SUMMARY AND CONCLUSION

In the past decades, the growth of Multimedia has been rapidly increased. It affects the way how people act, work, communicate, consume media, interact, and gather information (Park & Lee, 2011). Multimedia technology like-Internet, Mobile, Video game etc are frequently used by people to meet day to day needs. Use of multimedia is essential to make life’s task easier but its abnormal, excessive and unnecessary use leads to addiction and make life more difficult. Multimedia has become much more important in last decades for adolescents, and they are heavy users of new media. According to Young (1998), adolescents are particularly vulnerable to technology addiction. They have poor coping mechanisms. When they face stress, they often chose what is comforting them, usually something easy to focus on such as online videos or social media sites.

Mobile phone, television, video games, movies and internet have assumed central roles in adolescent’s daily lives. The multimedia has demonstrated potentially profound effects both positive and negative, on adolescent’s social, cognitive and personality development. Adolescent’s personality development is largely affected by all form of multimedia.

According to Marks (1990) Media addictions are a type of behavioural addiction in which there is no chemical substance involved. Multimedia addicted adolescents are very much preoccupied for their multimedia gadgets and can’t stay without them. They often check their internet or mobile for email and social networking sites. They sending unnecessary SMS, playing video games and
chatting through social networking sites. Such behaviours were commonly seen in addicted to multimedia. Use of multimedia is essential to make the life’s task easier but its abnormal excessive and unnecessary use leads to addiction and makes life more difficult.

**Researchable Questions:**

This study aimed to provide an understanding of Multimedia addiction and its impact on personality of adolescents. Therefore, the following specific research questions were addressed.

- What is the extant of Multimedia Addiction among adolescents?
- Is there any relation between Multimedia addiction and Personality dimension of adolescents?
- Is there any difference between Gender and Multimedia addiction among adolescents?
- Which type of Intervention Module are required to reduce the Multimedia addiction among adolescents?
- Will Intervention module reduce the Multimedia addiction among adolescents?

Looking at the present Scenario it was realized that Multimedia technology is very useful for users to find information, communicate with others, entertainment, study purpose, fills leisure time as well. But if use of multimedia continues without any restriction, then multimedia will become very serious and
they affects negatively on adolescents personality. Adolescent’s personality is largely affected by all forms of Multimedia.

This study can provide information on the symptoms of the Multimedia addiction, impact of Multimedia addiction on adolescent’s personality and also intervention for multimedia addicted adolescents. So in this study is the main thing to start so that this problem can be solve and considering the above facts in mind, the investigation entitled “Impact Of Multimedia Addiction On Adolescents Personality And Effect Of Intervention” was undertaken with the following objectives:

1) To study the extent of multimedia addiction among adolescent.

2) To study the influence of multimedia on personality development of adolescent.

3) To develop need based Intervention module for multimedia addicted adolescent.

4) To apply the developed Intervention among adolescent and ascertain their effects.

Hypothesis:

In view of the presumed relationship and based on objectives of the study the three null hypotheses were formulated:

Ho1: There is no significant relation between Multimedia addiction and the adolescent’s personality.

Ho2: There is no significant difference between Multimedia addicted and non-addicted adolescent’s personality.
**Ho3:** There is no significant difference in the mean score of pre-test and post-test of the adolescents.

**Selection of Locale:**

The data collection for present study was carried out in Uttar Pradesh at Gorakhpur district. Gorakhpur city was selected as Locale.

**Selection of Samples:**

Five Urban schools were randomly selected from Gorakhpur city and 200 respondents, 100 adolescent boys and 100 adolescent girls purposively, were taken as the sample for the present study.

**Research design:**

Research design is the plan and the procedure for research that spans the decisions from broad assumptions to detailed methods of data collection and analysis. It involves the intersection of philosophic assumptions; strategies of inquiry and specific methods. In this study Experimental and Descriptive research design were used with two group comparison design with Pre and Post assessment.

**Tools and Techniques for Data collection:**

To fulfill the objectives of the study the researcher had to use the following tools for data collection.

**Socio- Economic Status Scale (SES):**

For the purpose of present study Agrawal et al. (2005) Socio Economic Status Scale (SES) was used. It was an important aid to measure socioeconomic status of families in urban and rural areas.
Internet Addiction Test:

Young’s Internet Addiction Test (YIAT 20) was applied to qualify for the extent of Internet addiction. The Internet Addiction Test is the first valid and reliable measurement of internet addiction. This 20-item questionnaire was designed by Kimberley Young (1998). It measures Internet addiction in mild, moderate and severe levels.

