

Study on the Effect of Media and Video Games Over Aggression and Social Isolation amongst College Students

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Abstract

Background: Media has always been an instigating factor towards the people of our communities. Youths, especially college students are becoming more and more vulnerable in playing video games especially of violent categories and consuming different media content with easy access. Recent studies have also focused on the significant correlations between media, aggression and social isolation, thereby making this study prudent for conduction.

Methodology: Total 256 college students from two different colleges were studied in a cross-sectional study. The scales used were UCLA Loneliness Scale & Aggression Questionnaire by Buss and Perry.

Statistical Analysis: Scores obtained were computed using basic descriptive statistics as well as computerized statistical software.

Results: College students playing violent video games and watching more violent news contents were prone towards developing aggression and social isolation.

Conclusions: This study provides insight into thoughts that high use of new technologies is socially more harmful than of help. Therefore, judicious use of media and video games are to be encouraged for preventing their malfunctioning in our daily lives.

Key words- Media, Videogames, isolation, Aggression

INTRODUCTION

Advent and saturation of media has been one of the most important aspects to be considered in the context of social environment in the 21st century. The Oxford dictionary defines media as the collective organization of mass communication involving broadcasting, publishing and internet ^[1]. It

also includes movies, videos, televisions, radios, social media and even video games. Establishing their significance in our lives, various research evidences over many years have concluded that viewing of violence on television and video games exaggerates the risk of aggressive behavior amongst an individual, exactly resembling the way it grows up in a real violent environment ^[2]. Further, aggression is defined as an intended act of inflicting damage or unpleasantness amongst other individuals with an overt, harmful and social interaction^[3].

Meanwhile a significant correlation has been pointed towards the relationship of causality between aggressive behavior and media violence by the six major professional societies in United States, namely, the American psychiatric association, the American psychological association, the American academy of family physicians, the American medical association, the American academy of pediatrics and the American academy of child and adolescent psychiatry ^[4]. The impact on social interaction amongst the individuals due to the implementation of such means in social settings has been tremendous. Technology has been used independently, rather than collectively due to privatization, which in return, is a result of the introduction of these new media technologies. Interaction of the people with the environment has changed considerably taking into consideration the rapid advancements made by these technologies. It has been an encouraging force so far in obtaining rapid information, services, Goods and in communicating thoughts to other people, both personally and professionally. Establishment of interpersonal relationships due to excessive use of technological products, however, is a result produced by the changes of these technologies^[5].

Social isolation is further defined as a condition with individuals lacking a sense of social belongingness, having a limited number of social contacts, lacking proper engagement with other people, and is deficient in fulfilling quality relationships ^[6]. Recent studies have suggested evidences that distant and relatively weak social ties have been encouraged by these information and communication technologies in comparison to encouraging a more locally based, strong ties. The profound statement here is that a withdrawal from local social settings has been encouraged by the use of internet and mobile phones ^[7].

There has been an increased incidence of violence or aggression amongst youths in India over the years. It includes behaviors such as hitting, slapping, rape, truancy, driving and shooting in school, road rage, recklessness and other associated high-risk behaviors. About 18.6% of females, aged 12-17 years, get into serious fights at work or at school. Around 14.1% participate in a group fight and about 5.7% attack other persons with an intent to seriously harm him or her. Researchers in India have focused on risk factors like environment, family system, romantic relations, academic performance, victimization, aggressive relationships, social relationships, peer aggression, perceived popularities among the peer groups, prevalence and gender differences, contributing towards aggressive or violent behaviors of the individuals^[8].

Increasing violent activities and crime rates of youths in India, have triggered researchers

to focus on aggression among youths. Further, increase in the isolated lives of young adults in India, contributing towards the development of aggression, makes it prudent for the proper assessment of contribution of media and violent video games in aggression and isolation amongst college students, which is still unexplored towards the west of our country.

