



Violent Media Exposure and Its Effects on Overall Empathy in Pakistani Gen Z University Students

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Abstract

The purpose of this research is to highlight the link between violent media consumption and overall empathy. With the rise of violent content in different forms of media like video games, movies, social media and TV shows, and the ease in accessibility of this content, concerns have started to rise about the potential impact of this type of content on our emotional sensitivity and emphatic responses. A sample of 30 Pakistani generation Z university students was selected through purposive sampling to fill a questionnaire through google forms. This study follows a quantitative, correlational and cross-sectional research design. Violent media exposure was measured through the Content-based Media Exposure scale (C-ME), and overall empathy was measured using the Interactive Reactivity Index (IRI), by measuring the scores of Perspective taking and Empathetic Concern, and then adding them together. Desensitization Theory (Bushman & Anderson, 2009) and Empathy Erosion Hypothesis (Bushman & Anderson, 2009) were used as the framework for this study since they clearly explain how repeated exposure to violence may reduce emphatic responses. A weak positive correlation between violent media consumption and overall empathy was found ($r = .14$) through Pearson correlation in this research which was not statistically significant ($p = .45$). To better understand this relationship, it is suggested that other researchers may be done focusing on different age groups and demographics in the Pakistani context.

Keywords: violent media exposures, empathy, Pakistani, generation Z university students, desensitization, empathy erosion.

Introduction

In today's modern time the use of internet and other entertainment platforms is widespread. Consequently, the exposure of violent and graphic content is also more common, especially among the younger generation whom spend more time online (Emily A. Vogels 2022) With the spread of streaming platforms, social media apps, games, etc. the exposure to content with blood, injury or real-life violence is quite the norm. Unlike the older generations who were exposed to violent content less frequently and only through limited media like horror and action films, the younger generations have lesser restrictions and hurdles while accessing the internet, they are more frequently exposed to violent media than the generation before them. Thus, their exposure is continuous and not occasional (Anderson et al., 2017).

Empathy which is defined as the ability to understand and compassionately respond to another person's pain and suffering plays a vital role in the healthy development of morality, compassion and prosocial behavior (Davis, 1983). Concerns regarding the fact that frequent exposure to violent content may reduce emotional responses, weaken sensitivity to other's suffering, and normalize violence (Bushman & Anderson, 2009). The use of social media and internet is extremely high among the generation z youth of Pakistan. In Pakistan the exposure to gore is quite common as even news channels show violent injuries or violent imagery on TV. So, understanding the effects of violent media exposure is really important.

The purpose of this study is to investigate the relationship between violence exposure in media and overall empathy among the generation z university students of Pakistan. By assessing the 18 plus students, the study aims to examine if the frequency of violent media consumption is linked to lower empathetic responses. The intent is not only to find out the extent of exposure to media violence, but also to see if such exposure causes any psychological changes in a society where graphic media is prevalent.

Youth in Pakistan and all around the world are regularly being exposed to violent and graphic content, yet there is limited understanding on how this exposure is influencing their empathy and emotional responses. A lot of people are being exposed to it intentionally. Meaning they are viewing it thorough their own free will. This includes violence in movie, TV shows, games and in other platforms. However, a large portion of the youth is exposed to violence unintentionally, meaning they have no interest in actively watching violent media. This may be through uncensored news, viral violent footage or peer pressure (Krahé & Möller, 2010).

The core research problem of this study is the likelihood that constant exposure to violence and violence in media may affect empathy and emotional responses and sensitivity to the suffering of others. Lower empathy can shape harmful attitudes, decrease prosocial behavior and consequently cause problems in society (Eisenberg et al., 2010). It remains unclear if Gen Z students are becoming emotionally desensitized, and to what extent is this exposure to violence affecting their empathy.

