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By

Kenzie M. Bush

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ABSTRACT

COMMUNICATION TECHNOLOGY USE AND WELL-BEING: DOES LESS SCREEN

TIME LEAD TO GREATER HAPPINESS?

by

Kenzie M. Bush

Spring 2018

Both positive and negative effects of communication technology use have been studied with contradictory findings. Some research has shown that engagement with this technology can reduce face-to-face interaction, which threatens subjective well-being. Other studies have shown that the right combination of personality traits and the amount and type of technology use can enhance well-being, to some degree. I examined the relationship between communication technology use and subjective well-being and whether participants sought face-to-face interaction when not engaged with this technology. Participants in the experimental group reduced their use of communication technology two days per week for three hours each day over a four-week period, while participants in the control group continued their regular use of communication technology. Communication technology use was defined as time engaged with any of the following devices: mobile phone, tablet, laptop or desktop computer, television, movie screen, and headphones. Participants who reduced communication technology use reported increased levels of subjective well-being. While previous research on communication technology and well-being largely focused on the negative and positive effects of engagement, the current study focused on the positive effects of disengagement with this technology. The current study did not direct participants in the experimental group to engage in alternatives to communication technology.

Communication technology use and well-being: Does less screen time lead to greater happiness?

Would you choose have a face-to-face conversation over the ease and convenience of using technology to contact friends? Sending a text message or checking in with social media takes seconds and can be done anywhere, whether at work, at home, or in the car, whereas a face-to-face conversation requires travel to see the other person and a much greater time commitment. A growing number of people are beginning to choose technology over direct human contact. In the fourth quarter of 2017, Facebook had 239 million active users in North America, while Twitter had 68 million active users in the United States (Facebook, 2017; Twitter, 2017). These numbers indicate an upward trend in the use of social media in North America in recent years. According to Pew Research, 64% of Americans have a smart phone, which is a substantial increase from the 35% reported in 2011 (Anderson, 2015). Smart phones are versatile; in many ways they are like a handheld computer. Users can call, text, search for information, and use the device as a source of entertainment by playing games or watching television or movies. Smartphone users also search for jobs, access dating apps, receive news updates, and read books (Rainie & Perrin, 2017). According to Rainie and Perrin (2017), 46% of Americans say they "couldn't live without" their smartphone. This is a change from the 54% who stated, "their cell phone is not always needed" in a 2014 survey (Rainie & Perrin, 2017). Smart phones are also used as a sole source of internet connection; people are forgoing home internet and opting for service on their mobile devices instead (Anderson, 2015; Rainie & Perrin, 2017).

How people communicate and entertain themselves has been changing since the advent of the internet and mobile communication. The available options for entertainment

are increasing. Even grocery shopping can be done from the comfort of one's home, delivered right to your door through Amazon Pantry or Wal-Mart. Because of these advances, many would argue that technology has made people's lives easier and more convenient, but at what cost?

Based on the rising popularity and versatility of communication technology, it is fair to say that technology is here to stay. What is happening to our interpersonal skills, our relationships, and our well-being when this technology is being substituted for tradition communication techniques? How can people find the balance between technology use and maintaining the benefits of the human element of communication? Most people have full, seemingly impossible schedules. Ordering groceries to be delivered to your home is convenient and therefore saves time. However, home delivery also eliminates interactions with the produce clerk, running into friends or neighbors, and conversations with the cashier. Updating social media about current events in a person's life is equally convenient; however, using social media updates can take the place of meeting friends for coffee to discuss current events. Further, communication through social media comments may not be as in depth as a reciprocal, live conversation. Additionally, reading typed messages on a screen eliminates nonverbal information like tone of voice and facial expressions, possibly leaving the reader to misconstrue or gloss over emotional content entirely. Reading comments versus speaking aloud allows for emotional meaning to be diminished and it is likely that the connection felt during traditional communication is diminished and/or lost as well.

Communication can be defined in terms of expression: verbal and nonverbal. Much of communication is nonverbal: tone of voice, facial expression, and body

language. All lend a great deal of meaning to the actual words being spoken and they provide context. Being able to gain understanding from both words and non-verbal cues is crucial to forming and strengthening the bonds between people (Goodman-Deane, et al., 2016). To demonstrate the importance of nonverbal cues, a humorous example of applying different meanings to the same words was recently provided by a television commercial for State Farm Insurance (Statefarm, 2016). The commercial features two people in opposite situations. Each uses the same words to express very different meanings. The young lady in the commercial has just received a new car from her father and is excited. The adult male discovers that his car has been vandalized and is outraged. The exact same words are used by each of them, expressing both excitement and dismay. Some of the phrases heard during the commercial included: "Is this my car?" "What?" "This is ridiculous!" When the nonverbal, emotional content is removed then either the meaning of the words, the excitement, or the outrage, could be misinterpreted. When using text messaging, email, or social media, the non-verbal portion of communication is absent and all that is left are the words. Misunderstandings can arise, conveyed emotion is diminished, and social connections can weaken.

Human beings are social creatures at heart. Humans have lived communally, bonded in monogamous relationships and formed communities throughout history. From an evolutionary standpoint, there was safety in numbers when it came to basic survival. Whether keeping warm, sharing resources, or hunting big game, people were together in groups. In modern life, social connections serve a different purpose. For example, human connectedness can increase one's sense of self-esteem, subjective well-being, and relationship satisfaction.

