

**A STUDY ON LONELINESS AND PROBLEMATIC MOBILE
PHONE USAGE AMONG ADOLESCENTS**



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B.A. (Honours) in Psychology**

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SUPERVISOR'S CERTIFICATE

This is to certify that **Ms. Kritika Choudhary** student of **B.A. Honours Psychology Semester VI, Session 2021-2024**, bearing **Roll No 2108011** has worked under supervision of **Dr. Priya Choudhary** on Project entitled “**A STUDY ON LONELINESS AND PROBLEMATIC MOBILE PHONE USE AMONG ADOLESCENT**”. Her mini project is fit for submission, in partial fulfillment of their requirements for the award of the Degree in **B.A. Honours Psychology**.

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CHAPTER - I

INTRODUCTION

21st Century is Science and technological century. Progress is seen life day by day because of Revolution there are so many invention fire is modern area. Invention of mobile is the most important invention last two decades is increase use of mobile. Mobile phone is amount the technological tool with greatest presence in the market now a day's mobile is a main subject of fashion and hobby. Many year ago human was inventing new things for their satisfaction of their needs in their invention. Mobile is most important invention human are getting information from the world because of internet, way to S.M.S. whatsapp, viber, calling in modern Mobile is on type of hobby. People are choosing android mobile. Instead of simple mobile now a day's people are using such as particular mobile to increase their prestige of person and then gradually mobile is addiction of person some people are using thrifty and others are using mobile to show off fashion today business man, work, normal person labor people also usage to mobile phone. food, clothing and home these tree need is most important in are life but today fourth has mobile many people are think have no mobile, no mood, no life, no entertainment and also feel to guilt's. Use to mobile and maintained relation because of mobile and easily communication to our family and friends use to internet and thing all world information in over hand. Addicted person changes to mobile for change to fashion but strong our social relation interaction. Social involvement and social adjustment for use to mobile phone.

History of Mobile Phone

A man talks on his mobile phone while standing near a conventional. Telephone bat which stands empty enabling Technology for mobile phones was first developing in the 1940 but is was not until the mid-1980 that they became widely available by 2011 it was estimated in the United Kingdom. This history focuses on communication devices which connect wirelessly to the public switched telephone were barely portable compared to today's compact hand-held devices.

Use of Mobile in India

It was in the 1980, that mobile phone was first released into the market for private payers. Today, after just short time span billions of individuals around the world carry mobile phone in their over pockets. India has the fastest growing telecom network in the world with its high population and development potential, Airtel, Vodafone, Idea, Reliance, Tata Docomo, BSNL, Aircel, Tata indicom and MTNL are the major operators in India. One was introducing in India in 1882. The total number of telephone in the country stands at 957.61 million while the overall taledensity has increased to 76.75% as of 30 September 2014. The number of mobile phone subscribers in India has almost touched the billion figure mark according to the latest report from TRA, Mobile phone subscriber base in India recorded 6.71 % growth to 980.81 million users in 2015 in the first half of 2015. The mobile subscriber base in India became stronger with 36.84 million new mobile phone users which Resulted in 6.72% growth compared to the same duration last year

Addiction to Mobile

Today high speed developing to technology and that also depends over life style many people usage are mobile phone but all people's different to mobile usage style. Trend of Mobile Addiction of Mobile Thrifty of Mobile 1.2.6.1 Trend of Mobile Today most people use to android phone and all facility in also include mobile phone choice depend over life style. Mobile trend person some time use to mobile and change to mobile phone mobile trend also depend over fashion attitude.

Interestingly compared the use of mobile phone among youth to addicted many use mobile. These people have no mobile no mood no time pass, and also guilt. Different interpretation of the analogy between mobile phone use and addiction. Who compare the private talk that mobile telephony facilitates in public places. These people are especially mobile entertainment, playing, games, ringtone, and wallpaper downloads, sending pictures, using the device as a camera and other aspects of personalization and entertainment. View of addicted to Mobile. "I view cell phones as god, such a title gadget and you carry around in your pocket and you can that you can click pictures, send picture and sms you can store everything's in your (cell phones) memory it's like everything really important. I can say that I love my cell phone whether the screen is

broken or whether the first thing in the morning is my cell phone and the last thing before I go to bed is my cell phone... cell phone cell phone.. **-Review of 18-year-old student.** Thrifty use to Mobile These person has been located using mobile thrifty found on of those mobile choice important is to consider the value of time for such a person in need of affordable mobile also prays within me that Puerto located using the mobile.

What is the mobile overuse

Mobile addiction related new and dangerous affliction that can wreck tour health damage relationship ad people and reduce your over all productivity. While many you can't stop spending time on the internet, even though the rest of your life suffers for it. Mobile addiction disorder (mad) is now more commonly called problematic internet use or compulsive internet use. Mad was originally proposed as a disorder is a satirical hoary by I van old berg M. D. in 1995. Mobile addiction is a subject of a broader "Techno of fashion addiction" obsession with technology traded with radio in the 1930and with television in 1960 but 5 has recently exploded in importance during current digital age.

Meaning of Loneliness

Loneliness is as natural and integral a part of human being as are joy, hunger, and self-actualization. Humans are born alone, they experience the terror of loneliness in death, and often much loneliness in between (Rokach, 1988; Moustakas, 1961). Loneliness has been defined as the aversive state experienced when a discrepancy exists between the interpersonal relationships one wishes to have, and those that one perceives they currently have. This highlights the affective character of loneliness. Specifically, that it is an emotionally unpleasant experience. But it also emphasizes the cognitive element. That is, that loneliness requires the perception that one's social relationships are not living up. The three essential characteristics of loneliness are that it results from deficiencies in social relationships, that it represents a subjective experience (that is, it is not necessarily synonymous with social isolation as one can be alone without feeling lonely or lonely when in a group of people), and that it is unpleasant and emotionally distressing (Peplau & Perlman, 1982)

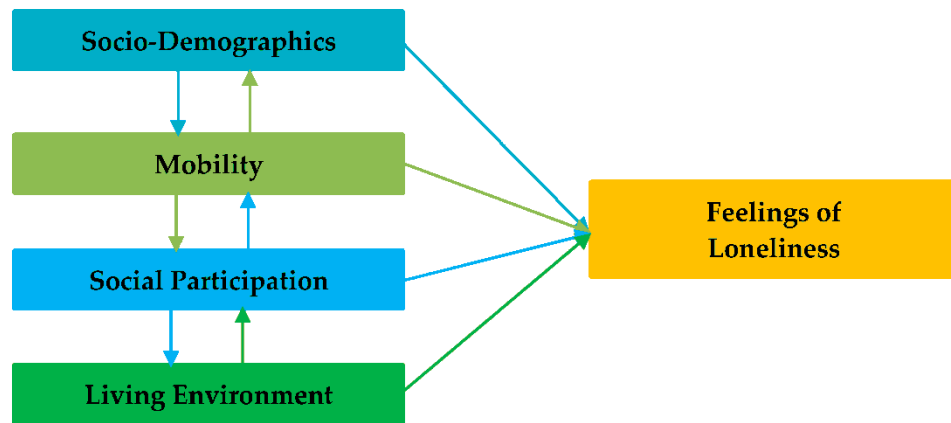


Fig 1. showing components of loneliness

According to Perlman and Joshi (1989) Loneliness is recognized as a socially prevalent phenomenon that has been described consistently as very painful, distressing, and disturbing, a lonely individual is commonly regarded as “deviant, as someone who is spoiled or generally undesirable”. Rokach (1988) theorized that the present structure of society in different geographical areas appears to magnify the alienation and separateness that humans feel along with their need to belong, to be needed, and to lead a meaningful and satisfactory life. Although common to all people, the nature of loneliness as a subjective experience varies from person to person, occurring under many conditions with a multitude of causes, results, and consequences. Seligman (1983) described loneliness as one of the most poorly understood of all psychological phenomena’s. Brennen and Auslander (1979) found certain personality characteristics increase loneliness in adolescents. Perhaps this was because adolescence is the first time individuals consciously try to conceptualize themselves.

According to Brennan (1982) a typical adolescent “experience” is that of sense of loneliness that may be so overwhelming as to cause a feeling of deep estrangement and isolation. They state that adolescence appears to be the time of life when loneliness first emerges, as “an intense, recognizable phenomenon”. Sullivan (1953) theorized that loneliness is experienced powerfully at adolescence as the result of new interpersonal needs for intimacy. Similarly, Erikson’s (1963) theory of psychosocial development stated that the characteristic crisis for adolescence is “intimacy versus isolation”, which deals with the establishment of an intimate relationship and leads to people of this age group to be particularly concerned about being unattached. (Brennan, 1981) believed

loneliness is powerfully experienced in adolescence as a result of an increased need for intimacy and self-disclosure, which may only be satisfied by close relationships with same and opposite sex peers. Stokes and Levin (1986) found that social network variables such as the number of confidants and the density of the social networks (i.e., the extent to which network members have relationship with one another) were better predictors of loneliness for male than female late adolescents. Social support has been found to have a variety of positive influences both as a direct effect on healthy adjustment and growth and as a buffer against the disorienting effects of stressful life events, Cohen and Wills (1985). Weiss (1973) differentiated between emotional loneliness, stemming from the absence of an intimate figure or a close emotional attachment [a partner, a best friend], and social loneliness stemming from the absence of a broader group of contacts, or an engaging social network [friends, colleagues, and people in the neighborhood]. Emotional loneliness arises when a partner relationship dissolves through widowhood or divorce and is characterized by intense feelings of emptiness, abandonment, and forlornness. According to Weiss (1973), social loneliness is frequently reported by young homemakers, who have moved to an area where they are newcomers. Their husbands, however supportive and intimate, cannot fill the gap that is caused by the absence of a group of friends and others with whom to socialize.