The core of this study is based on the Desensitization Theory, which claims that repeated exposure to violent media is linked with reduced sensitivity to violence and emotional numbing (Bushman & Anderson, 2009). Based on this theory, the Empathy Erosion Hypothesis suggests that continuous and frequent engagement with violent media is linked to lower empathetic concern over time (Krahé & Möller, 2010). These theories provide a theoretical framework for observing the relationship between consumption of media violence and overall empathy.

A number of international studies have explored the topic of violent media consumption and its psychological, social and behavioral effects. However, the majority of these studies focus on the Western society, which possesses different cultural norms, censorship standards and emotional standards (Anderson et al., 2017). Therefore, these findings cannot be applied to the Pakistani youth, whom may experience this exposure differently.

The number of studies which focus on the effects of violent media consumption on empathy among the Pakistani youth are very few, so this issue is understudied. And in the digital age it is the need of the time that we are aware of these effects, so we can make changes in our society accordingly. These gaps highlight the need for this study, so we can examine this issue with a Pakistani lens.

The research question guiding this study is as follows:

- How does exposure to violent content in media affect the overall empathy in gen z university students?

And the main research objective is:

- To examine the impact of exposure to violent content on empathy in gen z university students.

This study holds a lot of academic, social and practical importance. In terms of academic significance, it contributes to the limited literature on the topic of effects of exposure to media violence in a Pakistani context. This research will increase our understanding on how media influences emotional processing.

The social significance of this study can be highlighted by its focus on empathy which is a core factor for maintaining compassionate societies and communities. If the youth becomes emotionally desensitized, the social attitudes may shift towards violence. The results may help us see if this threat exists or not and how to diminish the risk if a threat exists.

Practically, teachers, parents and policymakers might benefit by understanding the effects of media violence on empathy. The findings may help them in discussions regarding content regulation and online safety. The results may even guide initiatives to foster healthier digital consumption habits in young adults.

This study has a few limitations. The study only focuses on a distinct group "Gen Z Pakistani university students", so the results may not apply to other age groups. This study does not contain the pre-test and pro-test design. As this was a correlational study, violent media exposure and empathy were measured at a single point in time, so the changes in empathy over time could not be observed. Consequently, the findings can only identify the relationship between the two variables and not the causal effects.

LITERATURE REVIEW

Violent Media Exposure

The relationship between violent media and psychological functioning has been a topic of interest for a long time. In the middle of the 20th century, concerns about media violence started to emerge because of the rise in popularity of television and cinemas. Researches became curious to find out if continuous exposure to violent media could have an effect on emotions, attitudes and human behavior (Huesmann, 2007). As Technology improved and became more publicly available, violent media started to appear in video games, streaming services, news, and even on social media. This spread increased the accessibility of violent media, especially for younger generations.

In the current era, there is limited content regulation but no limit in accessing different forms of media. In the past, the exposure of earlier generations to these media resources was limited due to multiple factors, such as parental supervision, lower amount of media platforms, and lower digital consumption. Consequently their interaction with violent imagery was lower. However, members of the Generation Z are continuously exposed to violent media both intentionally and unintentionally (Emily A. Vogels 2022). Due to this, the interest of researchers in understanding the effects of repeated exposure to violent media on emotional and social reactions, including empathy, has reignited.

Concept of Violent Media Exposure

Violent media exposure can be defined as "engagement with media that depicts physical aggression, injury, or harm towards others." (Anderson et al., 2017). This type of content exists in multiple forms, such as: in movies and videogames in the fictional context, and in viral online videos or in news broadcasts with real-life portrayal. According to researchers, this exposure is not always voluntary, as individuals may be exposed to it against their will through social media, peer pressure, and even through uncensored news reporting (Krahé & Möller, 2010).

Violent media exposure can be measured by means of self-report instruments like questionnaires that evaluate the frequency and type of media consumed. These methods help

researchers to study the patterns of exposure across different platforms, making it easier to assess for correlational researches studying psychological associations and not causal effects.

