

Internet Consumption in Young Adults

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INTRODUCTION

Since the early 2000s, the prevalence of technology has been growing every year. With addictive social media applications like Tik Tok, Instagram, Facebook etc. being so popular, internet addiction has become an issue. To follow this trend, the Annenberg Center of the University of Southern California (USC), has been conducting survey reports of digital content use since the early 2000s. In 2016 the Annenberg Center published a digital future report that stated overall internet use has increased from 67% to 92% in the U.S. alone. Internet use at home has increased from 3.3 hours to 17.6 hours per week and states more startling statistics (Lebo, 2016). In the last decade, the young adult population is most likely to be present online. According to the Pew Research Center: 93% of people ages 12-17 years old go online, as well as young adults ages 18-29 and over 74% of all adults aged 18 and over go online (Lenhart, n.d.). These statistics prove how prevalent internet use is among the U.S. and different age groups. The increase in overall use puts the population at risk for developing bad health behaviors regarding the internet and mental health issues. While not formally recognized as a diagnosis by the Diagnostic and Statistical Model (DSM), internet addiction is a serious mental health concern. Mental health affects everyday feelings, how people think and act, and helps determine how we relate to others and make choices (U.S. Department of Health & Human Services, 2001). When mental health is lacking it negatively impacts an individual's everyday life decisions. Since social media has been shown to have a strong association to negative mental health affects on its users, examining how the use of social media/internet affects adolescents' health is vital and should be a public health concern.

According to the National Survey of Children's Health, 26.9% of 12-17 year olds had one or more mental, emotional, developmental or behavioral problems (Auxier, B & Anderson, M, 2021). This is an issue because mental health concerns is among one of the top risk factors for suicide. Worldwide, 800,000 people die due to suicide making it the leading cause of death among people aged 15 to 29 (U.N. News, 2019). In the United States, suicide is also the second leading cause of death among adolescents. To combat this issue, Healthy People 2030 has an objective that is looking to increase the proportion of adolescents who speak to medical professionals in a preventative health meeting (Healthy People 2030, n.d.). By increasing this proportion it would help the interpersonal aspects of the adolescents life as well as positively

affect their healthy communication skills. Improving such relations and skills would ideally lead to less of a dependence and interest in negatively using the powerful entity that is the internet. At this time there is no specific data related to this objective. The purpose of this literature review is to examine the behavior of internet use, its impacts on interpersonal and intrapersonal relationships, apply this behavior to the Health Belief Model (HBM) and Theory of Planned Behavior (TPB) in a range of age groups including adolescents, examine its implications in communities and organizations as well as offer suggestions for intervention. The terms social media use and internet use are used interchangeably to describe activity related to using applications like instagram, tik tok, etc. while also referring to using the internet for recreational use.

THEORY

Behavior theories are especially useful when wanting to understand why people perform certain health behaviors. The most substantial change in behavior comes from a place of understanding through thorough investigation. In order to understand the impact and the effects of social media use, the Health Belief Model, and the Theory of Planned Behavior (TPB) have been used. Evaluating these theories can provide useful information on why people use social media in work related situations to procrastinate and the factors that contribute to internet addiction among secondary school students.

HEALTH BELIEF MODEL

The Health Belief Model (HBM) suggests that a person's perceived threat and susceptibility to a disease or illness in conjunction to their perceived effectiveness of possible treatment will determine whether or not they adopt a certain health behavior (Wayne, 2019). The key constructs or working variables of this theory include, perceived susceptibility, perceived severity, perceived benefits, barriers, cues to action, and self-efficacy. When evaluating internet addiction among secondary school students in Hong Kong, the HBM proved to be a good starting point to understanding the behaviors resulting in internet addiction. However, the influences of cognitions, perceived number of students suffering with internet addiction and mediating effects involved were not investigated (Wang, 2016).

