MATERIALS AND METHOD

The current study was made on several related measurements that examine Impact of Multimedia addiction on adolescent personality and effect of intervention. Research methodology is a technique to find out the result of a given problem systematically. Research methodology has many dimensions that include designing the research process with suitable research methods. This chapter precisely describes the methodological tools and instruments adopted in conducting the investigations.

This chapter is organized under the following sections to depict the plan of work and sequential study procedure:

3.1 Research Design

3.2 Locale of Study

3.3 Sampling

3.4 Conceptual Framework of the Study

3.5 Selection of Variables

3.6 Operational Definitions of Terms

3.7 Tools for Data Collection

3.8 Procedure of Data Collection

3.9 Statistical Analysis

3.1 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. This study was conducted in three phases. The first phase of this study consisted of a paper-pencil survey on the school’s students. It was conducted in order to assess the Multimedia addiction and personality among school students. Second phase of this study employed Intervention Program for addicted adolescent students with Intervention Module and their parents meetings. Last and third phase of this study was ascertaining the impact of developed Intervention programme on addicted adolescents and all tests was again applied for all addicted students.

3.2 Selection of Locale:

The data collection for present study was carried out in Uttar Pradesh at Gorakhpur district. Gorakhpur city was purposively selected as locale as it was convenient to the researcher and need of the study.
Fig. 3.1: Map of Uttar Pradesh showing district of research
Uttar Pradesh

75 (District)

Purposive sampling

Gorakhpur

Urban Gorakhpur

Fig. 3.2: Representation of selection of Locale
Urban Gorakhpur

Average No. of School = 84

5 Schools

Random Sampling

1 2 3 4 5

20 Boys 20 Girls 20 Boys 20 Girls 20 Boys 20 Girls

Purposive sampling

Total Respondents of 200

Fig. 3.3: Representation of selection of samples
3.3 **Sampling:**

The Sampling Process adopted for the present study was Purposive and Random Sampling technique.

**Selection of Samples:**

Five Urban schools were randomly selected from Gorakhpur city. 3 co-education, 1 boys school and 1 girls school were selected for study purpose. 200 respondents, 100 adolescent boys and 100 adolescent girls purposively, were taken as the sample for the present study.

3.4 **Conceptual Framework of the Study:**

As the usage of multimedia is growing rapidly each year and multimedia addiction is becoming a problem among adolescents. Addicted adolescents come from all walks of life and as a result they are suffering in the main aspects of everyday life in the situation such as school, family, work and relationship. In the present study it is conceptualized that if Use of multimedia continues without any restriction, then multimedia addiction will become very serious and they negatively affect adolescent’s personality. So researcher assessed the extent level of multimedia addiction and for reduces the multimedia addiction researcher developing an Intervention program for multimedia addicted adolescents.

3.5 **Selection of Variables:**

The concepts which can take different values are called variables. For the present study, following variables were selected.
Fig. 3.3- Conceptual Frameworks of the Study
3.5.1  **Dependent Variables**:

Dependent variables are those which are affected by the independent variables. The following dependent variables were selected for the study.

1. **Internet addiction**- The term Internet addiction is commonly describe to excessive use of Internet that lead to impairment or distress.

2. **Mobile addiction**- Mobile addiction is describe to excessive use of Mobile phone that addictive person neglect their other area of life.

3. **Television addiction**- Television addiction refers to out of control behaviour pertaining to the medium of television.

4. **Video game addiction**-

5. **Personality Dimensions** –

(a) **Neuroticism**- Neuroticism is characterized by individual’s susceptibility to worry, anxiety, anger and general emotional instability *(Markey and Markey, 2010)*. Conversely known as Emotional Stability, it reflects the tendency to experience negative emotions *(Larsen & Buss, 2005)* and measures the individual’s emotional stability and personal adjustment to circumstances *(Maltby, et al. 2007)*.