The distinction between social and emotional loneliness has again been gaining attention. Loneliness has a negative connotation. Lonely people carry a social stigma. For those reasons it is embarrassing to talk about feelings of loneliness, in particular for men (Borys & Perlman, 1985), and people with deficiencies in their relationships do not always admit to being lonely. The main approaches to loneliness focus on individual-level characteristics that predispose people to become lonely or to persist in being lonely [Marangoni & Ickes, 1989; Rokach & Brock]. People with poor social skills and psychological resources are likely to experience difficulty developing and maintaining relationships, and for that reason might feel lonely (Windle & Woods, 2004). Chodorow (1978) described the gender-specific socialization of men and women, arguing that men and women differ in the values they ascribe to different types of relationships. Men socialized to be emotionally independent prefer undemanding relationships and tend to rely on their wives and partners for social and emotional support. Women are socialized to have more complex affective needs in which an exclusive relationship to a man is not enough.

Perlman and Peplau (1981) argued that in any setting, factors that increase the frequency of interaction and foster group cohesiveness are likely to affect the incidence of loneliness. In our view, the dimension of socioeconomic equality versus inequality is among these factors. Unfortunately, empirical research connecting socio economic in equality concept at the contextual level to individual loneliness is virtually nonexistent. Wilkinson (1994) postulated that the link between socioeconomic inequalities and health or mortality is mediated by cognitive processes of social comparison, feelings of deprivation and disadvantage that can lead to depression. Kawachi, et al. (1997) provided evidence for the link between social in equality at the macro-level and perceived fairness and distrust at the micro level.

Mobile phone use is banned or illegal under certain circumstances and in some jurisdictions. Nevertheless, some people still use their mobile phones despite recognized safety concerns, legislation, and informal bans. Drawing potential predictors from the addiction literature, this study sought to predict usage and, specifically, problematic mobile phone use from extraversion, self-esteem, neuroticism, gender, and age. To measure problem use, the Mobile Phone Problem Use Scale was devised and validated as a reliable self-report instrument, against the Addiction Potential Scale and overall mobile phone usage levels. Problem use was a function of age, extraversion, and low self-esteem, but not neuroticism (Bianchi and Phillips 2005) As extraverts are more likely to take risks, and young drivers feature prominently in automobile accidents, this study supports community concerns about mobile phone use, and identifies groups that should be targeted in any intervention campaigns.

According to the Diagnostic and Statistical Manual of Mental Disorders (DSMIV,4th edn,1994) published by the American Psychiatric Association the seven criteria for addiction are: tolerance; withdrawal; increased quantity and longer duration of use; persistent desire and unsuccessful efforts to cut down; a great deal of time spent obtaining and using; important activities given up or reduced; and continued use despite negative consequences (Sharma, 2019; American Psychiatric Association,1994). A mobile phone addict uses the cell phone for an long span of time in order to achieve pleasure and satisfaction; repeated unsuccessful attempts to control or stop using the cell phone; feels lost and blank, impatient, apprehensive, irritable, low, or prickly when attempting to curb the use of cell phone; engaged in the cell phone longer than usual;

conceal from family and friends etc. to disguise or deceive the extent of engagement with the cell phone; and using the cell phone as a means of breaking away and ignoring the existing problems or to get temporary relieve from the feeling of seclusion, nervousness, solitude, and dejection (Leung, 2013). A person being a victim of this form of addiction can be well predicted by the amount of money spend on telephone bills and also the neurotic behaviour in case when the cell phone is not accessible or reachable at hand (Bhardwaj & Ashok, 2015).

Loneliness in adolescence

The close of the twentieth century represents both the best of times and the worst of times for adolescents. The lay public and health professionals have gradually changed their views of adolescence from a time of inherent stress and storm to one of opportunities for growth and positive development (Millstein et al., 1993, Feldman & Elliott, 1990; Peterson, 1988). ^ Paradoxically, the robust growth of a psychology of adolescence has been accompanied by a decline in the overall well-being and health status of adolescents. Although morbidity rates for most other age groups have declined in recent decades, adolescent's morbidity has increased » (Hamburg, 1992). The challenges faced by today's youth are reflected in a host of problems, including adolescents suicide (Garland & Zigler, 1993), depression (Peterson et al., 1993), violence and death due to violence (Earls et al. 1993, Hammond & Yung, 1993), unplanned pregnancy (Brooks-Gunn & Palkoff, 1993), substance abuse (Leventhal & Kesshan, 1993), and sexually transmitted diseases (Brooks-Gunn & Paikoff, 1993). Further evidence that problems of adolescence are on the rise comes from longitudinal research indicating that rates of emotional and behavioural problems of adolescents (and children) have increased over the past ten years (Achenbach & Howell, 1993)

Mobile phone use was banned or regulated in some circumstances. Despite recognized safety concerns and legal regulations, some people do not refrain from using mobile phones. Such problematic mobile phone use can be considered to be an addiction-like behavior. To find the potential predictors, we examined the correlation between problematic mobile phone use and personality traits reported in addiction literature, which indicated that problematic mobile phone use was a function of gender, self-monitoring, and approval motivation but not of loneliness. These findings suggest that the measurements of these addictive personality traits would be helpful in the screening

and intervention of potential problematic users of mobile phones. It is conceivable that lonely people are eager to maintain contact with their peers through frequent calls so as to fulfill their loneliness (Takao et al. 2009). Caplan (2006) theorized the model of problematic Internet use advanced and tested in the current study proposes that individuals' psychosocial well-being, along with their beliefs about interpersonal communication both face-to-face and online are important cognitive predictors of negative outcomes arising from Internet use. The results supported the hypothesis that the relationship between loneliness and preference for online social interaction is spurious, and that social anxiety is the confounding variable.

SIGNIFICANCE OF THE STUDY

Present study is descriptive in nature as it attempts to identify the correlation between loneliness and problematic mobile phone usage among adolescents. Conducting the study in the Jammu District provides insight into the specific challenges and behaviors faced by adolescents in this particular geographical area. It allows for a nuanced understanding of how cultural, social, and environmental factors unique to the district may contribute to loneliness and problematic mobile phone usage among adolescents. By identifying the prevalence and correlates of loneliness and problematic mobile phone usage among adolescents in the Jammu District, the study can inform the development of targeted intervention strategies. These interventions may include educational programs, counseling services, or community initiatives aimed at promoting healthier patterns of mobile phone use and reducing feelings of loneliness among adolescents. Loneliness and problematic mobile phone usage have been associated with adverse mental health outcomes among adolescents, such as depression, anxiety, and low self-esteem. By investigating these issues in the context of the Jammu District, the study can contribute to efforts aimed at addressing mental health concerns and promoting overall well-being among adolescents in the community. The findings of the study can empower various stakeholders, including policymakers, educators, parents, and healthcare professionals, to take targeted actions to support adolescents' mental health and digital well-being. This may involve implementing policies to regulate mobile phone use, enhancing mental health services in schools and communities, and providing resources and support for parents and caregivers. Therefore, the study has the potential to contribute valuable data and insights to the existing research literature, filling gaps in

knowledge and informing future studies in similar contexts. Overall, the study on loneliness and problematic mobile phone usage among adolescents in the Jammu District has significant implications for understanding, addressing, and ultimately improving the well-being of adolescents in the community.

STATEMENT OF THE PROBLEM

“A STUDY ON LONELINESS AND PROBLEMATIC MOBILE PHONE USAGE AMONG ADOLESCENTS”

OPERATIONAL DEFINITION

LONELINESS

Loneliness is operationally defined as the subjective feeling of social isolation or a lack of meaningful social connections. In this study, loneliness will be assessed using the UCLA Loneliness Scale, a validated self-report questionnaire consisting of items related to feelings of isolation, social dissatisfaction, and perceived social connectedness.

PROBLEMATIC MOBILE PHONE

Problematic mobile phone usage is operationally defined as the excessive or compulsive use of mobile phones, leading to negative consequences in various domains of life, including social, academic, and psychological well-being. In this study, problematic mobile phone usage will be assessed using the Mobile Phone Problem Use Scale (MPPUS), a validated self-report questionnaire designed to measure problematic mobile phone use. The MPPUS consists of items related to behaviors such as preoccupation with mobile phone use, loss of control over usage, withdrawal symptoms when not using the phone, and negative impacts on daily functioning.

ADOLESCENTS

Adolescents are operationally defined as individuals between the ages of 10 and 19 years old. This age range corresponds to the period of human development characterized by significant physical, cognitive, social and emotional changes, including the transition from childhood to adulthood.

