Article

Loneliness and Fear of Missing Out Among Young and Middle-Aged Adults

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Keywords

Attachment, fear of missing out, loneliness, peer group, social isolation, and social media.

Abstract

Humans are social beings and they hardly can survive on their own. In the due course of one's lifetime, they develop several attachments and when bereft of it, they face isolation and loneliness. In the new times, the phenomena of fear of missing out is recognized to which however has stuck to the social media roots. This study aims to understand the relationship between loneliness and fear of missing out among young adults and adults of various genders. For the purpose, UCLA Loneliness Scale version 3 by Daniel W. Russell and Fear of Missing Out Scale byAndrew K. Przybylski et. al was used to measure the levels of loneliness and fear of missing out in a sample of 40 males and 40 females, young adults and adults. Independent sample t test was carried out to find group differences in the levels of loneliness and fear of missing out and Pearson's product moment correlation was employed to find the relationship between levels of loneliness and fear of missing out. The results indicated that no significant gender differences or age differences are present in the levels of loneliness and fear of missing out among young adults and adults and no significant relationship was found between loneliness and fear of missing out in both the age groups. The findings of the study can be used to further understand the causation of fear of missing out and provide as a base to studies on loneliness and fear of missing out with other variables.

Introduction

Loneliness

Loneliness is the feeling of being alone, regardless of the amount of social contact. Social loneliness which is often confused with social isolation are closely related concepts but do not necessarily exist in all situations.

Psychologists generally consider loneliness to be a stable trait, meaning that individuals have different set-points for feeling loneliness, and they fluctuate around these set-points depending on the circumstances in their lives. Individuals' levels of loneliness typically remain more or less constant during adulthood until 75 to 80 years of age, when they increase somewhat. Prolonged loneliness is associated with depression, poor social support, neuroticism, and introversion. Studies have shown that loneliness puts people at risk for physical disease and that it may contribute to a shortened life span. (Hawkley, 2018)

Loneliness is a common experience; as many as 80% of those under 18 years of age and 40% of adults over 65 years of age report being lonely at least sometimes, with levels of loneliness gradually diminishing through the middle adult years, and then increasing in old age (i.e., ≥70 years). Loneliness is synonymous with perceived social isolation, not with objective social isolation. (Hawkley & Cacioppo, 2010)

Social isolation

Social Isolation is a lack of social connections. Social isolation can lead to loneliness in some people, while others can feel lonely without being socially isolated. While social isolation is a causal factor to loneliness as it results in absence of social contact. (No isolation, 2020) In modern times, social loneliness is being cut off from social networks.

Fear of Missing Out

FOMO refers to the feeling or perception that others are having more fun, living better lives, or experiencing better things than you are. It involves a deep sense of envy and affects self-esteem. People randomly use the term Fear of Missing Out (FOMO). However, FOMO is a form of social anxiety caused due to apprehension from being left out of mainstream society and its functioning.

FOMO is oftentimes used in a social-media context i.e; for being not updated with social media activities, trends etc. People use social media to keep updated on the world starting from friends to families, celebrities, groups etc. However, this race of being updated has led to competing for showcasing a perfect life on social media. This has also led to utilizing social media addiction. FOMO perpetuates the feeling of social loneliness. One wastes so much time thinking about watching someone else do something, that in your own life, you lose out on important possibilities. Lower life satisfaction and moods have been associated with FOMO. The omnipresent desire to be "in the loop" adds to further alienation, which further strengthens a continuing feeling of losing out and accomplishing things in life.

The theory of self-determination indicates that individuals are driven by three intrinsic and fundamental psychological desires to develop and evolve. In self-determination philosophy, the idea of intrinsic motivation, or participating in actions for the inherent benefits of the action itself, plays an important role. Two major assumptions of the theory are that need for growth drives the need for progress and Autonomous inspiration/motivation is crucial. (Cherry, 2019) The theory can be used to explain the phenomena of FOMO as to cope with social loneliness, the FOMO mechanism is activated leading to motivation to engage and spend time more socially.

Young and Middle-aged Adults

The Federal Interagency Forum on Child and Family Statistics describes young adults as individuals aged 18-24. According to the Massachusetts Institute of Technology (MIT), young adulthood is generally defined as 18 to 22 or 18 to 25. For the purpose of the study, individuals of age 18-24 are considered as young adults corresponding to the considerations of the UN. For the purpose of the study, individuals above the age of 25 are considered adults.

Theories Associated With Loneliness

As developed by the psychiatrist John Bowlby during the second half of the 20th century, attachment theory emphasizes the importance of a strong emotional bond between the infant and the caregiver; it stands as a forerunner to contemporary theories of loneliness. From that perspective, loneliness occurs when children with insecure attachment patterns behave in ways that result in their being rejected by their peers. Those rejections hinder their development of social skills and increase their distrust of other people, thereby fostering ongoing loneliness.

Attachment theory was the foundation for an influential psychological theory of loneliness developed by the sociologist Robert S. Weiss. Weiss identified six social needs that, if unmet, contribute to feelings of loneliness. Those needs are attachment, social integration, nurturance, reassurance of worth, a sense of reliable alliance, and guidance in stressful situations. As would be predicted by attachment theory, Weiss maintained that friendships complement but do not substitute for a close, intimate relationship with a partner in staving off loneliness.

Another theoretical perspective, the behavioural approach, holds that loneliness is characterized by personality traits that are associated with, and possibly contribute to, harmful patterns of interpersonal interaction. For instance, loneliness is correlated with social anxiety, social inhibition (shyness), sadness, hostility, distrust, and low self-esteem, characteristics that hamper one's ability to interact in skilful and rewarding ways. Indeed, lonely individuals have been shown to have difficulty forming and maintaining meaningful relationships. They are also less likely to share information about themselves with their peers, and that helps to explain why they report a lack of intimacy with close friends.