**Neuroticism Facets** -

- **N1**: Anxiety- level of free-floating anxiety;

- **N2**: Angry Hostility- tendency to experience anger and related states such as frustration and bitterness;

- **N3**: Depression- tendency to experience feelings of guilt, sadness, despondency and loneliness;

- **N4**: Self-Consciousness- shyness or social anxiety;
N5: Impulsiveness- tendency to act on cravings and urges rather than reining them in and delaying gratification;


(b) Extraversion- According to Bakker, et al. (2006) Extraversion is characterized by a tendency to be self-confident, dominant, active and excitement seeking. Extraverts show positive emotions, higher frequency and intensity of personal interactions and a higher need of stimulation. Extrovert individuals are friendly, sociable, chatty, fluent with active behaviour, whereas introverts are individuals who are not social and have friendless behaviour.

Extraversion Facets:

E1: Warmth (Friendliness) - interest in and friendliness towards others;

E2: Gregariousness- preference for the company of others;

E3: Assertiveness- social ascendancy and forcefulness of expression;

E4: Activity- fast pace of living;

E5: Excitement seeking- need for environmental stimulation;

E6: Positive Emotion or Cheerfulness- tendency experience positive emotions such as joy, happiness, love and Excitement (Costa & McCrae, 1992).

(c) Openness- Openness to experience is much less well known than N or E. This factor refers to the individual’s tendency to experience new ideas including new products and services (Maltby, et al. 2007). It distinguishes inventive, imaginative and creative people from modest conservative people (Larsen & Buss, 2005).
Openness Facets

O1: Fantasy (Imagination)- receptivity to the inner world of imagination;

O2: Aesthetics or Artistic Interests- appreciation of art and beauty;

O3: Feelings or Emotionality- Openness to inner feelings and emotions;

O4: Actions or Adventurousness- Openness to new experiences on a practical level;

O5: Ideas or Intellect- intellectual curiosity; and

O6: Values or Liberalism- readiness to re-examine values (Costa & McCrae, 1992).

(d) Agreeableness- According to McElroy (2007) people who are agreeable are sympathetic, good natured, cooperative and forgiving. They help others and expect help in return.

Agreeableness Facets:

A1: Trust- belief in the sincerity and good intentions of others;

A2: Straightforwardness or Morality- frankness in expression;

A3: Altruism- active concern for the welfare of others;

A4: Compliance or Co-operation- response to interpersonal conflict;

A5: Modesty- tendency to play down own achievements and be humble;

A6: Tender mindedness or Sympathy- attitude of sympathy for others (Costa & McCrae, 1992).

(e) Conscientiousness- Conscientious people are responsible, organized and persevering. They achieve high levels of success through focused planning and persistence (Costa & McCrae, 1992).
Conscientiousness Facets

C1: Competence- belief in own Self-efficacy;

C2: Order- personal organization;

C3: Dutifulness- emphasis placed on the importance of fulfilling moral obligations;

C4: Achievement Striving- need for personal achievement and sense of direction;

C5: Self-Discipline or Self-efficacy- capacity to begin tasks and follow through to completion despite boredom or distraction;

C6: Deliberation or Cautiousness- the tendency to think carefully before acting (Costa & McCrae, 1992).

3.5.2 Independent Variables:

A variable that is antecedent to the dependent variable is termed as independent variables. The independent variables include age, gender, Family type, and Socio-Economic Status.

Age – 15 to 17, age group were selected for the study purpose.

Gender – Boys and girls both adolescent respondents selected for the study purpose.

Types of family – Joint and nuclear both families were selected for the study purpose.

Socio-Economic Status- Socio-economic status is a blending of the two status- social and economic status.
3.6 Operational Definitions of Terms:

**Multimedia addiction** - Multimedia addictions are a type of behavioural addiction in which there is no chemical substance involved.

**Social Networking Sites** - Social networking sites are virtual communities where users can create individual public profile and interact with other peoples.