OBJECTIVES OF THE STUDY

- To study loneliness among male and female adolescent.
- To examine the mobile phone usage among male and female adolescent.
- To identify the relationship between loneliness and mobile phone usage among male and female adolescent.

HYPOTHESIS OF THE STUDY

- There will be no significant difference loneliness among male and female adolescent.
- There will be no significant difference in the mobile phone usage among male and female adolescent.
- There will be no significant relationship between loneliness and mobile phone usage among adolescent.

DELIMITATION OF THE STUDY

1. The study focuses specifically on adolescents having ages of 10 and 19 years old. This excludes younger children and adults.
2. This study is limited to the population of Jammu district.

CHAPTER - II

REVIEW OF THE LITERATURE

INTRODUCTION

The importance of review of literature is very heavy in the research process where every researcher wanted to have. Identify the need for additional research (justifying your research) and Place your own research within the context of existing literature making a case for why further study is needed. The major purpose of reviewing the literature is to determine what has already been done related to the topic and Identify the need for additional research that can relate to one's problem. It involves the systematic identification, Identification of the relationship of works in the context of its contribution to the topic, location and analysis of documents containing related information about the problem. The review of published literature is a faithful source of information where one can place their own research within the context of existing literature making a case for why further study is needed and it helps to show the relationship between completed research and the topic under investigation. A theoretical framework sharpens research objectives, suggests what variables should be eliminated as no meaningful and hence wasteful, increasing the likelihood of significant findings, simplified the complex task of interpreting results, aids in interpreting the result, aids in interpreting meaningful even if non-significance result and makes research cumulative from one study to the next.

STUDIES ON LONELINESS AND PROBLEMATIC MOBILE PHONE USAGE AMONG ADOLESCENTS

Maftai et al.(2024) this study examines the relationship between adolescents' problematic smart phone use and loneliness by using a moderated mediation analysis to identify the underlying mechanisms. The study examined the moderating function of the need to belong and the indirect effects of self-esteem and boredom proneness on the relationship between addictive smart phone use (ASU) and loneliness. 357 teenagers ages 12 to 19 were included in the sample. Findings indicated that loneliness has a

statistically significant impact on ASU. Therefore, high levels of the urge to belong also had a marginally significant effect on the relationship between loneliness and ASU.

Hunter et al. (2023) This study considered the effects of different trajectories of change in Isolation Loneliness and in Friendship Loneliness upon both positive wellbeing and symptoms of depression. 1782 young people took part in a longitudinal study. Youth who experienced low levels of Isolation Loneliness that subsequently increased appear to be at particular risk for poor outcomes. Similarly, initially high levels of Friendship Loneliness that decreased rapidly, or which began at a low level and only increased marginally, seem to also be a risk.

Zhen et al. (2023) this study examined the mediating role of loneliness and the moderating role of parent-child communication patterns on social isolation and MPD (mobile phone dependency). 683 adolescents from China were recruited to complete a self-report questionnaire. The results showed that social isolation had a significant and positive indirect effect on MPD via loneliness. These findings suggested that the indirect effect of social isolation on MPD via loneliness was moderated by parent-child communication patterns.

Mei et al. (2022) The purpose of this study was to investigate the relationship between the degree of addiction to mobile phones and the amount of time spent using them, as well as the effects on Chinese college students' physical, mental, and sleep quality. Stratified random sample was used in the cross-sectional questionnaire-based survey, which involved 946 participants. The Mobile Phone Addiction Index Scale was used to gauge the extent of addiction to mobile phones. The results show that the psychological, health, and sleep-related problems can be improved by reducing the MPA and limiting the amount of time spent on phones.

Zhang et al. (2022) The purpose of this meta-analysis was to investigate the connection between addiction to mobile phones and insecure attachment. A total of 22 studies with a sample size of 11,810 cases, including 38 independent effect estimates were included. Result showed mobile phone addiction measures mediated the association between attachment anxiety and addiction, as well as the relationship between attachment avoidance and addiction.

Feng et al. (2022) This study examined the mediating role of sleep quality and moderating role of peer relationships in the association between mobile phone addiction and depression. A sample of 450 Chinese medical students were recruited to complete measures of mobile phone addiction, depression, sleep quality and peer relationships. The results showed that sleep quality partially mediated the association between mobile phone addiction and depression. Moreover, the effect of sleep quality on depression was moderated by peer relationships.

Liu and Lu (2022) The aim of the study was to examine whether there is a relationship between mobile phone addiction and depression symptoms in University students, and to investigate whether sleep disturbances play a mediating role between mobile phone addiction and depression symptoms, as well as the moderating role of gender. This recruited 973 students. Result showed that there were positive correlations between mobile phone addiction and depressive symptoms among Chinese University students.

Gao et al. (2022) The present study aims to further explore the direct effects of parent-adolescent and peer relationships on adolescent MPA as well as the indirect effects through the mediating roles of autonomy, competence, and relatedness needs satisfaction. The method involved 1766 Chinese adolescents. Results showed positive parent-adolescent relationships were negatively associated with adolescent MPA, while peer relationships did not show a significant association with MPA.

Li et al. (2022) This study further explored the mediating effects of boredom proneness and self-control on the relationship between loneliness and mobile phone addiction. Sample of 1078 were taken. Result showed that loneliness, boredom proneness, and mobile phone addiction were significantly and positively correlated with each other, as well as significantly negatively correlated with self-control.

Zhang et al. (2021) The current study intended to explore the longitudinal relationship between boredom proneness and mobile phone addiction by conducting a cross-lagged analysis. 352 Chinese college students completed questionnaires assessing boredom proneness and mobile phone addiction. The cross-lagged analyses suggested that boredom proneness and mobile phone addiction are mutually influenced, and mobile phone addiction is a stronger predictor of boredom proneness than the other way around.

Choksi and Patel (2021) The study examined the relationship between mobile phone use and mental health by measuring the levels of depression, anxiety, stress and sleep quality among college students of Surat city. A cross-sectional study was conducted on a total of 100 numbers of college students. Data were collected by Self report questionnaires including depression, Anxiety and Stress scale (DASS), Insomnia was assessed using Athens Insomnia Scales (AIS), and Smartphone addiction scale - Short version. Results indicates that 27% of students were addicted to the smartphone. Stress, anxiety, depression and sleep quality have a positive significant correlation with smartphone addiction.

Li et al. (2021) this study examined the impact of escape motive and self-control on the association between problematic mobile phone use and loneliness among Chinese adolescents during the COVID-19 pandemic. Sample was gathered 1034 teenagers from China .The findings demonstrated a favorable correlation between teenage problematic mobile phone use and escape motivation and loneliness. Moreover, self-control moderated the association between escape motivation and problematic mobile phone usage.

Kim et al. (2021) this study examined the connection between elderly South Korean people' ego integrity and smart phones. 264 retired and smart phone users were selected. They were asked a series of questions about their use of smart phones, loneliness, and ego integrity, and completed a cross-sectional survey. Findings suggested that higher ego integrity was positively correlated with smart phone use, but not with smart phone proficiency. Path analysis showed that loneliness affected the associations between ego integrity and smart phone use. Overuse of smart phones fosters a sense of social confidence that is typically unsatisfied and ultimately increases loneliness.

Sicheng et al. (2021) this study used the meta-analysis method to explore the global prevalence of mobile phone addiction and its influencing factors. This study contained total of 145,380 participants. Random effects model was selected for analysis, and it was found that global prevalence of mobile phone addiction was 28.3%. Furthermore, the cultural background had significant effect on the prevalence of mobile phone addiction, while the age stage had no significant effect.

Molina et al. (2021) The objective of this research was to identify and analyze the relationships between the values taught in schools and mobile addiction. The sample consisted of 1453 students of primary and secondary education. The findings have shown a significant correlation between the values taught in schools and mobile phone addiction. It is concluded that the greater the formation of values, the less the mobile addiction. These correlations are especially significant regarding social values such as solidarity, inclusion, and justice, and personal values. Likewise, there are significant differences depending on the educational stage; the younger the age, the less the mobile addiction.

Yang et al. (2021) This aim of this study was to investigate the relationship between physical activity and MPA among undergraduates in China, and to further examine the moderating effect of exercise type in the relation between them. By the quota sampling, a total of 650 participants engaged in this survey and completed relevant measurements including physical activity rating scale and mobile phone addiction tendency scale. The relation between physical activity and MPA can be moderated by exercise type. Especially in terms of aerobic endurance exercise, the higher level of physical activity performed, the lower degree of MPA would be suffered by them.

Lei Lian et al. (2021) The present study tested the mediating role of rumination and the moderating role of the capacity to be alone in the relation between mobile phone addiction and psychological distress. 754 middle school students were recruited to complete measures of mobile phone addiction, rumination, the capacity to be alone, psychological distress and demographic variables. Finding revealed the direct effect of mobile phone addiction on psychological distress and the indirect effect of rumination in this link were moderated by the capacity to be alone. Both these two effects were stronger for adolescents with lower capacity to be alone.