Mobile Addiction Test:

Bianchi and Philips Mobile addiction test was applied for measured to Mobile addiction in respondents. Mobile Phone Problem Use Scale (MPPUS; Bianchi & Phillips, 2005) is a 27-item self-report scale. Scores on the MPPUS range from 27 to 135, with higher scores 50 and above indicating greater levels of dependence.

Video Game Addiction Test

Lemmens Game Addiction Scale was used for measured to Game Addicted respondents. The Game Addiction Scale (Lemmens et al., 2009) was 21 questions and contains seven items that measure symptoms of video game addiction.

Television Addiction Test:

Smith (1986) Television addiction scale was used for measured to Television addiction in respondents. The Television addiction scale consists of the 27 items. Eighteen of these 27 items were derived from statement on Television addiction in the popular literature.
Personality Assessment Test :

Costa and McCrae NEO PI-R (1992) was used to assess the personality of respondents. The Revised NEO Personality Inventory (NEO PI-R) was a concise measure of the five major dimensions, or domains of personality and some of the more important traits or facets that define each domain. This personality test was consists of 240 items answered on a 5-point scale.

Procedure - The present study has been carried out in three following phases.

Phase I: Five Higher secondary schools based in Gorakhpur city were approached for getting their permission to collect data from the students who were studying in their school. The questionnaire was handed out to the purposively selected five higher secondary school students. Before they began filling out the questionnaire, they were informed about the purpose and use of the study, their anonymity and privacy was assured and their consent was gained.

Phase II: For the main study, out of 114 students were assigned to addicted (65 Boys and 49 Girls) and 86 were non- addicted (35 Boys and 51 Girls). Addicted adolescents were subjected to intervention and then these addicted adolescents for Intervention programme were planned.

The 15 activities were selected for this intervention module which included 7 sessions and all sessions were carried out in groups.

1: Icebreaking - Icebreaking is the first opportunity for group members to meet each other with the researcher and familiarize with each other.

2: Meditation – During this session breathing training was taught and subjects were asked to practice it at home and at school. This is because when the
adolescents breathes deeply it sends a message to their brain to calm down and relax. The brain then sends this message to their body.

3: **Who am I** –The purpose of this activity is to remind adolescents about the importance of knowing ourselves.

4: **Behavior Modification**- Having a specific goal-oriented plan that modifies multimedia behavior for healthy multimedia use is necessary in the early stage of recovery.

5: **Multimedia management**- Set clear and achievable goal through time management to help reduce of multimedia use.

6: **Parents Meetings session**- Meeting with those parents whose children were addicted to multimedia and inform them their children’s problems due to multimedia and also advise them how to overcome this problem.

7: **Feedback session**- In this session adolescents students were explained about everyday use of the techniques learnt in order to prevent the relapse of Multimedia addiction symptoms. Session was terminated by thanking the students, parents and school administration.

**Phase III :**

**Post assessment for addicted adolescents :**

After six months of the intervention, Post-test was done individually. Once again, Internet addiction, Mobile addiction, Television addiction and Video game addiction tests were administered with personality assessment test on Multimedia addicted adolescents.
Major Findings of the Study:

Demographical details and SES of adolescents:

Analyzed data revealed that out of 200 adolescent students 50% male and 50% female. On the basis of this table majority of adolescents are 15 years and 32% of 17 years old. It was observed that majority of adolescents belong nuclear family whereas only 28% belong to joint family.

As per the findings, the majority of adolescents were upper middle socio-economic status whereas no one found that poor and very poor category of socio economic status.

Multimedia Addiction based on Gender and SES:

Data pertaining to multimedia addiction, assessed on adolescents showed that majority of adolescents were addicted to multimedia. In which 65% of male and 49% female were addicted to Multimedia. It was also found that majority of addicted adolescents belonged to high and upper middle socio economic status compared to upper high and lower middle.

Present investigation revealed that the effect of gender was found to be significant for multimedia addiction. [$F(1,198) = 9.38$ $p<0.01$]. Male scored higher ($M=127.28$) on Multimedia addiction test as compared to female ($112.84$) and both male and female are statistically different on Multimedia addiction test, the result indicated that male was more addicted compared to female.

Extent of Multimedia Addiction:

Data related to Internet addiction revealed that 26% of male were mildly addicted to Internet, 20% were moderate addicted and very few (4%) of male
were severely addicted. Similarly it was found that 27% of female were mildly addicted, 12% moderately addicted and none were severe addicted.

