

Shahla Ali Ahmed

**THE EFFECTIVENESS OF DIGITAL ENVIRONMENT AND PERFECTIONISM
ON ANXIETY AND DEPRESSION DURING COVID-19 IN THE NORTHERN
IRAQ**

PhD/Thesis

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**NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF GUIDANCE AND PSYCHOLOGICAL COUNSELING**

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PhD/THESIS

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Approval

We certify that we have read the thesis submitted by Shahla Ali Ahmed titled “**The Effectiveness of Digital Environment and Perfectionism on Anxiety and Depression during COVID-19 in the Northern Iraq**” and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of PhD of Educational Sciences.

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Declaration

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Name and Surname of the Student

3rd /Jun/2022

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ABSTRACT

The Effectiveness of Digital Environment and Perfectionism on Anxiety and Depression during COVID-19 in the Northern Iraq

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The recent growing of digital environment especially internet and Smartphone world has had significant psychological and social effects on the population. On the other hand unexpected health crisis that last year emerged covid-19 pandemic it has a huge role in changing earth population live areas specially psychology impact. However perfectionist people and high-achieving people usually show cues of perfectionism. While, research show and elucidate the impact of this global problem on psychological health and well-being. One of the most exposed groups during any change includes student and education staff. From this perspective, this study investigated the effectiveness of digital environment and perfectionism during covid-19 on anxieties and depression. The study was mixed methods design; mixed research methodology was used. Sequential designs in explanatory design, selected qualitative sub-sample from quantitative sample data. The researcher conducted the study on a sample of 980 student and non-student smartphone and internet user for both qualitative (self-report) and quantitative (questioners) parts. The participants were selected randomly. The researcher adapted 3 different questioners for this study including the Multidimensional Perfectionism Scale to measure perfectionism characteristics, To measure depression and anxiety, adapted form of Beck Depression Inventory and Beck Anxiety Inventory .were used. On the other side the researcher designed self-report interviews for quantitative part that had 5 major questions and 10 sub-questions. The data was examined using SPSS version 22 to observe a clear picture of this thesis and used simple descriptive statistics and coding.

The results denote that digital environment is significantly correlated with multidimensional perfectionism in a low positive manner for students. However, the correlation effects for non-students significantly high as evidenced by a significant positive

correlation. With that another finding of the study suggests that there is a positive but significant correlation between perfectionism with depression and anxiety.

According to the internet use standard, participants use the internet for nearly 9 h per day, which is a significant amount of time. As a result, it is critical to raise awareness about internet risk factors for health and psychological issues it be one of the clinical implications.

Keywords: Digital environment, covid-19, multidimensional perfectionism, Anxiety, Depression

ÖZET

Kuzey Irak'ta COVID-19 Sırasında Dijital Ortam ve Mükemmeliyetçiliğin Kaygı ve Depresyon Üzerindeki Etkinliği

AHMED,Shahla

Doktora derecesi, Rehberlik ve Psikolojik Danışmanlık

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Son zamanlarda dijital ortamın özellikle internet ve akıllı telefon dünyasının büyümesi, nüfus üzerinde önemli psikolojik ve sosyal etkiler yaratmıştır. Öte yandan geçen yıl ortaya çıkan beklenmedik sağlık krizi Covid-19 pandemisi, özellikle psikolojik etkisi ile dünya nüfusunun yaşam alanlarının değişmesinde büyük rol oynamaktadır. Ancak mükemmeliyetçi insanlar ve yüksek başarılı insanlar genellikle mükemmeliyetçiliğin özellikler gösterirler. Araştırmalar, bu küresel sorunun psikolojik sağlık ve esenlik üzerindeki etkisini göstermekte ve açıklamaktadır. Herhangi bir değişiklik sırasında en çok maruz kalan gruplardan biri, öğrenci ve eğitim personelidir. Bu araştırmanın temel amacı, Covid-19 ile mücadelenin farklı aşamalarında kullanılan teknolojiyi incelemektir. Çalışmada karma araştırma yöntemi kullanılmıştır. Araştırmaya 980 öğrenci ve öğrenci olmayan akıllı telefon ve internet kullanıcısı örnekleme dahil edilmiştir. Katılımcılar rastgele seçilmiştir. Veri toplama araçları olarak mükemmeliyetçiliği ölçmek amacıyla Çok Boyutlu Mükemmeliyetçilik Ölçeği, depresyon ve anksiyete düzeylerini ölçmek için ise uyarlanmış Beck Anksiyete Envanteri ve Beck Depresyon Ölçeği kullanılmıştır. Nitel veriler araştırmacı tarafından oluşturulan, 5 ana görüşme sorusu ve 10 alt soru içeren öz-bildirim görüşme soruları kullanılarak toplanmıştır. Veriler, bu tezin net bir resmini görmek için SPSS versiyon 22 kullanılarak incelendi ve basit tanımlayıcı istatistikler ve kodlamalar kullanıldı.

Sonuçlar, dijital ortamın çok boyutlu mükemmeliyetçilik ile öğrenciler için düşük düzeyde olumlu bir şekilde önemli ölçüde ilişkili olduğunu göstermektedir. Bununla birlikte, öğrenci olmayanlar için korelasyon etkileri, anlamlı bir pozitif korelasyonla kanıtlandığı gibi, önemli ölçüde yüksektir. Bununla birlikte, çalışmanın bir diğer bulgusu, mükemmeliyetçilik ile depresyon ve kaygı arasında pozitif fakat anlamlı bir ilişki olduğunu düşündürmektedir.

İnternet kullanım standardına göre, katılımcılar interneti günde yaklaşık 9 saat kullanıyor ki bu da önemli bir süre. Sonuç olarak, sağlık ve psikolojik sorunlar için internet risk faktörleri hakkında farkındalık yaratmak kritik öneme sahiptir, bunun klinik sonuçlarından biridir.

Anahtar Kelimeler: Dijital ortam, covid-19, çok boyutlu mükemmeliyetçilik, Kaygı, Depresyon

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LIST OF ABBREVIATIONS

QUAN: Quantitative

QUAL: Qualitative

AHDH: Attention Deific Hyperactivity Disorder

SPSS: Statistical Package for Social Sciences

SPMs: Social Personality Models

WHO: World Health Organization

APA: American Psychological Association

GAD: General Anxiety Disorder

SAD: Social Anxiety Disorder

OCD: Obsessive compulsive Disorder

PSU: Problematic Mobile Phone User

CBT: Cognitive-Behavior Therapy

BAI: Beck Anxiety Inventory

BDI: Beck Depression Inventory

MPS: Multidimensional Perfectionism Scale

FFT: Five factor Theory

PS: Perfectionist Strivings

PC: Perfectionist Concerns

CHAPTER I

Introduction

This chapter deliberates on the profound insights of the research. Include the problem of the statement that highlights the need for this research and develops an objective of the study. The second part of the chapter discusses the significance of the study and limitation of the study.

