## Correlation between recreation, technology and mental health

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Abstract - Recreation plays a very important role in the day to day lives of people. With time, its necessity is increasing and practice decreasing. Due to various factors like excessive use of technology, poor work-life balance and other such things, people have become physically and mentally stressed. The work life balance of millennials is getting worse day by day. In this regard an attempt has been made in this paper to study the correlation between the three aspect, recreation, technology and mental health. The evolution of these three individually has been discussed along with their relations with each other. Surveys were done which involved professionals from diverse fields. It was observed that all three factors were interlinked in providing a balanced life. Steps were discussed on how these can be balanced together and the impact it will have on day to day lives.

Key Words: recreation, technology, mental health, work life balance,

### 1. Introduction

Recreation is a body and mind activity that relieves tension and tiredness. It causes us physical and mental exhaustion and stress when we continue to do a job or perform an operation on a daily and continuous basis for several hours. Recreational exercise relieves us from feeling tired, boosts our vitality and fosters a sense of happiness. Recreation consists of leisure activities or experiences, typically chosen freely by the individual - either because of enjoyment, pleasure or artistic stimulation derived from them. Because of the complexities of today's civilization and way of living, people nowadays are both physically and emotionally lesser than their older generations. This is reflected in their emotional, physical and mental health and attitude and growth, which all the more calls for the worth recreation deserves. Different studies have shown the importance of recreation specifically in three aspects of one's life-physical health, mental health and improving quality of

**Physical Health:** Leisure activities, particularly open air activities, improve your well-being, such as decreasing the excess weight, blood and cholesterol, muscle strength, flexibility, muscle agility, cardio-vascular endurance and body composition. This increases one's strength and energy level generally, leading to greater focus to academic activities and to more learning. It also has an effect on one's engagement and attention. And ' health is wealth ' as we all know.

Mental Health: Mental health is important for physical health as a whole. Activities for fun help to manage stress. It gives you the chance to develop yourself and a sense of balance and self-esteem which can alleviate anxiety and depression directly. Further inspiration to learn is also

available. This provides an emotional stability and endurance mechanism for relieving stress and anxiety. Both activities help to increase students 'self-assurance, determination and self-discipline.

Improved Quality of Life: People who give preference to leisure will be happier with their entire lives. Rest practices aim to strike the balance between educational stress and physical and mental health. Multifold outdoor impacts. This enriches self-expression, self-realization, interpersonal skills, leisure and therapeutic strategies, physical strength, creative expression and visual sense.

## 2. Evolution 2.1. Recreation

The mode of recreation has changed significantly with time. The advent of education, industrialization, corporate culture etc. has changed the priority of leisure in children and adults alike. Our ancestors had healthier and better balanced lives. People had active social lives and lesser number of working hours.

Early civilizations: "In the early civilizations like Egypt, sports was a part of education and recreation. Music and arts had a strong emphasis in their culture while dancing and bull fighting were an important part of their religious traditions. Ancient Greece and Rome have been the birthplace of many kinds of cultural, leisure and sports that have inspired current understanding of social entertainment in different countries around the world." The Greeks had a strong belief in the unity of mind and body." They believed that setting aside time to enjoy music, art and other leisure activities is a critical aspect of living a good life and is considered to be a key to happiness physically and spiritually. Most of the Greek cities had gymnasiums which were open for public. Activities of entertainment, leisure and sports were kept in mind by urban planners who reserved Sufficient areas for parks, gardens, pools open-air theaters, gymnasiums, fitness grounds and stadiums. Women did not enjoy the leisurely pursuits of men in ancient Greece." Citizens were, by definition, men. (Sansone, 2003)

The Roman had a different concept of leisure than the Greeks.

They supported it for utilitarian reasons rather than spiritual or aesthetic ones. City planning by the romans included provisions for open air theatres, stadiums, amphitheaters etc.