As per the findings, 58% male and 44% female were addicted to Mobile. It was also found that frequency of Mobile addiction was very higher compared to other Multimedia Addiction.

Result showed that 8% of adolescents were addicted to Television and majority of adolescents (92%) were not. On the basis of this finding it was also concluded that Television addiction was less compared than other multimedia addiction among adolescents.

Analyzed data revealed that 30% male and 19% female were addicted to video game, whereas 70% male and 81% female were not addicted to video game addiction.

It is clear from the data that majority (41.54%) of male were addicted to two type of multimedia gadgets whereas only 6.15% of them were addicted to more than three type of gadgets. The finding also revealed that most of adolescents addicted to 2-3 type of electronic gadgets. A similar situation was found in case of female, majority (55.10%) of female were addicted to two type of gadgets whereas only 6.12% of them were addicted to more than three type gadgets.

**Influence of Multimedia Addiction on adolescents Personality:**

As per the findings, the effect of addiction was found to be significant for Neuroticism Personality dimension \( F = (1.196) \ 66.36 \ p <.01 \). The result indicated that Multimedia addicted adolescents have higher score on this
Personality dimension (M= 97.14) compared to non addicted adolescents (M= 86.51).

The effect of addiction was found to be significant for Extraversion Personality dimension \([F= (1,196) 105.55, p<0.01]\). It was found that Multimedia addicted adolescents have lower score on this Personality dimension (M= 11.21) compared to non addicted adolescents (M= 126.21).

Result showed that the effect of addiction was found to be significant for Openness Personality dimension \([F= (1,196) 47.60, p<0.01]\). It was found that Multimedia addicted adolescents have lower score on this Personality dimension (M= 103.87) compared to non addicted adolescents (M=113.94).

Data revealed that the effect of addiction \([F= (1,196) 22.63, p<.01]\) was found to be significant for Agreeableness Personality dimension. It was found that Multimedia addicted adolescents have lower score on this Personality dimension (M= 102.80) compared to non addicted adolescents (M=109.93).

The effect of addiction \([F= (1,196) 76.73, p<.01]\) was found to be significant for Conscientiousness Personality dimension. It was found that Multimedia addicted adolescents have lower score on this Personality dimension (M= 112.47) compared to non addicted adolescents (M=128.48).

**Effect of Intervention on Multimedia Addiction:**

Data revealed that the percentage of mild level decrease from 40% to 18.46%, the moderate level from 30.77% to 15.38%, the severe level decrease from 6.15% to 3.08% in male adolescents. Whereas, the percentage of mild level decrease from 55.10% to 36.73% and the moderate level decrease from 24.49% to 6.12%, in female adolescents after Intervention.
Result showed that percentage of Mobile Addiction decrease from 89.23% to 43.07% in male adolescents, whereas the percentage of mobile addiction decreases from 89.79% to 42.86% in female adolescents after intervention.

Results indicated that percentage of Television Addiction decrease from 12.30% to 6.15% in male adolescents, whereas the percentages of Television Addiction decrease from 16.33% to 6.12% in female adolescents after intervention.

It was concluded that percentage of Video game Addiction decrease from 46.15% to 23.07% in male adolescents, whereas the percentages of Video game Addiction decrease from 38.78% to 14.29% in female adolescents after intervention.

**Statistical Different between Pre and Post Condition of Multimedia Addiction:**

The effect of Pre-Post Condition \[ F = (1,212) \ 32.16, \ p < .01 \] was found to be significant for Internet Addiction. It was found that Pre Condition addiction score was higher compared to Post condition for Internet Addiction.

Data revealed that the effect of Pre-Post Condition \[ F = (1,212) \ 46.50, \ p < .01 \] was found to be significant for Mobile Addiction. Pre Condition addiction score was higher compared to Post condition for Mobile Addiction.

Result showed that the effect of Pre-Post Condition \[ F = (1,212) \ 6.73, \ p < .01 \] was found to be significant for Television Addiction. Pre Condition addiction score was higher compared to Post condition for Television Addiction.
The effect of Pre-Post Condition \( F = (1,212) 10.40, \ p<.01 \) was found to be significant for Video game Addiction. Pre Condition addiction score was higher compared to Post condition for Video game Addiction.

**Statistical Difference between Pre and Post Condition for Personality dimension**

The effect of Pre-Post Condition \( F = (1,212) 10.18, \ p<.01 \) was found to be significant for Neuroticism Personality dimension. Pre Condition Neuroticism Personality dimension score was higher compared to Post condition.