AIMS & OBJECTIVES

1. To determine the frequency and nature of media and video game use amongst college going students
2. To determine effect of media on social isolation amongst college going students
3. To determine effect of media on aggression amongst college going students
4. To determine effect of video games on social isolation and aggression amongst college going students
5. To determine relevant demographic factors effect on social isolation and aggression amongst college students

MATERIALS & METHODOLOGY

This cross-sectional study has been conducted in 2 different colleges in Ahmedabad. After permission from institution review board, college authorities were contacted and their permission, brief information regarding study was given to students in a classroom setting and after taking their informed consent; students were asked to fill up forms containing the details of demography, media using and video gaming habits along with UCLA Loneliness Scale & Aggression Questionnaire. Total data of 257 students from 2 different colleges of Ahmedabad were collected but 21 forms were discarded because they were incomplete. So total data of 236 students of which 140 females and 96 males was included in study.

Inclusion Criteria

College students aging between 17 years to 25 years
College students who give informed consent
College students who thoroughly know English or studying in English medium

Exclusion Criteria

College students who did not give informed consent

Scales:

UCLA Loneliness Scale (Version 3)

This scale was developed at the University of California, Los Angeles. After getting published for the first time in 1978, by Russell, Peplau and Ferguson, the scale was revised in the year 1980 and 1996. Here, we have used the 1996 version^[9]. This scale has already been used as a measure of isolation in various national and international studies as well^[10,11].

It is a 20 question, 5-point Likert-type scale. The total score of the scale is 80. Higher the score, higher is the loneliness. The scale is highly reliable, with respect to internal consistency (alpha coefficient values from .89 to .94) along with test-retest reliability throughout a 1-year period ($r = .73$)^[9].

Aggression Questionnaire (Buss & Perry, 1992)

This questionnaire was designed by Arnold Buss and Mark Perry, professors from the University of Texas, at Austin in the year 1992. It is also referred to as the AGQ or simply, the Aggression Questionnaire in some contexts ^[12]. This scale also has already been used as an instrument to quantify aggression in various national and international studies as well ^[13]. It is a 29 question, 5-point Likert-type scale. The total score of the questionnaire is 145. Higher the score, higher is the aggression. This questionnaire has 29 items, subdivided into four factors: (1) Physical aggression (9 items), (2) Verbal aggression (5 items), (3) Anger (8 items), (4) Hostility (8 items).

The first two items mentioned above implicate the instrumental component. Anger represents the physiological activation and signifies the emotional component. Hostility includes feelings of injustice and as well as opposition, thereby symbolizing the component of cognition within. As a result, the instrumental and cognitive components are apparently connected by a psychological bridge, representing anger.

Reliability: the correlations of the test-retest are: - Physical Aggression corresponds to 0.80; Verbal Aggression to 0.76; Anger to 0.72; and Hostility to 0.72 (total score = 0.80). Taking into effect, a relatively small number of items, an adequate stability over time is suggested by these coefficients. The internal consistency of these four items and total scores are evaluated by the coefficient alpha. They are: - Physical Aggression corresponding to 0.85; Verbal Aggression to 0.72; Anger to 0.83; and Hostility to 0.77 (total score = 0.89). Significant internal consistency has been shown by the alpha values ^[12].

Statistical analysis

All collected data were summarized amidst a M.S. Excel (trial version) sheet and data analysis was done using same M.S. Excel (trial version). T-test was applied for comparison between groups. p-value of <0.01 was taken as statistical significant value.

RESULTS

In this study, we tried to know different kinds of media including videos games used by college students and assessed their effect on social isolation and aggression using UCLA Loneliness Scale and Buss & Perry aggression questionnaire respectively. Total data of 257 students from 2 different colleges of Ahmedabad were collected but 21 forms were discarded because they were incomplete. So total data of 236 students of which 140 females and 96 males were included in the study. Other characteristics of samples were as per the table below.