The bonds people form are an important part of everyday life and contribute to subjective well-being. There are two types of connections formed between people; strong bonds and weak bonds (Chan, 2014). Strong bonds are formed with the people we turn to when we need help, want support, or want to share exciting news. People we have strong bonds with are the ones we see often, understand who we are, offer support, and play an integral part in our lives. Weak bonds, by comparison, are more closely related to acquaintances. These are not relationships that are relied upon for emotional support. For example, the barista you see each morning or the person you talk to riding the bus to work are not considered people who significantly impact one's well-being. We are generally happy to see a familiar face and enjoy exchanging a few friendly words; however, we would not turn to them in a crisis. A weak bond can become a strong bond over time by developing a deeper personal connection. A deeper personal connection can be accomplished with traditional communication techniques (e.g. face-to-face interactions). However, with an over-dependence on technology for social connection, the weak bonds that form may never get the chance to transform into strong bonds. Also, strong bonds may deteriorate into weak bonds when based off of communication that is void of emotional context like those found on social media. While a person may have many on-line friends, the connection can be superficial due to the friendship being based on quick updates and only knowing a person through what they post. These two types of social bonds, weak and strong, both contribute to one's subjective well-being and both are affected by time spent interacting with technology (Chan, 2014).

Another concept to consider is the distracting nature of technology. If you are engaged with a screen of any size, your attention is not on the people or the environment

around you. It is not uncommon to be in a restaurant or coffee shop and see a table with two or more people, each focused on their phone versus interacting with each other. Meeting a friend for coffee or a meal affords the opportunity for conversation; more importantly, feeling connected to others is a means for strengthening and maintaining the social bonds. When each person is more engaged with a screen than the person across the table from them, that opportunity is missed. How much time is lost to social media, video games, information seeking, and online shopping that could be spent maintaining or developing social bonds?

Displacement theory suggests that time spent using the internet is being substituted for more social activities (Kraut et al, 1998). Further, the theory posits that if a person is engaged with a screen at home or at work, then they are not engaged in social connectedness. With less connection, there is a risk of diminished well-being. Displacement theory also hypothesizes that instead of maintaining strong bonds with face-to-face interaction, weak bonds are developed and come to replace the strong bonds (Kraut et al, 1998).

The internet usage paradox (Kraut et al., 1998; Kraut et al., 2002) is similar to the displacement hypothesis. The internet paradox is the idea that, while social technology and access to the internet could shorten time needed to complete tasks and make keeping in contact more convenient, therefore freeing up time for more social activities, this is not always the outcome. Instead, people spend more time on-line occupied by the variety of things that can be done. In fact, higher usage rates can be associated with declines in social involvement and smaller local social circles. Also, increases in loneliness and depression can be seen with higher internet usage (Kraut et al, 1998; Twenge et al, 2017).

These increases may be due to people spending more time alone on the computer and less time with others. According to Chan (2014), people have a fundamental need for affiliation, and high internet usage may hinder real life communication, leading to a replacement of strong social bonds with weak ones. With fewer strong bonds, there are fewer people to confide in, receive help from, or gain resources from. With fewer perceived strong bonds, people may not have a sense of affiliation with others, thus leading to feelings of isolation which can contribute to mental illness and decreased life satisfaction (Chan, 2014). When distracted by use or substituting internet, communication and entertainment technology for social interaction and relationship building, subjective well-being can decrease.

The advent of social media, like Facebook, was intended to rekindle old and build new social connections. However, for some, social media platforms may have been overused and the idea of more connection backfired, leading to superficial social connection. The ability to communicate well with others and form social bonds has many facets. Empathic social skills are an important part of communication and are defined as the ability to accurately encode, decode, and regulate communication with others; in other words, to accurately read and respond to the non-verbal part of communication. With good empathic social skills, social bonds can be strengthened and maintained. People are able to sense what others feel and, in turn, respond appropriately. In particular, empathy was found to be at the core of relatedness and connection with others, whereas high use of social media was found to suppress social skills and empathy (Chan, 2014; Przybylski & Weinstein, 2012). When over-using a computer to communicate and connect with others, the opportunity to read social cues is diminished, and over time, this

skill can be lost. As communication skills decrease, social isolation can increase because people tend to avoid situations which make them uncomfortable. If face-to-face interaction becomes uncomfortable or stressful, fewer opportunities for social contact will be sought. This can lead to dependence on computer-mediated communication simply because it is less stressful (Chan, 2014). People who are lonely, depressed, or believe their social skills are poor have been found to prefer internet communication and find it less threatening and more satisfying. However, an overdependence on internet communication has been shown to increase problems in other areas of life (Caplan, 2003).

Past research on the effects of technology use has largely taken an either-or stance; either technology use is beneficial or harmful to overall well-being. The results of past research have been contradictory, at best. Depending on the type of technology used, personality of the person, and specific uses, some people experience positive effects and others negative. One fact that most past research agrees on is that face-to-face communication is the gold standard when it comes to forming and maintaining social bonds.

The purpose of the current study is to determine if subjective well-being increases when time with internet, communication, and entertainment technology is reduced. Particularly, will limited use enhance well-being? The idea of eliminating technology use entirely is not realistic because technology is an increasing part of almost everyone's daily lives. Additionally, the question of whether people seek out face-to-face communication when there is an absence of these forms of technology will be examined.

Given the growing prevalence of internet, communication, and entertainment technology use, it is important to know if well-being is positively affected when all internet, communication, and entertainment devices are turned off for specific blocks of time. Considering the importance of social connectedness to happiness and that face-to-face interaction is one key to forming strong bonds, examining what people do in the absence of communication technology is important as well. If displacement theory and the internet paradox prove to be true, and people are losing close bonds because of screen-time, there could be a substantial impact on overall well-being. The answer to increased well-being could be as simple as choosing to turn devices off for a period of time. In order to better understand the connection between internet, communication, entertainment technology use, and subjective well-being, considering past research on technology use and happiness, varying types of technology use, individual differences, and existing theories surrounding this topic are a crucial first step. The current study predicted the following:

Hypothesis One: Participants who reduce internet, communication, and entertainment technology use will increase reported subjective well-being.

Hypothesis Two: Participants who reduce internet, communication, and entertainment technology use will report decreased levels of depression, anxiety, and stress levels.

Hypothesis Three: Participants who reduce internet, communication and entertainment technology use will increase face-to-face interaction.