Statement of the Problem

The planet has undergone a severe ordeal over the last year. That COVID-19 pandemic came as a surprise. It spread rapidly throughout the globe and caused a lot of worries, fear, and anxiety. There has been a noticeable change in the lives of millions of people across the planet. One of the most challenging situations faced by the world in the past two years is the COVID-19 pandemic. The lives of people have entirely changed due to social isolation, and there are consequences for this both psychological and technical. Concerning social and psychological well-being, Increased depression, stress, and anxiety are now associated with significant psychiatric consequences. According to one of the study that done in Iraq by Lafta & Mawlood, (2022) indicated that the symptoms of depression and anxiety in time of COVID-19 are prevalent, out of the total sample (1,000), 389 had a history of infection with COVID-19. The main mental symptoms reported were depression (67.8%), and anxiety (46.9%), males and females equally reported symptoms of anxiety, while depressive symptoms were reported more among females (59.9%), Fear and worries of the participants about their health and their families' was the main reason for mental symptoms (94.7%).while, The Iraq's ministry of Education is responsible for the education of her population. It monitors the work of universities. Over 20% of her annual budget goes to the education sector. In federal Iraq, there are 35 public universities, and 45 private universities. There are currently a total of 115,000 students enrolled in the 13 public universities and 11 private universities of the Kurdistan Region. About 850,000 students are enrolled in undergraduate and graduate programs in federal Iraq (exclusive of the IKR). (Iraq - Country Commercial Guide, 2021). In Iraq, there was little or no extant registered data on the psychological consequence and health anxiety per se in the public during the

peak of communicable disease outbreak such as H1N1 in 2009. Thus, the current study aims to address the paucity of these data as an estimation of the mental health burden during this universal outbreak of COVID-19. Since the government took rigorous lockdown measures to contain the epidemic, positive trends have been seen. Total curfew started from March 17, 2020, to the partial lifting on April 26 with keeping airport closures extended. On February 24, the first coronavirus case was reported, and the first death was on March 4, 2020. However, the total was 1761 confirmed cases and 1224 recovered by April 26, 2020, extended (Iraq Government, 2020). Therefore, in this exceptional circumstance, the researchers adopted the aim of recognition of health anxiety among a sample of the Iraqi population during the COVID-19 pandemic. With that there is some basic point that researcher chose Iraq as population and Sulaymaniyah as sample researcher was having enough information about Iraq. Also Iraq was not developed country and there is lack of enough study about psychology state during crisis and pandemics. While Iraq one of those country that death rate was high among covid-19 patients. On the other hand young generation in Iraq spend their times in social media. According to those points researcher decided to choose Iraq to collect enough data. The anti-epidemic measures implementation, the lockdown, in particular, and its effect on social contacts and day-to-day activities, have caused feelings of isolation, harmful misuse of alcohol and drugs, and depression to rise. Social networks and the mass media also greatly influence fears. The head of the United Nations (UN) highlighted psychological issues such as isolation and depression in a video message as "being the greatest causes of unhappiness today" (Iancheva, Rogaleva, GarcíaMas & Olmedilla, 2020). Nine out of ten people have internet access at home (Ofcom, 2018), and wearable technology such as fitness trackers is owned by 20% of households. Portability is one of the essential aspects of a digital environment, and wearable technology can be designed and taken anywhere a person goes. (Chayko, 2017). A significant issue for modern society is smartphone dependence different kinds of undesirable consequences like dissimilar social and psychiatric issues may come about because of it (Demirci, Akgönül & Akpınar, 2015 and Enez Darcin, Noyan, Nurmedov, Yılmaz, & Dilbaz, 2015). The diverse applications of digital interventions and their potential effect on medical care, worldwide distribution of psychological therapies, and clinical services are taken into account around the same time (Abdullah, Matthews, Frank, Doherty, Gay, & Choudhury, 2016). Perfectionism as a concept is complicated because, in

addition to its different functional effects, it is also multidimensional. Positive outcomes are linked to some of its facets. However, with negative consequences, others can be associated (Macedo, Maeques & Pereir, 2014). Perfectionism exposes anyone to experience depression and anxiety, numerous studies have shown (Blankstein & Dunkley, 2002). How objectively one judges themselves when anticipated results are not accomplished is a critical link between depression and maladaptive perfectionism. Therefore, the fundamental approach is to find the effectiveness of the digital environment and perfectionism on depression and anxiety, use the digital environment and perfectionism as a suitable way to stop both the disorder and its prevalence, and also aid the psychological treatment disorder. The prospects for organizations and individuals to involve with these technologies in a wellness-promoting and more cooperative manner and the opportunities for new research are highlighted (Lattie, 2019).

COVID-19

A worldwide pandemic that poses a health crisis that is daunting for everyone is the COVID-19 pandemic; as people attempt to deal with their stressors, life interruptions, and fears, worries are being expressed about an unresolved mental health crisis. Coronavirus disease (COVID-19) and its continuing outcomes concern the global community. Various disciplines such as health care, agriculture, economy, the global market, human health, and industries will be impacted. Concern has also been expressed over the pandemic's psychosocial and psychological health outcomes by the World Health Organization (WHO). New processes of containing the pandemic, such as quarantine and self-isolation, have disrupted regular routines, livelihoods, and activities, and this may lead to a spike in depression, self-harm, loneliness, insomnia, suicidal behavior, anxiety, and harmful drug and alcohol use, it has been speculated (World Health Organization, 2020c). In Iraq, during the COVID-19 pandemic, nearly half of the respondents have health anxiety, among the 1591 Iraqi respondents, 788 (49.5%) accounted for having health anxiety over the current home restriction situation. Younger ages experienced more COVID-19-related health anxiety compared to older ages. Females reported higher health anxiety compared to males (57.7% vs. 42.3%). The health care professionals reported 20.9% health anxiety. The Iraqi southern population displayed more health anxiety compared to the northern and middle portions. These works showed about half of the respondents were spending over 60 min focusing on