**Middle ages:** With time recreation started taking a backseat in people's lives as they got more engrossed in politics and religion. People were divided into class and recreation became a luxury for a select few. Slavery came into existence which gave the masters a lot of time to indulge in leisure whereas the slaves overworked. Engaging in recreation meant a sign of affluence and was done by the noblemen. During the renaissance period the wealthy class

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had time for recreation all week long. They engaged in social visits, dining, theater, ballet, and opera. In contrast to this, the working class were only given Sundays for their amusement. (el-harami, 2015)

The Industrial Revolution had changed the way people lived, more than any other cause, and it also had an adverse impact on traditional entertainment and leisure habits. Leisure was more freely available to all by the early decades of the 20th century, with a massive leisure movement initiating in the United States. New forms of commercial recreation sprung up or expanded during the nineteenth century, especially in larger cities.

**Modern society:** Recreation historians term the public recreation movement the era from the mid-19th to the early 20th century. The era was marked by the widespread implementation of coordinated recreation by government and voluntary organizations to achieve favorable social results. During the community recreation movement there were four major development streams: the movement for adult education; the growth of federal, state and municipal parks; the formation of voluntary organizations; and the movement for playgrounds. In the 21<sup>st</sup> century, recreation has mostly been constricted to mobile games and other technological advancements with minimum focus on outdoor activities.

#### 2.2. Technology

Our social lives are affected by technology. Technology has significantly enlarged social media horizons, and although it has linked people from all over the world, it can also make many people suffer in their daily lives. Communication tools provide one of the greatest examples of rapidly evolving technology. In the past, you had to write a letter in order to connect with someone. It would take days to deliver the letter. You had to track the letter to check if it was sent and received by the appropriate person. But mistakes were not uncommon. There is, however, no such phenomenon today— which science and technology have guaranteed. We can interact in society today with so many choices at your disposal. We can provide them with an e-mail, text, or call from social media outlets. Every technology is deliberately born.

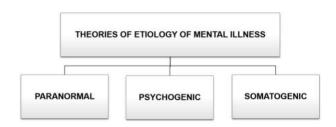
Search engines, for instance, have been designed to filter massive amounts of data online. With every new upgrade process, current systems are amplified to produce something different than before. And it's going on and on. It is no secret that many people have struggled to keep up with the lightning speed of technical evolution. The further we immerse ourselves in technology, the more it is that we want to merge physical and virtual realities together. The technical boom to travel in future involve smart headphones, intelligent homes and even clever vehicles, but this is just the start.

The analyst company Gartner expects to have more than 26 billion connected devices before 2020. Imagine the future warnings of your car about heavy traffic and the alarm clock tells you that your kitchen coffee was brewing. Think of living in a smart home in a smart town. In other words, the future is now. Or it's going to be here at least before you could hope.

#### 2.3. Mental health

Throughout history many references can be found to mental illness. Its evolution, has been cyclical rather than being direct or broad-minded. The classification of a behavior into being normal or uncharacteristic depends on the context that accompanies the behavior and therefore varies as a result of a certain period and ethos. In the ancient times, unusual behavior or that differing from the socio-cultural norms and prospects of a particular beliefs and period was used as a means of silencing or controlling certain groups or individuals. Supernatural beliefs relay mental illness to be wicked and supernatural spirits possession, divine wrath, eclipses, curses, celestial inertia or sin. Somatogenic theories describe physiological behavioral abnormalities caused by either disease, brain damage genetic inheritance, or dysfunction. Trephination is the earliest example of mental, illness's supernatural explanation.

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The view that insanity had at the time was inhumane, as they likened the mentally ill to an animal (i.e., an animalism) who could not reason, could not be self-controlled, was capable of violence without provocation, had no same physical feeling to pain or temperature, and could live short of a complaint in miserable conditions. (Restak, 2000)

As such, the best way of returning an unordered mind to purpose was believed to be imparting terror. During the late 18th century and the 19th century Western medicine between somatogenic struggled or psychogenic explications of mental illness, in general insanity, including hallucinations and paralysis which caused physical manifestations that did not appear to have any purpose. Modern treatments of mental illness are most associated with the establishment of hospitals and asylums beginning in the 16th century. Such institutions' mission was to house and confine the mentally ill, the poor, the homeless, the unemployed, and the criminal. War and economic depression produced vast numbers of undesirables and these were separated from society and sent to these institutions. In the establishment of the first psychotropic medications in mid-20th century, one can find the leading somatogenic treatment for mental illness.