The study that used the Health Belief Model to investigate internet addiction in adolescent aged students (7th-10th grade), used a cross sectional study that surveyed nearly 10,000 students across the 19 school districts that exist in Hong Kong. One school from each district was randomly selected to participate in the study. This study defined Internet Addiction to be an impulse-control disorder that has negative effects on daily life function which includes familial relationships and emotional stability (Wang, 2016). To their knowledge this was the first study applying HBM to explain internet addiction and misuse.

Perceived Susceptibility, a key construct to the HBM relating to this study was found to be that the students did not believe that internet addiction would be harmful. However, a positive relationship was found between perceived susceptibility and perceived severity with internet addiction. This study found that the difference between the two is due to the set up of the actual study design as some participants before participating had the possibility to acknowledge behaviors associated with internet addiction.

Many barriers were expressed by the participants to explain why it would be difficult to reduce this behavior. For example, students explained that without the internet, there would be social and personal consequences. Feeling bored, being disconnected from their friendships and reduced communication were among the negative effects the participants believed they would experience were they to reduce internet use. These barriers then increased their perceived benefits of participating in this behavior and caused them to continue their use of the internet. In addition, the cue to action from parents to reduce internet use, was found to be positively associated with the risk of internet use. The study recognized that there are issues with this positive association as this is an issue that is often seen when the HBM is applied to cross sectional studies, however, the results show that one third of the internet addicted cases reported they were never spoken to by their parents about their use.

Overall the study could not produce a causal relationship, but it does suggest that age and the social influences regarding that age range interact with the associations made. It was determined that further studies need to be investigated in order to make stronger claims about

age related internet addiction. This study proved that the HBM is a useful tool, but it is quite limited when used in cross sectional studies. There needs to be more research using the Health Belief Model when investigating associations related to social media and internet use.

THEORY OF PLANNED BEHAVIOR (TPB)

The Theory of Planned Behavior (TPB) is an expanded version of the Theory of Planned Action which was created in the 1980s. TPB, intends to explain all the behaviors that an individual has control over when deciding to behave a certain way. This theory is a linear way of thinking in an attempt to understand the specific relationship between a person's attitudes and their behaviors (Wayne, 2019). The key constructs in this theory include behavioral beliefs, evaluation of behavioral outcomes, normative beliefs, motivation to comply with other's beliefs, control beliefs, and perceived power. Each construct contributes to the attitudes towards a certain behavior which affects the behavioral intention and ultimately leads to whatever behavior is chosen.

When evaluating social media use as a tool to communicate personal issues related to work, the theory of planned behavior was found to be an accurate predictor of this behavior. A study conducted by the Amsterdam School of Communications, used structural equation modeling (SEM) in addition to the theory of planned behavior to determine that work related social media use is likely to take place spontaneously rather than a planned thought through action (Zonnen, 2014). When evaluating why these employees would use social media as a way to express work relational thoughts and feelings, the study found that there is a higher likelihood of the behavior to occur if the employee believes that this behavior will positively benefit their personal reputation and the reputation of their workplace. In addition, if the employer's values lined up with their corporate companies values, there was an even bigger increase in participating on social media.

This study is relevant to the public as social media influences the thoughts, actions and perceptions of the public. As the School of Communications and Helen Bouygues state, social media is a source of information and way people take social cues of how to behave. This has both a positive and negative effect as there is a risk that if an individual's perception is warped

due to social media influence it can lead to errors in judgment (Bouygues, 2019). These investigations demonstrate two sides of the multifaceted effects of social media use. The Theory of Planned Behavior study indicated that there is evidence to prove that a higher percentage of use of social media in work related situations is likely to occur if the use led to a better social image. While, on the other hand, both have responsibility in influencing the public at large, which can have good and bad effects. The study by the University of Amsterdam showed how the constructs of this theory like perceived behavioral outcome, motivation to comply and perceived power of social media use affected the likelihood or intention of the behavior.

