

## Impact of Media Exposure on Aggression Level and Self-Esteem among University Students

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### ABSTRACT

*The current study investigated the effects of media exposure on aggression and self-esteem as well as the connections between these variables among university students between the ages of 18 and 25. Convenience sampling was used to select a sample of 300 participants (n=150 males and n=150 females) for a cross-sectional study. The Rosenberg Self-Esteem Scale (Rosenberg, 1965), the Buss–Perry Aggression Questionnaire (Buss & Perry, 1992), and the Content-Based Media Exposure Scale (Bushman et al., 2017) were used to gather data. The findings showed a strong positive correlation between media exposure and aggression, showing that more media exposure was linked to higher levels of hostility, rage, verbal aggression, and physical violence. Aggression and self-esteem were significantly correlated negatively, indicating that people with lower self-esteem tended to be more aggressive. Significant gender disparities were found in a number of variables using independent samples t-tests. Male students scored higher on verbal aggressiveness and self-esteem, whereas female students reported more media exposure and higher levels of physical aggression, wrath, and hostility. The results demonstrate how media exposure has a psychological impact on behavioral outcomes and self-perception. The study provides useful recommendations for the creation of media literacy initiatives, mindfulness-based therapies, and counseling techniques meant to lessen hostility and foster positive self-esteem among college students.*

**Keywords:** Media Exposure, Self-esteem, Aggression and Young adults

### INTRODUCTION

The social, psychological, and cultural contexts of young adults have been profoundly altered by the rapid growth of technology in recent decades. Particularly among college students, mass media which includes movies, TV shows, video games, social networking sites, streaming services, and mobile devices has become an essential aspect of daily life. This group uses media intensively for social, recreational, and

scholarly reasons. Although there are many advantages to media, such as social connectivity and information access, there is growing scientific evidence that it may have negative psychological effects, especially when it comes to aggression and self-esteem (Anderson & Bushman, 2002; Valkenburg et al., 2006).

A crucial developmental stage characterized by identity formation, emotional control, and increased sensitivity to social judgment is represented by university students. People are particularly vulnerable to outside factors that affect behavior, self-concept, and interpersonal connections at this time of transition (Arnett, 2015). As a result, it is crucial from both a scientific and practical standpoint to comprehend the psychological effects of media exposure on this group.

The usual definition of aggression is actions meant to cause bodily or psychological harm to another person. Physical, verbal, relational, and hostile cognition tendencies are just a few of the ways it can manifest. Exposure to violent or antisocial media content is positively correlated with aggressive thoughts, feelings, and actions, according to a large body of research (Bushman & Huesmann, 2006; Gentile et al., 2003). Because media exposure is frequent and pervasive, meta-analytic results indicate that even while effect sizes are frequently small, they are significant at the population level (Anderson & Bushman, 2002).

Frequent exposure to violent television was found to be a predictor of later aggressive behavior in early research (Atkin, 1985). This focus has been expanded to include movies, video games, and interactive digital media in more recent studies. According to longitudinal and experimental research, exposure to violent media can both lessen sensitivity to actual violence and increase aggressive cognition, emotional arousal, and behavioral tendencies (Anderson & Dill, 2000).

The potential impact of media exposure on aggression is explained by a number of theoretical frameworks. According to the Social Learning Theory, people pick up new behaviors by watching and copying role models, especially when those activities seem to be rewarded or unpunished (Bandura, 1977).

Therefore, imitation of aggressive behavior may be encouraged by exposure to violent media characters. Further emphasizing cognitive mechanisms, Social Cognitive Theory proposes that aggressive scripts, ideas, and normative attitudes toward violence are reinforced by repeated exposure to violent media (Bandura, 1986). By describing how situational and personal factors interact to affect aggression in both the short and long term, the General Aggression Model incorporates different viewpoints (Anderson & Bushman, 2002).

A person's total assessment of their own value is known as their self-esteem, and it is crucial to psychological adjustment. As students deal with academic obligations, social comparison, and identity exploration during their time in college, self-esteem becomes especially important (Harter, 2012). Idealized ideals of achievement, looks, and social standing are commonly presented in media content, which may have a detrimental effect on self-evaluations.