Empathy: a Multidimensional Phenomenon

Empathy is a very important psychological process, as it plays a fundamental role in moral reasoning, social functional and prosocial behavior. Empathy is a multidimensional phenomenon which consist of both affective and cognitive processes Davis (1983). Empathic concern is the ability to feel compassion and concern for others, and perspective-taking refers to the cognitive ability of understanding someone else's viewpoint.

Higher levels of empathy have been linked to reduced anger / aggression, better interpersonal relations, and increased prosocial behavior (Eisenberg et al., 2010). On the other hand, low empathy is linked to lower concern for the suffering of others, antisocial behavior, and emotional detachment. Empathy has become an essential variable in studies investigating the effects of media exposure, because of its role in maintaining and promoting healthy social interactions.

Violent media exposure and Empathy

A large amount of studies have explored the relationship between violent media consumption and empathy. Many studies claim that continuous exposure to violent media is linked with reduced emotional sensitivity and empathy towards other people's suffering. Bushman and Anderson (2009) discovered that people exposed to media violence had lower levels of prosocial and helping behavior towards other people. This supports the idea that repeated exposure to violent media lowers emotional responses.

Longitudinal studies have also been done on this topic, which further support these findings. Krahé and Möller (2010) observed that repeated exposure to media violence was linked to decrease in empathy over time in adolescents, even when baseline aggression was controlled. According to these findings it is safe to say that violent media consumption is not only linked to behavioral responses but also emotional and cognitive outcomes related to empathy.

However, this link isn't consistent in all studies. Some academic literature claims that there is a weak or insignificant link between media violence exposure and empathy, proposing that this relationship may be influenced by other factors such as cultural differences, type of media consumed, and individual differences. These inconsistent results signify the need for more research on this topic, especially in non-Western context.

Desensitization Theory

The Desensitization Theory can be used the basic framework for comprehending how changes in emotional responsiveness is linked to continuous and repeated violent media exposure. This theory states that, frequent exposure to violent stimuli leads to reduced physiological arousal and emotional reactions, resulting in emotional numbing over time (Bushman & Anderson, 2009). As violence becomes more normalized for individuals, their emotional sensitivity to other people's pain may decrease.

A multitude of studies show how individuals with frequent exposure to violent media show lower emotional reactions to actual real-world violence and distress (Funk et al., 2004). So, there is a lot of empirical evidence supporting this framework. However, Desensitization Theory does not claim the existence of causation in correlational research, but it gives us an explanation for the observed association between violent media exposure and emotional responsiveness, which includes empathy.

The Empathy Erosion Hypothesis

The Empathy Erosion Hypothesis, which was based upon the Desensitization Theory, claims that repeated exposure to violent media is linked with a slow and gradual decrease in empathic concern (EC) and perspective-taking (PC). According to this hypothesis, empathy is major aspect

which is affected by violent media exposure. This indicated that desensitization to violent images can affect everyday real-world scenarios (Krahé & Möller, 2010).

A lot of research supports this hypothesis and shows that people who consume violent media regularly show reduced empathetic concern and lower emotional responsiveness to other people's pain and suffering (Bushman & Anderson, 2009). The Empathy Erosion Hypothesis focuses on the associations between these variables and not the causal links between them, which makes it extremely relevant for correlational studies.

Cultural Context

The majority of research on violent media exposure and empathy has been done in the West, and not in Pakistan. In the West, cultural and social norms, media regulation and emotional expression are very different as compared to the South Asian countries. For instance, in Pakistan violent media exposure is more common due to graphic news broadcasts, viral reels depicting violence and almost no content regulation. There may be differences in how media violence is processed by an individual due to multiple cultural factors such as religion, societal norms, collectivism, and difference in emotional expression.

Even though the consumption of violent media among the Pakistani Generation Z youth is high, there is a lack of research and documentation on how this exposure affects the youth psychologically. Western studies on this topic may not be relevant or accurate in the context of the Pakistani population due to environmental and cultural factors. So, the results of Western studies cannot be generalized for Pakistan.

