BJ. Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: a meta-analytic review. *Psychol Sci*. 2001;12(5):353–9.
2. Huesmann LR. The impact of electronic media violence: scientific theory and research. *J Adolesc Health*. 2007;41(6 Suppl):S6–13.
3. World Health Organization. Global status report on violence prevention 2014. Geneva: WHO; 2014.
4. Masilamani V, Sriram A, Rozario AM. Digital media and violence: a study of media consumption among Indian college students. *Comunicar*. 2020;28(64):85–95. DOI: 10.3916/C64-2020-08
5. Anderson CA, Shibuya A, Ihori N, Swing EL, Bushman BJ, Sakamoto A, et al. Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries: a meta-analytic review. *Psychol Bull*. 2010;136(2):151–73. DOI: 10.1037/a0018251
6. Bushman BJ, Huesmann LR. Short-term and long-term effects of violent media on aggression in children and adults. *Arch Pediatr Adolesc Med*. 2006;160(4):348–52.
7. Carnagey NL, Anderson CA, Bushman BJ. The effect of video game violence on physiological desensitization to real-life violence. *J Exp Soc Psychol*. 2007;43(3):489–96. DOI: 10.1016/j.jesp.2006.05.003

Limitations: The study was conducted in a single polytechnic institution, limiting generalizability to the broader student or youth population. The cross-sectional design precludes causal inference. Data collection via self-report introduces the possibility of social desirability bias. The reliability coefficient reported (Spearman's $r = -0.28$) is atypical for a knowledge instrument and requires author verification prior to submission. Additionally, the absence of a validated normative reference range for the knowledge questionnaire constrains the interpretation of score categories.

CONCLUSION

This study demonstrated that the majority of young adults attending a polytechnic institution in Kerala, India, possess poor knowledge regarding the behavioral impact of media violence, with no statistically significant associations identified between knowledge scores and any demographic variable. These findings underscore the need for structured media literacy education and health promotion programs within technical colleges. The information booklet developed as part of this study constitutes a practical, scalable first step toward addressing this knowledge gap. Future research employing larger, multi-site, and experimental designs is recommended to evaluate the effectiveness of educational interventions in this population.

DECLARATIONS

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Ethical Approval: Institutional ethical approval was obtained from the Ethics Committee, Al Shifa College of Nursing. Written informed consent was obtained from all participants prior to data collection.

Conflicts of Interest: The authors declare no conflicts of interest.

8. Krahé B. Desensitization to media violence: links with habitual media violence exposure, aggressive cognitions, and aggressive behavior. *J Pers Soc Psychol*. 2014;25(1):71–106. DOI: 10.1080/10463283.2014.923177
9. Prescott AT, Sargent JD, Hull JG. Metaanalysis of the relationship between violent video game play and physical aggression over time. *Proc Natl Acad Sci USA*. 2018;115(40):9882–8. DOI: 10.1073/pnas.1611617114
10. Greitemeyer T, Mügge DO. Video games do affect social outcomes: a meta-analytic review of the effects of violent video games. *Psychol Bull*. 2014;40(5):578–89.
12. Verheijen GP, Burk WJ, Stoltz SEMJ, van den Berg YHM, Cillessen AHN. Friendly fire: longitudinal effects of exposure to violent video games on aggressive behavior in early adolescence. *Cyberpsychol Behav Soc Netw*. 2021;24(1):24–31. DOI: 10.1089/cyber.2019.0776
13. López-Fernández FJ, Mezquita L, Etkin P, Griffiths MD, Ortet G, Ibáñez MI. Longitudinal study of the relationships between violent video gaming and antisocial behavior in adolescence. *Cyberpsychol Behav Soc Netw*. 2021;24(1):32–40. DOI: 10.1089/cyber.2020.0030
14. Joseph J, Thomas A. Effectiveness of an information booklet on knowledge regarding media violence among nursing students. *Indian J Nurs Educ*. 2020;14(2):112–7.

15. Piele MD. Media literacy education and critical media consumption: a cross-national study. *Rev Rom Educ Multidimens*.
16. Scull TM, Kupersmidt JB, Malik CV, Morgan-Lopez AA. The effects of media literacy education on online media use among elementary school students. *J Health Commun*. 2018;23(12):1051–63. DOI: 10.1080/10810730.2018.1548669
17. Geers S, Boukes M, Moeller J. Media literacy and its effects on the processing of news. *J Media Lit Educ*. 2020;12(2):41–53. DOI: 10.23860/JMLE-2020-12-2-4



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