People assess themselves in relation to others, and media contexts offer constant chances for upward comparison, according to Social Comparison Theory (Festinger, 1954). Young adults who are exposed to idealized media representations have been linked to higher self-criticism, body dissatisfaction, and low self-esteem (Bessenoff, 2006; Valkenburg et al., 2006). According to the Objective Self-Awareness Theory, when differences between the real and ideal selves are noticed, the heightened self-focus brought on by media exposure may exacerbate unfavorable self-evaluations (Duval & Wicklund, 1972).

Theoretically and experimentally, the connection between violence and self-esteem is still complicated. According to conventional viewpoints, poor self-esteem causes feelings of frustration and inferiority, which in turn fuel violence (Horney, 1950). According to empirical research, there is a negative correlation between aggression and self-esteem, suggesting that those who have lower self-esteem may be more likely to act hostilely and antisocially (Donnellan et al., 2005; Trzesniewski et al., 2006).

However, other perspectives suggest that, especially in those with narcissistic features, aggressive behavior may result from unstable or threatened high self-esteem (Baumeister et al., 2000). These contradictory results highlight the need for more investigation to elucidate the nature of the association between violence and self-esteem, particularly among college students.

Relatively few studies have examined university students, especially in non-Western cultural contexts, despite a large body of study on children and adolescents. Additionally, the emergence of social and interactive media has changed media exposure patterns, requiring new empirical research. The current study intends to investigate how media exposure affects university students' levels of aggression and self-esteem.

In particular, the goals are to investigate the following relationships: (a) media exposure and aggressiveness; (b) media exposure and self-esteem; (c) aggression and self-esteem; and (d) the influence of demographic factors including age and gender. By addressing these goals, the study hopes to add to the body of knowledge and provide guidance for interventions meant to enhance university students' psychological wellbeing.

### **Objectives**

Following are the objectives of the study:

1. To explore the relationship of Media exposure, Aggression level and Self-esteem among university students.
2. To investigate the aggression with reference to gender differences among university students.

### **METHODS**

#### **Hypotheses**

1. There will be a positive relationship between media exposure and aggression level among university students.
2. There will be a negative relationship between media exposure and self-esteem among university students.
3. There will be a negative relationship between aggression and self-esteem among university students.
4. Female participants will score high on aggression than males among university students.

#### **Research Design**

Quantitative research method and convenient sampling technique were used.

### **Sample**

The sample (N=300) was comprised of university students between age ranges 18 years to 25 years and include male (n=150) and female (n=150) students of university level. The sample of the study was selected by using convenient sampling technique. The sample included university students of different universities of Rawalpindi and Islamabad.

### **Inclusion criteria**

The participants must be university students and between the ages range of 18-25 and participants must not be physically or psychologically ill.

### **Exclusion criteria**

Participants who are university students but not between the age range of 18-25. Participants who have any physical or psychological illness. Participants who provide incomplete or inconsistent responses on survey calculates omitted from the analysis to ensure data quality and reliability.

### **Procedure**

The management of the university granted formal approval to carry out the study. Before the assessment scales were used, permission was also obtained from the authors. Informed consent was obtained from all participants, who were assured of confidentiality, anonymity, and voluntary participation, with the right to withdraw at any moment without consequence. The study was conducted by approaching students individually. They were briefed about the objectives of study and assured about the confidentiality of their opinions and beliefs. They were, then, requested to fill the questionnaires including The Content-based Media Exposure Scale, The Rosenberg Self-esteem Scale and BussPerry Aggression Questionnaire. The participants were informed of their ethical right to withdraw anytime in between the study. They were also told about the use of their data and informed about privacy and confidentiality of their responses. All their queries were addressed at the time and they were encouraged to provide as accurate information as they can. Finally questionnaires were collected, and students were thanked for their cooperative and nice behaviour. After data collection, all instruments were scored and data was coded and entered into statistical software, Statistical Package for the Social Sciences (SPSS). By using SPSS, relevant statistics were applied to test the hypotheses. Correlation analysis was used to test the relationship properties and t-test was used for comparison purposes.

### **INSTRUMENTS**

**BussPerry Aggression Questionnaire (Buss & Perry 1992)** It is consisting of 29 total items. Utilizing the 5 point scale appeared underneath, show how unique or characteristic each of the taking after explanations is in portraying the person. Participants will place their rating in the box to the right of the statement. 1 = extremely uncharacteristic to 5 = extremely characteristic of me. The Aggression scale consists of 4 factors, Physical Aggression (PA), Verbal Aggression (VA), Anger (A) and Hostility (H). The total score for Aggression is the sum of the factor scores. The value of Cronbach alpha is .80.