Research Gap and Rationale for the Present Study

Even though, a tremendous amount of international literature has explored the link between violent media consumption and overall empathy, many gaps still exist. Firstly, there aren't many researches using a multidimensional measure to examine empathy as a primary outcome. Secondly, there aren't many studies done in the Pakistani context, more specifically, there is limited literature focusing on the Pakistani Generation Z university students, a population that has a high level of exposure to violent media.

Moreover, not many studies have examined this relationship with a correlational research design within the Pakistani context, even though violent media is prevalent in this population. Filling these gaps is very important, as it would help us understand the effects of violent media on the psychological functions of our youth in a culturally relevant way. It will also help us identify any risks, if any, of consuming this type of content, and help us in minimizing these risks.

This study, which is grounded in Desensitization Theory and Empathy Erosion Hypothesis, plans on addressing these gaps by observing the link between consumption of media violence and overall empathy among the Generation Z university students of Pakistan. The present study aims to contribute to both the psychological literature and practical discussions regarding emotional well-being and media consumption by paying attention to this understudied population.

Methodology

Research Design

This study is using a quantitative, correlational and cross-sectional research design. The aim of this research design is to study the relationship between violent media exposure and overall empathy in the Generation Z Pakistani university students. A correlational design seemed appropriate as the aim of this study was to examine the association between consumption of violent media and overall empathy. The study is cross-sectional as data was collected at a specific moment in time, and not over a period of time. The research design used in this study mirrors the design used in many media and psychological studies.

Theoretical Framework

The theoretical framework of this study is based on the Desensitization Theory and the Empathy Erosion Hypothesis. These theories describe how repeated exposure to violent content can influence empathetic responses.

Desensitization Theory states that repeated exposure to violence reduces the intensity of emotional responses towards violence. After multiple repeated exposures, the individual may become numb and indifferent towards other people's suffering, and may show lower arousal and concern. This lack of emotional sensitivity goes beyond just the media context and starts to affect interpersonal reactions in everyday life.

Building upon the Desensitization Theory, the Empathy Erosion Hypothesis claims that prolonged exposure to violent imagery may gradually weaken empathetic responses and abilities, specifically empathetic response and perspective-taking. As media constantly shows depiction of violence as the norm, individuals may start to find it as something normal and even entertaining. In this case, their ability to connect with people emotionally and understand their pain may decline. Both of these theories guide this research, and help in showing violent media exposure as the independent variable and overall empathy as the dependent variable.

Population and Sample

The population selected for this study consists of the Generation Z university students of Pakistan. Students above 18 years of age were considered due to ethical concerns. Only students who were enrolled in undergraduate programs were considered to keep the results generalized. The reason for selecting this specific population was due to the fact that this population has the most interaction with the violent media across multiple platforms such as social media, movies, video games, etc.

A purposive sampling technique was used to select participants. This sampling technique was used to make the study more effective as individuals who consumed violent media regularly were selected. Informed consent was taken from all the participants who took part in this study. The sample consisted of 30 university students who fulfilled the inclusion criteria. Even though the sample size was small, it seemed adequate for an exploratory correlational study done at the undergraduate level.

Instruments and Tools

For data collection a self-report questionnaire was administered through google forms. There were three sections of this questionnaire: Demographics, Violent media exposure and Empathy. To measure violent media exposure Content-based Media Exposure (C-ME) scale was used. This scale measured the participant's frequency of exposure to violent content across multiple media platforms such as Television, movies, video games and internet videos. Participants were instructed to report their frequency of encountering violent content using a Likert-type scale. Higher the score higher would be the exposure to violent media.

The Interpersonal Reactivity Index (IRI) was used to measure empathy. The IRI measures and assesses empathy across multiple dimensions of empathetic functioning, and it is widely used and validated. For this study in particular, the Empathic Concern (EC) and Perspective-Taking (PT) sub-scales were used, and the other sub-scales were ignored. Responses were measured from a scale of 1 to 5. Higher scores indicated higher overall empathy. The IRI was used because it has shown great reliability and validity in previous studies.