Literature Review

The ability to form and maintain relationships is a skill that begins developing in childhood. Communication skills are a means to forming social relationships. The better a person is at communicating with others, the stronger their relationships will be. With stronger relationships, life satisfaction increases. The quality and quantity of time spent with friends are also associated with friendship satisfaction. Quality of interaction includes authenticity of conversation, level of disclosure, and emotional expression. When considering personality traits, extraversion has been found to predict more time spent with friends (quantity), higher quality interactions, and higher friendship satisfaction than other traits. High neuroticism, on the other hand, predicts lower friendship satisfaction and less time spent with friends (Wilson, Harris & Vazire, 2015). According to Chan (2014), a person's empathic social skills and life satisfaction are both affected by Facebook usage. Empathic social skills include a person's ability to encode, decode, and regulate communication with others. Possessing strong social skills enables a person to form and deepen social bonds, which ultimately leads to higher subjective well-being. Chan (2014) considered self-presentation theory and two specific personality traits (extraversion and neuroticism) when determining the positive or negative effects of Facebook as a path to relatedness. Self-presentation theory suggests that a person's goal is to either gain social approval or avoid disapproval by managing self-image in social situations. Extroverted people, by nature, are outgoing, warm, and seek to gain social approval. Neurotics, on the other hand, are fearful of social rejection, self-conscious, and seek to avoid disapproval. On one hand, a small amount of Facebook usage was found to lessen the negative effects of neuroticism on empathic social skills. It was suggested that

individuals may use Facebook as a less threatening place to practice social skills. This can be an effective strategy. People can reread what they want to say before posting and gauge the reactions of others. Once confidence is higher, the social skills are then translated to face-to-face interactions where people will have more confidence and feel less awkward. On the other hand, with a high amount of use, empathic social skills were lessened for both extroverts and introverts. It was suggested that high usage replaces real life interaction and inhibits a person's ability to exhibit empathy, which leads to social isolation, a dependency on technology enhanced communication, and lower subjective well-being. In other words, using Facebook to practice empathy and social skills was a good thing if the enhanced or learned social skills were then translated to face-to-face interaction. However, a little use can turn to a lot of use, which leads to overdependence on internet connection and, ultimately, lower levels of well-being (Chan, 2014).

Related to the idea that less socially skilled individuals may prefer online interaction, a study conducted by Ye and Lin (2015) examined locus of control, loneliness, subjective well-being, and preference for online interaction. Locus of control refers to the amount of control an individual believes they have over events that affect their lives. External locus of control indicates a belief that a person has little to no control over their lives and decisions are made based on factors outside their personal influence. These people believe life happens to them, but not because of them. Individuals with an internal locus of control believe they are the masters of their own fate and are in control of the events in their lives. They feel that, good or bad, their actions determine their futures. Preference for online interaction was defined as "a cognitive individual-difference construct characterized by beliefs that one is safer, more efficacious, more

confident, and more comfortable with online interpersonal interactions and relationships than with traditional face-to-face social activities" (Caplan, 2003 p.629). It was found that individuals with an external locus of control not only preferred online interaction but were also lonelier and had lower subjective well-being. People who reported more loneliness preferred online social interaction, as did those who reported being more unhappy. It was also found that a preference for online social interaction based on being lonely, having an external locus of control, or low subjective well-being, can lead to problematic use or an over dependence on online social interaction in lieu of face-to-face interaction. Ironically, it appears that relying on online social interaction leads to more isolation and unhappiness than face to face interaction.

With some uses of technology, social bonds can be maintained and with others, bonds can weaken, leading to a decline in well-being. In some cases, use of communication technology can have positive impacts on relationships. How people communicate has been changing since the advent of communication technology, but there is a difference between using communication technology to stay in contact with others, thus maintaining bonds, and watching television or movies, which do not foster relationship maintenance or contact with others. Hooghe and Oser (2015) found that even for people who spend a great deal of time using internet technology, a balance between use for communication with others and more solitary activities still supports social capital, which is defined as the outcome of social interaction, and includes being able to access resources via social networks. A study conducted by Chan (2015) examined the effects of mobile phone use on social capital and subjective well-being. Chan (2015) considered the effects of communicative and non-communicative use on bonding and

bridging social capital. Bridging social capital is similar to weak social ties and very close to acquaintances. Bonding social capital was defined as close social relationships (Chan, 2015). Communicative use included voice calls, text messaging, instant messaging, and social networks. Non-communicative use included activities like information seeking, apps, games, and watching television or movies for entertainment. Results of Chan's (2015) study indicated several different findings. First, different types of communication support different forms of social capital. Communicative uses for groups that have existing strong ties serve as alternative means of communication when the people are not in the same location. It was noted that bonding social capital groups already know each other well and have regular face-to-face interaction. Therefore, voice communication was a good substitute when face-to-face communication was not possible. It was also found that mobile online-communication (such as social networks or messaging) helps maintain bridging social capital because of the convenience and the fact that regular face-to-face interaction does not typically take place with weak social ties. Used correctly, online mobile communication strengthens both bonding and bridging social capital. Second, Chan (2015) found a positive correlation between voice communication and subjective well-being; however, the same correlation was not found for online communication. This was not surprising because voice communication was considered an extension of face-to-face interaction and something that happens between people who already share strong social ties. Additionally, information seeking was related to less positive affect and activities such as playing games and using apps were linked to more negative affect. Both suggest a possibility for negative emotional consequences with over-use of mobile phones for activities other than communication.

Past research has also examined the relationship between technology used for communication and both life and relationship satisfaction. In this case, relationship satisfaction was studied in place of the broader construct of subjective well-being. Again, communication technology that was used for direct communication, such as talking on the phone or video calls, was found to have a positive impact on relationship satisfaction. Face-to-face communication was still the best method for achieving and maintaining relationship satisfaction. Text messaging and instant messaging were found to be negatively associated with both life and relationship satisfaction (Goodman-Deane, et al, 2016). Different uses of communication technology have different effects of life and relationship satisfaction. Face-to-face communication is the richest form of communication and is the best method for forming and maintaining bonds, which leads to higher levels of overall satisfaction. Communication technology can be a benefit or a distraction, and face-to-face interaction is still the best means for promoting well-being (Sherman, Michikyan, & Greenfield, 2013).