news of COVID-19. We found that 80 to 90% carrying out preventive efforts and home quarantine against COVID-19 infection. Interestingly, participants experienced fear from the risk of COVID-19 infection, whether more or equal to a level of war scare, in 70.1% of the sample (Karim et al, 2020). The recent Indian Psychiatric Society survey displays a noticeable 20% rise in mental diseases. When the virus outbreak showed up in India (Loiwal, 2020), the mental well-being of the inhabitants internationally will be impacted, plus an upsurge at the time of self-harm, depression, and suicide, as well as the COVID-19 symptoms reported globally as a result of the pandemic mental health professionals and psychologists, have speculated (Li, Yang, Liu, Zhao, Zhang, Zhang, Cheung & Xiang, 2020; Moukaddam & Shah, 2020; Yao, Chen & Xu, 2020). Large population groups guess the likelihood of evolving neurotic conditions like obsessive-compulsive disorders (OCD) and generalized anxiety disorder. A significant population group globally may be affected by overemphasis on continuous hand washing (for twenty seconds), given that individuals are unaware of how often and when washing is needed. In such a case, many individuals wash their hands regularly (Times of India, 2020). In several nations, citizens hoard essential items due to anxieties, contributing to shortages. The jobs of millions of people have been lost. The worse hit is those people in the unorganized and informal sectors, since they have difficulties with their livelihoods, somewhere to stay, and food, which has caused insecurity, causing suicide, self-destruction, depression, and so on. To break the chain of transmission, lockdown is an essential strategy. However, monotony and boredom among children and office goers have also developed (Kumar & Nayar, 2020). Intriguingly, in this era of social media, the Coronavirus pandemic has another feature; gossip and misrepresentation that are not genuine and confirmed are overloading the people. Alongside a rapid and frequent influx of news stories regarding an outbreak, speculation and negative information create anxiety, tension, and panic. Many people in India have been exposed to those affected by the pandemic or others at risk and those who traveled abroad. Owing to social isolation and social stigma, though, they are not stepping in order to be tested because of the fear and terror of isolation, being taken away from one's family members, and blame.

A timely emergence of a clear impact of public health issues on the public's MH during the epidemic period can be provided using social media data (Li, Wang, Xue, Zhao & Zhu, 2020). The media, though, may also have detrimental effects on the MH of

individuals. Research has found that more than 80 percent (95 percent CI 80.9 percent -83.1 percent) of members reported being constantly exposed to social media. (Gao, Zheng, & Jia, 2020). Moreover, in users who were regularly exposed, elevated probabilities of anxiety and a mixture of anxiety and depression were found (Gao, Zheng, & Jia, 2020). A significant number of people with a higher level of anxiety was found among people who accessed the latest news about the spreading of the pandemic on social media and other platforms, a study conducted in Iran has found (Moghanibashi, 2020). The concern is also the panic and distress caused by the easy accessibility of the information to the public through several media or "infodemia". This type of distress may be minimized by filtering and screening fake information and encouraging truthful information through cooperation between practitioners from diverse backgrounds. Gao, Zheng, & Jia,(2020). MH programs are also recommended to be disseminated across multiple platforms, including internet consultations, hotlines, outpatient consultations, and online courses regarding symptoms of anxiety and depression (Gao, Zheng, & Jia, 2020). The increase of publicity for psychological counseling and reporting the epidemic's progress should be the aim of the media. (Tian, Li, Tian, Yang & Shao, 2020).

Situations such as the global health pandemic, on the other hand, are daunting for all, those with existing mental health problems, most especially. The implication that raised perfectionism is linked with various psychiatric problems, for instance, various disorders (i.e., depression and anxiety), is another fact for most perfectionists that creates the pandemic, particularly stimulating (Hewitt et al., 2017).

One of the most insightful problems facing people associated with the practice of physical isolation is loneliness. People who usually isolate themselves physically will feel a sense of connection with other people or identify ways of trying to get in connection with others. Because of this, the term "physical isolation" is preferred to "social isolation ".A strong impact on many perfectionists will be had by any condition that facilitates the sense of aloneness and isolation of people who struggle with the pressure of being perfect. The perfectionism social disconnection model has growing support, and the link between the interpersonal forms of perfectionism with loneliness has seen growing evidence (Hewitt et al., 2018; Sherry, Mackinnon, & Gautreau, 2016).

Perfectionism is an approach to life that makes failures and stressors distressing and aversive but likely to happen. (Hewitt, Flett, & Mikail, 2017, p. 1). This illustrates the significance of the current working hypothesis. At the best of times, that is known as perfectionism is troublesome, but at the worst of times, it is incredibly problematic, and arguably, for billions of people, right now is the worst of times. Lives are at risk, and life is restricted.

The COVID-19 pandemic, of course, has caused certain conditions that have dramatically raised anxiety and stress among people worldwide. We are in a time of considerable perceived uncontrollability and uncertainty, as stated by (Flett and Zangeneh, 2020) while attempting to deal with changes in living conditions and fears of safety. To avoid the virus transmission, the practice of communal and physical separation contributes to feelings of isolation, loneliness, and disconnection. More importantly, goal-motivated actions and daily routines are seriously disturbed, which is not only alarming. With typical sources of personal worth and personal needs, it can also be highly dissonant, and the sense of identity and self may be impaired. Seeing it as confined in a state that cannot be escaped and a situation that can make individuals feel like they have been limited in one way of showing the impact of the current pandemic situation we would add; there is a helpless feeling caused by this sense of trapped with no end in sight, for the near future, at least. However, it follows that some perfectionists right now should be in a very awkward state of anxiety, and most of them do not feel psychologically and physically safe. Perfectionism may also be adopted as a technique intended to make a messy and uncontrollable situation look more controllable and less chaotic. That perfectionists are significantly over-represented among those worried individuals and anxious because of the pandemic and the circumstance in which they discover themselves, it is likely; There is a feeling of compulsion to get some measure of control felt by some of these people, although while required to remain isolated, here is likely no understandable way to reduce anxiety or develop a sense of control without exposing oneself and others to potential harm. (Flett & Hewitt, 2020).

Digital Environment

The cause of the problem is technology, some perceive. Another assumption is that the problematic dispositions that people already possess are what technology shows. Technology is allowed to interfere with their own lives by some people; however, others can get back to their economic, social, academic, or family activities and know when to turn off a device. While witnessing a person checking text messages or Facebook at the dinner table, some individuals take offense; some do not consider such activity uncommon. In other words, not everyone reacts in the same way to the technology environment (Yamamoto, 2015). Whether they are print, mobile devices, computers, or electronic media and cameras, media and technologies have always been used by humans to build the environment in which they form their relationships and lives. Portability is one of the essential aspects of a digital world, which can be designed and taken along wherever a person goes (Chayko, 2017).