**The Rosenberg Self Esteem Scale (RSE; Rosenberg 1965)** The scale consists of 10-item self-report questionnaire which asks participants to indicate on a 4-point scale how much they agree, or Aggression and Self-Esteem in Youth 7 disagree with statements about their self-worth (0 = strongly agree, 1 = agree, 2 = disagree, 3 = strongly disagree). The statements contain both positive and negative evaluations. The

possible range of RSE scores is 0 to 30, with higher scores indicating higher levels of self-esteem. Internal consistency was good with the Cronbach's alpha for self-esteem = .86.

**The Content-based Media Exposure Scale (C-ME Bushman et al., 2017)** It includes 17 items that measure exposure to antisocial media content (8 items) and neutral media content (9 items). It is a 5-point scale (e.g., 1=Never, 2= Incidentally 3=Sometimes, 4= Often, 5=Very often). The factor structure was investigated in three independent samples (N=892; N=748; N=524). Exposure to antisocial media content positively correlated with sensation seeking, trait aggressiveness, violent media use, and general media use. The C-ME proves a reliable and easy to use instrument that measures media exposure in today's (new) media landscape. The value of Cronbach's alpha is = .70.

## RESULTS

**Table 1**

*Frequency distribution of Gender, Age and Education of the participants.*

Variable		<i>f (f %)</i>
Gender	Male	150 (50%)
	Female	150 (50%)
Age	18	5 (1.7%)
	19	37 (12.3%)
	20	57 (18.3%)
	21	73 (24.3%)
	22	58 (19.3%)
	23	40 (13.3%)
	24	16 (5.3%)
Education	25	16 (5.5%)
	Undergraduate	275 (91.7%)
	Graduate	25 (8.3%)

*f*= frequency, *f*%= frequency percentage

The participants' demographics are shown in Table 1. The sample consisted of an equal amount of males and females (50% each). 21-year-olds made up the plurality of participants (24.3%), followed by 22-year-olds (19.3%) and 20-year-olds (18.3%). Most participants were undergraduate students (91.7%), but a minor proportion belonged to the graduate level (8.3%).

**Table 2**

*Psychometrics Properties and Alpha Reliability Coefficient of content-based media exposure scale, BussPerry aggression questionnaire and Rosenberg self-esteem scale and their Subscales (N = 300)*

Scales	No of items	$\alpha$	M	SD	Ranges		Skew	Kur
					Potential	Actual		
C-ME	17	.68	46.70	8.31	17-85	26-79	.51	.80
Antisocial media content	8	.73	19.18	5.59	8-40	8-39	.51	.27
Neutral media content	9	.68	27.52	5.79	9-45	12-42	.24	-.31
BP-AQ	29	.86	22.80	3.93	29-145	11-34	-.20	-.16
Physical aggression	9	.60	127.28	11.7	9-45	98-141	-.80	-.85
Verbal aggression	5	.34	37.98	4.11	5-25	24-42	-.99	-.08
Anger	7	.77	24.09	1.58	7-35	19-25	-1.56	.97
Hostility	8	.69	28.37	4.26	8-40	16-35	-1.14	-.16
RSE	10	.77	36.84	4.28	0-30	24-40	-.91	-.63

*Note.* Skew = Skewness; Kur = Kurtosis, C-ME = The content-based media exposure scale; BP-AQ =BussPerry aggression questionnaire; RSE = Rosenberg self-esteem scale.

The reliability coefficients and psychometric characteristics for the research variables are shown in Table 2. Cronbach's alpha values for most scales range from  $\alpha=.68$  to  $\alpha=.86$ , indicating acceptable to good internal consistency; however, the Verbal Aggression subscale had lower reliability ( $\alpha =.34$ ). The data is roughly normally distributed, according to the results, which show that all variables fall within the permissible range for skewness and kurtosis. Additionally, the actual score ranges across the scales indicate enough variability to support additional statistical analysis.