Hemberg et al. (2021) The aim of this study was to explore how adolescents experience and describe negative and positive sides of loneliness. Data was collected through interviews with 15 samples. Results revealed that negative experiences resulting from involuntary loneliness were shame, self-blame and self-contempt, as well as meaninglessness, hopelessness and exclusion. Positive experiences from self-chosen solitude were freedom, calmness and recovery, creativity and meaningfulness as well as reflection, recharging and personal growth.

Chen et al. (2021) In this study the reciprocal effects of victimization and MPA, the role of adolescent depression in these effects was also taken in account. The sample included 1987 adolescents from middle schools Cross-lagged models were adopted for data analysis. Result showed victimization by peers and MPA appear to have mutual influences over time that are explained in part by adolescent depression. The results have potential applied value for promoting adolescent adjustment.

Tian et al.(2021) This study aimed to explore the influence of demographic factors on mobile phone addiction, academic procrastination, and academic achievement among medical students. This cross-sectional study was conducted and total of 3 511 medical students participated in an online questionnaire survey. Mobile phone addiction was negatively associated with learning dedication, learning performance, and relationship facilitation. Academic procrastination was negatively associated with learning dedication, learning performance, relationship facilitation, and objective achievement. Mobile phone addiction and academic procrastination was revealed as prevalent among Chinese medical students, and negatively influences their academic achievement.

Christiansenet al. (2021) The study investigated whether loneliness and social isolation are associated with poor physical and mental health among adolescents and young adult. Sample size was 19,890. Logistic regression analyses showed that loneliness and social isolation were independently associated with poor physical and mental health. In adolescents and young adults, loneliness and social isolation were associated with poor mental health and loneliness with poor physical health.

Sundqvist and hemberg (2021) The aim of this study was to examine loneliness from adolescents and young adults' perspectives. Data was collected through semi-structured interviews with eleven (n = 11) adolescents and young adults using qualitative content analysis. Two main themes and six subthemes were found. The main themes were: risk factors for loneliness and different ways of alleviating loneliness. Risk factors for involuntary loneliness were: social transitions, isolation, not having anyone to contact, group differences, social expectations, viewing other companionships, ill-being, negative emotions.

Loades et al. (2020) This study aimed to establish what is known about how loneliness and disease containment measures impact on the mental health in children and

adolescents. Sample size was 51,576. Result showed social isolation and loneliness increased the risk of depression, and anxiety. Duration of loneliness was more strongly correlated with mental health symptoms than intensity of loneliness.

Liu et al. (2020) This study examined the relationship between peer victimization and mobile phone addiction and the moderating roles of self-compassion and gender. Cluster random sampling method was used, a sample of 1265 adolescents completed the anonymous self-report survey. Results showed that peer victimization was positively associated with mobile phone addiction. Gender also moderated the association between peer victimization and mobile phone addiction, with this association being stronger in girls than in boys.

Hong et al. (2020) The present study aimed to examine the mediating roles of sleep duration and quality and the moderating role of trait self-regulation between MPA and daily cognitive failures. A total of 1721 secondary school students were recruited to complete four self-reported questionnaires. The model results indicated that sleep quality partially mediated the association between MPA and daily cognitive failures. Overall, these findings address the issue of how and when MPA is linked with cognitive performance in daily life.

Sun et al. (2020) This study explores the underlying mechanism that connects parent–child relationships and mobile phone addiction tendency among adolescents. It tests the mediating role of psychological needs satisfaction and the moderating role of peer relationships. Data was collected from a sample of 1767 Chinese adolescents using a questionnaire survey. Results showed that psychological needs satisfaction can partially mediate the relationship between parent–child relationships and mobile phone addiction tendency and peer relationships can moderate the direct and indirect links between parent–child relationships and mobile phone addiction tendency.

Rashid et al.(2020) This study aims to identify how addiction to mobile phone usage affects academic performance. A quantitative approach was undertaken to determine how the level of mobile phone addiction could affect their academic performance. A total of 200 respondents among secondary school students in were selected through purposive sampling. The results show that the more the students use their mobile

phones, the more it will affect their academic performance. In other words, addiction to mobile phones will affect the student's academic performance.

Ivanova et al. (2020) The aim of the study was to establish if there is a relationship between mobile phone addiction and depression in university students and if phubbing is a mediator of this relationship. The participants were 402 university and college students from Ukraine. The results of the study have shown that higher mobile phone addiction and higher phubbing is associated with a higher level of depressive moods, with phubbing functioning as a mediator of the relationship between mobile phone addiction and depression.

Shen and Wang (2019) The goal of the study was to build a moderated mediation model to investigate the underlying mechanism of loneliness's influence on Chinese college students' excessive smart phone use. Using a sample of 549 smart phone users, study discovered that perceived stress reduced the link between the mediator (entertainment motivation) and excessive smart phone use. Furthermore, loneliness may influence excessive smart phone use solely through the escape desire escapism motivation's mediating function.

Kim et al. (2017) examined that people who are dissatisfied with their circumstances in the actual world frequently have an innate need to escape; for this reason, using a cell phone is considered an escape from reality. These ideas and beliefs imply that loneliness may be the source of escape motivation. In all, 200 college students took part in the research. The findings imply that there are mediating the link between attachment anxiety and smart phone addiction and the effects of loneliness and depression.

Lodder et al. (2017) The present study aimed to examine whether adolescents' perception of friendship quantity and quality, and the perceptions of their peers, were related to loneliness. Overall, 1,172 Dutch adolescents nominated their friends and rated their friendship quality. These findings indicated that loneliness is negatively related to the number of friends adolescents have, as perceived by themselves and their peers and suggested that, once a friendship is established, lonely adolescents may interpret the friendship quality less positively compared to their friends.

Endo et al. (2017) The study aimed to find relationship between the association of Social isolation with suicidal ideation (SI) and self-harm (SH) among adolescents.

Responses from 17,437 students. Findings indicated preference for solitude (PfS) was associated with increased odds of suicidal ideation and self harm in adolescents. No interaction effect between PfS and social isolation on suicidal ideation and self harm was found, but adolescents with PfS and social isolation had the highest risk for suicidal ideation and self harm.

Parasuraman et al. (2017) This study aimed to study the mobile phone addiction behavior and awareness on electromagnetic radiation. Totally, 409 respondents participated in the study. No significant changes were found on mobile phone addiction behavior between the participants. One-fourth of the study population were found having feeling of wrist and hand pain because of smartphone use which may lead to further physiological and physiological complication.

Danneel et al. (2017) aimed to find Developmental Change in Loneliness and Attitudes Toward Aloneness in Adolescence. These developmental trends were examined in two samples of Flemish adolescents consisting of 834 and 968 adolescents respectively. Adolescents filled out the Loneliness and Aloneness Scale for Children and Adolescents. The results regarding peer-related loneliness were inconsistent across samples and parent-related loneliness decreased, which was in contrast with theoretical expectations.

Puri et al. (2016) examined the relationships between internet addiction and depression, loneliness, and social isolation. Participants were 100 in the age group 16-18 years. The study found internet addiction was positively related to depression, loneliness and social isolation. However there was no gender difference observed in the study related to internet addiction, depression, loneliness and social isolation. The conclusion is that increased internet usage results in psychological problems like depression, social isolation and loneliness amongst adolescents.

Majorano et al. (2015) assessed the effects of two aspects of autonomy: emotional autonomy (separation and detachment) and autonomous motivation for solitary behavior, on parent- and peer-related loneliness during adolescence. The participants were 977 adolescents. Structural equation models and path analysis indicate the effects of separation-individuation process dimensions both on parent- and peer-related loneliness. Peer-related loneliness is more influenced by autonomous motivation than is

parent-related loneliness, and controlled motivation mediates its relationship with separation.

Bian and Leung (2015) focused on how psychological traits (such shyness and loneliness) and smart phone usage habits relate to the prediction of social capital and symptoms of smart phone addiction. An online survey was used to collect data from 414 university students in Mainland China. The Smartphone Addiction Scale was developed which found five symptoms of smart phone addiction. The results indicate that the likelihood of developing a smart phone addiction increases with one's level of shyness and loneliness.

Doane and Thurston (2014) examined the dynamic associations among daily stress levels, affect, and objective sleep quality in adolescence. 78 adolescents participated over three days. High daily stress was associated with shorter sleep duration. Models testing bidirectional associations indicated that prior day stress was associated with shorter sleep duration, but poor sleep duration and sleep efficiency were also associated with greater stress the next day. Results revealed loneliness was a significant moderator of the associations between daily stress and sleep duration.

Muusses et al. (2014) examined that in teenagers, compulsive internet use on mobile has been connected to decreased wellbeing. This study used a prospective, longitudinal sample of people (n = 398) to find the directionality of the relationship between CIU through mobile and both positive and negative wellbeing. In conclusion the findings imply that CIU reduces wellbeing. This is significant since worse wellbeing can have an impact on one's health.

Tan et al. (2013) analyzed university student loneliness according to gender, daily phone use time, and mobile phone addiction. In order to gather information, 527 students from various departments within the were administered the UCLA-loneliness scale, the problematic cell phone use scale, and the personal information form. The findings showed a strong correlation between problematic mobile phone use and loneliness.