In the new era, digital technology dramatically influences how we live. Furthermore, our system faces immense obstacles in terms of mental well-being. Although there is a broadly stable rate of lasting and severe mental disease in the population, there is a global opportunity. People worldwide suffer from mental health issues, and many of them face difficulties in obtaining care and assistance (Cotton, 2019).

There is an increasing number of people that uses cell phone technologies to deliver real-time support and psychological interventions, according to Menon, Rajan & Sarkar (2017). It has resulted in an unprecedented increase of people in the number of apps. More than 10,000 of them, one-fifth of them have some psychological health disorder related; of those mentioned above, 18% focused on peripheral issues like substance use, appetite, sleep, and relaxation, while 6% can be employed to analyze some core mental health issue (Donker, Petrie, Proudfoot, Clarke, Birch & Christensen, 2013; Tomlinson, Rotheram-Borus, Swartz & Tsai, 2013). Thus harnessing a lot of the apps available to promote mental health is possible. Their impact has been felt in most mental healthcare delivery domains, including tracking treatment results for people with conjoint mental disorders and real-time symptom monitoring.

A portable tool that can perform several responsibilities at different events is a smartphone. Smartphones have occupied a special place in our lives at an astonishing pace, with many powerful features. Smartphones have definitely made our lives much more accessible. However, when it is misused, it could also bring many issues. Smartphone addiction is no longer a new construct nowadays. (Billieux, 2012). A definition that applies to it is incapacity to illustrate one's smartphone use, which ultimately affects day-to-day life.

The mental health issues of psychological treatment were undergoing a fundamental transformation. These transformations were directed due to the overall abundance of "digital technology," which means mobile devices, computers, the internet, and other portable application software (also known as apps). Numerous digital intercessions reflect their possible influence on clinical services, clinical practice, and the worldwide distribution of psychological treatments (Abdullah et al., 2016).

The increase in personal computing technology usage and social media has concurrently occurred with an increase in adult teenagers showing mental health signs. An individual might wrongly deduce that all types of these instruments were not healthy (Lattie, Lipson & Eisenberg, 2019). There have been proposals that high levels of connectivity related to most of these instruments joined with a decline in quantity and quality of direct social connections. These highly contribute to teenagers' experiential increase in distress (Twenge, 2017; Alter, 2017). In contrast, numerous researchers reported that the period used on many social media platforms was related to poor mental health (Lin, 2016; Woods & Scott, 2016). Recently, a laborious investigation of 3 massive data sets revealed that the relationship between adolescent well-being and personal computing technology usage reveals negative results. It is clarified using a maximum of 0.4% variations in well-being (Orben & Przybylski, 2019). Additionally, these findings were correlational and therefore may not proclaim causality. Before regarding social media as unavoidably leading to poor mental health, it could be essential to differentiate between unhealthy and healthy utilization of social media, e.g., specific indications propose that Facebook usage is damaging to mental health only while passive-viewing of someone's posts disagreeing with serious vigorous engagement in social sites (Verduyn, 2015).

Although misuse tends to have many mental health detriments, there are several prospects for treating mental illness and enhancing mental health with the same technologies. To say that social media and smartphone use are inherently wrong will be irresponsible. They act as avenues to link people to new social support networks and as a pathway to maintain the connection with their current networks of social support. Avenues for maintaining and establishing social connections and making personal disclosures are increasingly seen on social media platforms like Instagram and Facebook (Moreno, Jelenchick, Egan, Cox, Young & Gannon, 2011; Andalibi, Öztürk, & Forte, 2017).

Social media means numerous internet-based networks that allow people to communicate visually and orally with others (Carr et al., 2015). At least 92% of adolescents are involved in social media, according to the Pew Research Centre (2015). Teenagers from the age group 13 to 17 were described by (Lenhart et al., 2015). As powerful operators of social media operators, plus 58% taking access to a tablet device also more than 85% having access to a computer. Nearly seventy-five percent of teenagers aged 15 to 17 apply smartphones. Also, 68% of adolescents aged 13 to 14 use smartphones (Pew Research Centre, 2015).

The World Wide Web has become a vital portion of the contemporary lifestyle, attracting magnificent development regarding working and living flexibilities. Though many disadvantages related to internet browsing related to medicine and communal issues, presently, the debate of whether internet connections, specifically those relating to online societies, affect behavior and support or induce pathological thinking (Morrison & Gore, 2010).

Despite speculation by the media, what is not yet apparent is whether depressive symptoms can be associated with excessive internet usage. More than a decade ago, the correlation between depression and internet addiction (IA) was first proposed when a correlation between high levels of internet addiction (IA) and depression as measured by the internet obsession test (IAT) and Beck depression inventory (BDI) respectively was reported by (Young, 1998).

It is without a doubt that smartphones make our lives massively more effortless and convenient however they are incredibly addictive also: While engaging in other activities such as learning, cycling, driving, crossing the road, in social events, and even while sleeping, individuals frequently abuse the smartphone (Gutiérrez, 2016). Various physiological problems may be triggered by this prolonged use, such as poor concentration, loss of pleasure or interest, unhappy mood, disturbed appetite or sleep, low energy, suicidal ideation, and feelings of low self-worth or guilt (World Health Organization, 2017). There is an actual suicide rate contributing to the approximately 340 million people worldwide who suffer from depression (Greden, 2001). While, Social anxiety and social phobia appeared as autonomous forecasters of mobile addiction in a survey of 276 African Americans (Lee, 2015). However, discover different forms of mental disorders associated with excessive smartphone use. (Cha & Seo, 2018).

The addiction to smartphone use is more likely for those with mood or instability disorder. It is believed that smartphone addiction is linked closely to psychological well-being, of which depression is a general indicator. A correlation between these two variables has been reported by most studies, all of which were performed in unique populations (Demirci et al.,2015). Mental disorders, trait anxiety, and state anxiety were appraised by a smartphone study to be closely linked with excessive smartphone use instead of more moderate use (Yoo, You, Yoon, Kim, Kim & Lee et al.,2012). However, a correlation between depression, sleep quality, and anxiety has not been found with smartphone overuse or addiction (Song, 2010) in the UK, as per the Mental Health Foundation.

Symptoms like loss of desire or interest, low dynamism, feelings of low self-confidence or guilt, disturbed appetite or sleep, poor concentration, and unhappy mood are experienced by people with depression. Two common disorders that are prevalent worldwide are anxiety and depressive disorders. It is estimated that depression affects about 300 million people, the equivalent of 4.4% of the worldwide population (World Health Organization, 2017). One's behavioral and mental status is not only affected by smartphone usage. It is speculated that smartphone addiction is also more likely for those with mood disorders (Zhang, Chen & Lee, 2014).