| Table-1. Frequency and nature of media and videogame use amongst college going students | | |
|--|------------------|------------------------|
| Demographic characteristic of data | | |
| Characteristic | Variables | Student (n=236) |
| Age (in years) | 18-20 | 107 (41%) |
| | 21-23 | 55 (23%) |
| | 24-26 | 74 (36%) |
| Background | Urban | 215 (91%) |
| | Rural | 21 (9%) |
| Family type | Nuclear | 144 (61%) |
| | Joint | 92 (39%) |
| Relationship status | Single | 90 (38%) |
| | In relationship | 146 (62%) |
| Study Stream | Science | 106 (45%) |
| | Non- science | 130 (55%) |
| Academic performance (in %) | 40-60 | 101 (43%) |
| | < 60 | 135 (57%) |
| Participation in Extracurricular activities | Take part | 110 (47%) |
| | Don't Take part | 126 (53%) |
| Substance Use | Present | 71 (30%) |
| | Absent | 165 (70%) |

The questionnaire given to students was having questions about their media using habits and the results were as per below. Result is described individually for each media separately.

A) Electronic Media

A1) Time spent per day in watching TV

In our study, 67% (157) students reported that they watch television daily for 2 to 5 hours which is same as TV watching time consumption found in other study by Comstock G et al ^[14]. Only 11 % (27) students reported that they watch TV less than 2 hours which shows how much TV is an important part of current adolescent life.

A2) Other Television watching Habits (n= 236)

As per details shown in table 1 most preferred program on TV are News (47.1%) and TV serials (35.6%). Violent content is more watched (58.9%) than non-violent content (41.1%). Most

(52.1%) students preferred watching TV alone than with family or friends. All students believed that somehow TV is a connecting media for them to in touch with other people in world. Findings were same as other studies ^[15,16].

B) SocialMedia

| Table 2. Different Television watching habits | | |
|--|--------------|-------------|
| Preferred Program | Movies | 40(17.1%) |
| | News | 111 (47.1%) |
| | TV Serials | 84(35.6%) |
| | Sports | 3(0.20%) |
| Preferred Content | Violent | 139(58.9%) |
| | Non-violent | 97(41.1%) |
| How prefer watching TV | Alone | 123(52.1%) |
| | With Family | 79(33.5%) |
| | With Friends | 34(14.4%) |
| That electronic media connect to other people in world | Always | 178(75.4%) |
| | Sometimes | 58(24.6%) |
| | Never | 0 |

B1) Time spent per day on Social media

In this study, most students spent around half an hour to 2 hours on social media (65%) leading to understanding of emergence of social media as a new important media platform, findings were similar to other study on social media by Keith N. Hampton, Lauren F. Sessions & Eun Ja Her ^[17].

B2) Favorite way to communicate with family and friends (n=236)

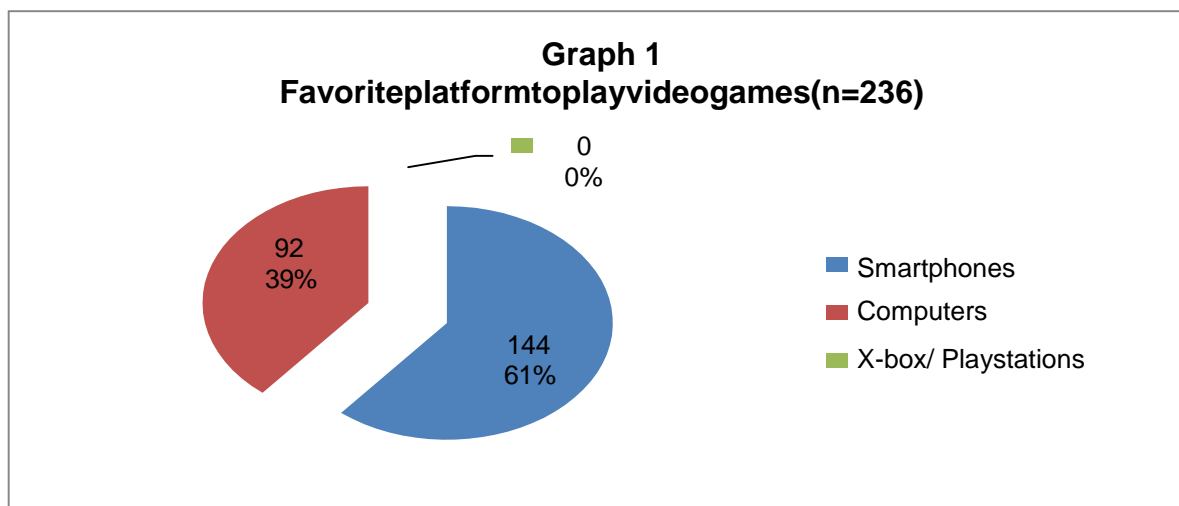
73 (38%) student still like to interact with family and friends in person which is highest preferred way of communication followed by social networking sites 63 (33%) and text messaging 36 (19%). Results were contradictory to other study by DiMaggio et al who found social media is preferred way of community with family and friends ^[18]. Low internet penetration may be the reason for that ^[19].