Ladd and Ettekal (2013) aimed to find normative levels and person-oriented developmental trends in loneliness across adolescence, and examine the association between loneliness and depressive symptoms. Participants included were 478. Findings implied that most adolescents experience loneliness more strongly during early rather

than later adolescence, but not all adolescents traverse the same loneliness trajectories. Adolescents following stable high and moderate loneliness trajectories displayed the most depressive symptoms.

Woodhouse et al. (2012) examined whether adolescent loneliness would be lower within the context of positive relationships with peers. Relationship experiences were hypothesized to serve as protective factors in the links between social behaviors/victimization and loneliness. Participants were 2091. Result showed adolescent loneliness was positively associated with shyness, even when social acceptance was controlled. Additionally, loneliness was positively correlated with victimization and inversely related to prosocial and disruptive behavior.

Schinka et al. (2011) found association between loneliness and suicidality. Logistic regression analyses were used to analyze data from a large sample (N = 937). Results indicated that loneliness at age 15 years was concurrently associated with both suicidal ideation and suicidal behavior.

Vanhalst et al. (2011) examined the direction of effect between loneliness and depressive symptoms, using cross-lagged path analysis present five-wave longitudinal study from mid- to late adolescence (N = 428). Results indicated that loneliness and depressive symptoms influenced one another reciprocally, and these reciprocal associations were not attributable to their mutual overlap with personality traits, neuroticism was found to be a moderator, in that the bidirectional effects between loneliness and depressive symptoms were only found in adolescents high in neuroticism.

Kim et al. (2009) demonstrated that people who were socially awkward or lonely could become highly compulsive Internet users, which would not solve their initial issues but would instead have detrimental effects on other important aspects of life, like relationships, employment, or education. It was anticipated that these increased negative effects would drive people away from constructive social interactions and increase their feelings of loneliness.

Hall-Lande et al. (2007) investigated the relationships among social isolation, psychological health, and protective factors in adolescents. The sample included 4,746 adolescents. The findings revealed that social isolation was associated with an increased

risk for depressive symptoms, suicide attempts, and low self-esteem. Protective factors influenced associations between social isolation and psychological health.

Corsano et al. (2006) investigated the influence of loneliness and relationships with parents and friends on the psychological well-being of adolescents. Data were collected via two questionnaires from a sample of 330 Italian adolescents, males and females, aged between 11 and 19. As hypothesized, results showed that a positive relationship with friends and parents promotes psychological well-being in adolescents and reduces malaise. In addition, the study showed that the adolescents were able to distinguish between different states of loneliness.

McWhirter et al. (2002) examined the relationships among types of loneliness, empathy, coping skills, and self-esteem among a sample of high risk adolescents (N = 75). Findings revealed that low self-esteem and low social coping significantly predicted high intimate and high social loneliness. Low emotional coping also significantly predicted high intimate loneliness but not high social loneliness.

Ammaniti et al. (1988) explored and describe loneliness in female adolescence as distinct from solitude and isolation. It was applied to a sample of 804 female adolescents. The data were analyzed using factor analysis. Furthermore, the variance analysis showed that loneliness increases with age, and is more evident in small towns as opposed to medium-sized or larger metropolitan areas.

Moore and Schultz (1983) conducted empirical data on the adolescent loneliness experience. 100 adolescents were given measures of loneliness, loneliness attributions, coping styles, and personal characteristics. Loneliness was positively related to state and trait anxiety, an external locus of control, depression, self-consciousness, and social anxiety and negatively related to self-reported attractiveness, likability, happiness, and life satisfaction. Lonely adolescents were also less willing to take social risks. Adolescents most often attributed loneliness to boredom and most often coped with loneliness by watching TV or listening to music.

CHAPTER – III

RESEARCH METHODOLOGY

INTRODUCTION

Research is a scientific enquiry, definite and systematic procedure to collect data. It helps to find out more information about study in detailed and careful manner. According to Creswell (2008) research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue. It consists of three steps: pose a question, collect data to answer the question, and present an answer to the question. The research methodology is a systematic way to resolve a problem. Methodology helps to contribution towards the success or failure of any research work. A pre-planned and well organized method of research that helps researcher to make scientific and systematic plan for solving the problem under investigation. After selection of the problem, the researcher has to decide suitable procedure and techniques that to be used for investigation according to the nature of research problem.

Research design

Research design is an outline or a sequence of steps to be followed for conducting the study in such a way that maximum control will be exercised over factors that could interfere with the validity of the research results. (Polit and Hungler,1999). The research design includes the researcher's overall plan for obtaining answers to the research questions guiding the study. Types of research design which are commonly used are exploratory, descriptive, correlational, experimental and causal. The present study followed an exploratory research design for deciding the hypotheses. Once the hypotheses were finalized, descriptive and correlational research designs were adopted. Exploratory research design is used for formulating the problem for more clear and definitive exploration. Extensive literature survey was done under exploratory research design to come up with the gaps in the current literature and identify hypothesis to be tested.

METHOD

There are several methods of collecting data but the selection of method of research is determined by the nature of the problem. The descriptive survey method is used in the study after considering nature, need and purpose of present research. Descriptive survey studies are conducted to collect the data of existing phenomena with the view to employ data to justify current condition and practices or make intelligent plans description of the tools and the sample is given under.

POPULATION AND SAMPLE OF THE STUDY

POPULATION

In the course of our research, our targeted population comprised adolescents, recognizing the importance of studying in school having age range 12-19 years. the sample will be collected from Jammu districts only.

SAMPLE

Sampling is the process by which a relatively small number of individuals is selected and analyzed in order to find out something about the entire population from which it was selected in the present study of purposive sampling technique was employed for collecting the data from 120 students from 4 different schools.

SAMPLING

Purposive sampling method will be used to ensure representation of key characteristics relevant to our study objectives.

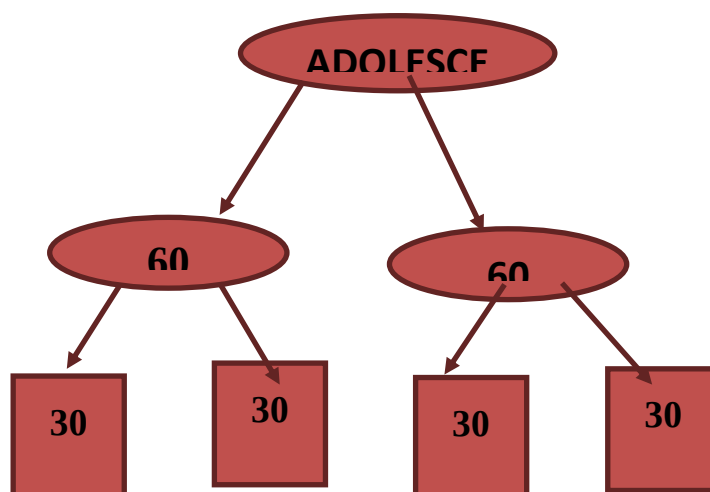


Table 1

Distribution of Sample of Adolescents

S.NO.	NAME OF THE SCHOOL	NO.
1	MODEL ACADEMY	30
2	JK PUBLIC SCHOOL,KUNJWANI	30
3	HERITAGE PUBLIC SCHOOL	30
4	DPS PUBLIC SCHOOL	30

VARIABLES

On the basis of above illuminations and nature of problem following independent variables were selected in present study.

A) DEPENDENT

- Adolescents

B) INDEPENDENT

- Loneliness
- Problematic problem usage

RESEARCH TOOLS

In the course of the study, a robust set of research tools were used to gather, analyze, and interpret data. These tools were carefully chosen to ensure the precision and reliability of our findings. The key research tools utilized in this study include

- **Problematic mobile phone use**
- The Problematic Mobile Phone Use Questionnaire(PMPUQ): Billieux, J., Van Der Linden, M., & Rochat, L. (2008).This scale contains 30 items based on 4 point rating scale such as strongly agree to strongly disagree. The Cronbach's of this scale is 0.88.

- **UCLA (Loneliness Scale :by Daniel Russell, Letitia Peplau, and Mary Ferguson)**
- A 20-item scale designed to measure one's subjective feelings of loneliness as well as feelings of social isolation. Participants rate each item as either O ("I often feel this way"), S ("I sometimes feel this way"), R ("I rarely feel this way"), N ("I never feel this way"). The measure has been revised two times since its first publication; once to create reverse scored items, and once to simplify the wording. (See other UCLA Loneliness Scale pages on the site). internal consistency (coefficient a ranging from .89 to .94) and test-retest reliability over a 1-year period ($r = .73$).

DATA COLLECTION

The data collection for the study was quantitative in nature. standardized measurement tools were used to gather information on loneliness and problematic mobile phone usage among adolescents in the Jammu District. This approach allowed for systematic data collection, facilitating the analysis of trends, patterns, and associations between variables of interest. After data collection, I It was ensured to maintain the confidentiality and privacy of participants' information. All collected data were anonymized and securely stored to prevent unauthorized access or disclosure. Additionally, participants were informed about the purpose of the study, their voluntary participation, and their right to withdraw consent at any time without facing repercussions.