Recent studies have examined changes in depressive and anxiety symptom trends since the smart phone gained market saturation in 2012 (Smith, 2017) and mobile technology use increased. Anderssen (2013) highlights increasing anxiety levels in children and adolescents, citing higher mental health services usage, more prescriptions being written, and the changing culture that has a type of "anxiety for everything" (Anderssen, 2013). Anderssen (2013) discussed a pressure filled life for adolescents; the pressure to succeed, live up to unhealthy expectations presented by celebrities, and navigating social media. Another study conducted by Twenge, Joiner, Rogers, and Martin (2017) focused on adolescents and the increases seen in depressive symptoms after 2010.

Twenge et al. (2017) examined the trends in mental health indicators and correlations between screen and non-screen time. Mental health indicators, including depressive symptoms and suicide-related outcomes, rose dramatically between 2010 and 2015. Females experienced the greatest increases in depressive symptoms, seeing an increase of 58% between 2010 and 2015. Suicide rates increased during the same time period for both males and females, but rates for females rose 65% (Twenge et al, 2017). These findings were similar between race, ethnicity, and socioeconomic status. Subjects who spent more time on screen activities were much more likely to report high depressive symptoms. Those who spent more time engaged in activities other than screen-time were much less likely to experience depressive symptoms. Non-screen activities included print media, indicating perhaps not all media has the same effect. Overall, Twenge et al. (2017) found a clear pattern linking screen time with higher levels of depression and suicide related outcomes, with females being at higher risk than males. Furthermore, it was found that teens who spend 3 hours or more per day were 34% more likely to experience one or more suicide-related outcome. Participants who used social media sites daily were 13% more likely to have high levels of depression than those who used social media less often. A clear picture can be drawn based on data from this study. As electronic device use and social media use increased, so did depression and suicide-related outcomes. Conversely, the only activities that predicted lower depression and suicide-related outcomes were face-to-face interaction, print media, and sports or exercise (Twenge et al, 2017). In the view of this study, social media and screen-time are a new risk factor to be considered, especially for female adolescents.

Other studies have focused on utilization of Facebook and depression. For example, Kross et al. (2013) examined the effects of Facebook use on subjective well-being; specifically, how people feel moment to moment and how satisfied people are with their lives. Results indicated that the more people used Facebook throughout the day, the worse they felt moment to moment. Additionally, the more participants used Facebook, the more their life satisfaction declined over time. This study found that participant use of Facebook did not increase when they felt bad already. Loneliness did predict Facebook use and decreased life satisfaction. Face-to-face interaction effects were also measured and it was found that life satisfaction increased as direct social interaction increased.

One study has examined the benefits of reducing technology use. Trombolt (2016) conducted an experiment that asked participants to take a break from Facebook for one week while the control group continued normal Facebook usage. Life satisfaction and emotional well-being both increased significantly for those NOT using Facebook for one week. The largest increases were seen in participants with the highest usage who had been envious of what they saw in other people's timelines and who randomly scrolled through. The suggestion is not that Facebook has to be eliminated in order to improve subjective well-being. Instead, changing how one uses social media may be enough (Trombolt, 2016).

In the current study, to investigate these issues, participants were asked to reduce their use of internet, communication, and entertainment technology for a specified amount of time each week. For the purposes of this study, internet, communication, and entertainment technology was defined as: mobile phones, tablet computers, laptop computers, desktop computers, televisions, movie screens, and headphones. There was

also no distinction drawn between using these devices for work purposes or for personal reasons. Any time spent engaged with the specified electronic devices was defined as time away from one-on-one activities. I hypothesized that participants who engaged in reduced usage would show decreases in reported stress levels and increases in their subjective well-being. Additionally, participants who increased face-to-face interaction would show larger increases in subjective well-being than participants who engage in other types of activities when devices were turned off.

Method

Participants

The sample was derived from the student population at Eastern Washington University. Announcements were made in several undergraduate psychology classes. Students signed up to participate on SONA where they were given an identification number to be used in order to maintain anonymity. Online signup included an information sheet about the study. Informed consent was part of the sign up process on SONA. Students also chose from six days and times to participate. Twelve SONA credits were awarded for completing the study. In some cases, participation in research was a required element of the class; in others, extra credit was awarded. In both cases, this was left to the discretion of the individual professor. The experiment was run twice to gather more participants. Both administrations were done in the exactly same manner. Overall, 85 students signed up to participate in this study. Ten were eliminated due to not completing the post-test or incorrect/unmatched identification codes. The final total of participants was seventy-five; thirty-six in the control group and thirty-nine in the experimental group. In the control group, there were nine males and twenty-seven

females. In the experimental group, there were nine males and twenty-nine females. There were sixty participants between eighteen and twenty-four; fourteen participants between twenty-five and forty-four; and one participant between forty-five and sixty-four.

Independent Variables

The independent variable in this experiment was the amount of time participants in the experimental group reduced their use of internet, communication, and entertainment technology. Each participant chose two 3-hour blocks of time each week to not use any form of internet, communication, or entertainment technology. These were defined as: mobile phone, tablet, laptop, or desktop computers, television, movie screen, and headphones. At the pre-test administration, participants in the experimental group chose a specific day and time slot for the following four weeks when they would disengage from technology use as defined above.

Dependent Variables

I used several scales to measure various types of subjective well-being. In this experiment, subjective well-being was measured with the Satisfaction With Life scale, an emotional well-being scale, and depression, anxiety, and stress level scales (see Appendix 1: Technology Use Survey Packet). These scales were used to examine and compare participants' subjective levels of well-being during the pre and post-tests. The dependent variable for hypothesis one was greater well-being, as measured by the Satisfaction with Life Scale (Diener, 1985) and Flourishing Scale (Diener, et al, 2009). The dependent variable for hypothesis two was reduced depression, anxiety and stress scores as measured by the Depression, Anxiety, and Stress scale (DASS-21) (Lovibond, P. and

Lovibond, S. 1996) and the Scale of Positive and Negative Experience (Diener, et al,

2009). The dependent variable for hypothesis three was increased face-to-face

interaction, as measured by the activity log entries made by the experimental group.