**Cyber bullying** - Harassment through technology, often this takes place on the Internet, but it can also be done with other technologies, like cell phones.

**Massively Multiplayer Online Games (MMO)** - A video game that is played online with thousands of people or more. Players share the same game world with other members, and the members can interact within the game.

**Intervention** - An intervention is a combination of programme elements or strategies design to produce behaviour changes or improve health status among individuals or an entire population.

**Risk Factors** - A risk factor is something that increases an individual’s chances of developing an addiction or disease.

**Pre Condition** - For the purpose of preset study, pre condition refers to the addicted group without any Intervention programme.

**Post Condition** - For the purpose of present study, post condition refers to the addicted group that has been provided the Intervention for 6 months.
3.7 Tools & Techniques for Data collection

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

3.7.1 General information:

The first part of general questionnaire pertaining to respondent’s general profile in terms of name, age, gender, types of family.

3.7.2 Socio-Economic Status Scale (SES):

Socio-economic status is obviously a blending of the two status- social and economic status. Socio-economic status would be a ranking of an individual from the society he lives in, in terms of his material belongings and cultural possessions along with the degree of respect, power and influence he wields. 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. This scale consisted of 22 items. Suitable weightage was given to each item and scoring for each item was based on a scale ranging from 3 to 9. Question 18 i.e. regarding the presence of non milch cattle or pets in the family was scaled on a 3 point scale and question 12 regarding living in the type of a house was scaled on a 9 point scale. The maximum aggregate score was 100. Based on the final score, the socio-economic status of the family is divided into six Socio-Economic categories. (Appendix- I).
3.7.3 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. Each answer is scored on a five point Likert scale from 0 to 5. In a way that, score 0 = does not apply, score 1 = rarely, 2 = occasionally, 3 = frequently, 4 = often, and 5 = always. This test is having moderate to good internal consistency i.e. alpha coefficient ranges from 0.54 to 0.82. The final score was obtained by summing the scores of all questions. The higher score represents a greater level of addiction. (Appendix- II)
3.7.4 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 & Philips, 2005) is a 27-item self-report scale. Mobile Phone Problem Use Scale listed a series of questions based on the Addiction literature and in particular, what is currently known about behavioural and technological addiction. Twenty seven questions covered the issues of tolerance, escape from others problems, withdrawal, craving and negative life consequences in the areas of social, familial, work and financial difficulties. These questions included issues such as a person’s loss of control over their amount of Mobile phone usage and time spent on Mobile phone related activities. The scale also included some questions related to the social motivational aspects of Mobile phone use that are based on the extraversion literature. For example: “My friends and family complain about my use of the mobile phone” and “My friends don’t like it when my Mobile phone is switched off”. All questions in this section were on, a five-point Likert scale was utilized to score the MPPUS with responses ranging from Not true at all (1), Somewhat true (2), True (3), Very True (4) and Extremely True (5). Scores on the MPPUS range from 27 to 135, with higher scores 50 and above indicating greater levels of dependence. The scale had a high level of internal consistency ($\alpha = .93$). (Appendix- III).

3.7.5 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 (1-5, 9-11, 13-18, and 24-27). These will be referred to as the addict’s items. The remaining nine items assessed behaviour that was not described in the literature and therefore not thought to be particularly characteristic of Television addicts. They include items that might describe either “normal habits (I forget watch a TV show that I want to see) or deviance of another sort (I have fears of losing control or going crazy). Respondents were asked to rate their own behaviour on these items on a five point scale from 0 (never) to 4 (always). If respondents will score 3 (often) or 4 (always) on 12 out of 18 addict items they addicted to Television. (Appendix-IV).