C) PrintMedia

All the students 236 (100%) replied that they spend average 30 minutes or less daily on reading newspaper, books, magazines etc., with all students 236 (100%) feel that print media connect them to other people in world and newspaper being the most preferred thing to read. of Phillips DP and Guerra N ^[15].

D) Videogames

D1) Favorite platform to play video games (n=236)



Of 236 students only 70 reported that they daily play video games with 55 reporting playing games sometimes a week and 111 reporting playing games once a week or even less but all 236 students played videogames once or more. As per Graph 1, smart phones were the most preferred 144 (61%) platform to play videogames followed by computers & laptops (39%). Results were comparable to study by Haninger K et al^[20].

D2) Time spent per day in playing videogames (n= 70)

Around 43 (62%) students of 70 students who played videogames daily spent approximately more than 30 minutes (23) to up to 2 hours (22) in playing video games. Results were comparable to study by Haninger K et al^[20].

D3) Other video gaming habits

Table 2 shows that in our study most students 214 (90.6%) preferred to play violent videogames. Most students 205 (86.9%) played violent video games because they liked rush of competing. 162 (68.6%) student played video games without parental monitoring. Results were comparable to study by Haninger K et al who also found preference for violent video games over nonviolent ones with most video games were played in absence of parents^[20].

For correlation purpose, data of media and video game use habits was divided in high and low use group taking spent time as a common variable except for print media because all (236) students reported spending 30 or less minutes in reading print media so correlation was not possible.

People watching TV more than 5 hours were included in high electronic media use group and less than 5 hours in low electronic media use group. Similarly spending 1 hour or more was

considered high use for social media and daily use of game was considered high use for video games. All divisions were done as per average time of use found for electronic media in study by Comstock G et al, for social media by Keith N. Hampton et al and for video games by Haninger K et al. ^[14, 17,21].

| Table 3. Different video game habits | | |
|--|--|------------|
| Preferred Content of video games | Violent | 214(90.6%) |
| | Non-violent | 22(9.4%) |
| How frequently play violent videogames | Daily | 0 |
| | Sometimes a week | 94(39.8%) |
| | Once a week or less | 142(60.2%) |
| Why find violent video game interesting | Fun to do illegal things without consequences | 31(13.1%) |
| | Like rush of competing | 205(86.9%) |
| Rating of content of video games by parents | Yes | 74(31.4%) |
| | No | 162(68.6%) |

2. Effect of media on social isolation amongst college going students

The UCLA loneliness score for high use group of electronic media (mean score 54.78) accounted more than low use group (mean score 37.71) and for group of high (mean score 42.96) and low (mean score 40.67) use for social media, denoting high use of electronic media statistically significantly ($p < 0.00$) associated with social isolation but the same cannot be said for social media use ($p = 0.14$). These findings were same as many studies, signifying that TV has made the whole world a family with the internal feeling of most people spending more time on TV being isolation and loneliness. The reason may be that TV is now a day in people's living room or bedroom. Instead of healthy chit-chat at evening time, people are busy watching their favorite prime time programs, leaving very less time to interact with one another.