Materials / Measures

Participants were asked to complete the same survey packet for both the pre and

post-tests.

Demographics: three demographic questions were asked; age, ethnicity and

gender.

Average Daily Use of internet, communication, or entertainment technology:

Participants indicated how many hours per day they used various technology on a scale

from 0 hours to 9+ hours. Items included: instant messaging, cell phones, social media,

listening to music, email, YouTube, Netflix, information seeking, online shopping, video

games, television/movies, and other online time. The average daily use item was derived

from the Comfort Level in Interacting with Others Measure (Pierce, 2009).

Social interaction and social support: Participants indicated how frequently

(0=never to 4=daily) they have face-to-face social interaction with a variety of people in

an average month. Participants also indicated the level of support they receive (0= no

support to 3= a lot of support) from the same groups of people. These questions were

derived from the Social Capital Measure (Yiengprugsawan, et al, 2011).

Satisfaction with Life: Participants indicated their level of agreement (from 1=

strongly disagree to 7 = strongly agree) to five questions from the Satisfaction with Life

Scale (Diener, 1985). The five questions were summed to derive an overall score

indicating how satisfied participants are with their life.

Flourishing Scale: Participants indicated their level of agreement (from 1 = strongly disagree to 7 = strongly agree) with eight items from the Flourishing Scale (Diener, et al, 2009), which was developed as a compliment to measures of subjective well-being. The Flourishing Scale is a measure of the participants' perceived success in areas such as relationships, self-esteem, and optimism. The eight items are summed. High scores indicate the participant views themselves as doing well in the above areas of functioning.

Emotional Well-being: Participants indicated how often (from 1 = very rarely or never to 5 = very often or always) they experienced each of 12 feelings from the Scale of Positive and Negative Experience (Diener, et al, 2009). Scores for positive affect and negative affect can be separated by summing each separately. Additionally, the summed negative affect score can be subtracted from the summed positive affect score to provide an overall affect balance score.

Depression, Anxiety and Stress: Participants indicated the frequency (from 0 = does not apply to me to 3 = applied to me very much or most of the time) of their experiences over the last week. There are seven questions for each subscale from the Depression Anxiety and Stress Scales (DASS-21) (Lovibond, P. and Lovibond, S. 1996). Scores for depression, anxiety, and stress are determined by summing the relevant scores for each set of questions.

Personality Factors: Participants indicated their level of agreement (from 1 = disagree strongly to 5 = agree strongly) to 41 statements from the Big Five Inventory (John & Srivastava, 1999).

Activity Log: The entries into the activity log determined if the participant replaced screen time with face-to-face interaction, solitary or onlooker activities. Parten (1929) developed a classification for children's play in her dissertation. Parten's (1929) original classification included the following types of play: unoccupied, onlooker, solitary, parallel, associative, and cooperative play. Parten's (1929) initial research on children's play has been extensively studied and is a cornerstone to child behavior; however, it has yet to be applied to adult interactions. Three types of play were adopted from Parten's stages of children's play for this experiment. Face-to-face interaction is closely related to cooperative play, which Parten (1929, 1932) defined as being interested and engaged both in the people playing and the activity they are doing (Parten, 1929 & 1932; Tomlin, n.d.). Solitary activities closely resemble solitary / independent play when a child is alone and occupied with their own activities. Parten (1929, 1932) described onlooker play as being near and watching but not engaging with others. The same definition was used in this experiment; the participant was around others but not engaging.

Procedure

Participants were asked to arrive at a predetermined class room at a specific time, and were randomly divided into control and experimental groups by being given a card with either an "A" (control group) or "B" (experimental group) on it when they arrived. Each group was directed to a different room. Participants were briefed on the purpose of the study, received instructions for completing the survey packet, and were given the packet. As each participant in the control group completed their packet, they were given a reminder card with the date, time, and location of the follow-up session, and were then

released. The experimental group participants were asked to remain seated until all had

completed the survey packet. Instructions regarding limiting screen time for three hours

at a time, two days per week for the following four weeks were presented. Experimental

group participants were also given log sheets to complete during the four weeks.

Instructions on how to use the sheets to record the day, time, and activity while limiting

screen time were given both verbally and in written format. A reminder card with the

date, time, and location of the follow-up session was provided along with written

instructions for which internet, communication, and entertainment technology should be

eliminated during the following four weeks.

Results

Design and Analysis

The experiment used a two by two mixed factorial design. Participants were split

into 1) experimental group and 2) control group.

Tables One through Eight show the pairwise comparisons of the experimental

and control groups through an analysis of covariance (ANCOVA), where I tested for

main effects of the treatment effect on posttreatment scores after controlling for baseline

levels of the relevant dependent variable (the covariates). Although means were in the

expected direction, analyses did not provide support for my hypotheses, as the main

effect for treatment was not significant for any of my dependent variables. Thus, the main

effect for treatment was nonsignificant for the SWLS (p=.47), DASS Stress (p=.34),

DASS Depression (p=.12), DASS Anxiety (p=.62), SPANE Positive Affect (p=.36),

SPANE Negative Affect (p=.91), Flourishing Scale (p=.14), and trait gratitude via the

GRAT (p=.14). Although the effects for DASS Depression, flourishing, and gratitude

approached what some might call a nonsignificant trend, these effects cannot be taken to support my hypotheses. Thus, the general conclusion from my primary analyses is that my data did not provide support for my theory or hypotheses, with the caveat that the study was somewhat underpowered (i.e., given more participants and adequate statistical power, some of these effects might have been statistically significant).