This connection has not been proven by any study, though several studies have been done on the topic. It has been discovered that smartphone addiction is related to multiple psychological and physical problems, as demonstrated in various studies between different age groups that tested this relationship. One research, for instance, showed that those with isolation, social anxiety, depression, and diverse mobile uses relative to others. (Wei & Lo, 2006). There were fewer text messages and outgoing calls from social anxiety than those without it (Wei & Lo, 2006). High levels of mobile addiction have been associated with isolation, shyness, depression, and low self-esteem. (Bian & Leung, 2015).

Furthermore, various mental health conditions, such as depression and an elevated risk of anomalous anxiety, are closely associated with prolonged smartphone use (Lee, 2016). The positive correlations between smartphone addiction (SA) and internet addiction (IA) with anxiety and depression have been widely documented in the psychological aspect. (Ko, 2012). The role of life satisfaction and empathy in both IA and SA was indicated in a recent study. (Lachmann, 2018). Numerous studies have also established a progressive correlation between anxiety, despair, and Internet addiction (IA) regarding psychopathology. (Ostovar, 2016). New research has also identified a link between anxiety, depression, and the frequency of smartphone use. (Demirci et al., 2015).

According to Hwang (2012), psychological health issues, such as depression and anxiety, can be triggered by smartphone addiction, causing disruptions to hobbies, satisfying relationships, and physical and mental well-being. Problematic internet use strongly correlates to computer self-efficacy, loneliness, and depression by studies (Ceyhan & Ceyhan, 2008). Researchers have shown compulsive internet use to have potentially detrimental effects on adolescents' views (Roberts & Good, 2010) and such cognitive progressions as being lost in thought. (Caplan, 2010). Besides its adverse impact on job performance, academic achievement, and intimate relationships.

Perfectionism

Perfectionism is a trait where individuals have an illogical or unrealistic conviction about their world and themselves. The perfectionist assumes that all attempts in life must be without error or mistake and that they and their world must be perfect (Koroush & Afra, 2012). To the research component, the dimensions of perfectionism should be added that

represent the inter-personal, inner-personal, and social multi-aspect nature of perfectionism (Sherry et al., 2009). Socially approved perfectionism, self-oriented perfectionism, and other-oriented perfectionism have been specified as three of such dimensions by Hewitt also Flett (1991) To obtain approval. The socially prescribed perfectionism is exerted such that the individual feels required to follow the requirements and understand the standards prescribed by the essential individuals. A tendency to dwell on performance imperfections and deficiencies and create an unrealistic metric for oneself, which is also defined by detailed self-controlling, is associated with self-directed perfectionism. Other-oriented perfectionism is the inclination to evaluate other people and have extreme expectations critically. Perfectionist individual traits can be referred to as frustration, anxiety about making mistakes, ambition, and fear of disapproval from others, and anxiety and depression.

It is not only multidimensional but also has diverse functional effects. The concept of perfectionism is complex. A number of its features are associated with negative consequences, whereas others are linked to positive outcomes. (Macedo, Maeques & Pereir, 2014). As a personality trait, perfectionism is described by an individual setting competitive high-performance standards and striving for flawlessness, followed by concerns regarding the evaluations made by others and overly critical self-evaluations. (Yong and Stoeber, 2012). It is a multifaceted trait that could be manifested in adaptive or maladaptive ways and has negative and positive aspects. (Flett and Hewitt, 2002). According to (Frost, Marten, Lahart & Rosenblate, 1999), there are six facets of perfectionism: organization, concerns about actions, parental disapproval, parental aspirations, personal values, and worry over failures. According to these authors, using a dimensional approach, the facets of perfectionism from several instruments are combined to form two independent dimensions of perfectionism: (a) perfectionistic strivings (PS) and (b) perfectionistic concerns (PC). PS is a dimension that comprises those facets of perfectionism that capture perfectionistic personal standards and self-oriented striving for perfection. This dimension has been associated with positive characteristics, processes, and outcomes such as higher levels of extroversion, conscientiousness, endurance, positive affect, satisfaction with life, active coping styles, achievement, academic performance, perceived social support, and lower levels of external control, depression, suicidal ideation, self-blame, and perceived hassles.

Stoeber & Otto (2006), the aspects of perfectionism from several instruments are merged, according to these authors, using a dimensional approach, to shape two distinct perfectionism dimensions: (a) perfectionist strivings (PS) and (b) perfectionist concerns (PC). A dimension that encompasses those aspects of perfectionism that captures a perfectionist's self-oriented pursuit of perfection and personal standards is PS. Positive characteristics, practices, and effects such as thoroughness, positive affect, life satisfaction, higher stages of extroversion, endurance, successful coping strategies, success, perceived social support, academic success, relatively lower control levels, perceived hassles, suicidal ideation, depression, and self-blame have been associated with this dimension. (Stoeber & Janssen, 2011). Gordon Flett (2004) offered a variety of questions so that the patterns that begin to indicate maladaptive perfectionism will have light shed on them.

- (1) Either you want something "just right" to do, or you do not want it.
- (2) Long after other people have left, you can continue with a job.
- (3) You are very self-conscious about making mistakes in front of other people.
- (4) You demand perfection from others.
- (5) If asking may be interpreted as a mistake or failure, you would not ask for help.
- (6) You are highly competitive and cannot bear doing worse than others.
- (7) You are highly mindful of the demands and expectations of other people.
- (8) You are a faultfinder who must correct others.
- (9) In the title of this list, you found the error (Flett, 2004).
- (10) You do not stop thinking about your error.

In developing the adaptability of the individual behavior, research on perfectionism has comprehensive coverage and progress throughout the 20th century. It has grown into a simple multidimensional model, over time, with many distinct forms. A Multidimensional Perfectionism Scale (MPS) was introduced by Hewitt and Flett (Frost et al., 1990) that

divides perfectionism into three forms: self-oriented, socially approved, and other-oriented. Individuals either concentrate on avoiding social criticism to appease others or participate in behavior for them. These dimensions differentiate between the motivations for perfectionist behavior, not between maladaptive or adaptive types of perfectionism. The emphasis of other multidimensional models is to divide behavior into groups. Frost et al., (1990) state that perfectionism was categorized (across different facets of life, such as parental disapproval, professional values, doubts about actions, concern over errors, organization, and parental aspirations. While different aspects of perfectionism appear to be measured by these two multidimensional models, these two models were analyzed by (Frost et al., 1990), and two essential factor loadings were found. Different elements represent the adaptive facets of perfectionism; For instance, the first factor consists of the classes of personal standards, self-oriented perfectionism, other-oriented perfectionism, and organization. The second factor is the maladaptive facets of perfectionism, consisting of socially approved perfectionism, parental expectations, worry over errors, parental criticisms, and suspicions about actions (Ram, 2005).