Results showed that the effect of Pre-Post Condition \( F = (1,212) 18.58, \ p<.01 \) was found to be significant for Extraversion Personality dimension. Pre Condition Extraversion Personality dimension score was lower compared to Post condition.

Data revealed that the effect of Pre-Post Condition \( F = (1,212) 15.04, \ p<.01 \) was found to be significant for Openness Personality dimension. Pre Condition Openness Personality dimension score was lower compared to Post condition.

The effect of Pre-Post Condition \( F = (1,212) 17.06, \ p<.01 \) was found to be significant for Agreeableness Personality dimension. Pre Condition Agreeableness Personality dimension score was lower compared to Post condition.

Results showed that the effect of Pre-Post Condition \( F = (1,212) 6.33, \ p<.01 \) was found to be significant for Conscientiousness Personality dimension. Pre Condition Conscientiousness Personality dimension score was lower compared to Post condition.
Relation between Personality dimension and Multimedia addiction:

Data related to Co-relation between Multimedia addiction and Personality dimension revealed that Conscientiousness Personality Dimension was correlated significantly and negatively with Multimedia addiction, whereas others Personality Dimension were not correlated with Multimedia addiction in Pre Condition.

Analyzed data revealed that Personality Dimension of Neuroticism was correlated significantly and positively with Multimedia addiction, whereas other Personality Dimension namely Extraversion, Openness, Agreeableness and Conscientiousness were correlated significantly and negatively with Multimedia addiction in Post Condition.

Conclusion:

This study was examined the extent of Multimedia Addiction among adolescents and unfortunately the result indicate that the Multimedia Addiction is alarming condition among adolescents. This study provides the relation between Personality and Multimedia Addiction. Multimedia Addiction was significantly and positively correlated to Neuroticism and negatively correlated to Extraversion, Openness, Agreeableness and Conscientiousness. Personality dimensions were characterized by high Neuroticism and low Extraversion, Openness, Agreeableness and Conscientiousness for Multimedia Addicted adolescents.

This study also provides a strong Intervention for Multimedia Addicted adolescents. Pre- test and Post-test data generally showed that the Multimedia Addiction score of the adolescents significantly decreased after 6 months of
Intervention and there were significantly positive changes in Personality dimensions also after Intervention. Adolescents generally perceived that the program was helpful due to their positive feedback.
IMPLICATIONS AND RECOMMENDATIONS OF THE STUDY

The findings of the investigation brought out a number of Implications for Adolescents, Parents, Teachers, Psychologists, Researchers and Policy makers.

For adolescents: This study will also help the adolescents to make them aware about Multimedia Addiction and to know Intervention techniques to overcome with these problems.

For Parents and Teachers: This study will be also important to let the people who are involved in taking care of adolescents such as parents and teachers. Mostly parents and teachers are promoting the use of Multimedia technology without thinking about its bad effects. Through this study, they may start to aware of the use of Multimedia technology and control their children/students to overuse of Multimedia.

For Psychologist: This study provides the relation between Personality Dimensions and Multimedia Addiction. This finding indicates that Multimedia addicted and non-addicted Personality dimensions were different. Therefore, it will be important for Psychologist to pay additional attention to this factor.

For Researchers: This study will give them baseline information with scientific results about the Personality Dimensions of adolescents towards the Multimedia Addiction and Intervention for addicted adolescents.

For Policy makers: Policy makers could utilize our study findings and develop new and strict policies to control the excessive use of Multimedia among adolescents.
Recommendations:

For the further research, firstly it is recommended that by study of Multimedia Addiction with more details in Physical and Mental Health problems. It is because this problem seems like quite severe in now a day especially people who are Multimedia addicted may have anxiety and depression also. This is also the way to let society realize the severity of social disease as well as psychological disorders. Second, more research related to gender differences needs to be done to understand why Multimedia Addiction is high in boys’ adolescent compare to girls. Future studies might also find gender differences in the effect of addictive Multimedia on different outcomes, which might indicate different Interventions for Multimedia addicted boys and girls. In addition, it is also recommended that more variable can be taken into consideration in order to determine the extent of Multimedia Addiction. Moreover, this study is using quantitative method to find out the result, it is recommended that using the both quantitative and qualitative method to collect data and find out the result. Moreover, the similar and related topic of research is recommended to do more in the future as it is an important issue in the society.