Table One

SATISFACTION WITH LIFE

Pairwise Comparisons

Dependent Variable: T2SWL_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Experimental	Control	.645	.890	.471	-1.130	2.420
Control	Experimental	-.645	.890	.471	-2.420	1.130

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2SWL_Total

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	7.725	1	7.725	.524	.471	.007	.524	.110
Error	1060.444	72	14.728					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Two

DASS STRESS

Pairwise Comparisons

Dependent Variable: T2DASS_Stress_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Experimental	Control	-.797	.826	.338	-2.443	.849
Control	Experimental	.797	.826	.338	-.849	2.443

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2DASS_Stress_Total

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	11.878	1	11.878	.931	.338	.013	.931	.159
Error	918.887	72	12.762					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Three

DASS DEPRESSION

Pairwise Comparisons

Dependent Variable: T2DASS_Dep_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Experimental	Control	-1.276	.799	.115	-2.869	.317
Control	Experimental	1.276	.799	.115	-.317	2.869

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2DASS_Dep_Total

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	30.361	1	30.361	2.550	.115	.034	2.550	.351
Error	857.146	72	11.905					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Four

DASS ANXIETY

Pairwise Comparisons

Dependent Variable: T2DASS_Anx_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Experimental	Control	-.360	.723	.621	-1.802	1.083
Control	Experimental	.360	.723	.621	-1.083	1.802

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2DASS_Anx_Total

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	2.321	1	2.321	.247	.621	.004	.247	.078
Error	657.262	70	9.389					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Five

SPANE POSITIVE

Pairwise Comparisons

Dependent Variable: T2SPAN_Pos_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Experimental	Control	.604	.658	.362	-.709	1.917
Control	Experimental	-.604	.658	.362	-1.917	.709

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2SPAN_Pos_Total

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	6.615	1	6.615	.842	.362	.012	.842	.148
Error	549.820	70	7.855					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Six

SPANE NEGATIVE

Pairwise Comparisons

Dependent Variable: T2SPAN_Neg_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Experimental	Control	.087	.736	.906	-1.381	1.555
Control	Experimental	-.087	.736	.906	-1.555	1.381

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2SPAN_Neg_Total

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	.142	1	.142	.014	.906	.000	.014	.052
Error	730.984	72	10.153					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Seven

FLOURISHING

Pairwise Comparisons

Dependent Variable: T2FC_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.ᵃ	95% Confidence Interval for Differenceᵃ	
					Lower Bound	Upper Bound
Experimental	Control	1.424	.966	.145	-.502	3.350
Control	Experimental	-1.424	.966	.145	-3.350	.502

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2FC_Total

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerᵃ
Contrast	37.335	1	37.335	2.173	.145	.030	2.173	.307
Error	1219.865	71	17.181					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Table Eight

GRAT

Pairwise Comparisons

Dependent Variable: T2Grat_Total

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.a	95% Confidence Interval for Differencea	
					Lower Bound	Upper Bound
Experimental	Control	2.825	1.862	.134	-.890	6.540
Control	Experimental	-2.825	1.862	.134	-6.540	.890

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: T2Grat_Total

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powera
Contrast	143.387	1	143.387	2.302	.134	.032	2.302	.322
Error	4298.262	69	62.294					

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Discussion

Several limitations can perhaps account for these non-significant results. If the sample size had been larger and the study had more power, the results may have been significant. If was also unclear that there was an actual decrease in the experimental groups use of technology due to there not being a change in task 7 from the pre-test to the post-test. It is possible that time in the quarter could have affected self-reported scores. It is possible that students' levels of stress, anxiety, and happiness naturally rise and fall over the course of an academic quarter. The pre- and post-tests were administered four weeks apart and for a student, a lot can change from beginning to middle or end of a quarter. The Big-5 questionnaire was not administered correctly and was, therefore, unusable. Instructions for the experimental group need to be extremely clear. After the experiment was completed, it was apparent that participants had several interpretations of the instructions that were given.

Hypothesis 1 predicted that participants who reduce internet, communication, and entertainment technology use will increase reported subjective well-being. While results were not significant, perhaps owing to the low power of the study, if limitations were overcome one could speculate that consciously reducing the amount of time spent with technology may have a positive effect on subjective ratings of life satisfaction. Technology is becoming an ever present reality in most of our day to day lives. Today, there is an app for almost everything and a shortcut to many daily activities. In fact, a grocery order can be called into a store for curbside pickup. This may save time. However, phoning a grocery order in eliminates walking through the store and running into a friend, talking to the meat counter person, and having a conversation with your

cashier; all of which are social interactions that have the potential to meet our need for affiliation as humans.

If limitations were overcome, Hypothesis 2 might have shown that participants who reduced communication technology use also reported decreased levels of depression, anxiety, and stress. Perhaps taking time to engage in enjoyable activities, like going to lunch with friends, rather than engaging in screen time, allowed them to be less socially isolated. Social isolation is known to contribute to depression (American Psychiatric Association, 2013). Based on the findings of this experiment, it would seem screen time is related to depression and it is possible that social isolation is one of the contributing factors to this dynamic. Conversely, it is also possible that taking time to disengage from the constant chatter of the internet and engage in personally satisfying pastimes, like reading a good book, may also reduce reported depression levels.

Hypothesis 3 predicted that experimental group participants who reduced communication technology use would increase face-to-face interaction. This hypothesis was not supported.

Technology is an ever increasing part of all our lives. The idea of finding ways to maintain the human element in everyday life is a valid one. There are multiple directions future research could take. Adding questions to the experimental group post-test regarding their impressions of how much time they actually spend online may be useful. After the experiment was completed, several participants indicated how surprised they were by how reliant they were on technology. Many stated they had no idea how much time they spent with their phones. Exploring this idea may reveal interesting findings. Adding a third experimental condition, where participants are guided to which activities

they engage in, might be interesting. Participants could be directed to face-to-face, solitary or onlooker activities. Increasing the length of the experiment, changing the time per week without technology requirement (either increasing the length of time each day or reducing the time while increasing the number of days), and having a mid-point check-in may add valuable information. Also, a follow-up survey, administered a month after the post-test, would be a good idea. Based on how unaware people were of the amount of time spent with screens, it would be interesting to know if they continued specifically taking time away.