Current research states that the feelings of social deprivation and loneliness have been negotiated by individuals by correlating with similar characters within their favorite movies and television shows, thereby forming a parasocial relationship amongst the two ^[18]. Meanwhile, Derrick, Gabriel and Hugenberg stated that people are less likely to feel lonely while they are watching their favorite movies or TV shows, in comparison to when they are not being able to interact with other people. This has been referred to as the social surrogacy hypothesis. Furthermore, viewing a favorite movie or a TV show helps in alleviating feelings of inadequacy and reduced self-esteem after having a fight or quarrel with close friends and family members thereby minimizing loneliness and depression within oneself. Thus, psychological damages like separation from social relationships can be counteracted by watching TV in a positive note ^[22].

On the contrary social media is helpful to even get in connect with family members or friends who are in different city, state, country or even continent leading to feeling of social harmony tone are ones. Di Maggio et al. (2001) states that friends and families, connected frequently through internet, serves as a basis of social ties^[23]. Thus, the internet plays a vital role in social relationships between individuals. Yoon (2006) further outlines that internet helps young people to re-establish impaired relationships amongst family members. It also allows strengthened connectivity of individuals with extended families beyond own families^[24].

Internet therefore serves as a medium of online interaction that facilitates offline relationships by filling communication gaps amongst individuals^[25]. Furthermore, Mesch (2006) stated that low internet usage individuals had improved relationships with family and friends in comparison to those with high usage of internet^[19].

3. Effect of media on aggression amongst college going students

a) Electronic Media

In this study, students who spent more than 5 hours on electronic media, had a total aggression score (mean score 110.17) with an increase, individually, in all components of aggression {physical (mean score 34.19), verbal (mean score 18.71), anger (mean score 21.61) and hostility (mean score 32.65)} compared to the students spending less than 5 hours on electronic media, having a total aggression score (mean score 74.82) with individual components of aggression {physical (mean score 22.64), verbal (mean score 12.45), anger (mean score 18.38) and hostility (mean score 21.41)}. So students spending more than 5 hours on electronic media were statistically significant ($p < 0.00$) in having increased aggression. Findings of this study are similar to other national and international studies done in children and adolescents like in the study, done by Drabman & Thomas, which showed that youngsters viewing violent films were significantly slow in acquiring adult help amidst fights and quarrels in comparison to those who viewed neutral films^[26]. The single violent film temporarily made the children more acquired towards aggression^[27].

Similarly, Malamuth and Check (1981) noted an increased acquaintance of physical aggression towards women by college men, several days after watching violent sex scenes^[28]. However, other studies report that college students randomly assigned in viewing violent film segments, possess more aggressive thoughts or emotions than students assigned in viewing nonviolent film segments^[29, 30].