The cognitive approach to loneliness is based on the fact that loneliness is characterized by distinct differences in perceptions and attributions. Lonely individuals tend to have a pessimistic general outlook: they are more negative than are individuals who are not lonely about the people, events, and circumstances in their lives, and they tend to blame themselves for not being able to achieve satisfactory social relationships. besides the cognitive approach largely takes account of the attachment and behavioural perspectives by explaining how (a) failure to meet the need for attachment, social integration, nurturance, and other social needs results in perceived relationship discrepancies that are experienced as loneliness, and (b) loneliness is perpetuated by way of a self-fulfilling prophecy in which poor social skills result in unsatisfactory personal relationships that in turn result in negative self-attribution that lead to further social isolation and relationship dissatisfaction.

These three emotion regulation and coping strategies—problem-focused, emotion-focused, and avoidance-focused strategies—are the source of many of the interesting cognitive and behavioural outcomes that have been discovered in people who have different attachment styles or orientations. More securely attached individuals, for instance, typically experience more intense and mild positive emotions in their romantic relationships and fewer intense and mild negative emotions, whereas the reverse is true of more insecurely attached persons. Longitudinal research has also documented connections between an individual's early attachment pattern (being classified as secure or insecure in the Strange Situation at age one) about the mother and emotions experienced and expressed with a romantic partner 20 years later. Besides, individuals classified as insecure (either anxious-avoidant or anxious-resistant) in the Strange Situation at age one are rated by their teachers as less socially competent during early elementary school. Lower social competence, in turn, predicts a greater likelihood of being rated as insecurely attached to same-sex friends at age 16, which in turn predicts both the experience and expression of greater negative effect in relationships with romantic partners when individuals are in their early 20s. Thus, there are indirect but theoretically meaningful links between early attachment experiences and later attachment-based relationships in early adulthood, just as Bowlby anticipated. (Simpson, 2017). There are four patterns of attachment, including:

Ambivalent attachment

These children become very distressed when a parent leaves. Ambivalent attachment style is considered uncommon, affecting an estimated 7–15% of U.S. children. As a result of poor parental availability, these children cannot depend on their primary caregiver to be there when they need them.

Avoidant attachment

Children with an avoidant attachment tend to avoid parents or caregivers, showing no preference between a caregiver and a stranger. This attachment style might be a result of abusive or neglectful caregivers. Children who are punished for relying on a caregiver will learn to avoid seeking help in the future.

Disorganized attachment

These children display a confusing mix of behaviour seeming disoriented, dazed, or confused. They may avoid or resist the parent. Lack of a clear attachment pattern is likely linked to inconsistent caregiver behaviour In such cases, parents may serve as both a source of comfort and fear, leading to disorganized behaviour.

Secure attachment

Children who can depend on their caregivers show distress when separated and joy when reunited. Although the child may be upset, they feel assured that the caregiver will return. When frightened, securely attached children are comfortable seeking reassurance from caregivers. (Cherry, 2019)

Concepts associated with Fear of Missing Out and Loneliness

Neuroticism is a tendency towards traits like anxiety, self-doubt, depression and other negative feelings. While there is no observational proof (except those that suggest a correlation between neuroticism and problematic smartphone usage (Billieux et al. 2007)), it is logically rational to conclude that neuroticism is correlated with higher levels of phobia, considering the socially insecure and impulsive disposition and lower self-control of individuals with higher neuroticism (Fetterman et al. 2010).

The theory of self-determination indicates that individuals are driven by three intrinsic and fundamental psychological desires to develop and evolve. In self-determination philosophy, the idea of intrinsic motivation, or participating in actions for the inherent benefits of the action itself, plays an important role. Two major assumptions of the theory are that need for growth drives the need for progress and Autonomous inspiration/motivation is crucial.(Cherry, 2019)

The theory can be used to explain the phenomena of FOMO as to cope with social loneliness, the FoMO mechanism is activated leading to motivation to engage and spend time more socially.

For both practical and ethical reasons, loneliness is difficult to manipulate in an experimental setting. That has posed a challenge to researchers attempting to distinguish between the causes and consequences of loneliness. One experiment used hypnotic suggestion to overcome that obstacle: highly hypnotizable individuals were asked to recall a time when they felt lonely and then, after they returned from that hypnotic state, to recall a time when they felt highly socially connected. While in those states of social disconnection and connection, participants completed a set of psychosocial measures. When participants were induced to feel lonely, they scored higher in measures of shyness, negative mood, anger, anxiety, and fear of negative evaluation and lower on measures of social skills, optimism, positive mood, social support, and self-esteem. Conversely, when individuals were induced to feel that their intimate, relational, and collective social needs were being met, their dispositions were generally more positive and engaged.

Lonely individuals' negative social expectations tend to elicit behaviours from others that match those expectations. That reinforces lonely individuals' expectations and increases the

likelihood that they will behave in ways that push away the people who could satisfy their social needs. That has been demonstrated in experimental studies in which perceived social threats (e.g., competition, betrayal) cause lonely individuals to respond more quickly and intensely with distrust, hostility, and intolerance.

The negative self-protective lens through which lonely individuals view their social world also influences how they interpret and cope with stressful circumstances. Lonely individuals are more likely to disengage or withdraw from stressors, whereas individuals who are not lonely are more likely to actively cope (e.g., problem solve) and seek tangible and emotional support from others. Withdrawing from stressful circumstances is reasonable in certain instances, but when applied generally to everyday hassles, it can lead to an accumulation of stress that becomes increasingly taxing and oppressive. Increased stress may be at least partially responsible for the risk of mental and physical disease in lonely individuals. For instance, loneliness has been associated with elevated levels of stress hormones, poor immune functioning, and health-jeopardizing changes in cardiovascular functioning.