**Table 3**

*Correlation between the Media Exposure, Aggression & Self-Esteem among university students (N=300)*

Variables	1	2	3	4	5	6	7	8	9
1 CM-E	-								
2 Antisocial media content	.71**	-							
3 Neutral media content	.73**	.06	-						
4 BP-AQ	.12**	.04	.13*	-					
5 Physical aggression	.16**	.17*	.06	.06	-				
6 Verbal aggression	.15**	.09	.13*	.17**	.33*	-			
7 Anger	.18**	.14*	.12*	.004	.31*	.20**	-		

8	Hostility	.02	.04	-.008	.11*	.30*	.44**	.26**	-
9	RSE	-.02	.09	-.13*	-.15**	.24*	-.02	.15**	.04

*Note.* C-ME= The Content-based Media Exposure Scale; BP-AQ= BussPerry aggression questionnaire; RSE= Rosenberg self-esteem scale. \*p < .05. \*\*p < .01.

The Pearson correlation coefficients between media exposure, aggression, and self-esteem (N = 300) are shown in Table 3. Results demonstrate significant positive relationships between content-based media exposure and overall aggression, as well as its subscales of physical aggression, verbal aggression, and anger (p < .01). Notably, there is a significant negative correlation between self-esteem and neutral media content and general aggression, although there is a significant positive correlation between self-esteem levels with physical aggression and anger. These findings imply that higher levels of media exposure and certain aggressive traits are systematically associated to the psychological profile (e.g. self-esteem) of university students.

**Table 4**

*Group comparison of scales and sub-scales of all study variables across Gender (N = 300)*

Variables	Male (n = 150)		Female (n = 150)		t (298)	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
	C-ME	45.48	7.29	47.93			9.08	2.57	
Antisocial media content	18.89	4.95	19.47	6.17	.89	.37	1.85	.69	-
Neutral media content	26.58	5.30	28.46	6.12	2.83	.00	3.17	.57	0.32
BP-AQ	122.02	13.3	132.5	6.34	8.70	.40	12.91	8.15	-
Physical aggression	36.76	4.12	39.20	3.74	5.36	.00	3.33	1.54	0.62
Verbal aggression	24.49	1.30	23.69	1.73	4.51	.00	.45	1.14	0.52
Anger	25.94	4.84	30.80	1.01	12.0	.37	5.66	4.07	-
Hostility	34.82	4.77	38.85	2.43	9.19	.01	4.88	3.16	1.06
RSE	23.27	3.74	22.32	4.07	2.09	.03	.05	1.83	0.24

*Note.* CI = confidence interval; LL = lower limit; UL = upper limit; C-ME = The Content-based Media Exposure scale; BP-AQ = BussPerry Aggression questionnaire; RSE = Rosenberg self-esteem scale.

Table 4 shows the gender differences across the study variables using independent samples t-tests. Neutral media content and content-based media exposure showed significant differences, with females scoring higher than males with minor effect sizes (d = 0.29 and 0.32, respectively). Physical aggression (d = 0.62, moderate effect) and hostility, which demonstrated the greatest difference with a large effect size (d = 1.06), were both substantially greater among females. On the other hand, men scored far higher in self-esteem (d = 0.24, modest effect) and verbal aggression (d = 0.52, moderate effect). These findings show that although gender has an impact on the majority of variables, the difference is most noticeable in hostile affect.

## DISCUSSION

The present study aimed to examine the impact of media exposure on aggression level and self-esteem among university students, i.e. how media exposure effect aggression level of students and how we can define relation between media exposure and aggression level, this study aims that there is positive relationship between media exposure and aggression level, if media exposure consume much time of any individual aggression level of that person automatically increase. And the present study also aims to examine the relation between aggression level and self-esteem, several studies in past claims that there is no relation between aggression level and self-esteem.

It was hypothesized that there will be a positive relation between media exposure and aggression level among university students (H1). Results supported this hypothesis as there was a significant positive relationship of Media Exposure with Aggression (see table 3). Correlation evidence has found the positive link between media use and aggression. (Gentile et al., 2004) A solid justification for this finding is founded in the General Aggression Model (GAM), which proposes that repeated exposure to media content can trigger aggressive thoughts, enhance physiological arousal, and contribute to the formation of aggressive scripts in social interaction. As students engage more regularly with media, they may undergo a process of desensitization or observational learning, where aggressive behaviors become more available. This finding fits with the work of Gentile et al. (2004), who propose that excessive media consumption serves as a strong predictor for increased violent behavior through the reinforcement of hostile cognitions.