Procedure and Ethical considerations.

The questionnaire was sent to the participants through Google Forms to make sure it was easy and convenient to access. All participants were provided with an informed consent form highlighting the aim and purpose of the study, confidentiality and the fact that participation is

completely voluntary. All responses were anonymous and no information was taken that may violate the privacy of the participant.

Special focus was given to the ethical considerations, and the participants were informed that they may withdraw from the study at any point in time without any sort of penalty. All standard ethical guidelines for psychological research were followed.

Data Analysis

This study is using a quantitative, correlational and cross-sectional research design to observe the relationship between violent media exposure and overall empathy among Pakistani Gen Z university students. A purposive sampling technique was used to collect data from a sample of 30 participants using a google form. For the statistical analysis a descriptive and inferential technique was used.

This study had a sample of equal numbers of men and women to keep the data valid and reliable by minimizing gender based sampling biased. All participants were university students, currently enrolled in a university, as reported in the survey.

Gender	Frequency	Percentage %
Male	15	50%
Female	15	50%
Total	15	100%

Fig 1: Gender Distribution Table

Descriptive Statistics

The Interpersonal Reactivity Index (IRI) was used to measure empathy in this research. The main focus was on the 2 sub-scales of this scale, which were Perspective Taking (PT) and Empathic Concern (EC). Overall empathy was measured by adding both of these sub-scales. Content-based Media Exposure Scale

C. ME) was used to measure violent media exposure.

Below is a table explaining what different median ranges mean. These ranges apply for PT EC and violent media exposure.

Median Ranges	Interpretation
1.0 - 2.33	Low
2.34 - 3.66	Moderate
3.67 - 5	High

Fig 2: Median ranges and their Interpretation

Perspective Taking (PC)

Variable	Mean	Standard Deviation
Perspective Taking (PC)	3.14	1.49

Fig 3: PC Mean and Standard Deviation

Perspective Taking is the tendency to understand a situation, problem or concept from another person's viewpoint. The mean score of all the 30 participants in this study is 3.14, which comes in the moderate range of cognitive empathy. The standard deviation is relatively high, which suggests high variability in the participant's extent of perspective taking abilities. This highlights the individual differences in the cognitive empathetic processing of the participants.

Emphatic Concern (EC)

Variable	Mean	Standard Deviation
Emphatic Concern (EC)	3.32	1.32

Fig 4: EC Mean and Standard Deviation

Emphatic Concern is defined as the feeling of compassion and emotional responsiveness towards other individuals. The EC mean score of this study is 3.32 which highlights a moderate to slightly high level of affective empathy within the participants of this study. The high standard deviation shows the variability in the scores among the participants. This shows that some participants fell strong emotional concern for other people and others don't. This highlights the personal differences in the sample.

Overall Empathy

Variable	Mean	Standard Deviation
Overall Empathy	3.23	-

Fig 5: Overall Empathy value

Overall Empathy was calculated by averaging the score of Perspective Taking and Emphatic Concern. The summed up score for this sample was 3.23 which shows a moderate level of overall empathy. This shows a balanced mixture of both cognitive and emotional empathetic abilities.

Violent Media Exposure

Variable	Mean	Standard Deviation
Violent Meida Exposure	3.58	0.64

Fig 6: Violent Meida Exposure Values

Violent media exposure can be defined as the frequency of consumption of violent, brutal or gore content throughout the different media types like movies, video games, social media, etc. The mean score of violent media consumption for this sample was 3.58 which comes in the moderate to moderately high range. This confirms that our sample was frequently exposed to media violence.

Inferential Analysis

Correlation between Violent media exposure and Overall empathy

A Pearson correlation was used to analyze the relationship between violent media exposure and overall empathy.