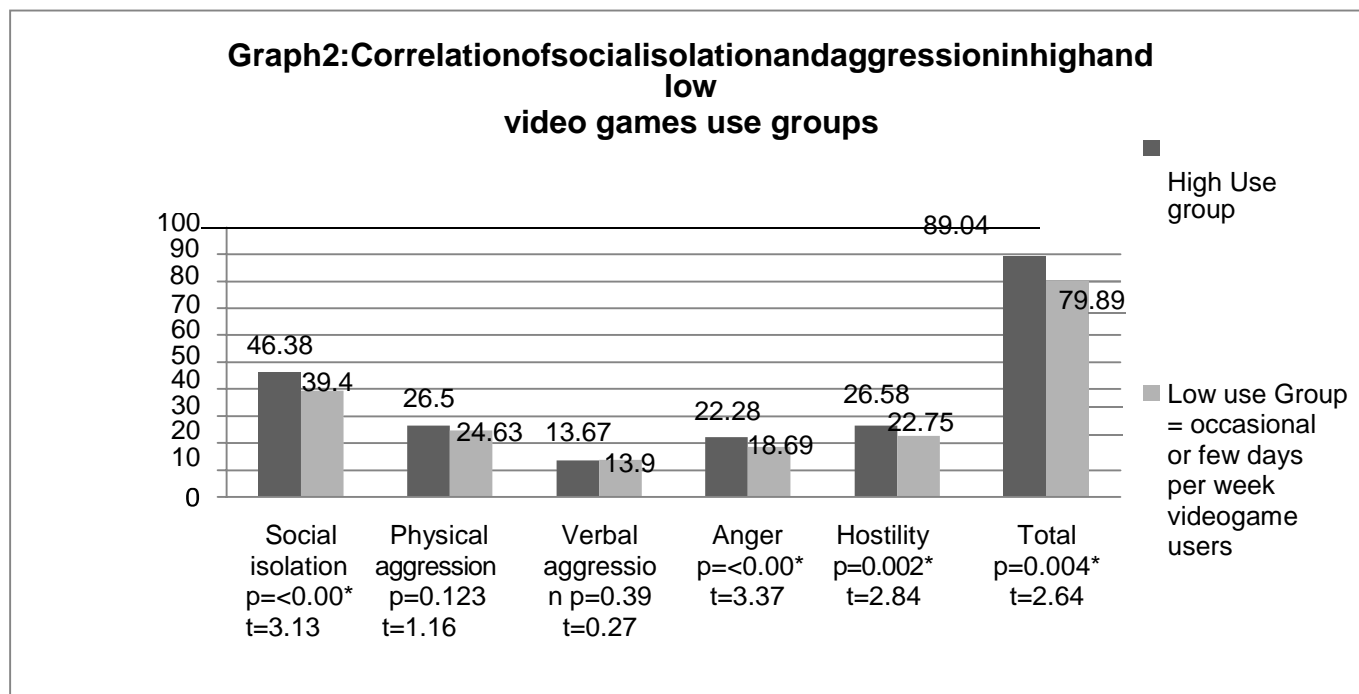
Zillmann and Weaver (1999) also reported that, when college aged males and females were asked to view either four nonviolent or violent films on successive days, those who previously viewed the violent films, exhibited more hostility than those who viewed nonviolent films. Nowadays, TV contents like movies, serials and even news, use violent material to access the public. Scenes of murders, terrorist attacks, thefts, or fights, prevalent on TV, appears prudent in increasing aggression amongst college going students^[31].

b) Social Media

The mean scores for aggression questionnaire total, physical aggression, verbal aggression, anger and hostility in high use group of social media were 81.72, 25.42, 13.95, 19.1, 23.26 compared to low use group of social media 83.09, 25.05, 13.77, 20.11, 24.23 respectively. There was no significant correlation ($p = 0.34$) found between high and low social media use group. It was contrary to the study done by Mesch, Gustavo Setal in the west that reported increased aggression in relation to

social media use. These finding may be due to comparatively less social media use, relatively new format of media with less internet availability in India than west. Further, these findings are reflected in accounting less cybercrimes in India as compared to the west^[19].

4.Effect of videogames on social isolation and aggression amongst college going students



Graph2showsthe daily use of videogames feeling of social isolation as per mean score of UCLA loneliness scale was (46.38), compared to the mean score of occasional use (39.4). Similarly, for aggression questionnaire, total aggression score (mean score of 89.04 vs 79.89) along with all its components of physical aggression (mean score of 26.5 vs 24.63), verbal aggression (mean score of 13.67 vs 13.9), anger (mean score of 22.28 vs 18.69) and hostility (mean score of 26.58 vs 22.75) were found in daily vs occasional videogame users. These results show significant association of daily videogame use with social isolation ($p < 0.00$) and aggression ($p < 0.00$).

The results are similar to another study conducted by Anderson et al, which states that videogames of violent categories, have a significant association with increased physiological arousal, increased aggressive thoughts, behavior and affect, and decreased prosocial behavior^[32]. Study by Block, J.J., & Crain, B.R. (2007) reported that video game violence is linked to aggression in the short term. Cross-sectional studies have been able to show a correlation between long term exposure to

video game violence and real world violence. Some longitudinal studies have also proved that aggression can be considered as a direct result of long term video game exposure^[33].

The study by Escobar-Chaves et al found that a significant link persists within electronic media and other collaborators in the form of drinking, smoking and violence. Television and movies have been considered to play a significant role in increasing the risks of video game violence within the teens by increasing their aggressive thoughts, feelings and behavior. Content of blood, killings, fights may be the reason for increase in aggression. Also due to leaving a virtual life and feeling of intense competitiveness would be the reason for increase in social isolation and aggression in high video game users^[34].