Rationale

There is a research gap between the two concepts together and little or no relation has been established between these concepts. There were several other reasons to choose the variable taken into consideration in the study like:

To understand the variable loneliness across various ages and finding the relation with the relevant factors leading to the particular phenomena.

To understand and develop scales used for loneliness and fear of missing out in the Indian context with relation to the set global standard.

To understand age and gender difference in the instances of the phenomena of Fear of missing out associated with loneliness in various age groups (here, adults).

To understand the phenomena of fear of missing out beyond social media usage, i.e., in other physical aspects of life as well as in relationships of an individual.

To understand the variables aspects like that of anxiety, isolation, somatic symptoms, attachment styles, social relationships as affected by the variables considered under the study.

Literature review

Elhai, Yang, Rozgonjuk & Montak (2020) studied the model of psychopathology correlated with Problematic Smartphone use (PSU) using machine learning processes. A sample of 1097 Chinese graduation level students finished measures questioning socioeconomics, and mental proportions of PSU, sadness and tension indications, the dread of passing up a major opportunity (FOMO), and rumination. We utilized a few diverse AI calculations to prepare our measurable model old enough, sex and the mental factors in demonstrating PSU seriousness, prepared to utilize many reenacted replications on an

irregular subset of members, and remotely tried on the rest of the subset of members. Shrinkage calculations (rope, edge, and flexible net relapse) perform somewhat yet factually better than different calculations. Results from the preparation subset summed up to the test subset, without significant exacerbating of fit utilizing customary fit records. FOMO had the biggest relative commitment in displaying PSU seriousness while modifying for different covariates in the model. Results accentuate the essentialness of FOMO to the development of PSU.

Lemay, Dolek & Bazelais (2019) studied that Fear of Missing Out (FOMO) is a phenomenon that emerged with regards to online media use and alludes to the need to remain ceaselessly associated. Studies have demonstrated that dangerous online media and versatile innovation use are identified with sentiments of nervousness, discouragement, and loneliness, and FOMO. Barely any examinations have analyzed the connections between these elements and scholastic execution. This investigation studies Loneliness, Autonomy, Competence, FOMO, Relatedness and Autonomy as identifiers with Academic Performance. The study locates a positive impact of FOMO and a negative impact of Autonomy on Academic Performance.

Alt (2018) studied student's well being concerning maladjustment in college towards excessive social media engagement and its relation with fear of missing out. The study was conducted on 290 undergraduate college students using path analysis. The results showed that maladjustment occurring due to social media engagement is mediated by fear of missing out.

Dhir, Yossatorn, Kaur & Chen (2018) examined the uses of the stressor-strain-result system (SSO) to inspect whether psychosocial prosperity measures, for example, impulsive media use and dread of passing up a great opportunity, trigger exhaustion and whether web-based media fatigue brings about tension and discouragement. The examination used conducted in a cross-sectional strategy whereby two batches were sample size 1554 and 1144 respectively. The exploration model focused on young adult web-based media clients in India. The study suggests that habitual media utilisation essentially set off web-based media weakness, which later resulted in raised nervousness and melancholy. The dread of passing up a major opportunity by implication anticipated web-based media exhaustion through the intervention of enthusiastic web-based social media use. The practical and theoretical implications, constraints of the current examination and plan for future investigations are introduced.

Hunt, Marx, Lipson & Young (2018) conducted a study on 143 undergraduates at the University of Pennsylvania where one group was required to reduce the usage of Facebook, Instagram and Snapchat to 10 minutes per day following a week of baseline testing, whilst other participants used social media for three weeks as usual. The restricted usage group saw substantial declines in isolation and stress over three weeks relative to the control group, the findings indicated. Both groups showed a substantial reduction in anxiety and fear of missing out on the bottom line, indicating a positive value of increased self-monitoring. Restricting just 30 minutes of social media significantly improved the well-being of the subjects.

Scott & Woods (2018) explored relations between the social media behaviours of teenagers aged 12-18, fear of missing out and sleep results, using path analysis to test a model of suggested underlying mechanisms on a sample size of 101. Late bedtime, increased pre-sleep cognitive arousal, longer sleep onset delay and shorter sleep period were correlated with nighttime social media use. Two mechanisms, one at a behavioural level, by pushing social media usage late at night, which delays bedtime, second at a cognitive level, by the cognitive arousal pre-sleep, thus further delaying the onset of sleep. Therefore, attempts to create and assess prevention techniques can take into account not only social media habits but also cognitive mechanisms driving them, such as fear of missing out.

Goll, Charlesworth, Scior & Stott (2018) explored the relationship between social engagement and identity. An inductive qualitative methodology was used for older adults living alone in London, England, which was based on semi-structured interviews and thematic interpretation. Participants also talked of obstacles to social involvement identified elsewhere, including illness/disability, lack of interaction with friends/relatives, absence of a stable group, and the absence of adequate social opportunities. These activities were correlated with concerns about involvement in opportunities for social engagement, including fears of social exclusion and/or coercion, and fears of sacrificing important facets of identity. It is concluded that the absence of previously reported obstacles alone would not increase social engagement among isolated older people; instead, the values, fears and personalities of older people must be discussed.

Blackwell, Leeman, Tramposch, Osborne & Liss (2017) investigated whether extraversion, neuroticism, connection style, and FOMO were indicators of online social media use and addiction. The sample size was 207 elected to finish a short study estimating levels of extraversion, neuroticism, connection styles, and FOMO. In the last model of hierarchical regression, more youthful age, neuroticism, and dread of passing up a major opportunity anticipated web-based media use. Just dread passing up a great opportunity anticipated online media enslavement. Connection nervousness and evasion anticipated web-based media addiction, yet this relationship was not, at this point noteworthy after the involvement of FOMO.