Much progress has been made in the 21<sup>st</sup> century, mental health is not treated to be as much a taboo as it was before. People have started opening up about their struggles although it may be limited to the creamy layer of the society. Treating mental health is still an expensive exercise and not accessible to all.

#### 3. Inter-relationship

#### 3.1. Recreation and Technology

The infusion of technology in the late twentieth century disturbed the normal way of life of the people in that age.

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The technology has advanced even further, with new platforms taking shape in the modern age. For instance the new millennium witnessed the development of social media platforms that took the world by storm. This has resulted in people engaging online for longer hours without the need to resort to traditional methods of recreation like outdoor camping and travelling.

But the idea of leaving technology indoors is being challenged in recent years. The younger generation is so overwhelmed by technology that they fear that their technology is no more working. The millennial period has been significantly shaped by the wide-ranging infiltration of innovations in technical advance that have converted the earth into a global village. Electronic mass media is now easily reachable to many thus linking more people through contact of information. (Austin, 2018)

The millennial generation is given the gift of choice for what they can readily find in entertainment media. Social networks have brought new enthusiasm as people have easier ways to interact. The other important development is to build a smartphone, which allows for more advanced applications and offers an exciting experience with bigger screens. Anyone with a smartphone can create an endless source of entertainment and education. More new applications enable instant messaging and multimedia entertainment sharing between friends. The virtual world of social movement, however, is now part of the norm and embraces the concept of social action. For outdoor recreation and adventure, technology plays an increasingly important and important role. In addition, over the past decade, there has been a digital boom in outdoor engineering ranging from dressings to devices such as signals and protective equipment. In the field of outdoor recreation and adventure engineering played an important part in five fields: accommodation and transport, convenience, safety, interaction and information.

#### 3.1.1. The imbalance

Technologies are growing the shift towards digital society at a higher rate; furthermore, it can change the way we communicate with each other and the environment. Technologies, however, have a significant impact on sport and leisure participation. It is used as a way to provide real-time and on-demand virtual access to sport for sport fans, which in turn enables them to create personal and specific methods of interaction and sport experience. While sports require specific physical strength in the offline world, technology replaces conventional need and body skills with awareness skills. One of the sport's prolific features is that they are deeply rooted in both creating a recreational or professional community and fierce competition. Given the changes from the move to the digital from the physically demanding ("real world sports"), these two core aspects are not missing in E-Sports. Instead, both group integration and competition exist through the digital as well as the physical world. At no time in documented history have Entertainment and arts been so significant in the lives of numerous individuals. Contemporary inventions such as the internet have put approximately every individual within range of music and drama all day, at home, and outdoors. The internet has also made it probable for public to not just become spectators but also the artists themselves as they are capable of uploading their own videos on diverse websites. The future of performing arts is taking form through technology and the society itself. (Pressley, 2010)

As much as technology has promoted both art and entertainment, its effects are far reaching on the side of arts, proving to be a real obstruction to its success. Presently, recreation only means spending time on various mobile applications or video games. Outdoor movement has declined to a drastic level.

#### 3.2. Technology and Mental health

Mental and physical health of users could be influenced by technology. Too much connection may lead to psychological problems, including distraction, narcissism, instant gratifying expectations, and even depression. In addition to affecting mental health, technology can also have a negative effect on physical health that leads to vision problems, hearing loss and stress in the neck. The title of a 2012 study by the Pew Research Center Internet and American Life Project is a good summary of the present discussion of how the rapid development of techniques will impact our minds. Technology can make us restless, sometimes overwhelmed and hungry for constant entertainment. A recent book by Professor Larry Rosen of California State University, Dominguez Hills suggested that many people could today be diagnosed as an iDisorder. In an article Rosen sums up the disorder as follows: All the symptoms of psychiatric disorders are presented in an iDisorder, such as OCDs, narcissism, dependence or even ADHD, that are manifested through your use of technology or overuse. IDisorder can express itself by an obsessive need to search for text messages, a desperate desire to change your Facebook status or a quasi-addiction to iPhone apps. Regardless of whether or not changes in our behavior are classified as a disorder because of technology, the way we work is undeniably affected by it. Exactly how technology affects our psyches remains to be seen, but some changes have already begun to emerge. A recent study by high-school students was published by Professor Rosen of California State University, Dominguez Hills with a focus on how technological distractions affected the way students studied. He found that on average three minutes in a period could be optimized by pupils. The greatest responsibility for your lack in focus? The Technology. Students who appeared to "multitask" (or, rather, switch tasks frequently) or who even occasionally tracked Facebook over the 15 minutes were often bad. Students indicated that they were obsessed externally with whether anyone was trying to contact or comment about their status even without constant reminder of lights and sounds. (Dr Baldwin, 2018)

Technology has helped in treatment of mental health issues too.