3.7.6 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 over the past six months. These are: How often during the last six months: 1. Did you think about playing a game all day long? (Salience), 2. Did you spend increasing amounts of time on games? (Tolerance), 3. Did you play games to forget about real life? (Mood modification), 4. Have others unsuccessfully tried to reduce your game use? (Relapse), 5. Have you felt bad when you were unable to play? (Withdrawal), 6. Did you have fights with others (e.g., family, friends) over your times spent on games? (Conflict), 7. Have you neglected other important activities (e.g., school, work, sports) to play games? (Problems). The items on the Game Addiction Scale are rated on a 5-point Likert scale: 1 (never), 2 (rarely), 3 (sometimes), 4 (often) and 5 (very often). As
suggested by the authors of the scale, an item was considered endorsed when a respondent scored 3 or higher. The cut-off for addiction was in the present study set to a minimum score of three on at least four of the seven items. (Appendix-V).

3.7.7 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. It was self administered and appropriate for male and female respondents. The Revised NEO Personality Inventory (NEO PI-R) was a concise measure of the five major dimensions- (Appendix- VI).

1) Neuroticism (N) – Respondents who score low on Neuroticism were emotionally stable. They were usually calm, even-tempered and relaxed and they were able to face stressful situations without becoming upset or rattled. High scores may be at risk for some kinds of psychiatric problems.

2) Extraversion (E) – Highly Extraversion respondents were happy, friendly and outgoing whereas low extraversion respondents were unhappy, hostile and shy.

3) Openness (O) – Respondents who score low on Openness tend to be conventional in behaviour and conservative in outlook. High score tend to be artistic and sophisticated in taste and appreciate diverse views, ideas and experience.
4) **Agreeableness (A)** – Highly Agreeableness respondents were cooperative, warm and helpful. Respondents who score low on Agreeableness were cold, disagreeable and antagonistic.

5) **Conscientiousness (C)** – Highly Conscientiousness respondents were responsible, organized, dependable and persistent. Those who score low on this dimension were easily distracted, disorganized and unreliable.

### 3.7.8 Intervention Module developed for Multimedia Addicted Adolescents:

The 15 activities were selected for this stage of study which included 7 sessions and all sessions were carried out in groups. All the intervention sessions were conducted in the school. The Multimedia Intervention Module consisted of the following sessions as described below.-

#### Table 3.1- Details of Intervention Module for Multimedia addicted adolescents

<table>
<thead>
<tr>
<th>Name of Intervention</th>
<th>No of Activities</th>
<th>Type of intervention</th>
<th>Times of Sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icebreaking</td>
<td>2</td>
<td>Group (adolescent boys and girls)</td>
<td>10 minute</td>
</tr>
<tr>
<td>Meditation</td>
<td>1</td>
<td>Group</td>
<td>5 minute</td>
</tr>
<tr>
<td>Who am I</td>
<td>2</td>
<td>Group</td>
<td>20 minute</td>
</tr>
<tr>
<td>Behaviour modification</td>
<td>3</td>
<td>Group</td>
<td>25 minute</td>
</tr>
<tr>
<td>Multimedia Management</td>
<td>5</td>
<td>Group</td>
<td>20 minute</td>
</tr>
</tbody>
</table>
Parents meeting | 1 | Group | 30 minute
Feedback sessions | 1 | Group | 10 minute

3.7.8.1 Icebreaking:

Icebreaking was the first opportunity for group members to meet each other with the researcher and familiarize with each other.

**Objective:** getting to know each other from icebreaking activities.

**Procedure:**

3.7.8.1.1 Introductory session:

Any group therapy session begins with ice breaking session. It was necessary for any group therapy to get familiarize with other members of the group. It was helpful for group members to introduce themselves and say a little bit about themselves.

3.7.8.1.2 Birthday Line:

Researcher call out any month of the year and have all students born in that month come up to the front of the room. It was up to the students to decide who stands first, second, etc., so they were standing from the first day of the month to the last day of the month. Now researcher call out another month and have those students try to position themselves correctly by day and by where they should stand as an entire month. This was a great way to get students working together and knowing each other.
3.7.8.2 Meditation:

Meditation involves sitting in a quiet place focusing on a certain object, for example, the breath. It is a state of poised, highly directed concentration towards the object. Meditation is the very opposite of wandering thoughts or even of a directed train of thinking. By sitting quietly and doing nothing, the mind is held clear and still, alert and watchful, and free from loosing itself in thinking.