A significant risk factor for depression and anxiety is perfectionism, numerous studies have shown (Blankstein, 2002). When expected objectives are not attained, how critically one evaluates oneself is a critical connection between depression and maladaptive perfectionism. They can be characterized as "clinically important perfectionists" when people with the personality type of the maladaptive perfectionist display patterns of anxiety about errors and persistent concerns about their actions (Lundh, 20018). Clinically significant perfectionism renders individuals change their ways of thinking reluctant and vulnerable to depression. Despite the adverse effect on their quality of life of the pursuit of perfectionism nevertheless, high achievement can be fostered by perfectionist personality types (Shafran & Egan, 2010)

These people are depressed because they view themselves as inept, and they become depressed and disappointed when they do not achieve their objectives. A common and severe disease characterized by an apparent disorder in the mood is depression, and it has a prevalence rate of up to %25 (Sadock, 2003). There are perfectionism dimensions that comprehensive reviews have a significant part in various anxiety, mood, and eating disorders (Egan, 2011). A subscale containing the suspicions regarding activities,

maladaptive perfectionism dimensions also, anxiety over faults after regulating towards depression also anxiety correlated considerably with the Penn State Worry Questionnaire (PSWQ) findings (Meyer, 1990), found a study using a sample of college students (Stoerber & Joormann, 2001), after monitoring for social anxiety, depression and experiential averting, a second study (Santanello & Gardner, 2007) discovered that there is a significant correlation with PSWQ and the section of the exact perfectionism dimensions. The worry dimensions of state anxiety and autonomic arousal have substantial significant correlations of the variables, namely Self-oriented perfectionism and socially prescribed perfectionism, a student sample has found (Flett, Hewitt, Endler, & Tassone, 1994).

Increased psychological distress is often what people associate with perfectionism, findings from a qualitative study of the significance of perfectionism indicate (Rice, Bair, Castro, Cohen & Hood, 2003). There have also been six significant findings for intermediaries of attainment striving-anxious symptom-logy affiliation in the 15 studies discussed. A characteristic of those with high personal standards of perfectionism is that they tend to have perfectionist cognitions and increased contingent self-worth and may overrate their responsibility and the cost and probability of adverse events. A rise in anxiety symptoms can be associated with a contribution of these features, which may be further compounded by poor social support and moderators of life stress. However, some of the literature examined indicated either no association between anxiety or the striving for achievement or a negative link between the two (Burgess & DiBartolo, 2015).

Perfectionism was psychologically recommended as the best indicator of depression in the Hewitt and Flett model (Sherry, Hewitt & Flett, 2003). Other studies, however, suggest that self-oriented perfectionism, which entails unrelenting self-criticism and exceptionally high personal expectations, is often closely associated with elevated depression rates (Blatt, 1995). Perfectionism has also been recognized as a trans-diagnostic mechanism that triggers and retains multiple manifestations of psychopathology, including schizophrenia, anxiety, and even eating ailments (Egan, Wade & Shafran, 2011). Results often show that communally prearranged perfectionism, suspicions regarding action, and worry over errors damage psychological well-being due to strong favorable correlations with stress, anxiety, and depression (Smith, Sherry, Rnic, Saklofske, Enns & Gralnick, 2016). Wheeler and colleagues found that those with panic disorder or obsessive-

compulsive disorder (OCD) had lower scores of maladaptive perfectionism than those with a social anxiety disorder (SAD) (Wheeler, Blankstein & Antony, 2011).

An association between anxiety and socially prescribed perfectionism research has shown (Klibert, 2005). Perfectionists are usually anxious and self-critical, a report by Johnson & Slaney (1996) found. It has been accepted for a long time that there is a connection between anxiety and perfectionism (Horney, 1951). A wide range of personal adjustment problems has been associated with this perfectionism, including suicide (Sherry, Hewitt & Flett, 2003), depression (Flett, Hewitt & Endler, 1994), and anxiety disorders (Antony, Purdon, Huta, Richard & Swinson, 1998).

Apart from the goals and unrealistic standards, maladaptive perfectionists usually fail in their efforts, and as a result, they experience a sense of inadequacy, depression, and anxiety. (Sherry, MacKinnon, Fossum, Antony, Stewart, Sherry & Mushquash, 2013). And (Stoeber, Schneider, Hussain & Matthews, 2014). There are generally thought to be two components to perfectionism which are the personal and interpersonal components that are correlated with different elements, for example, endorsement of irrational beliefs, suicide ideation, depression, personality disorder, and anxiety (Vargahan, Gharraee, Kazem, Vahid & Habibi, 2014) and (Handley, Egan, Kane & Rees, 2014).

Anxiety and Depression

Depressive symptoms from the DSM-5 comprise major depressive disorder, premenstrual dysphoric disorder, chronic depressive disorder, substance/drug-caused depressive disorder, disorderly temper deregulation, and those depressive disorders due to other medical conditions.

The presence of an empty, irritable, or sad mood is the common characteristic of these conditions that, along with somatic symptoms and specific cognitive, leads to impairment in functioning or significant distress and anxiety. The DSM-5 Diagnostic and Statistical Manual of Mental Disorders recognize disorders that include panic syndrome, specific phobia, separation anxiety syndrome, and generalized anxiety syndrome. Anxiety syndrome incited by substances/drugs, agoraphobia, selective mutism, and disorder in anxiety due to another medical condition. Characteristics of excessive anxiety and fear

correlated with behavioral alterations are something all the disorders share. The stimulus, internal or external, causes out of proportion fear response in anxiety disorders that cause significant impairment of functioning or intense distress (Maina, Mauri & Rossi, 2016).

The term anxiety has a wide variety of meanings. As a state, it can be described as worry and uncertainty, which lasts longer than fear, distressing and unpleasant expectations, and premonition, wherefrom either a person's internal conflicts or a person's environment feelings of vulnerability originate, and this may lead to considerable somatic and psychological changes. (Eric, & Strah, 1972). The anxiety model of Spielberger differentiates general anxiety from state anxiety - anxiety as a trait. A consciously perceived condition of worry and fear, which is subjective, can be triggered by a threat and is linked to heightened alertness of the autonomic nervous system or by an internal or external stimulus observed as a danger is State anxiety (Spielberger, 1989). Anxiety is a feature characterized by a predisposition to respond to everyday situations more intensely than the state requires scientifically and to perceive as frightening situations that are objectively harmless. The interaction model of Endler (1991) also differentiates state anxiety, and trait anxiety yet supposes their multidimensionality. We looked at anxiety as a trait in this report. In understanding the normal or pathological functioning of personality, understanding anxiety is essential. Researchers have found, among other things, a positive correlation between depression and anxiety (Vulic-Prtoric & Macuka, 2004) and a negative relationship between self-respect and anxiety (Anlelkovic, 2008).