Nowland, Necka & Cacioppo (2017) presented that a bidirectional and complex relationship occurs between isolation and social usage of the Internet. It is a valuable instrument for minimising alienation as the Internet is used as a way station on the road to strengthening current relationships and forging new social ties. Yet feelings of isolation are intensified as social media are used to avoid the social environment and remove from the "social pain" of contact. We believe that isolation is also a determinant of how the digital world communicates with individuals. Lonely persons demonstrate a desire for social contact using the Internet and are more likely to use the Internet in a fashion that displaces time spent on offline social experiences. This indicates that isolated individuals can need assistance in their use of the social Internet to employ it in a way that strengthens current friendships and/or forges new ones.

Wegmann, Oberst, Stodt & Brand (2017) examined 270 participants using a basic structural equation model and examined the part of psychopathological manifestations and FOMO towards Internet-correspondence applications in the improvement of indications of an Internet-correspondence issue. The outcomes propose that psychopathological indications foresee higher dread of passing up the person's Internet-correspondence applications and higher levels of FOMO to escape from negative feelings. These particular insights intercede the impact of psychopathological side effects on Internet-correspondence problems. Nonetheless, further examinations ought to research the function of the FOMO as an opportunity for particular inclination and perception in the online setting.

Bian & Lueng (2014) explored the roles of attributes like shyness, loneliness and other psychological variables concerning smartphone addiction symptoms and patterns of smartphone use. A sample of 414 students was taken from mainland China and through exploratory factor analysis, it was found that 5 smartphone addiction symptoms, which formed the Smartphone Addiction Scale were disregard of harmful consequences, productivity loss, feeling anxiety and lost, preoccupation and inability to control craving. Results also show that individuals who score more in loneliness and shyness, are more likely to be addicted to smartphones. The research provides compelling evidence that the use of smartphones for multiple reasons and the showing of different signs of addiction has had a substantial effect on the building of social capital. For parents, educators, and decision-makers, the powerful connexions between mobile use and mobile use, depression, and shyness have strong consequences for prevention and intervention.

Quan, Zhen, Yao & Zhou (2014) explored the relationship among coping style, adjustment to college from school and loneliness among college freshmen. A sample of 276 was taken from colleges in China and the coping style scale, academic adjustment scale & Emotional and social loneliness scale was used for data collection. Results conveyed that loneliness was negatively affecting adjustment by activating negative coping styles in most cases. The results have implications for understanding the mediating role of coping styles between loneliness and adjustment in the Chinese context.

Przybylski, Murayama, DeHaan & Gladwell (2013) explored three investigations directed to experimentally advance the Fear of Missing out phenomena. The first examination gathered various global participants to make a vigorous individual contrast proportion of FOMO, the Fear of Missing Out scale (FoMOs); this investigation is the first to operationalize the build. Study 2 enlisted a broad agent associate to research how segment, inspirational and prosperity factors identify with FOMO. Study 3 analyzed the social and enthusiastic associates of dread of passing up a great opportunity in an example of youthful grown-ups. Ramifications of the FoMOs measure and for the future investigation of FoMO are examined.

Gentzler, Oberhauser, Westerman & Narorff (2011) studied the relationship between electronic communication with loneliness, attachment and relationship quality. In a survey, 211 undergrads reported about their utilization of electronic correspondence technologies with a parent who they distinguished as their nearest relative. Results demonstrated that

understudies who report regular likewise report all the more fulfilling, cosy, and steady parental connections, yet those understudies who utilize an interpersonal interaction site to speak with guardians report more elevated levels of loneliness, anxious attachment and conflict among the parental relationship. The study also proposes that further exploration is required to utilize longitudinal designs to see better youthful utilization of innovation to impart in the present society.

Keitzmann, Hermkens, McCarthy & Silvestre (2011) presented a structure that characterizes online media by utilizing seven utilitarian structure blocks: personality, discussions, sharing, presence, connections, notoriety, and gatherings. As various online media exercises are characterized by the degree to which they centre around a few of these squares, we clarify the suggestions that each square can have for how firms ought to draw in with web-based media. To finish up, we present various suggestions concerning how firms ought to create systems for checking, comprehension, and reacting to various web-based media exercises.

Woodhouse, Dykas & Cassidy (2011) explored how with positive relationships with peers, teenage loneliness would be lower. A sample of 2091 cases was collected from 11th-grade students. Adolescent depression was correlated positively with shyness, as predicted. In comparison, loneliness was associated with victimisation favourably and was inversely linked to prosocial and destructive behaviour. By social recognition, the link between victimisation & loneliness was completely mediated. There was no indication that the associations between social activity or victimisation and depression were mitigated by social acceptance. Sociometric studies found that teens who were ignored and shy-rejected, but not aggressive-rejected, were lonelier than normal peers.

Methodology

Aim

To study the relationship between loneliness and fear of missing out among young adults and adults.

Objectives

To find the difference on the level of Loneliness among Male and Female young Adults and Adults.

To measure the difference on the level of Fear of missing out among Male and Female Young Adults and Adults.

To study the relationship between Loneliness and Fear of missing out among Young Adults and Adults.

Hypothesis

There will be significant gender difference on the level of Loneliness among Male and Female Young Adults.

There will be significant gender difference on the level of Loneliness among Male and Female Adults.

There will be significant difference on the level of Loneliness among Young Adults and Adults.

There will be significant gender difference on the level of Fear of Missing out among Male and Female young adults.

There will be significant gender differences on the level of Fear of missing out among Male and Female Adults.

There will be significant difference on the level of Fear of missing out among Young Adults and Adults.

There will be significant relationship between Loneliness and Fear of missing out among Young Adults.

There will be significant relationship between Loneliness and Fear of missing out among Adults.

Design

For the purpose of the study, the research design employed is a correlational study with t-test for studying group differences i.e., quantitative type of research. The research design was chosen because a quantitative research design enables one to be able to conduct research on a sample of large participants (here 80) & analyze them based on different statistical analyses. The questionnaires chosen are standardized which with close-ended responses facilitate the collection of a larger sample. The design is simple with only two variables taken into consideration where the gender and age differences within those variables are investigated and then also finding out how the two considered variables are correlated in various age groups.