Trying to show that technology is either good or bad seems to be a pointless endeavor. Technology is here to stay and the applications used in daily life continue to increase. Perhaps it would be more productive for researchers and have a higher impact on people's quality of life, if the focus moved to how to maintain human connection in a technology-based society.

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Appendix 1

SONA Code: _____

Technology Use

Survey Packet

Task 1

Below are five statements that you may agree or disagree with. Using the 1 – 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

1 = Strongly disagree

2 = Disagree

3 = Slightly disagree

4 = Neither agree nor disagree

5 = Slightly agree

6 = Agree

7 = Strongly agree

_____ In most ways, my life is close to my ideal.

_____ The conditions of my life are excellent.

_____ I am satisfied with my life.

_____ So far, I have gotten the important things I want in life.

_____ If I could live my life over, I would change almost nothing.

Task 2

Below are eight statements with which you may agree or disagree. Using the 1 – 7 scale below, indicate your level of agreement with each item by indicating that response for each statement.

1 = Strongly disagree

2 = Disagree

3 = Slightly disagree

4 = Neither agree nor disagree

5 = Slightly agree

6 = Agree

7 = Strongly agree

_____ I lead a purposeful and meaningful life.

_____ My social relationships are supportive and rewarding.

_____ I am engaged and interested in my daily activities.

_____ I actively contribute to the happiness and well-being of others.

_____ I am competent and capable in the activities that are important to me.

_____ I am a good person and live a good life.

_____ I am optimistic about my future.

_____ People respect me.

Task 3

Please provide your honest feelings and beliefs about the following statements which relate
to you. There are no right or wrong answers to these statements. We would like to know
how much you feel these statements are true or not true of you. Please try to indicate your
true feelings and beliefs, as opposed to what you would like to believe. Respond to the
following statements by filling in the number in the blank provided that best represents your
real feelings. Please use the scale provided below, and please choose one number for each
statement (i.e. don't write in two numbers), and record your choice in the blank preceding
each statement.

1	2	3	4	5	6	7	8	9
I strongly disagree		I disagree somewhat		I feel neutral about the statement		I mostly agree with the statement		I strongly agree with the statement

_____ 1.   I couldn't have gotten where I am today without the help of many people.

_____ 2.   Life has been good to me.

_____ 3.   There never seems to be enough to go around and I never seem to get my
share.

_____ 4.   Oftentimes I have been overwhelmed at the beauty of nature.

_____ 5.   Although I think it's important to feel good about your accomplishments, I
think that it's also important to remember how others have contributed to
my accomplishments.

_____ 6.   I really don't think that I've gotten all the good things that I deserve in life.

_____ 7.   Every Fall I really enjoy watching the leaves change colors.

_____ 8.   Although I'm basically in control of my life, I can't help but think about all
those who have supported me and helped me along the way.

_____ 9.   I think that it's important to "Stop and smell the roses."

_____ 10.   More bad things have happened to me in my life than I deserve.

_____ 11. Because of what I've gone through in my life, I really feel like the world owes me something.

_____ 12. I think that it's important to pause often to "count my blessings."

_____ 13. I think it's important to enjoy the simple things in life.

_____ 14. I feel deeply appreciative for the things others have done for me in my life.

_____ 15. For some reason, I don't seem to get the advantages that others get.

_____ 16. I think it's important to appreciate each day that you are alive.

Task 4

Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings, using the scale below. For each item, select a number from 1 to 5, and indicate that number on the line next to the word.

1 = Very rarely or never

2 = Rarely

3 = Sometimes

4 = Often

5 = Very often or always

_____ Positive

_____ Negative

_____ Good

_____ Bad

_____ Pleasant

_____ Unpleasant

_____ Happy

_____ Sad

_____ Afraid

_____ Joyful

_____ Angry

_____ Contented

Task 5

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1 = Disagree strongly

2 = Disagree a little

3 = Neither agree nor disagree

4 = Agree a little

5 = Agree Strongly

There are no "right" or "wrong" answers. Please select the number that most closely represents you on each statement. Take your time and consider each statement carefully.

I see Myself as Someone Who...

_____1. Is talkative

_____2. Tends to find fault with others

_____3. Does a thorough job

_____4. Is depressed, blue

_____5. Is original, comes up with new ideas

_____6. Is reserved

_____7. Is helpful and unselfish with others

_____23. Tends to be lazy

_____24. Is emotionally stable, not easily upset

_____25. Is inventive

_____26. Has an assertive personality

_____27. Can be cold and aloof

_____28. Perseveres until the task is finished

_____29. Can be moody

_____8. Can be somewhat careless

_____9. Is relaxed, handles stress well

_____10. Is curious about many different things

_____11. Is full of energy

_____12. Starts quarrels with others

_____13. Is a reliable worker

_____14. Can be tense

_____15. Is ingenious, a deep thinker

_____16. Generates a lot of enthusiasm

_____17. Has a forgiving nature

_____18. Tends to be disorganized

_____19. Worries a lot

_____30. Values artistic, aesthetic experiences

_____31. Is sometimes shy, inhibited

_____32. Is considerate and kind to almost everyone

_____33. Does things efficiently

_____34. Remains calm in tense situations

_____35. Prefers work that is routine

_____36. Is outgoing, sociable

_____37. Is sometimes rude to others

_____38. Makes plans and follows through with them

_____39. Gets nervous easily

_____40. Likes to reflect, play with ideas

_____41. Has few artistic interests

Task 6

Please consider the **past week**. Then, indicate the extent to which you have experienced the following during that time using the 4-point scale below.