INTERPERSONAL FACTORS

Interpersonal factors are the external influences that affect someone's behaviors. These factors include, but are not limited to family, friends and societal influence (Beiswenger, & Grolnick, W. S, 2010). Social Media and phone use also plays a huge role in how as a society people stay connected with each other. Six in ten cell owners ages 18-34 say that they have slept with their phone next to them so that they don't miss any updates from friends or family. Six percent of teens use social media, and it is an important way to interact and have conversations with peers among America's youth population (Leinhart, 2015). These statistics are examples of how integrated social media use is within social interactions and daily life of cell phone users. However, the numbers are usually higher for dependence among younger generations.

Another study from the Pew Research Center titled *Phone Attachment and Etiquette*, found that younger populations tend to want to stay connected to their notifications on their phones that way they remain connected to their social circles (Smith, 2012). In addition to friends, family also influences how much an adolescent will use social media and technology. For adolescents, their family is typically who they are around the most. A family as a whole has complex social systems, but research has found that as parents increase screen time, so do the children in the family, even if the children feel like they would like to interact with their children more. Family systems also have to battle phone addiction among its members and has a great impact on how much or how little social media and technology are used (Procentese et. al, 2019). It is apparent that the technology that provides information, communication and entertainment services are profoundly affecting the behavior of how people relate to each other.

In a recent study investigating the importance of interpersonal factors relating to social media use, the evidence is contradictory. Instead of finding a correlation between suicide and social media, some social media platforms inclined towards positive mental outcomes. This would support why many have adopted more dependence on using social media and the internet. Instagram was specifically found to offer informational support and esteem reports to its users. This study also suggested that the social support Instagram offers might be more representative of their personal support groups that they interact with physically like their friends and families. This is a possible reason as to why there is a positive correlation. Ultimately the results of the study concluded that based on the strength of interpersonal factors like personal experience and sense of online community and what social platform is used are what creates the differing mental health outcomes.

Social media platforms (SM) are increasingly beginning to act as a supplement or substitute for older forms of interpersonal communication like meeting face to face with friends and family. This study's results contradict past research findings investigating relationships between social media use and negative health outcomes like suicide. In general, people feel connected to social media due to being able to socialize with friends, family or another interpersonal factor. If there is no negative health outcome, but rather a sense of community it is reasonable to conclude that an individual would participate more in a behavior due to positive experiences (Dawes, E. et. al, 2022).

INTRAPERSONAL FACTORS

Due to the growing increase in the use of technology, using social media and the internet has become second nature and trending apps come and go and their users change. With the life of the internet constantly changing, the internal motivating factors to post and use the internet change as well. Intrapersonal factors are the internal aspects that affect a person's behavior, whereas interpersonal factors are the external influences. These factors include someone's personal beliefs, values, attitudes, knowledge as well as socioeconomic class. A person's psychological well being is also an important factor to consider. All of these aspects are what can affect the motivation behind participating in a certain behavior and these factors relating to social media use are constantly changing and vary depending on the platform. For example, digital fluency affects whether a person participated in using technology according to a study conducted

in 2018 (Liu, 2018). This study found that the participants who had digital competency that was flexible are positively associated with more social media use. That being said, the participants believed in themselves with their capability of being able to use an application that they have never used before. In a similar way of believing in personal capabilities, assuming an app is only for old people, will also affect the participation. This can be seen with the changing group of users using Facebook.

Facebook was one of the first major social media platforms and continues to have one of the most users. However, older people are typically the ones who use it the most at the moment. According to a study done in 2022, Facebook has offered a way to give feelings of autonomy and relatedness to populations older than 60-years old. Posting was also found to be associated with competence which is also related to well being. Similar to feeling the study about digital fluency, both studies demonstrated that feelings of competency positively affect someone's rate of behavior. Competency falls under the intrapersonal factor of attitude and personal beliefs in this specific example (Eun Hwa Jung & S. Shyam Sundar, 2022).