STATISTICAL TECHNIQUE EMPLOYED

The collected data was scored according to directions given in the list manuals. Then standard statistical procedures were used to conduct the analysis. In this study, the investigator employed the following statistical techniques

- Mean and Standard Deviation
- Coefficient of correlation

CHAPTER - IV

RESULTS AND DISCUSSION

Statistics were used to analyze the data collected in this research. Independence sample T-test and Pearson Correlation were used to analyze the differences and relationships between different variables. Gender Differences in the Uses of Smartphone per day. The results below show the gender differences in using the Smartphone for different activities in a day among male and female adolescent. Independent sample t-tests are used to analyses the gender differences in using the Smartphone.

Descriptive analysis

Table 1

Showing sample of the participants

Gender	N	%AGE	TOTAL
M	60	50	120
F	60	50	

This table depicted that there are 120 participants, comprising 60 males and 60 females. 50% of the population fall in each category of both male and female. The graphical representation of the sample is represented in the fig 4.1.

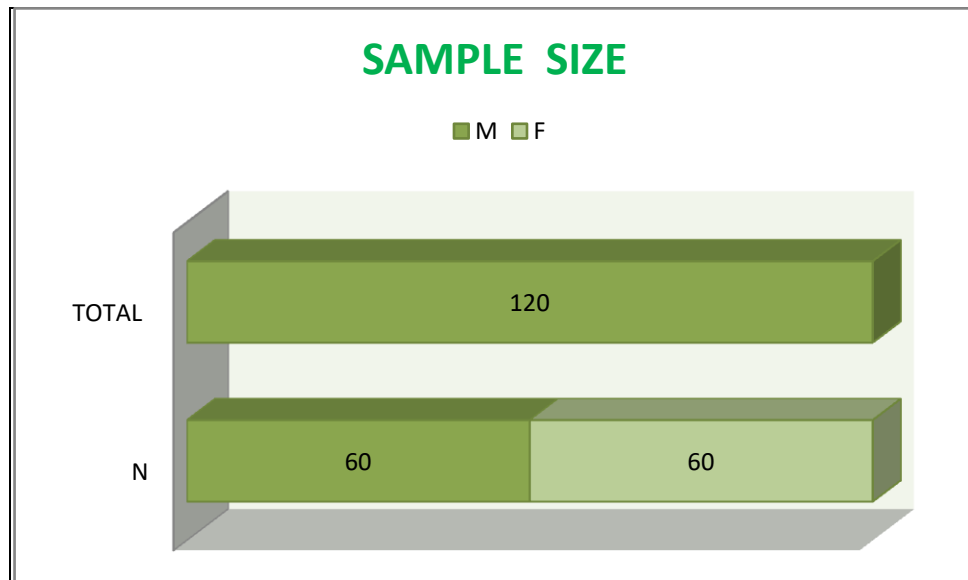


Figure 4.1: Graphical representation of adolescents by gender

OBJECTIVE 1

To study loneliness among male and female adolescent.

Table 2:

Showing loneliness among male and female adolescent

	Gender	N	Mean	SD	T	P
LS	M	60	26.53	12.86	-3.73	.000
	F	60	33.43	6.24		

Note: L: loneliness, M: male, F: Female

* $P < .001$

According to the loneliness scale results, males exhibited a mean score of 26.53 with a standard deviation of 12.86, whereas females had a higher mean score of 33.43 with a standard deviation of 6.24. The graphical representation of the sample is represented in the fig 4.2.

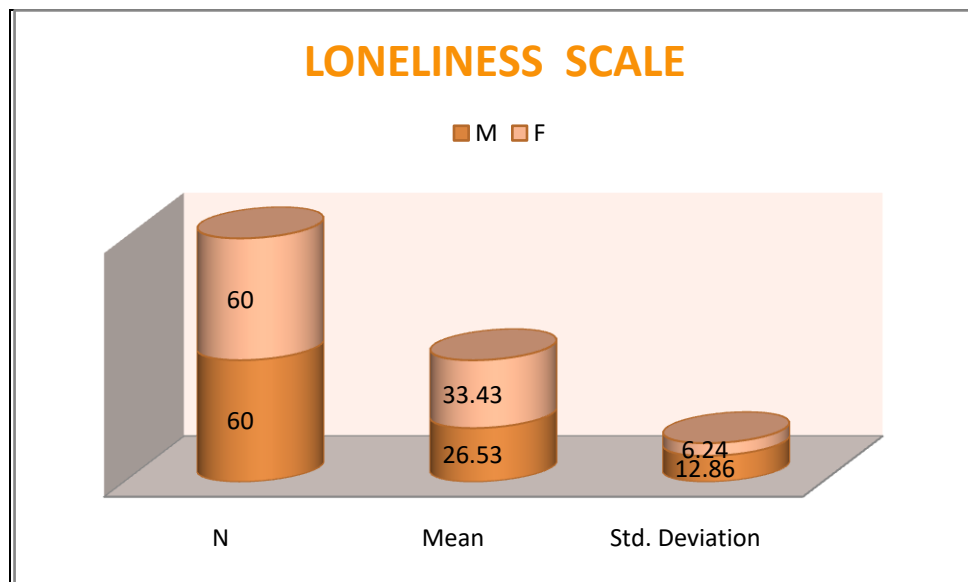
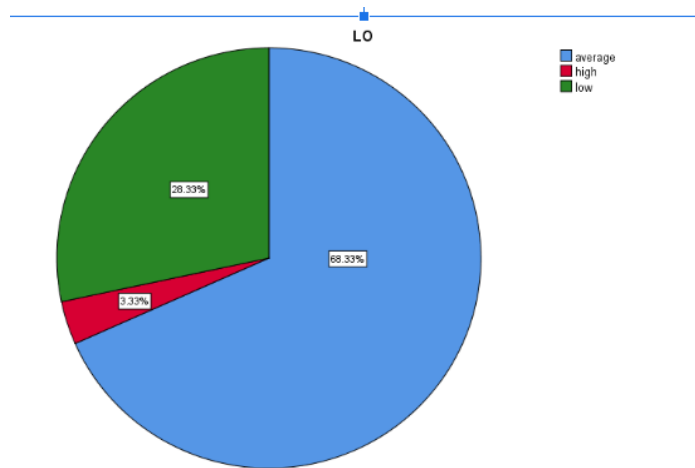


Figure 4.2: Graphical representation of adolescents on the basis of loneliness scale.

There will be significant difference loneliness among male and female adolescent.

LO

	Frequency	Percent	Valid Percent
Valid			
average	82	68.3	
high	4	3.3	
low	34	28.3	
Total	120	100.0	



Gender Differences in Loneliness

The results (see Table 2) show that there is significant gender differences in loneliness. The hypothesis predicted was there will be no significant difference of loneliness among male and female adolescent. Independent sample t-test was used to analyses the gender differences in loneliness. Mean value of Male ($M = 26.53$, $SD = 12.86$) and mean value of female ($M = 33.43$, $SD = 6.24$) with t test -3.73 , $p=.000$ which is significant. Hence, Null hypothesis rejected and alternative hypothesis is accepted. Maftai et al. (2024) concluded in his study that high levels of the urge to belong also had a marginally significant effect on the relationship between loneliness and ASU. Hemberg et al. (2021) concluded in his study that negative experiences resulting from involuntary loneliness were shame, self-blame and self-contempt, as well as meaninglessness, hopelessness and exclusion.

OBJECTIVE 2

To examine the mobile phone usage among male and female adolescent.

Table 3:

Showing mobile phone addiction among male and female adolescent.

	Gender	N	Mean	SD	T	p
PMPU	M	60	76.65	13.02	2.49	.000
	F	60	71.73	7.93		

Note: PMPU: Problematic mobile phone usage , M: male, F: Female

* $P<.001$

Results from the Problematic Mobile Phone Usage Questionnaire (PMPUQ) indicated that males had a mean score of 76.65 with a standard deviation of 13.02, whereas females had a mean score of 71.73 with a standard deviation of 7.93 with t value of 2.49 significant at .000 level. The graphical representation of the sample is represented in the fig 4.3.