Variables

Two variables are taken into consideration for the purpose of the study,

Loneliness

Fear of Missing Out

Sample

The total sample collected for the purpose of the study is 80, which consists of 40 males and 40 females. The sample of the study is divided into two categories according to age with

40 young adults and 40 adults. Random sampling was employed to collect the sample from urban and suburban backgrounds from within the country.

Description of tools employed

Table 1

Table showing description of the table

S.no	Name of the scale	Author	Year of development	No. of items	Reliability and Validity
1	UCLA Loneliness Scale (Version 3)	Daniel W. Russell	1996	20	Internal consistency with coefficient α = .89 to .94 and test-retest reliability over one year period with r = .73
2	Fear of Missing Out Scale	Andrew K. Przybylski, Kou Murayama, Cody R. DeHaan, and Valerie Gladwell	2013	10	All ten items form a reliable composite measure with α = .87 to .90

UCLA Loneliness Scale (Version 3)

It is a 20-item scale designed to measure the subjective feelings of loneliness as well as feelings of social isolation in the subjects. Responders rate each item on a scale from 1 - Never to 4 Often. The measure is a revised version of the original UCLA Loneliness Scale as well as the Revised UCLA Loneliness Scale. The scale was developed by Daniel W. Russell in 1996 based on data from various studies. It is a culture free test that is widely used and has been rendered highly reliable both in terms of internal consistency with coefficient alpha ranging from .89 to .94 and test-retest reliability with r = .73. Convergent validity was determined by significant correlations with other measures of loneliness. The construct validity was determined by significant relations with measures of the adequacy of the individual's interpersonal relationship through correlations between measures of health and well-being and loneliness.

Fear of Missing Out Scale (FoMOs)

FoMOs or the Fear of Missing Out Scale is a 10 item measure which uses the Likert scale where the subject chooses from the 5 options of Not at all true of me, Slightly true of me, Moderately true of me, Very true of me and Extremely true of me. The measure was validated through various studies using Item Response Theory and principal components analysis. Andrew K. Przybylski, Kou Murayama, Cody R. DeHaan, and Valerie Gladwell developed the measure and published it first in 2013 in their paper titled Computers in Human Behavior.

Procedure

The concepts concerning the topic were researched upon and several existing papers were reviewed related to the variables in the study. The area of research was reviewed and the research gap was identified. The sample characteristics were considered and appropriate questionnaires to measure the variables were selected. The sampling was done through online mode using google forms. The data collected was analysed using t-test and Pearson's product-moment correlation. The analysed data were tabulated and discussed. Further implications and limitations of the study were mentioned.

Result

The raw scores obtained from the responses collected were analysed. The results obtained from the analysis (t-test and correlation) are tabulated below.

Table 2

Mean, SD and t values for Loneliness among males and females young adults

	Gender	N	Mean	SD	t value	P
Loneliness	Males	20	49.15	10.46	0.093	Insig
	Females	20	48.85	9.84		

The table records the t-test done among males (N=20) and females (N=20) for the scores recorded for the Loneliness variable where the mean score 49.15 is and 48.85, the standard deviation is 10.46 and 9.84 for males and females respectively. The t value is found to be 0.093 and the value is not significant at 0.05 and 0.01 level of significance.

Table 3

Mean, SD and t values for Loneliness among males and females adults

	Gender	N	Mean	SD	t value	P
Loneliness	Males	20	43.4	11.97	0.499	Insig
	Females	20	45.15	10.11		

The table records the t-test done among males (N=20) and females (N=20) for the scores recorded for the Loneliness variable where the mean score is 43.4 and 45.15, the standard deviation is 11.97 and 10.11 for males and females respectively. The t value is found to be 0.499 and the value is not significant at 0.05 and 0.01 level of significance.

Table 4

Mean, SD and t values for Loneliness among young adults and adults

	Age	N	Mean	SD	t value	P
Loneliness	Young Adults	40	49	10.03	2.009	Insig
	Adults	40	44.275	10.97		

The table records the t-test done among young adults (N=40) and adults (N=40) for the scores recorded for the Loneliness variable where the mean score is 49 and 44.275, the standard deviation is 10.03 and 10.97 for young adults and adults respectively. The t value is found to be 2.009 and the value is not significant at 0.05 and 0.01 level of significance.

Table 5

Mean, SD and t values for Fear of Missing Out among males and females young adults

	Genders	N	Mean	SD	t value	P
Fear of Missing Out	Males	20	27.2	7.67	1.904	Insig
	Females	20	22.8	6.92		

The table records the t-test done among males (N=20) and females (N=20) for the scores recorded for the loneliness variable where the mean score is 27.2 and 22.8, the standard deviation is 7.67 and 6.92 for males and females respectively. The t value is found to be 1.9034 and the value is not significant at 0.05 and 0.01 level of significance.

Table 6

Mean, SD and t values for Fear of Missing Out among males and females adults

	Gender	N	Mean	SD	t value	P
Fear of Missing Out	Males	20	21.2	7.63	1.659	Insig
	Females	20	25.8	9.76		

The table records the t-test done among males (N=20) and females (N=20) for the scores recorded for the loneliness variable where the mean score is 21.2 and 25.8, the standard deviation is 7.63 and 9.76 for males and females respectively. The t value is found to be 1.659 and the value is not significant at 0.05 and 0.01 level of significance.

Table 7

Mean, SD and t values for Fear of Missing Out young adults and adults

	Age	N	Mean	SD	t value	P
Fear of Missing Out	Young Adults	40	25	7.55	0.809	Insig
	Adults	40	23.5	8.95		

The table records the t-test done among young adults (N=40) and adults (N=40) for the scores recorded for the loneliness variable where the mean score is 25 and 23.5, the standard deviation is 7.55 and 8.95 for young adults and adults respectively. The t value is found to be 0.809 and the value is not significant at 0.05 and 0.01 level of significance.