**Objective** - To calm down and relax adolescents student’s brain and body help of meditation.

**Procedure:**

**Deep breathing**

During this session breathing training was taught by the researcher and subjects were asked to practice it at home and at school. This was because when the adolescent breathes deeply it sends a message to their brain to calm down and relax. The brain then sends this message to their body.

1. Sit up straight.

2. Inhale and at the same time relaxes the belly muscles. Feel as though the belly is filling with air.

3. After filling the belly, keep inhaling. Fill up the middle of your chest. Feel your chest and rib cage expand.

4. Hold the breath in for a moment, and then begin to exhale as slowly possible.

5. As the air is slowly let out, relax your chest and rib cage. Begin to pull your belly in to force out the remaining breath.

6. Close your eyes, and concentrate on your breathing.
7. Relax your face and mind.

8. Let everything go.

9. Practice about 5 minutes

3.7.8.3 Who am I:

Objective- The purpose of this activity was to remind adolescents about the importance of knowing ourselves.

Procedure:

3.7.8.3.1 Mind Mapping

Researcher provide several sheets of paper and a pen and have them write “Who am I?” in the center of each of the pages. Get them to do a series of where they write down who they perceive themselves to be in various areas of life. Spend a few minutes on each of the following mind map topics:

Relationships – List all the different relationship roles that they have, such as brother, son, grandson, nephew, student, etc.

Cultural – List cultural aspects of their life like religion / faith, language, nationality, etc.

Likes – List their favorite activities, hobbies, music, sports, TV shows, etc.

Dislikes – List the activities, music, sports, TV shows, etc. that they don’t care for

Hopes – List things that they want to do in the future, such as jobs, going skydiving, etc.

3.7.8.3.2 Valuing Yourself:

Self-acceptance is a specific stage in self-discovery that occurs whenever adolescents are willing to look at themselves objectively. When they
do, they will realize that their strengths far outweigh their weaknesses. The Researcher asks adolescents to reflect on these questions and try to answer them honestly.

What three things do I like about myself?
1
2
3

What are my strengths?
1
2
3

What activities can make me a better and stronger person?
1
2
3

3.7.8.4 Behavior Modification

Objective - Having a specific goal-oriented plan that modifies multimedia behavior to healthy multimedia use. It was necessary in the early stage of recovery.

Procedure:

3.7.8.4.1 Keep a diary:

Researcher suggested multimedia addicted adolescents to keep a diary for a few days to identify the amount of Multimedia use (Internet, Mobile, Television and Video game). The main focus included taking a complete assessment of the
multimedia addicted students current Multimedia use to help determine the Internet, Mobile, Television and Video game activity. Researcher told them to mention the date and time of each Multimedia use. Next, addicted students keep track of how long each session lasts, specifically recording the number of minutes or hours per Multimedia use session. Finally, adolescents describe the outcome of the Multimedia use in terms of what actions were completed, what activities were interrupted while they online, chatting with text through Mobile, playing video game or watching Television, or the feelings they experienced after each gadget use. Then researcher told them to slowly decrease their use of gadgets and mentions it’s to their diary and compared their previous multimedia activities and related experiences.