It was also hypothesized that there will be a negative relation between media exposure and self-esteem among university students (H2). Results find a negative relation but not significant between Self-esteem and Media Exposure. There could be some factors which can be the reason, like it may be explained by a number of methodological elements. First, even though the sample size (N=300) is large, if the effect size is especially tiny, it might not have the statistical power required to find a relationship. Second, the existence of outliers participants with extreme scores can disproportionately influence the correlation coefficient, thereby disguising a genuine trend. Additionally, it's possible that students responded in a way they thought was socially acceptable rather than being honest about their media habits or self-esteem, a phenomenon known as social desirability bias. Lastly, "noise" might be introduced into the data by random responses or participant tiredness during the survey procedure, making it statistically challenging to find a meaningful relationship between these two complicated factors. Recent study supports the hypothesis (table 3); it was found that increased media exposure decreased self-esteem in participants. (Silje et al., 2020)

The third hypothesis was that there will be a negative relation between aggression and self-esteem among university students (H3). Result supports this hypothesis as there was a significant negative relation between Aggression and Self-esteem (see table 3). Literature found some mixed finding, study found that aggression is more strongly associated with low self-esteem (Donnellean et al., 2005) and Some studies found inconclusive evidence with low self-esteem and call for further research (Ang, 2005; Ostrowsky, 2010).

The fourth hypothesis was that Female participants will score high on aggression than males among university students (H4). The results support the hypothesis, according to results, females scored higher on Aggression than male population (see table 4). Females aren't unassertive sufferer of violence. Rather, they react to rousing and active contributors in aggressive interactivities. (Richardson, 2005).

### **LIMITATIONS AND SUGGESTIONS**

In spite of the fact that discoveries of the consider were comprehensive; however there are a few inadequacies of this study.

1. Sample was taken only from universities of Islamabad and Rawalpindi, so the discoveries cannot be generalized to the by and large populace of Pakistan. Future analysts must take test from all over Pakistan so that discoveries can be generalized to entirety populace of Pakistan.
2. Another impediment whereas conducting the inquire about work was time obliged as the investigate should be concluded within the given time allotment, subsequently confronting certain limitation amid information collection, and other processes.
3. Moreover, there can be component of biasness on the portion of respondents as the scales were self-reported. It gives frail separation in comes about. So, future analysts ought to consider a few way better degree to survey these variables.
4. The study was conducted on constrained statistic factors, which can be secured through a broader investigate with more energetic socioeconomics in future research. In this respect, it is recommended that inquire about upon these themes ought to be performed in Pakistan for coherent understanding of the issues.
5. A key weakness of this study is the lack of mediators or moderators, which limits a fuller understanding of the mechanisms behind these connections. To understand how and when media exposure actually influences behavior, future studies should take into account factors like emotional regulation or personality features.

### **IMPLICATIONS**

The present study provides significant contribution in the field of research work and in practical life. The findings of the present study can have important implications for young adults:

1. Different workshops, programs, and mindfulness campaigns can be concocted to bring mindfulness that how the exposure of media impact on the aggression and as well as on self-esteem.
2. The discoveries of study are of extraordinary intrigued for both clinical and non-clinical tests. Discoveries important to clinical point of see will offer assistance the clinicians to alter the client's behavior.
3. To raise awareness among parents, university student affairs departments and campus counseling centers could host workshops. Raising awareness of the kinds of content that students consume should be a key component of parental counseling. Counselors can help parents understand how to support their children to lessen the danger of violent behavior and promote healthy digital habits.

### **CONCLUSION**

The current aim of the study is exploring the impact of media exposure on aggression level and self-esteem among university students. Correlation result indicates that Media Exposure is positive correlated

with Aggression, Self-esteem is negative correlated with Aggression. Result of sub scales correlation shows that Anti-social media content is positive correlation with Physical aggression and Anger. Verbal aggression and Anger is negative correlation with Self-esteem. Further result on exploring the genders difference on social media exposure, Aggression and self-esteem and result shows that male score high on self-esteem as compare to female while female score high on Social media exposure and Aggression as compare to male.

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#### **Conflict of Interest**

*The authors declared no potential conflicts of interest.*

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#### **Authors Contribution**

Farah Aymen (First Author): Conceptualization, Methodology, Data Collection, Formal Analysis, Writing - Original Draft, and Visualization.

Maria Tanvir: Supervision.

Ayiza Asif: Assisted in Methodology & reviewing the manuscript.

Marzia Batool: Assisted in data collection

Muhammad Sarram Hassan: Contributed in literature review.

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