Table 8

Correlation between Loneliness and Fear of Missing Out among young adults

	N	r	P
Loneliness	40	-0.214	Insig
Fear of Missing Out	40		

The table records the correlation for the variables Loneliness and Fear of Missing Out among young adults (N=40), where the r value is found to be -0.214 and which is not significant at 0.05 and 0.01 level of significance.

Table 9

Correlation between loneliness and fear of missing out among adults

	N	r	P
Loneliness	40	0.072	Insig
Fear of Missing Out	40		

The table records the correlation for the variables Loneliness and Fear of Missing Out among adults (N=40), where the r value is found to be 0.072 and which is not significant at 0.05 and 0.01 level of significance.

Discussion

The topic of the dissertation is Loneliness and Fear of Missing Out among Young adults and Adults. It aims to study the relationship between loneliness and fear of missing out in young adults and adults. The sample of the study consisted of 80 participants, of which 40 were males and 40 were females. 40 fell in the age range of 18-24 years and the rest 40 fell in the age range of 25-55 years of age. The relationship between loneliness and fear of missing out was explored on the sample by using independent sample t-test and Pearson's product moment correlation. The study was considered to understand the effect and causal factors for loneliness and FOMO through the existing reviews and the findings of the research. UCLA Loneliness Scale(Version 3) by Russell and FOMO scale by Przybylski et. al. was used in the study to measure the levels of Loneliness and Fear of Missing Out respectively, among the subjects.

The independent sample t-test was done on samples of males and females to find the gender differences on the levels of loneliness. Similar t-test was employed to find the gender difference on the levels of fear of missing out. Further, an independent sample t-test was employed to find differences in levels of loneliness and FOMO for the young adults (18-24 years) and adults (25-55 years). Using Pearson's product moment correlation, the relationship between both the variables was studied for adults and young adults separately. The results obtained were analysed and tabulated. The following observations were made after reviewing the analysis of the result table:

To examine Hypothesis 1 an independent sample t-test was carried out and the results were recorded in Table 2. The table contains the descriptive statistics showing differences in the levels of Loneliness among males (N=20) and females (N=20) young adults. The mean score for loneliness among males is 49.15 and females is 48.85, the standard deviation is 10.46 and 9.84 for males and females respectively. This shows that males scored higher average scores for loneliness and the variation of the results (the spread of scores) is more for males than females young adults. The t value is found to be 0.093. The p value at 0.05 level is 2.09 and 0.01 level is 2.84 and as the value is less than the p value at both the levels, therefore, the t value is not significant at 0.05 and 0.01 level of significance. Therefore, no significant gender difference was found implying that the levels of loneliness are experienced similarly in both males and females young adults. Even though there are individual differences in the levels of loneliness, an established difference in loneliness is rather uncommon among genders.

To examine Hypothesis 2 an independent sample t-test was carried out and the results were recorded in Table 3. The table contains the descriptive statistics showing differences in the levels of Loneliness among males (N=20) and females (N=20) adults. The mean score for loneliness among males was 46.275 and females was 47, the standard deviation is 11.97 and 10.11 for males and females respectively. This shows that males scored higher average scores for loneliness and the variation of the results (the spread of scores) is more for males than females adults. The t value is found to be 0.499. The p value at 0.05 level is 2.09 and 0.01 level is and as the value is 2.84 less than the p value at both the levels, therefore, and the t value is not significant at 0.05 and 0.01 level of significance. Even though in adults, the average scores for loneliness was found to be higher in females, no significant gender difference through t test was found implying that the levels of loneliness are experienced similarly in both males and females adults.

To examine Hypothesis 3 an independent sample t-test was carried out and the results were recorded in Table 4. The table contains the descriptive statistics showing differences in the levels of Loneliness among young adults (N=40) and adults (N=40) where the mean score for young adults is 49 and adults is 44.275, the standard deviation is 10.03 and 10.97 for young adults and adults respectively. The average level of loneliness is higher in young adults than adults and the variance is spread wider for young adults. The t value is found to be 2.009. The p value at 0.05 level is 2.02 and 0.01 level is 2.71 and as the value is less than the p value at both the levels, therefore, the t value is and the t value is not significant at 0.05 and 0.01 level of significance. Therefore, no significant age difference was found implying

that the levels of loneliness are experienced similarly in young adults and adults. As people age, they tend to experience similar levels of loneliness as the younger self possibly due to change factors yet similar socialising skills.

Barreto et. al (2020) studied loneliness around the world, among age, gender and cultural differences. They found that loneliness increased with individualism, decreased with age, and was greater in men than in women. They also found that age, gender, and culture interacted to predict loneliness. However, those interactions did not qualify the main effects, they simply accentuated them. In this study, the average levels of loneliness have been seen to be higher in males than females and higher average levels are seen in young adults than adults, even though no significant age or gender differences are found on the levels of loneliness.

To examine Hypothesis 4 an independent sample t-test was carried out and the results were recorded in Table 5. The table contains the descriptive statistics showing differences in the levels of Fear of Missing Out among males (N=20) and females (N=20) young adults. The mean score for loneliness among males is 24.2 and females is 24.3, the standard deviation is 7.67 and 6.92 for males and females respectively. The average scores of males and females young adults are similar and the variance for males is spread wider than females. The t value is found to be 1.904. The p value at 0.05 level is 2.09 and 0.01 level is 2.84 and as the value is less than the p value at both the levels, therefore, the t value is and the t value is not significant at 0.05 and 0.01 level of significance. Therefore, no significant gender difference was found implying that the levels of FOMO are experienced similarly in both males and females young adults. The average scores for FOMO in both genders is similar, This might be due to the similarities on social circle and social media experiences felt by the genders. The gender difference might be insignificant as the gender gap in socialising is decreasing and males and females young adults alike feel the need to be "part of the plan."