3.7.8.4.2 Do the opposite:

Multimedia use may be reduce by ‘Do the opposite’ to help the adolescents break through the daily routine and their addictive use of multimedia habit. If they access the mobile, internet, videogame or television first thing in the morning, then researcher told the addicted adolescents that they takes a shower first; if they use the multimedia immediately after they comes home in the evening, sporting after work and waiting until dinner or evening news may be proposed; if they uses it during the week, weekend may be proposed and if they use it without a break, having a break in 30- 45 minute intervals may be proposed, if they use the internet at a certain point of the room, changing the place of the computer may be proposed. The most important thing is removing Television from bedroom.
3.7.8.4.3 Do the extra activities:

When the adolescent trying to reduce the use of multimedia. It was a good time to help those adolescents to create an extra activity instead of use of multimedia. Then researcher told the adolescent make a list of her most favorite work or creative activities that has been neglected, because of the time spent on the Internet, Mobile, Video game and Television, perhaps the adolescent was spending less time their hobbies. Researcher asked the adolescent how these activities improved the quality of their life. This exercise helped the adolescent become more aware of the choices they have made regarding the use of multimedia.

3.7.8.5 Multimedia management

Objective- Set clear and achievable goal through time management to help reduce of multimedia use.

Procedure:

3.7.8.5.1 Use your Time Wisely:

When you’re travelling on the bus or taxi, use the time to get some reading done, not to surfing social networking sites.

3.7.8.5.2 Learn to Say No:

If your friend asks you to go to a movie on a Thursday night and you have an exam the next morning, realize that it's okay to say no. Keep your short- and long-term priorities in mind.
3.7.8.5.3 **Don’t spoil your Sleep:**

Your brain needs rest to perform at its peak. Lack of sleep makes the day seem longer and your tasks seem more difficult. So please do not logins in late night.

3.7.8.5.4 **Tell your routine to others:**

If phone calls or text messages are proving to be a distraction, tell your friends that you are only available at certain times of day and not to expect a response at other times.

3.7.8.5.5 **Make a List Every Day:**

Put things that are most important at the top and do them first. Then you are easily stay away from multimedia, and don't forget to reward yourself for your accomplishments e.g. assignment and homework.

3.7.8.6 **Parents Meetings session**

**Objective-** 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.

**Procedure:**

Move your child’s personal computer, Mobile, Video game console and Television out of their bedroom and dining area. When you cut down your child's Internet, Television, Video game and Mobile time, they will be looking for something to do, then help him or her find new extra activities, whether it is something they used to enjoy or something new. Talk to them about what they
most enjoy instead of use of multimedia, so you can choose for them toward a healthy alternative.

### 3.7.8.7 Feedback session

The final session, involved summing up the previous sessions. Advice was given regarding the steps to be taken to prevent further difficulties and planning how to overcome such difficulties. Eliciting the feedback from students, discussed about the goals achieved. In this session 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. (Appendix- VII).

**Feedback form**

1- Do you like in this intervention session?

   Yes              No

2- Which session do you like most?

   Ice braking
   Meditation
   Who am I
   Behaviour modification
   Setting goals and time management

3- Do you have any other suggestions to make this intervention more useful to reduce multimedia addiction? Please write it

4- What you have learnt in this module? Please write it

5- Your overall reaction to the intervention module

Excellent
3.8 Procedure of data collection

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

3.8.1 Phase I:

Five 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 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.

Screening: For the purpose of the present study, initially 200 students (100 girls and 100 boys) were administered the research tools. Out of 200 students, 114 of them fulfilled research criteria (Addicted in Internet, Mobile, Video game and Television). From 114 students, 65 of them were Boys and 49 of them were Girls.

3.8.2 Phase II:

Addicted adolescents were subjected to intervention and then these addicted adolescents for Intervention programme were planned.
3.8.3 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.

3.9 Statistical analysis:

Statistical Package for the Social Sciences (SPSS) IMB SPSS version 20 was used for the statistical analysis. Gender, Socio-Economic Status (SES), Addiction score (Internet, Mobile, Television and Video game) and Personality dimensions score of the adolescents were all coded and were entered into the computer. Required Analysis was done with the aid of IBM SPSS 20 version.

In the present study frequency, percentage, Analysis of Variance (ANOVA) and Correlation were computed.