In this study the the correlational coefficient (r) value was $r = .14$ and the p value which represents the statistical significance was $p = .45$. According to this there was a weak positive correlation between violent media exposure and overall empathy, but this link was very weak. Similarly due to the high p value, this relationship was not statistically significant. Hence, the higher levels of media violence consumption were not reliably linked with changes in overall empathy levels in this sample.

This lack of statistical significance shows that, violent media exposure itself does not meaningfully predict overall empathy, in this study, within the Pakistani Gen Z university students. The findings may be like this because of the influence of sample size, or self-report bias of the participants.

Findings and Discussions

This study wanted to study the relationship between violent media exposure and overall empathy within the Pakistani Gen Z university students. However, The results were not according to the expected outcome based on the Desensitization Theory and Empathy Erosion

Hypothesis, since according to the results there was a weak positive, but non-significant correlation between exposure to media violence and overall empathy.

Desensitization Theory (Bushman & Anderson, 2009) states that repeated exposure to violent media may reduce empathy and emotional responsiveness towards other people's suffering and pain. Building upon Desensitization Theory, the Empathy Erosion Hypothesis states that regular engagement with violent content is expected to slowly decrease both cognitive and emphatic capacities. However, according to the results of this study, there was no empirical evidence to prove that there's a negative correlation between these two variables within the sampled population.

Hypothetically, overall empathy should have decreased when violent media was consumed frequently. Both of the above theories provided some level of supporting evidence for this theoretical expectation. Theoretically, if an individual consumes a lot of violent content, the individual should become desensitized to violence and as a result violence becomes normalized for that person, as a result it becomes harder for that person to empathize with people suffering from actual violence. However, in the sample population no such relation was found. So, our theoretical expectations may have been incorrect.

One explanation for this specific outcome can be the small sample size. A small sample size limits the statistical power and the chances of finding significant effects also decrease. Subtle relationships between variables may have remained unnoticed because of the small sample size of 30 participants. Furthermore, long-term effects of exposure to media violence could not be examined due to the cross-sectional research design.

Another reason why there was no significant link between our variables may be related to the cultural factors specific to the Pakistani context. In the Pakistani society, great emphasis is given to collectivism and moral responsibility. These factors may have played a role in slowing down or protection against empathy erosion. The emphasis on the religious and cultural values in Pakistan may have acted as a shield against the negative effects of violent content, especially among university students who are engaged in the social environments.

The context and interpretation of violent media may also play a major role in protection against desensitization and empathy erosion. Some individuals may consider violent content in media as a fictional form of entertainment, rather than something real. This emotional and cognitive distancing may preserve emphatic responses and prevent or slow down desensitization.

Violent media alone may not be enough to influence overall empathy levels. Variables like personality, peer influence, emotional regulation and family environment may influence the individual's emphatic responses more, that is why our findings were not significant.

Even though this study has some limitations, it contributes to the limited body of literature on effects of violent media on empathy within the Pakistani context. It also brings attention to the need for future researches with larger and more diverse samples to better understand how violent media exposure shaped emphatic responses in different cultures.

Conclusion

The aim of this study was to examine the relationship between violent media exposure and overall empathy in Gen Z university students. In the digital age where everyone is frequently being exposed to violent content through different sources like social media, video games, movies, etc., it is extremely important to understand the psychological impacts of this exposure. The findings of this research show that there is not much risk to our emphatic and emotional responses due to frequent violent media exposure.

There are limited studies done on the effects of media violence, especially in the Pakistani context. This study contributes to this limited body of research. Empathy plays an important role

in our social and personal lives, therefore it is important to study the effects of external stimuli on it, especially in different cultural contexts.

Even though, this study was extremely insightful, it had a few limitations which include its small sample size and correlational design. In the future, researchers can further our understanding on this topic by adopting longitudinal research designs and by researching the effects of media on different psychological factors.

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Appendix

Google Doc Questionnaire

<https://docs.google.com/forms/d/e/1FAIpQLSd0bybe4XV4qRnzQS5VZcmGthY9mrVsk700g2V5lEI99iQ83A/viewform?usp=header>