Smartphone apps help people cope with anxiety and depression: Not only can mental health apps benefit patients, but they can also provide useful data to physicians, therapists, and health care informatics experts. Since people carry their phones wherever they go, the apps can collect valuable information and record valuable data. Many of these apps focus specifically on depression and anxiety disorders.

Mobile apps can also help people who struggle with addiction: Apps offer daily meditations, alcohol consumption trackers, and access to visualization exercises. Alcoholics Anonymous also has a 12-step app that follows its program's progression.

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**People Can Find Guidance through Internet-Based Support Groups:** Many people don't feel comfortable attending support groups in their hometowns. Others don't have the time during regular meeting hours. According to Lena H. Sun of The Washington Post, websites such as the Big White Wall have offered alternatives in the form of Internet support groups.

**Telehealth Could Improve Access to Mental Health Care:** In addition to apps and Internet portals, telehealth, consulting with a health care provider via phone or video conference, offers promising opportunities for health technology. (Lichtenwald, 2015)

#### 3.3. Recreation and Mental health

Exercise and recreation are key tools to encourage positive mental health. With a growing focus on supporting people who face mental health difficulties, recreational therapy programs offered in hospitals, ambulatory clinics and home health care services have expanded. More time spent in parks and green spaces can help individuals fight against mental health issues like depression, anxiety and stress. To ensure everyone has access to parks and outdoor activities is a vital way to improve the community's good health and quality of life impact. People who live more than 1 km from a green space are about 50 percent more likely to be depressed than someone who live less than 300 meters from a green space. Participants without discomfort are more than fifty percent more likely to frequent a green space than those who feel tension, at least a couple days a week. The further strain the researchers encountered, the more often green spaces were used. Several studies provide evidence that isolation from nature is dangerous to human growth, wellbeing and health. For proper mental health, frequent interaction with nature is needed. As urbanization increases across the country, it is also associated with increased levels of mental illness. Some studies show that people who live in urban areas have 20% higher risk of anxiety and 40% higher risk of mood disorders. But researchers believe outdoor recreation can reduce these risks.

Physical exercise is the cheapest and most effective healthcare intervention you can make, but your heart isn't the only one that will be thanking you. A variety of drug tests have shown that routine (trail or road racing) aerobic activity is as effective as any of the leading SSRI pharmaceutical items to relieve the effects of depression. Furthermore, exercise has proven to improve the immune system, which is gradually considered to be a cause in psychiatric illnesses such as schizophrenia. (Catherine, Karen, Susan, & Barb, 2016)

The effects of exercising for mental wellbeing have been well established and understood to alleviate depression and improve "feel good" hormones, such as dopamine. However, many people who are striving for improved health ignore the effects of spending time alone. The old adage turned out to be right: fresh air's fine for you! As the National Institutes of Health and Harvard School claim that while physical fitness, such as jogging, trail ride and walking combine the exercise and the environment for a mental health lift, only spying time in nature in all ways will enhance your mental performance and have your physical advantages. Getting outdoors and taking a stroll actually can clear our mind while also enhancing our immune system and uplifting our sense of happiness. If we can get outside regularly, we can trade periodic light therapy boxes and non-natural indoor illumination for natural light, which floods our body with vitamin D and instantly improves our mood. Just 15 minutes of natural sunshine per day is known to decrease depression and anxiety levels. Possibly even more importantly, vitamin D and all that natural sunshine helps us sleep healthier at night. A study out of the Saint Louis University School of Medicine noted that regular sunshine helps set our body's internal clocks. And the better refreshed we are, the better our mood and mental state. (Whitely, 2016)