To examine Hypothesis 5 an independent sample t-test was carried out and the results recorded in Table 6. The table contains the descriptive statistics showing differences in the levels of Fear of Missing Out among males (N=20) and females (N=20) adults. The mean score for males is 21.2 and females is 25.8, the standard deviation is 7.63 and 9.67 for males and females respectively. The average scores for males are lower than females and the variance of females is spread wider than males adults. The t value is found to be 1.659. The p value at 0.05 level is 2.09 and 0.01 level is 2.84, as the value is less than the p value at both the levels, therefore, the t value is and the t value is not significant at 0.05 and 0.01 level of significance. Therefore, no significant gender difference was found implying that the levels of FOMO are experienced similarly in both males and females. The average scores on the levels of FOMO in females is higher. This might be due to social restrictiveness experienced by female adults due to difference in their duties and lifestyles than male adults.

To examine Hypothesis 6 an independent sample t-test was carried out. The results recorded in Table 7. The table contains the descriptive statistics showing differences in the levels of Fear of Missing Out among young adults (N=40) and adults (N=40) where the mean score for young adults is 25 and adults is 23.5, the standard deviation is 7.55 and 8.95 for young adults and adults respectively. The average scores for FOMO is higher in young adults

than adults and the variance for adults is spread wider than young adults. The t value is found to be 0.809. The p value at 0.05 level is 2.02 and 0.01 level is 2.71 and as the value is less than the p value at both the levels, therefore, the t value is and the t value is not significant at 0.05 and 0.01 level of significance. Therefore, no significant age difference was found implying that the levels of FOMO are experienced similarly in young adults and adults. Even though Fear of Missing Out exists in all age groups, an age wise comparison is difficult to establish as the factors leading upto FOMO are relatively different in different age groups.

To examine Hypothesis 7 the Pearson's Product-moment correlation between variables Loneliness and Fear of Missing Out among young adults (N=40). The results recorded in Table 8 depict the correlation between Loneliness and Fear of Missing Out in young adults and the correlation coefficient ('r' value) is -0.214. The p value for correlation coefficient is 0.304 at 0.05 level and 0.398 at 0.01 level. As the r value is lesser than the p value at both the levels, the results are not significant at 0.05 and 0.01 level of significance. This implies that no significant relation or weak relation was found between loneliness and fear of missing out among young adults. The negative r value indicates that a weak but inverse relation is established meaning with rise in levels of FOMO, levels of loneliness decreases for young adults and vice-versa. This might be due to young adults filling up their time with certain activities as they start experiencing FOMO and therefore, the levels of perceived loneliness is lesser. However, as loneliness increases, FOMO levels might seem to decrease as the individuals might start feeling detached from their surroundings and therefore, keeping up with it doesn't become necessary as much.

Barry and Wong (2020) studied Fear of missing out (FoMO) as both generational phenomenon or result of individual differences. The study implied that the FoMO from adolescence to middle adulthood can be better understood as a correlate of other aspects of self-perception like loneliness, self esteem and self compassion. More specifically, across age cohorts, having low self-esteem and low self-compassion as well as high levels of loneliness were each related to FoMO. Therefore, a negative correlation among loneliness and FOMO is expected, however, due to possible differences among other underlying factors the correlation might not always be significant.

To examine Hypothesis 8 the Pearson's Product-moment correlation between the variables Loneliness and Fear of Missing Out among adults (N=40). The results recorded in Table 9 depict the correlation between Loneliness and Fear of Missing Out in adults and the correlation coefficient ('r' value) is 0.072. The p value for correlation coefficient is 0.304 at 0.05 level and 0.398 at 0.01 level. As the r value is lesser than the p value at both the levels, the results are not significant at 0.05 and 0.01 level of significance. This implies that no significant relation or weak relation was found between loneliness and fear of missing out among adults. The positive r value indicates that a weak but direct relation is established meaning with rise in levels of FOMO, levels of loneliness rises for young adults and vice-versa. Such results might be observed as the age increases because perceived alienation from surrounding or lesser social contact in older adults might lead to rise in levels of FOMO and perceived levels of loneliness. However, with company around, as loneliness levels decrease, the perceived FOMO in social settings also decreases.

Hypothesis Testing

Hypothesis 1 stating there will be significant gender difference on the level of loneliness among males and females, young adults, is rejected/disproved.

Hypothesis 2 stating there will be significant gender difference on the level of loneliness among males and females, adults, is rejected/disproved.

Hypothesis 3 stating there will be significant difference on the levels of loneliness among young adults and adults, is rejected/disproved.

Hypothesis 4 stating there will be significant gender difference on the levels of fear of missing out among males and females, young adults, is rejected/disproved.

Hypothesis 5 stating there will be significant gender difference on the levels of fear of missing out among males and females, adults, is rejected/disproved.

Hypothesis 6 stating there will be significant difference on the levels of fear of missing out among young adults and adults is rejected/disproved.

Hypothesis 7 stating there will be significant relationship between loneliness and fear of missing out among young adults, is rejected/disproved.

Hypothesis 8 stating there will be significant relationship between loneliness and fear of missing out among adults, is rejected/disproved.

Conclusion

Interventions that target maladaptive social cognition (e.g Cognitive behavioural therapy that involved training to identify automatic negative thoughts and look for disconfirming evidence, to decrease biased cognitions, and/or to reframe perceptions of loneliness and personal control) would be more effective than interventions that targeted social support, social skills, or social access. The new age, therefore, now more than ever needs to stay connected and take care of their mental and physical health instead of running in a meaningless rat race. Translating, one must know when to 'call the quits.' The findings of such study further create opportunities to delve into the concepts and understand the ever-increasing phenomenon in children and adults alike. It also creates room for extensive focus to understand the educational and work-life related implications of these phenomena.