0 = Did not apply to me

1 = Applied to me to some degree or some of the time

2 = Applied to me to a considerable degree or a good part of the time

3 = Applied to me very much or most of the time

_____ I found it hard to wind down.

_____ I was aware of dryness of my mouth.

_____ I couldn't seem to experience any positive feeling at all.

_____ I experienced breathing difficulty.

_____ I found it difficult to work up the initiative to do things.

_____ I tended to over-react to situations.

_____ I experienced trembling (e.g., in the hands).

_____ I felt that I was using a lot of nervous energy.

_____ I was worried about situations in which I might panic and make a fool of myself.

_____ I felt that I had nothing to look forward to.

_____ I found myself getting agitated.

_____ I found it difficult to relax.

_____ I felt down-hearted and blue.

_____ I was intolerant of anything that kept me from getting on with what I was doing.

_____ I felt I was close to panic.

_____ I was unable to become enthusiastic about anything.

_____ I felt that I wasn't worth much as a person.

_____ I felt I was rather touchy.

_____ I was aware of the action of my heart in the absence of physical exertion (e.g. …).

_____ I felt scared without any good reason.

_____ I felt that life was meaningless.

Task 7

1.   On an **average day**, how much time do you spend with each of the following

(either for work or personal use):

	9+ hours	7-8 hours	5-6 hours	3-4 hours	1-2 hours	30 min	None
Instant messaging							
Cell phone (text)							
Cell phone (talk)							
Social Media							
Listen to music							
Email							
YouTube							
Netflix							
Information seeking							
Online shopping							
Video games							
Other online time							
Television/movies							

2.   Using the scale below, please indicate how frequently you have **face-to-face**

social interaction with the following in an **average month**.

0 = never

1 = very rarely

2 = a couple times per month

3 = nearly or every week

4 = daily

____ Parents or other relatives   ____ Colleagues from work/class

____ Neighbors   ____ Random people (eg: in a

                                         coffee shop or on the bus)

____ Close friends   ____ Acquaintances

3.   Please use the scale below to indicate the level of support you are getting from the

following.

0 = no support

1 = a little support

2 = some support

3 = a lot of support

____ Parents or other relatives

____ Neighbors

____ Close friends

____ Colleagues from work/class

____ Random people (eg: in a

coffee shop or on the bus)

____ Acquaintances

Task 8

1. What is your gender: ____ Male   ____ Female   ____ Other

2.   What is your age:

____ 18-24 years

____ 25-44 years

____ 45-64 years

____ 65 years and over

3.   What is your ethnicity:

____ White

____ Hispanic or Latino

____ Black or African American

____ Native American or American Indian

____ Asian / Pacific Islander

____ Other

VITA

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Summa Cum Laude

Honors and Awards

Dean's Honor List
Eastern Washington University   Spring 2013 – Spring 2015

President's Honor Roll
Spokane Falls Community College   Winter 2010 – Winter 2013

Group Membership

Western Psychological Association   November 2014 - present

Research

Graduate
Master Thesis   In progress
Communication technology use and well-being:
Does less screen time lead to greater happiness?

Undergraduate
Senior Thesis   Spring 2014
Community Based Support for At-Risk Youth
Advisor: Dr. Nick Jackson

Successful Development Research Group   Fall 2014 – Spring 2015
Happiness at EWU

Presentations

Communication Technology Use and Well-Being: Spring 2018
Does less screen time lead to greater happiness?
Western Psychological Association Conference
Portland, Oregon

Implications of Happiness   Fall 2014
Women's Studies Luncheon
Eastern Washington University

Implications of Happiness   Spring 2014
Student Research and Creative Works
Symposium
Eastern Washington University

Experience

Adapted-DBT Lead Skills Trainer
     Aacres, LLC   Spokane, WA   February 2018 – Present

- Develop Functional Skills Program staff training
- Conduct group skills classes
- Conduct individual skill review sessions
- Complete end of month progress reports for all clients
- Develop monthly outings and activities
- Coordinate with treatment teams
- Conduct monthly staff meetings / trainings
- Assist Program Coordinators with relevant plans
- Supervise Skills Trainer
- Maintain hour tracking records
- Attend quarterly and annual review meetings

Program Coordinator
     Aacres, LLC   Spokane, WA   August 2017 – February 2018

- Build strong working relationships with clients
- Complete Functional Assessments
- Complete Positive Behavior Support Plans
- Complete Individualized Instruction Support Plan
- Maintain client records

- Coordinate with DDA Case Managers
- Ongoing staff training
- Communication with guardians and family members
- Oversee medical appointments
- Attend quarterly and annual assessment meetings
- Complete incident reports, internal investigations, and RCS investigations

Instructor, Adjunct
Eastern Washington University   Cheney, WA   Fall 2016, Spring 2017, 2018

- Lifespan Development, Psychology 201
    - Prenatal development
    - Parenting styles
    - Learning styles
    - Attachment theories
    - Adolescent development / Identity formation
    - Young / middle / older adult development
    - Ongoing impact of early development
    - Methods of change throughout the lifespan

Internship, Clinical Psychology
Spokane Falls Community College   Spokane, WA   August 2016-June 2017

- Adult and Adolescent Intake Interviews
- Ongoing Weekly Treatment
- Crisis Intervention
- Suicide Assessment and Intervention
- Cognitive Behavioral Therapy
- Mindfulness Based Cognitive Therapy
- Attachment
- Life Review
- Assessments
- Progress Notes
- Psychoeducation Presentations
- Group Therapy (limited)

Peer Tutor
Spokane Falls Community College   January 2012 – March 2013

- On Campus Tutoring Center
    - Writing: English 101, 102, History, Psychology
    - Psychology
    - Study Skills
- On Line Tutoring
    - Undergraduate and graduate writing (all subjects)

Youth Program Director

Peaceful Valley Community Center   Oct 2007 – Oct 2009

- Develop after school program
- Recruit participants
- Implement homework help / tutoring
- Develop daily, full time summer program
- Coordinate fieldtrips, neighborhood activities
- Hire / supervise support staff
- Secure community support for the program