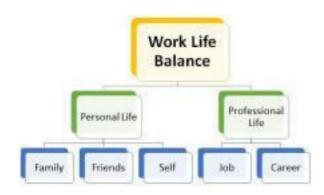
A 2010 learning also found that those who strolled outside testified higher ranks of vitality. "Nature is energy for the soul," said lead author Richard Ryan. "Often when we feel exhausted we reach for a cup of coffee, but research suggests a better way to get invigorated is to connect with nature." Other studies have shown that the existence of nature helps ward off moods of exhaustion, and that 90% of people report increased vigor when they're enjoying outdoor activities.

#### 4. Work life balance

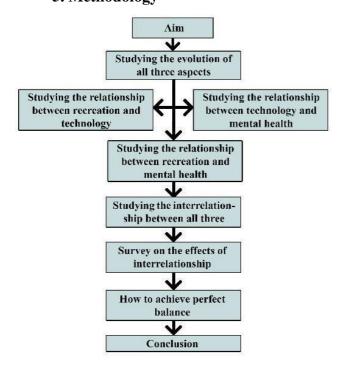
The collective effects of amplified work hours have a major impact on many people's lifestyles, which can affect their mental well-being. The Mental Health Foundation is concerned that a great number of people ignore the aspects that make them mentally resistant or resilient. One out of six of us will have a problem with mental health every week. A good work / life balance helps you to harmonize various aspects of your life, where rewards from each region will add to and strengthen the others. Integration of work-life is a new concept that enables many people to successfully mix their work and life. Years of research have shown that working for physical and mental health and well-being is usually good. The benefits of work include: a sense of meaning and purpose, providing activity and a daily structure, relationships and a sense of community and financial independence. However, some aspects of work can

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adversely affect mental health. Employment stress, remote working conditions, mental demands, a lack of effort rewards, insecurity in the workplace and lack of control can help improve mental health. Adrenalin live' can be effective only for a short period of time. It can draining our physical and mental resources if the pressures continue too long or exceed our capability to cope with the stress. Stress can negatively affect physical and mental health, friendships, education and well-being.



### 5. Methodology

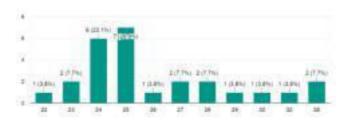


# 6. Survey on the interrelationship between recreation, technology and mental health

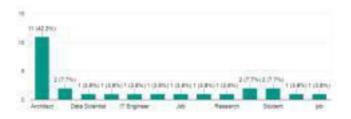
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A survey was conducted with 26 participants regarding their work life balance. The participants were from different professions and working in private and government sector and some of them were self-employed. The age of the participants ranged from twenty-two years to thirty-eight years. The aim of the survey was to determine how the working people spend their day to day lives and what the mental satisfaction level of theirs is. Following are the questions and the responses:

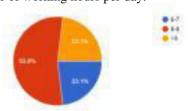
#### Age of participants:



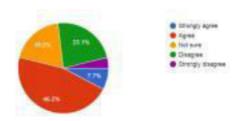
#### Profession of participants:



Number of working hours per day.



Your work schedule helps you to spend time with family and friends?



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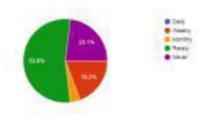
pressure. Employees are getting lesser time for leisure. Whatever little time the get they indulge in social media as it does not require energy.

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## Number of hours spent scrolling through social media on your mobile on daily basis?



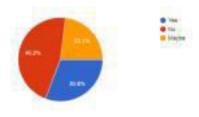
#### How often do you indulge in outdoor sports activities?