One of the most prevalent psychiatric conditions is major depressive disorder (MDD), with a prevalence rate of 16.2% in the United States of America (Kessler, Berglund, Demler, Jin, Koretz & Marianas, 2003). It is one of the world's top three causes of disease burden causes, and it is one of the major disability effects in the world (Lopez, Mathers, Ezzati, Jamison & Murray, 2006). As specified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), about 60 percent of individuals who meet MDD criteria (American Psychiatric Association, 2013) report moderate or extremely severe functional disorder (Kessler et al., 2003) that significantly undermines self-care and independent living ability, producing a sum score by combining the severity scores of several different symptoms, the severity of MDD is regularly measured. Baseline values for these sum scores are typically used to classify individuals as not depressed or depressed.

The presumption that all symptoms are equally good indicators and interchangeable and that depression is a single condition results in the collapsing of individuals with varying symptoms into one undifferentiated category and gives rise to the practice of calculating sum scores. This review shows that this popular practice discards valuable knowledge on individual symptoms that can offer substantial insights from their analysis.

Nine symptoms characterize MDD in the DSM-5: 1. fatigue or energy loss 2. Decrease or increase in either appetite or weight 3. Psychomotor retardation or agitation 4. Feelings of inappropriate guilt or worthlessness 5. Recurrent suicidal ideation or recurrent thoughts of death 6. Depressed mood 7. Hypersomnia or insomnia 8. Markedly diminished interest or pleasure 9—diminished ability to concentrate or think. An individual must show five or more symptoms to qualify for the diagnosis; either a depressive mood or anhedonia must be one; there are sub symptoms in all except the first (e.g., pleasure or diminished interest). Furthermore, three symptoms: problems with appetite/weight, psychomotor problems, and issues with sleep— comprise opposite characteristics (appetite/weight loss vs. gain; agitation vs. psychomotor retardation; insomnia vs. hypersomnia). The consequence is that about 1,000 distinct symptom variations are all suitable for an MDD diagnosis. (Fried & Nesse, 2015).

Depression has a diverse effect that causes disability globally, a study by the World Health Organization says (Friedrich, 2017). Depression first occurs during adolescence for many people (Merikangas, Cui, Kattan, Carlson, Youngstrom & Angst, 2012) between 24 and 10 years (Sawyer, 2018). while approaching the age of 18 years, approximately one in five adolescents will suffer a depressive episode (Lewinsohn, 1993), a variety of adverse effects, including lower academic achievement, social dysfunction, substance misuse, low levels of school attendance, anxiety, poor sleep, diabetes, sociality, and metabolic syndrome, are associated with earlier onset (Johnson, 2018). The foundations are set for a smooth transition into the different roles of adulthood, including the period of life when job productivity peaks as adolescents develop. As a young person, developing depression may adversely affect social, psychological, educational, emotional, and occupational pathways into adulthood, with profound consequences for societies, families, individuals, and the economy (Lund & Cois, 2018).

There has been a minimal emphasis on targeting major mental disorders such as mania, chronic depression, stress, and anxiety. Around 25% of all people are affected by mental disorders. It is essential to note. Furthermore, individuals of all ages and societies, and countries are affected by these disorders due to their universal nature. The impact imposed indirectly or directly affects the quality of life of families and individuals and the economy is tremendous, according to the World Health Organization (WHO, 2012).

For individuals afflicted by mental disorders, widespread computing tools and techniques may have a positive effect since instructing patients on managing and understanding early warning signals on their own is a viable strategy. However, to effectively understand this new form of therapy, patients and clinicians require ongoing assistance in the objective and prompt identification of early warning signs. Ubiquitous computing technologies can play a vital function (Arnrich, 2013).

Psychological disorders' environmental risk factors also play a significant role in twin studies (Kendler, Prescott, Myers & Neale, 2003). The modest, proven impact of the non-genetic risk factors identified to date has hindered research. Adverse risk-related circumstances such as early childhood neglect, crime, poverty, and stress are more robust for depression, anxiety, and drug use disorders, where environmental risk factors are more prevalent (Patel & Kleinman 2003).

Adolescents' daily lives have become intertwined with Social Networking Services (SNSs). For example, on Instagram, Facebook, and Snapchat, 89 percent of US teenagers reported that their social media use ranges from many times a day to constant (Anderson & Jian, 2018), a Pew Research survey indicates. On average 15-16 year old boys spend about 4 h 22 min online per day in Finland (Smahel, MacHackova, Mascheroni, Dedkova, Staksrud, Olafsson & Hasebrink, 2020). Worries are there that the high degree of connectivity provided by social platform sites and the time used on them by adolescents negatively affects their psycho-social well-being and can make them susceptible to depressive symptoms. (Twenge, Haidt, Joiner & Campbell, 2020), in this age group, there is a dramatic increase in reported rates of depressive symptoms that have been indicated by recent studies (Keyes, Gary, O'Malley, Hamilton & Schulenberg, 2019). However, social

media's role in these increases is a source of disagreement— It could be causally unrelated or either be a cause or a consequence.

Meanwhile, in numerous studies, perfectionism is a significant risk factor for depression and anxiety (Blank stein & Dunkley, 2002). The opportunities for new studies in this field are also highlighted. Perfectionism on anxiety and depression among internet and smartphone users and the digital environment's effectiveness are the concepts this research aims to describe. In this fashion, the research will support people to solve these challenges and sustain a healthy life.

Research Gap

People pass difficult time on 2020 because of covid-19 it was a challenging and full of stress time and full of stress because this new version of Sars-covid-2, this covid-19 dramatically affect people live. Changed busy and crowd world to empty and silent place everything was close people see outside from windows and obtained information about world from media and TV. Normal environment changed to digital environment. On the other side there protection circle that people want to stay on this cycle to save his or her live and loved live. So according to the above explanation there is three factors that affect people live and psychological state. Digitalization and the use of emerging technologies have accelerated and effective than before while The COVID-19 pandemic has amplified the urgency to create conditions which effectively use digital solutions for virtual work and commerce. It is fundamental to fine the significance effect of this variables and changes on people psychology especially anxiety and depression because both were common disorder in the world and both were more targeted by pandemic and crisis. This study was developed to answer those question that relate to this topic and effectiveness of independent variables on depend variables among most important generation that basic of society young generation smartphone and internet user.