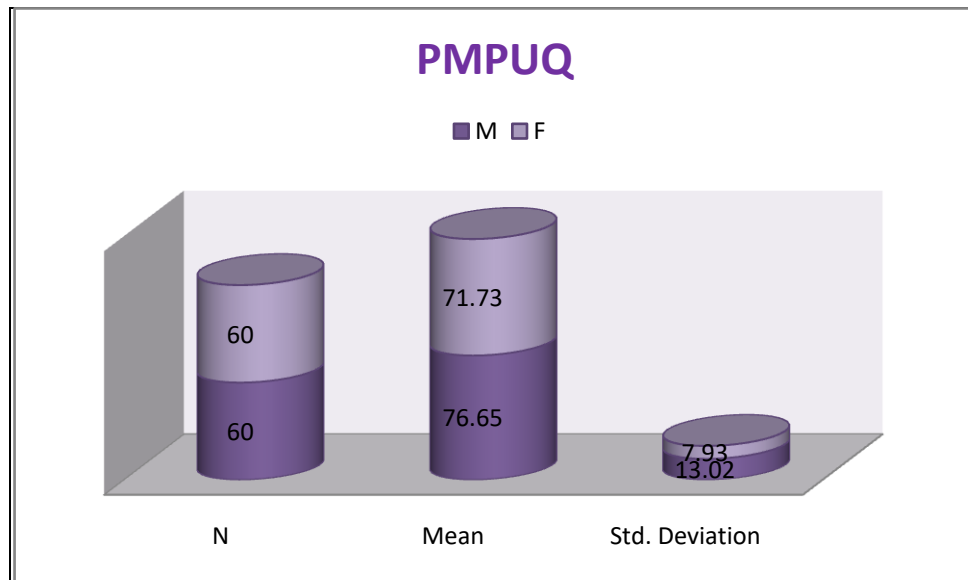
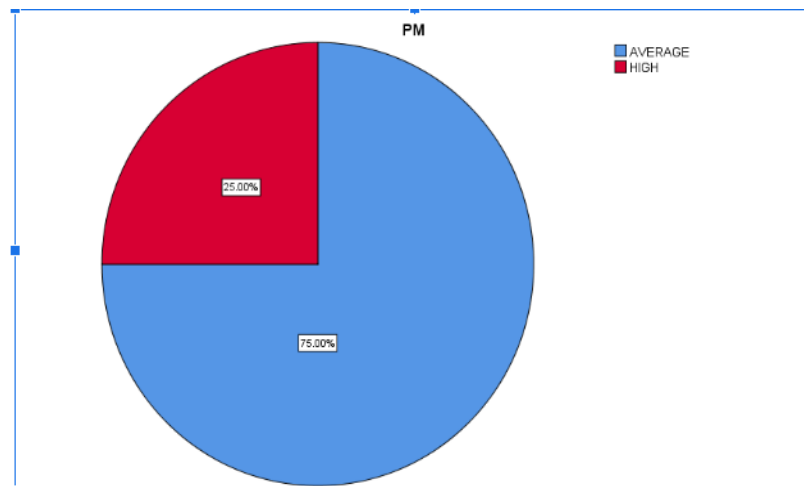


Figure 4.3: Graphical representation of adolescents on the basis of PMPUQ.

There will be significant difference in the mobile phone usage among male and female Adolescent.

		Frequency	Percent	Valid Percent
Valid	AVERAGE	90	75.0	75.0
	HIGH	30	25.0	25.0
	Total	120	100.0	100.0



Gender Differences in Smartphone Addiction

The results (see Table 3) show there is gender differences in smartphone addiction among male and female adolescents. Male students ($M = 76.65$, $SD = 13.02$) and female students ($M = 71.73$, $SD = 7.93$) with t test test of 2.49 significant at .000. Zhang et al. (2021) concluded in his study that boredom proneness and mobile phone addiction are mutually influenced, and mobile phone addiction is a stronger predictor of boredom proneness than the other way around. Liu and Lu (2022) concluded in his study that there were positive correlations between mobile phone addiction and depressive symptoms.

OBJECTIVE 3

To identify the relationship between loneliness and mobile phone usage among male and Female adolescent.

CORRELATION ANALYSIS

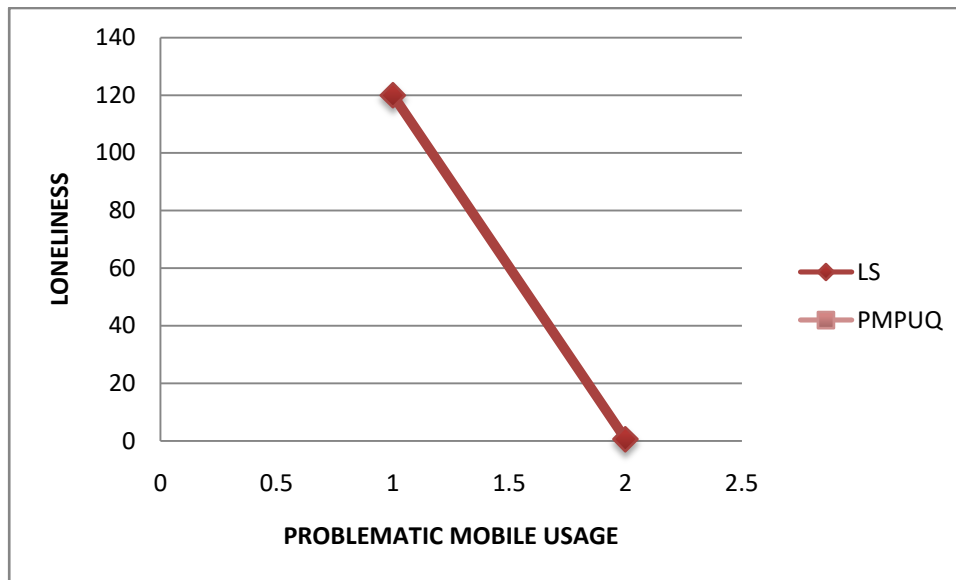
The data collected from the responses of the participating adolescent respondents were analyzed with the help of statistical package for social sciences (SPSS) for windows, version 23.0. Initially, the Karl Pearson's product moment correlation coefficient was computed to establish the relationship between prevalence of smart phone addiction and loneliness.

Table 4.4

Demonstrates the results of the bivariate correlation analysis.

	N	r	p
LS	120	0.591	.000
PMPU			

Note: LS: loneliness scale, pmpu : problematic mobile phone usage



There will be no significant relationship between loneliness and mobile phone usage among adolescent.

The Correlation between Smartphone Addiction and Loneliness

The result below shows the relationship between Smartphone addiction and loneliness among male and female adolescents. The third hypothesis of our research study is there is no significant relationship between Smartphone addiction and loneliness among male and female adolescents. To analyze the significant relationship between Smartphone addiction and loneliness Pearson's Correlation had been used. The results of Pearson's Correlation (see Table 3) showed that there is negative correlation between Smartphone addictions and loneliness among , r (0.591). The hypothesis is supported by our finding. Therefore, the higher the level of smartphone addiction, the lower the tendency to be loneliness among adolescents.

Li et al. (2021) concluded in his study that demonstrated a favorable correlation between teenage problematic mobile phone use and escape motivation and loneliness. Moreover, self-control moderated the association between escape motivation and problematic mobile phone usage.

Shen and Wang (2019) concluded in his study that loneliness may influence excessive smart phone use solely through the escape desire escapism motivation and mediating function.

CHAPTER – V

SUMMARY, CONCLUSION, SUGGESTIONS AND FUTURE IMPLICATIONS OF THE STUDY

The present study intends to make A STUDY ON LONELINESS AND PROBLEMATIC MOBILE PHONE USAGE among Male and Female adolescents who are studying in different schools of Jammu. This study also aims to find out whether there is any correlation between Loneliness and PMPUQ among adolescents of Jammu city. The current chapter contains the detailed discussion of the obtained results as presented in Chapter 4. The discussion chapter is organized in the following manner:

- There will be no significant difference loneliness among male and female adolescent.

HO: rejected, HA: accepted

- There will be no significant difference in the mobile phone usage among male and female Adolescent. HO: rejected, HA: accepted
- There will be significant relationship between loneliness and mobile phone usage among adolescent. HO: rejected, HA: accepted

Gender Differences in Smartphone Addiction

Our finding that there are gender differences in smartphone addiction. This finding is similar with the results of Perry and Kevin (2007) which have no gender differences in mobile phone addiction. In our study, gender differences among male and female adolescents were found on Smartphone addiction. our study result with other than that, according to Park and Lee (2014), male and female are using smartphone for different purpose.

Gender Differences in Loneliness

There are gender differences in loneliness according to our findings. There were studies also found no gender differences in loneliness (Bhardwaj & Ashok, 2015; Gürsoy & Bıçakçı, 2006; Neto, 1992; Ozdemir & Tuncay, 2008). In the other hand, some studies found gender differences in loneliness. From that studies, some found female have higher loneliness compare to male (BAŞ, 2010; Bugay, 2007; Al Khatib, 2012) whereas some studies found male have a higher loneliness compare to female (Salimi, 2011; Wiseman, Guttfreund, & Lurie, 1995; Yang, 2009).

The Correlation between Smartphone Addiction and Loneliness

Based on the findings of the research, it is showed that a negative correlation exists between Smartphone addiction and loneliness among adolescents. With this, it can be posited that the higher the level of Smartphone addiction, the lower the tendency to be loneliness; or the lower or fewer the level of Smartphone addiction, the higher the tendency to be loneliness.

The findings were inconsistent with the study which Casey (2012) stated that smartphone addiction may cause someone to feel lonely. This is because loneliness is an undesirable feeling that derives from inconsistency between wished and accomplished levels of social connection (Perlman & Peplum, 1981). Smartphone addiction might influences the way people communicate and causing social stress (Perlman & Peplau, 1981).

Our results are also supported by a study by Jafari et al. (2019) There was a significant and negative correlation between the scores of mobile phone addiction and sense of loneliness.