References

Alt, D. (2018). Students' Wellbeing, Fear of Missing out, and Social Media Engagement for Leisure in Higher Education Learning Environments. Curr Psychol. 37, 128–138.

Balta, S., Emirtekin, E., Kircaburun, K. et al. (2020). Neuroticism, Trait Fear of Missing Out, and Phubbing: The Mediating Role of State Fear of Missing Out and Problematic Instagram Use. Int J Ment Health Addiction. 18, 628–639.

Barreto, M., Victor, C., Hammond, C., Eccles, A., Richins, M. T., & Qualter, P. (2021). Loneliness around the world: Age, gender, and cultural differences in loneliness. Personality and Individual Differences, 169, 110- 136.

Barry, C. T., & Wong, M. Y. (2020). Fear of missing out (FoMO): A generational phenomenon or an individual difference? Journal of Social and Personal Relationships, 37(12), 2952-2966.

Bian, M. & Leung, L. (2014) Linking Loneliness, Shyness, Smartphone Addiction Symptoms, and Patterns of Smartphone Use to Social Capital. Social Science Computer Review. 33 (1), 61-79.

Billieux, J., Van der Linden, M., d'Acremont, M., Ceschi, G., & Zermatten, A. (2007). Does impulsivity relate to perceived dependence on and actual use of the mobile phone? Applied Cognitive Psychology, 21(4), 527–537.

Blackwell, D., Leeman, C., Tramposch, R., Osborne, C. & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. Personality and Individual Differences, 116, 69-72.

Cherry, K. (2017, October 7) Self-Determination Theory and Motivation. Verywell Mind.

Cherry, K. (2019, July 17) What Is Attachment Theory? The Importance of Early Emotional Bonds.Verywell Mind.

Dhir, A., Yossatorn, Y., Kaur, P. & Chen S. (2018) Online social media fatigue and psychological wellbeing—A study of compulsive use, fear of missing out, fatigue, anxiety and depression. International Journal of Information Management. 40, 141-152.

Elhai, J., D., Yang, H., Rzgonjuk, D. & Montag, C. (2020) Using machine learning to model problematic smartphone use severity: The significant role of fear of missing out. Addictive Behaviors.103,106-261.

Fetterman, A. K., Robinson, M. D., Ode, S., & Gordon, K. H. (2010). Neuroticism as a risk factor for behavioural dysregulation: A mindfulness-meditation perspective. Journal of Social and Clinical Psychology, 29(3), 301–321.

Gentzler, A., L., Oberhauser A., M., Westerman, D. & Nadorff D., K. (2011) College Students' Use of Electronic Communication with Parents: Links to Loneliness,

Attachment, and Relationship Quality. Cyberpsychology, Behavior, and Social Networking. 14, 1-2.

Goll, J., C., Charlesworth, G., Scior, K. & Stott, J. (2018). Correction: Barriers to Social Participation among Lonely Older Adults: The Influence of Social Fears and Identity. PLOS ONE 13(7).

Granger, B. (2017, July 29) FOMO: A surprising way to stay motivated. https://medium.com/@getsupporti/fomo-a-surprising-way-to-stay-motivated-c003a797b910

Hawkley, L. (2018, December 6). Loneliness. Encyclopedia Britannica.

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters a theoretical and empirical review of consequences and mechanisms. Annals of behavioural medicine: a publication of the Society of Behavioral Medicine, 40(2), 218–227.

Hunt, M., G., Marx, r., Lipson, C. & Young J. (2018) No More FOMO: Limiting Social Media Decreases Loneliness and Depression. Journal of Social and Clinical Psychology. 37 (10), 751-768.

Kessler, S. (October 4, 2020) What Age Range is Considered a Young Adult? JoinCake.

Kietzmann, J., h., Hemrkens, K., McCarthy, I., P. & Silvestre, B., S. (2011) Social media? Get serious! Understanding the functional building blocks of social media. Business Horizons. 54 (3), 241-251.

Lemay, D., J., Doleck, T. & Bazelais, P. (2019) Self-determination, loneliness, fear of missing out, and academic performance. Knowledge Management & E-learning: An International Journal. 11 (4).

Newland, R., Necka, E., A. & Cacioppo, J., T. (2017) Loneliness and Social Internet Use: Pathways to Reconnection in a Digital World? Perspectives on Psychological Science. 13 (1) 70-87.

No Isolation. (2017, April 18). What is social isolation?

Przybylski, A., K., Murayama, k., Dehaan, C., R. & Gladwell, V. (2013) Motivational, emotional, and behavioural correlates of fear of missing out. Computers in Human Behavior, 29(4), 1841-1848.

Quan, L., Zhen, Rui., Yao, B., & Zhou, X. (2014). The Effects of Loneliness and Coping Style on Academic Adjustment Among College Freshmen. Social Behavior and Personality: an international journal, 42 (6), 969-977.

Russell, D. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. Journal of Personality Assessment, 66 (1), 20-40.

Scott, H. & Woods H., C. (2018) Fear of missing out and sleep: Cognitive behavioural factors in adolescents' nighttime social media use. Journal of Adolescence. 68, 61-65.

Simpson, J. A. and Beckes, L. (2017, April 12). Attachment theory. Encyclopedia Britannica. https://www.britannica.com/science/attachment-theory

Wegmann, E., Oberst, U., Stodt, B. & Brand, M. (2017) Online-specific fear of missing out and Internet-use expectancies contribute to symptoms of Internet-communication disorder. Addictive Behaviors Reports, 5, 33-42.

Woodhouse, S., S., Dykas, M., J. & Cassidy, J. (2011). Loneliness and Peer Relations in Adolescence. Social Development, 21 (2).