The intrapersonal factor of mental well being and self esteem also plays a large role in social media use. Studies have shown countless times how social media use could increase the likelihood of depression, anxiety, and feelings of isolation. The psychosocial interpersonal factor and social media are closely related as mentally ill adolescents are the population whose social media use is high, even though social media and technology are also ways to feel connected to friends (Keles, 2020). Yet, in a study done with girls from Saudi Arabia, the use of social media increased feelings of autonomy, but due to wanting privacy restrained their posting on the platforms. It increased the self esteem of some while others found themselves comparing themselves to others on the sites (Alruwaili, & Ku, H.-Y, 2020). Varying perspectives, but this goes to show how contradictory and varied the motivational factors can be when using social media.

Demography is an intrapersonal factor whose impact on social media use behavior is more distinguishable. Age is a demographic characteristic that shows the most stark differences in the participation of the behavior regarding social media use. Adults under thirty years old stand out for their use of Instagram, Snapchat and Tik Tok. "In a pattern consistent with past Center studies on social media use, there are some stark age differences. Some 84% of adults ages 18 to 29 say they ever use any social media sites, which is similar to the share of those ages 30 to 49

who say this (81%). By comparison, a somewhat smaller share of those ages 50 to 64 (73%) say they use social media sites, while fewer than half of those 65 and older (45%) report doing this” Age, how societal influence the individual, and varying trend factors all play an important role in the behavior of using social media (Anderson, 2021).

ORGANIZATIONAL, COMMUNITY, ENVIRONMENT, PUBLIC POLICY FACTORS

Social media is present at the individual, organizational, and community level. When evaluating social media use, it is present anywhere mobile devices, computers, or technology and available wifi is present. The fact that it is so readily available anywhere you go is its blessing and curse. However, the internet also provides online communities for people to explore their common, or less common interests. For example, Redditt is a forum website where you can follow threads of peoples questions or posts about a certain topic that is of interest. This allows for communities to be formed, similar to social media platforms, but it is more intellectual and no photo content. No matter what the person is like, whether an introvert or extrovert, online communities and internet interests keep the individual engaged with social media use and outside influences like school, affects the use social media use as well. Typically these factors increase the behavior of using social media.

The average age of people signing up for social media accounts is 12.6 years old. This result was based on a survey conducted with 1,786 parents in 2018 with kids ages 8-18 (Howard, 2018). This means most people have a social media account at around middle school age. However, the age group between the ages of 18-29 years, are the ones who tend to use social media the most. This would make sense as a person matures, there are more opportunities available to them. When it comes to online activities once you become older, posting photos, editing photos, video editing and more is more readily available for you to learn and is often learned through consuming social media. According to the Journal of Pediatrics, over 45% of the participants in the survey report being online nearly all the time, due to consuming content or engaging in their online communities, keeping up with friends, making plans or simply scrolling through. These statistics show that in a country where there are no policy restrictions on recreational internet use, the rate of usage is high (Moreno, 2021). Due to such high rates of usage, it is hard to ignore phones or devices anywhere you go. Some public schools have banned cell phone use altogether because their students were too preoccupied with their devices. This

not only shows that the institutional level restricts the ability to participate in this behavior, but also shows it is prevalent among its student population as students encourage other students to use (Chen, 2021)

In countries like Sri Lanka and the other 30 countries that have banned social media, these figures would not accurately represent the community and organizational factors that contribute to their social media use (Business Today, 2022). State, local, and national governments have censorship abilities and some take it as far as banning all social media like Sri Lanka. Since social media is so readily available and able to reach a lot of people quickly with a lot of different information it has shown to be troublesome in modern politics. Due to political protest in Sri Lanka, the country decided to restrict social media as it was feeding the fire of their social conflict. In general, social media has transformed how political participation is experienced and adds in motivational factors as to why an individual would want to use social media and post (Daniella da Silva, 2020). Social media has made it easier to participate in political debate via social media by posting graphics supporting a cause, following a cause, or getting up to date information fast about what is going on. During the Trump administration, this trend is clear and has its own controversies about issues with censorship and other internet hacking reports. Although no conclusive data is published, the internet and social media were contributing factors and up for political debate during this election.