DELIMITATION OF THE STUDY

- The study was conducted exclusively on an adolescent population, meaning that only individuals within the adolescent age range were included in the research.
- The study was limited to just four schools, indicating that data was collected from a small, specific sample of educational institutions.

- The study focused solely on the Jammu district, highlighting that the geographical scope was restricted to this particular area.

SIGNIFICANCE

Conduct longitudinal research to understand the long-term effects of mobile phone addiction on adolescents' mental health, specifically focusing on how it impacts loneliness over time. Develop and test intervention programs aimed at reducing mobile phone addiction and loneliness among adolescents. Investigate the prevalence and impact of mobile phone addiction and loneliness across different cultures. Explore the role of psychosocial factors such as family dynamics, peer relationships, and school environment in the relationship between mobile phone addiction and loneliness. Identify and analyze mediating and moderating variables that influence the relationship between mobile phone addiction and loneliness.

Investigate potential gender differences in mobile phone addiction and loneliness. Assess whether boys and girls experience and cope with these issues differently, and tailor interventions accordingly. Utilize neuroscientific methods, such as brain imaging, to explore the neural correlates of mobile phone addiction and loneliness. Examine the co-occurrence of mobile phone addiction with other mental health issues, such as anxiety, depression, and ADHD. Conduct qualitative studies to gain in-depth insights into adolescents' personal experiences with mobile phone addiction and loneliness. Use interviews and focus groups to explore their perspectives and feelings in detail.

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APPENDIX

DEMOGRAPHIC INFORMATION

NAME

AGE

SCHOOL TYPE

GENDER

CITY

Problematic mobile phone use questionnaire

Indicate how often each of the statements below is descriptive of you.

- Strongly agree: 1
- Agree: 2
- Disagree: 3
- Strongly disagree: 4

1. I don't use my mobile phone when it is completely forbidden to use it

1 2 3 4

2. It is easy for me to spend all day not using my mobile phone

1 2 3 4

3. My mobile phone bill is too high in terms of my overall expenses

1 2 3 4

4. I use my mobile phone while driving

1 2 3 4

5. I don't pay attention to my mobile phone spending

1 2 3 4

6. Is it hard for me not to use my mobile phone when I feel like it

1 2 3 4

7. I don't use my mobile phone in a library

1 2 3 4

8. I can easily live without my mobile phone

1 2 3 4

9. My mobile phone bills prevents me from buying some other things I need

1 2 3 4

10. I get irritated when I am forced to turn my mobile phone off

1 2 3 4

11. I try to avoid using my mobile phone when driving on the motorway

1 2 3 4

12. I can control my mobile phone bills

1 2 3 4

13. I use my mobile phone where it is forbidden to do so

1 2 3 4

14. I find myself in financial difficulties because of mobile phone costs

1 2 3 4

15. I'd like to spend less time using my mobile phone

1 2 3 4

16. I use my mobile phone in situations that would qualify as dangerous

1 2 3 4

17. I feel lost without my mobile phone

1 2 3 4

18. I receive mobile phone bills that are too high

1 2 3 4

19. When using my mobile phone on public transport, I try not to talk too loud

1 2 3 4

20. I spend too much time using my mobile phone

1 2 3 4

21. I efficiently manage the money that I spend using my mobile phone

1 2 3 4

22. I don't attach a lot of importance to my mobile phone

1 2 3 4

23. While driving, I find myself in dangerous situations because of my mobile

phone use

1 2 3 4

24. I have trouble paying my mobile phone bills

1 2 3 4

25. I try to avoid using mobile phone where people need silence

1 2 3 4

26. I am surprised by how big my mobile phone bills are when I get them

1 2 3 4

27. It is hard for me to turn my mobile phone off

1 2 3 4

28. I borrow money from family or friends to pay my mobile phone bills

1 2 3 4

29. I use my mobile phone while driving, even in situations that require a lot of

Concentration

1 2 3 4

30. My mobile phone conversations take longer than I want

1 2 3 4

LONELINESS SCALE

Scale: INSTRUCTIONS:

Indicate how often each of the statements below is descriptive of you.

- C indicates “I often feel this way”
- S indicates “I sometimes feel this way”
- R indicates “I rarely feel this way”
- N indicates “I never feel this way”

1. I am unhappy doing so many things alone

O S R N

2. I have nobody to talk to

O S R N

3. I cannot tolerate being so alone

O S R N

4. I lack companionship

O S R N

5. I feel as if nobody really understands me

O S R N

6. I find myself waiting for people to call or write

O S R N

7. There is no one I can turn to

O S R N

8. I am no longer close to anyone

O S R N

9. My interests and ideas are not shared by those around me

O S R N

10. I feel left out

O S R N

11. I feel completely alone

O S R N

12. I am unable to reach out and communicate with those around me

O S R N

14. I feel starved for company

O S R N

15. No one really knows me well

O S R N

16. I feel isolated from others

O S R N

17. I am unhappy being so withdrawn

O S R N

18. It is difficult for me to make friends

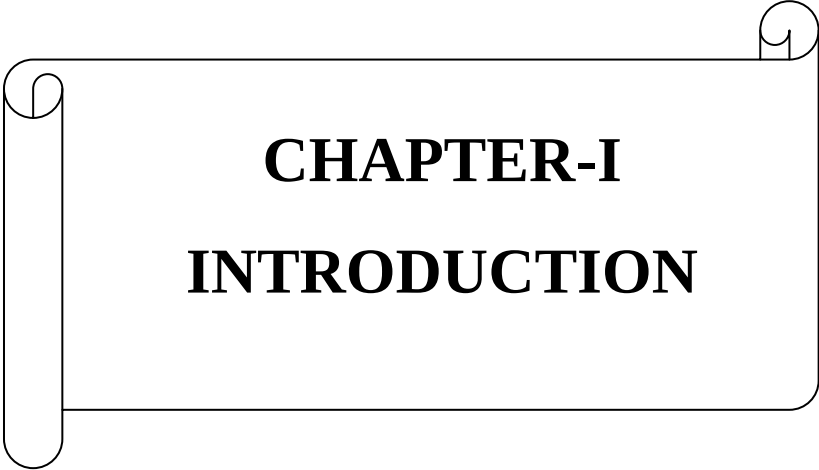
O S R N

19. I feel shut out and excluded by others

O S R N

20. People are around me but not with me

O S R N



CHAPTER-I

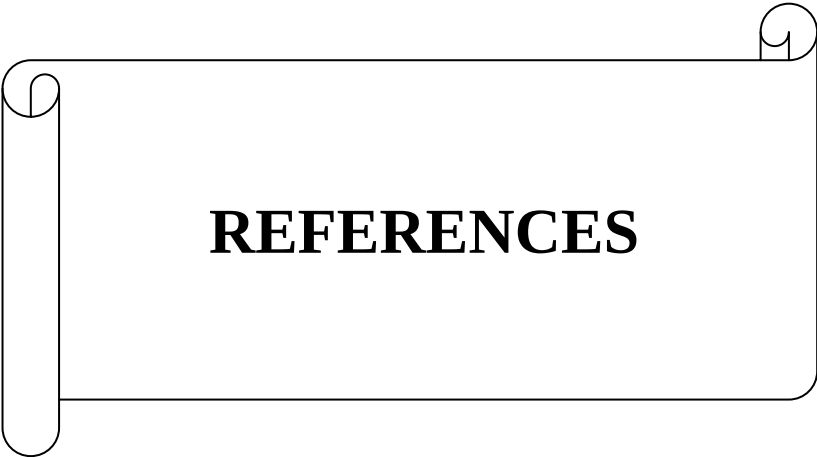
INTRODUCTION

CHAPTER-II
REVIEW OF
LITERATURE

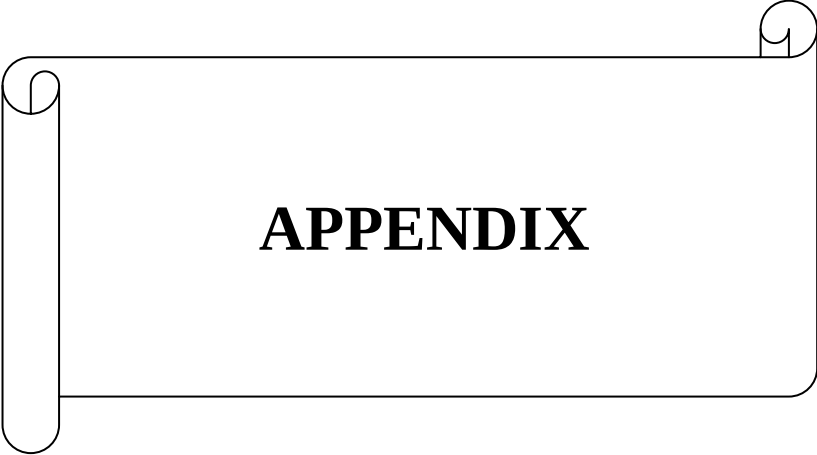
CHAPTER-III
RESEARCH METHODOLOGY

CHAPTER-IV
RESULTS AND
DISCUSSION

CHAPTER-V
SUMMARY, CONCLUSION
AND IMPLICATIONS



REFERENCES



APPENDIX