## How often do you feel strained or anxious due to use of social media?



#### Are you content with your work life equilibrium?



#### Inferences:

The participants were mostly from the private sector, working in multi-national companies as IT professionals and architects. Most of them work for 8-9 hours a day for 6 days a week. Majority of them are satisfied with their work environment. Around 1/3rd of them work overtime on a daily basis. This does not allow them to indulge in outdoor or active recreational activities. Almost all of them spend 1-2 hours on their phones surfing through social media. They often feel worried and strained due to work pressure and lack of leisure activities in their lives. Thus, in general it can be concluded that due to the increase in working hours and work

# 7. Inter relationship between recreation, technology and mental health.

#### 7.1. Effects on each other as a whole

The relationship between recreation and technology has already been established. Before the advent of technology, recreation used to be usually an outdoor activity. It was also given importance as people were more health oriented and had better work life balance. Mental health at that time was not a significant topic for people. Compared to the present times, not as much people suffered from depression and anxiety but that was due to better lifestyles and way less stress. In contrast to this the major mental issues were seen as taboo and not talked about openly. People suffering from mental health problems were shunned by society and tagged as mad or being possessed by evil. But in the present times, the notion about mental illnesses is changing for good. People have started realizing that mental health is as important, if not more, as physical health.

Recreation, technology and mental health have a proportional relationship. The increase in technology has resulted in reduced physical recreation and increased mental health issues. The decrease in recreation has resulted in mental imbalance. The increase in technology has also resulted in increase in mental health issues. On the other hand, technology is also being used to provide good treatment to mental health problems. Technology has also made it easier for people to enjoy recreational activities like sports etc., sitting in front of screens in their homes.

It has also given many new modes of recreation like mobile games, social media, internet browsing, etc. at the same time restricting the physical activity of the users leading to health issues. The increase in use of social media has also increased the level of mental stress in people. They are constantly worried about validation of pictures, posts etc. Memes have become so addictive to the youth that they spend a great amount of time in making and sharing them. This has given rise to competitive nature among the users. Therefore, it can be stated that some effects are good but in the long run, these three parameters need to be synchronized for better and healthier life.

### 7.2. How to achieve the perfect balance.

Things need to be changed right from the individual level. People need to stop giving into peer pressure. They need to find good work environments and stop stressing themselves and avoid overworking. The employers need to take care of their employees as it will also increase efficiency in their work. Various organizations have experimented with a four day working week and they observed that the productivity increased as the employees were better rested and better focused on their work. This schedule can be adopted by all employers for better achievement of targets.

People on their individual level need to stop the excess use of technology and devote their free time to more productive things like reading, playing sports etc. They need to start meditating and engaging in spiritual activities.

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Emphasis should be given to active recreation methods like participating in activities, sports, physical exercises like yoga etc. Sitting at one place the whole day and then lying down afterwards is making our bodies prone to diseases. Obesity is the result of this unhealthiness. The excessive use of technology has made people dependent on it. They no longer apply their own brain on things and depend on their phones for it.

The perfect balance can be achieved by decreasing the working hours of the employees, decreasing their use of technology and increase in their modes of active recreation. This will give them a healthy and balanced lifestyle and a good work life balance. This is necessary to achieve for the mental and physical well-being of people.

This will increase their productivity which will be fruitful for both the employer and the employee and healthy too.

#### 8. Conclusion

The aim of this dissertation was to figure out how recreation, technology and mental health are related to each other. The study of the relation between these three aspects of life has concluded that the equation between these affects our day to day lives.

Recreation and technology have both a good and bad relationship. Technology has given rise to accessible modes of recreation. People now have a wide range of options to pass their leisure time. At the same time it is making them physically unfit as they have stopped indulging in active recreation.

Same is the case with technology and mental health. On one hand technology is responsible for the increase in mental health cases. On the other hand it is being used to treat mental health patients through applications and other methods.

Recreation and mental health are so connected such that decrease in one often leads to increase in another.

The work life balance of millennials is severely hampered due to presence and absence of these three aspects. If we want our lives to be balanced and healthier we need to start working from the grassroots level.

Recreation needs to be increased, that too active recreation. Use of technology needs to be decreased. After these two are done, our mental and physical health will automatically improve.

By applying these methods, we can reduce the stress from work and instead refresh our body and minds. One important step which can be taken by employers is that the number of working days can be reduced to four days a week. Implementation has proved that it increases productivity and employees also are stress free. This will benefit the company and the employers.

Therefore, for balanced life, we need to balance recreation, technology and mental health.

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### **Biography**



Sholmaz Siddiqui is an architect who has completed her Masters in Recreational Architecture from Jamia Millia Islamia, New Delhi. She is currently involved in research projects on urban design.

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