Social media is used not only recreationally in schools, at home, while at work to procrastinate or just for fun, but it has completely transformed how our society functions. It has even affected political elections due to its impact on the people. There are many ways social media is encouraged among social circles, but also at a government and institutional level it can be restricted as well.

SUGGESTIONS FOR INTERVENTION

Social Media can be used as a creative outlet for content creators and be a way for people to connect with those who they may not have had the chance to otherwise, but its negative implications when social media is abused is hard to ignore. Internet addiction and overall abuse of screen time, isolates the person, can cause irritability from lack of stimulation and negatively impacts health, relationships and one's mental health. The factors that most impact the negative manifestation of social media and internet use include societal norms, relationships with others,

and mental health. As these factors are changeable through mindfulness and actions they should be the primary focus when considering intervention strategies. However, these factors are all large obstacles to tackle, which makes intervention strategies to treat this behavior to be tricky but not impossible.

One way the large task of challenging societal norms in relation to internet and social media use can be found through education. As the Health Belief model states, education and being knowledgeable of one's actions and their consequences aids in changing behavior. However, education is not the only thing that needs to be improved upon for long term change (Nejad, Wertheim, Greenwood, 2005). Making internet addiction improve among adolescents and adults will require individual motive, but also will rely heavily on familial and friend relationships. Based on who they are as a person and who the individual surrounds themselves with will greatly affect how effective their internet abuse treatment will be. Ideally if the family, and those around the individual seeking help has support or develops the self efficacy to reduce their social media use, the treatment will likely be more successful in reducing the dependency of using the internet.

Mental health, a changeable factor, is the factor that should be most heavily considered. Often people go on their phones out of habit to avoid awkward situations like waiting in a line or to procrastinate a stressful task. By developing better coping mechanisms to deal with anxiety and stress , it would decrease the use of phones. This can be done through getting mental health services and treatment. Mental health treatment involves specialized education and attention to the individual's needs. Cognitive Behavioral Therapy especially, helps the individual's self efficacy as it changes the way you think of your own actions and those of others. In relation to targeting one's mental health, past results from the use of cognitive behavioral theory (CBT) has proven to be effective in treating internet addiction. The founder of the Center for Internet Addiction, Dr. Kimberly Young, developed a therapy program in 1995 that proved to be effective in changing the mental blocks that contribute to internet addiction (Young, K.S. 1998).

Another mental health intervention program that has proven to be effective is a twelve-step program for internet addicts. It includes social skills training, and underlying mental health treatment that the individual may need. When done with professionals and with good

morals this kind of intervention can be useful. However, a camp that was meant to be similar to a twelve step intervention program in China has proved fatal to some participants (Stewart, 2010). This camp had no psychological professionals and were abusing the children whose parents sent them to get help with their internet usage issues. Although China poorly planned this program, a workshop for internet addicts or therapy groups similar to Alcoholics Anonymous could be useful to help individuals think through their triggers and why they are dependent on their phones and social media.

Overall, social media and internet addiction will be difficult to eradicate. Nothing has been proven to be one-hundred percent effective in solving the issue, but with a combination of mental health interventions and a group effort, progress can be made. According to Columbia University, the best way to combat this ongoing problem is to create boundaries with usage. Educating teens and people to be aware and mindful of their time online and regular emotional check ins can help combat the negative consequences of using the internet for too long. Taking breaks or even deleting the apps for a short period of time has been proven to be effective in improving one's mental state (MailMan School of Public Health, 2021). Therefore strategies should be focused towards increasing presence in life, mindfulness, and emotional regulation. At the end of the day the effect that creates the negative side effects to this behavior is emotional dysregulation, lack of exercise and physical social interaction. Applying programs that are holistic in treating the problem will suit best for successful intervention results in changing social media and internet use behavior.

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