5. Relevant demographic characteristics in relation to social isolation and aggression

The mean scores in this study for UCLA loneliness score for male gender, poor academic performance and less involvement in extracurricular activities were 44.62, 44.58 and 46.76 respectively compared to 39.32 for females, 39.15 for good academic performance and 36.94 for taking part in extracurricular activities. So male gender, poor academic performance and less involvement in extracurricular activities have been associated significantly ($p < 0.00$) with social isolation. Similarly, as per Table 4 for the same 3 variables of male gender, poor academic performance and less participation in extracurricular activity mean total aggression scores were (88.45, 88.12, 89.6 respectively) compared to mean total aggression score for female gender, good academic performance and participation in extracurricular activities (78.6, 78.18, 76.6 respectively). Apart from that male were found significantly more hostile (25.95 vs 22.47) and physically aggressive (27.59 vs 23.53). Students who used substance were found to be more physically (27.98 vs 23.98) and verbally aggressive (14.46 vs 12.38). So male gender, poor academic performance and less participation in extracurricular activity were significantly ($p < 0.00$) associated with increase in aggression.

Table 4. Correlation between different demographic variables and aggression

| Demographic Factors | Variables | Physical Aggression Score (Mean) | | Verbal Aggression Score (Mean) | | Anger Score (Mean) | | Hostile Score (Mean) | | Aggression total Score (Mean) | |
|---------------------|-----------|----------------------------------|--------------------------|--------------------------------|-------------------------|--------------------|-------------------------|----------------------|--------------------------|-------------------------------|--------------------------|
| Gender | Female | 23.53 | $p < 0.00$ $t = 2.75$ | 13.62 | $p = 0.51$ $t = 0.6$ | 19.06 | $p = 0.09$ $t = 1.6$ | 22.47 | $p < 0.00$ $t = 2.77$ | 78.6 | $p < 0.00$ $t = 3.08$ |
| | Male | 27.59 | | 14.13 | 5 | 20.77 | 9 | 25.95 | | 88.45 | |
| Family Type | Nuclear | 26.06 | $p = 0.13$ $t = 1.4$ | 14.13 | $p = 0.11$ $t = 1.5$ | 20 | $p = 0.54$ $t = 0.6$ | 25.04 | $p = 0.02$ $t = 2.3$ | 85.31 | $p = 0.03$ $t = 2.1$ |
| | Joint | 23.81 | 9 | 13.08 | 8 | 19.38 | 0 | 22.09 | 2 | 78.38 | 3 |
| Study stream | Science | 26.56 | $p = 0.08$ | 13.82 | $p = 0.97$ | 19.97 | $p = 0.69$ | 25.32 | $p = 0.03$ | 85.55 | $p = 0.09$ |

| | | | | | | | | | | | |
|---------------------------------|------------------------|-------|----------|-------|---------|-------|----------|-------|----------|-------|----------|
| | Non-Science | 24.06 | t=1.70 | 13.84 | t=0.03 | 19.58 | t=0.34 | 22.73 | t=2.07 | 80.20 | t=1.67 |
| Academic Performance | 40- 60 % | 27.59 | p=<0. 00 | 14.36 | p=0.2 2 | 20.96 | p=0.0 3 | 25.32 | p=0.0 4 | 88.12 | p=<0. 00 |
| | >60 % | 23.38 | t=2.87 | 13.47 | t=1.21 | 18.85 | t=2.10 | 22.82 | t=1.99 | 78.18 | t=3.03 |
| Extracurricular activity | Participate | 23.32 | p=<0. 00 | 13.07 | p=0.0 2 | 17.88 | p=<0. 00 | 22.35 | p=<0. 00 | 76.60 | p=<0. 00 |
| | Not Participate | 27.35 | t=2.77 | 14.72 | t=2.19 | 21.94 | t=4.22 | 25.68 | t=2.69 | 89.60 | t=4.19 |
| Substance use | No | 23.98 | p=0.0 1 | 12.38 | p=0.0 1 | 20.09 | p=0.3 0 | 23.44 | p=0.2 7 | 81.89 | p=0.4 9 |
| | Yes | 27.98 | t=2.52 | 14.46 | t=2.54 | 18.98 | t=1.02 | 24.92 | t=1.08 | 84.28 | t=0.68 |

DISCUSSION

This study was done to assess effect of media on social isolation and aggression among college students. For that cross sectional data of total 236 students in two different colleges in Ahmedabad containing media using habits and scales for social isolation & aggression was collected. Based on all the collected data and its analysis suggest that around 20-25% time of an adolescent student's average day is spent on different media use.

1. Frequency and nature of media and videogame use

In our study most time spent by student was on electronic media (approximately 3-4 hours) from all available media with social media (approximately 1 hour) being on 2nd position. Most preferred program on TV were News (47.1%) and TV serials (35.6%) being the 2nd choice. Violent content (58.8%) was more proffered than non-violent content (41.1%). Approximately 52.1% students preferred watching TV alone instead of with family (33.5%) or friends (14.4%). Social media is new in thing as all students in study reported daily usage of social media and it was also interesting to note that around 65 % students spent more than 30 minutes on social media. But strangely instead of using social media for communication with family and friends, the most preferred way to be in contact with near one was still on one to one contact (38%). Of all social media technologies, social networking sites (33%) were the most preferred followed by text messaging including WhatsApp and other instant messaging services (19%). In our study, all students used for less than 30 minutes found print media universally. Least time was spent on print media of all media technologies. Being the oldest media, it was astonishing to know how new media technologies like social media and electronic media are taking over old media technologies. In our study of 236 students only 70 reported that they daily play videogames with 55 reporting playing games sometimes a week and 111 reporting playing games once a week or even less. Smart phones were the most preferred 144 (61%) platform to play videogames followed by computers & laptops (39%). 43 (62%) students of 70 students who played videogames daily spent approx. more than 30 minutes (23) to up to 2 hours (22) in playing videogames. Mosts

tudents 214 (90.6%) preferred to play violent videogames. Most students 205 (86.9%) played violent video games because they liked rush of competing. 162 (68.6%) student played video games without parental monitoring.

2. Effect of media on social isolation

High use (5 hours or more) of electronic media was significantly associated with increase in feeling of social isolation with p value of <0.00 . This was contradictory to popular notion that electronic media gates a person connected to others. There was no significant association was found with time spent on social media on social isolation ($p=0.14$).

3. Effect of media on aggression

More use of electronic media was found to associated with significant ($p < 0.00$) increase in all 4 component of aggression (physical, verbal, anger, hostility) and also total aggression score. There was no significant association was found with time spent on social media on aggression ($p=0.34$). May be less availability of internet in India would be the reason for this result.

4. Effect of videogames on social isolation and aggression

Daily use of video game was significantly ($p < 0.00$) associated with more feeling of social isolation (mean score of 46.38 vs 39.4) and increase in total aggression (mean score of 89.04 vs 79.89) along with all its components of physical aggression (mean score of 26.5 vs 24.63), verbal aggression (mean score of 13.67 vs 13.9), anger (mean score of 22.28 vs 18.69) and hostility (mean score of 26.58 vs 22.75). Video games of violent categories are significantly associated with: - increased aggressive thought, affect and behavior, increased physiological arousal and decreased prosocial behavior.

5. Demographic factors effect on social isolation and aggression

Male gender, poor academic performance and less participation in extracurricular activity were significantly ($p < 0.00$) associated with increase in social isolation and aggression.

Conclusion & Future Directions:

This study provides insight into thoughts that high use of new technologies is socially more harmful than of help. Further nationwide studies with more parameters to access about effect of media technologies needed. Even periodic studies with motive to regulate use of media by providing certain public guidelines to advocate judicious use of media for more beneficial effects and less harm to society is a need of hour.

LIMITATIONS

Small sample size with cross sectional sample was taken, only English knowing students were included, limited age group of 18-25 years was studied, only effect of media on social isolation and aggression were studied, other parameters like addiction etc. needs to be studied

Ethical clearance- Taken from Institutional Ethics Committee

Source of funding- Self

Conflict of Interest - Nil

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