The objective of the study

Through Covid-19 on anxiety and depression, this research will address the effectiveness of the digital environment and perfectionism. The use of an explanatory mixed method design will be made to ensure a transparent follow-up system on the data obtained

through the quantitative section. It will require the gathering of qualitative data subsequently concerning the quantitative section. In the study's first quantitative phase, data will be collected to analyze the digital environment and perfectionism effectiveness and its relation to depression and anxiety throughout coronavirus by the questioner's instruments. The second phase, the qualitative phase, will be conducted to better our understanding of perfectionism during covid-19 on anxiety and depression and the effectiveness of the digital environment. The effectiveness of this exploratory follow-up will be explored by using semi-structured interviews with smartphone and internet users in northern Iraq, furthermore to have a better analysis and understanding of how perfectionism and the digital environment are effective in the course of coronavirus is the reason for the exploratory follow-up. This investigation aims to examine perfectionism on psychological disorders (anxiety and depression) and the effectiveness of the digital environment during coronavirus COVID-19.

The goal would therefore be to answer the following research questions:

1-The effect of demographic information like (hours spent on the internet and duration that using the internet and smartphone, age, education level, and gender) will be investigated.

2- Is there a substantial correlation between perfectionism, depression, anxiety, and the digital environment during the covid-19 pandemic?

Research Questions

- Is there the significant effect of gender on digital environment usage, anxiety, and depression?
- Is there the significant relationship between the following variables age and digital environment usage, anxiety, and depression?
- Is there a Location effect on Digital education, perfectionism, and mental health?
- Is there a significant difference in Multidimensional perfectionism in terms of hours they spend in the digital environment?

- Is there a significant relationship between digital environments and perfectionism with Anxiety and Depression?
- Is there a significant relation between perfectionism with Anxiety and Depression during the coronavirus?
- Is there the significant level of Anxiety and Depression among Internet and smartphone user in the course of COVID-19
- Does the digital environment have a role to play between covid-19 and mental health?
- Does multidimensional perfectionism have a role to play between covid-19 and mental health?
- What are the views of internet and smartphone users about the effectiveness of the digital environment on Anxiety and Depression during Covid-19?
- What are the views of internet and Smartphone users about the influence of perfectionism in the time of corona-virus?
- What are the views of internet and Smartphone users about the digital environment through covid-19?
- How does perfectionism influence anxiety and depression during Covid-19?
- What are the views of internet and Smartphone users about the relation between digital environments, perfectionism, and Anxiety and Depression during covid-19?

The correlation between qualitative results and quantitative results?

The observations come from quantitative data follow-up to the qualitative explanatory data with quantitative instrument data results in digital environments and perfectionism on Anxiety and Depression.

Significance of the Study

This research is both qualitative and quantitative. The focus of this research is the illustration and observation of commonly prevailing psychological disorders and the analysis of the effectiveness of perfectionism and digital environments during covid-19 on depression and anxiety. Throughout the time pandemic, the study will address the effectiveness of the digital environments and perfectionism. It will also examine the most efficient of the two independent variables to overcome these challenges that we face in coronavirus in the mental health area. The findings contribute to the particular area of research by adding to the existing body of literature.

Furthermore, solutions for overcoming mental disorders like anxiety and depression, prevalent amongst the digital generation, especially throughout the covid-19 crisis, will be suggested. Therefore, for coronavirus, the effectiveness of digital environments and perfectionism on depression and anxiety must be discussed, how to reduce psychological issues that we often tend to neglect as individuals and handle independent factors that are suitable. Individuals can be helped to build more sustainable and positive healthy lives in a digital environment by using technology and overcoming these challenges by this. It will allow individuals to enjoy the process of socialization and also improve psychological well-being. It would also allow people to understand how we manage psychological disorders using technology such as smartphones and how they can be controlled. World Health Organization (2017), there is a quite number of researches pointing out the severe mental illness of the young age group. According to Bloch (2016), in most developed countries like Canada, the UK, and the United States, cases of young people who are suffering from suicide ideation, anxiety, and depression than years ago. Paik & Sanchagrin (2013) Furthermore, more damage is noticeable in the people through loneliness that causes eating disorders and other related diseases that are more dominant in these years than in previous years. So it is essential to discover the factors that lead to an increase in the level of psychological disorder, especially (Depression and anxiety) on the other side, there is perfectionism.

Moreover, an increase in perfectionism has a traceable positive explanation for the increase in psychopathology occurrence. There is a link between the increase of

perfectionism and the rise of psychopathology caused by the effects of perfectionism that impose effects on a variety of disorders (Flett & Hewitt, 2002). The digital environment prevails commonly among the young generation. Moreover, during covid-19 all, the thing was dramatically changed. Thus, all public places were closed, quarantining was started, airports were closed, and at the top of this entire pandemic was a different feeling of fear. So people stay at home and lock down everything. No work and communication make people sad and depressed (Mirahmadizadeh et al. 1 2020).

They have mentioned that lack of human interaction with others has a tremendous negative effect on the well-being of people because of boredom and loneliness. In addition, it is necessary to focus on this psychological disorder (anxiety and depression). On the other side, perfectionism is one of the personality characteristics. People who face psychological problems deal with internal and external pressures and quickly suffer from distress, anger, dissatisfaction, blame, sadness, and embarrassment (Oros et al., 2017). Some scholars have testified that a person with maladaptive extents of perfectionism is correlated to psychopathological syndromes such as hopelessness (Lozano et al., 2015). Anxiety disorders (Scott et al., 2014), .so it is vital to care about this problem in our society, especially among students and internet users, to avoid psychological and social effects. Secondly, Thus, there is a need to address this subject among the young generation because they are the power of society; those who are in a perfectionism situation try to better their lives, so it is important to support and encourage them to stay healthy psychologically and they are the power of society also they are the basic unit for next-generation In this paper, will investigate the role digital environment in anxiety and depression levels of young adults student and non-student diving deep into current psychological research as well as user mixed research that can explain why this technology is so pervasive. It is almost impossible to escape social media platforms, thus making their negative effects unavoidable. Intend to heighten awareness of the issues presented to young adults according to young adults.

Limitation of the Study

One of the drawbacks is that this study did not include cross sectional design, which means that there was no reported information about pervious or current treatments (both

medications (pharmacological and psychotherapeutic session), while standardized instruments have been adapted, we do not have psychometrics and validation's specific information. Lack of ample information about methods of treatment (like psychotherapeutic, psychopharmacological) that are Limitations of the Study necessary for those who participated and did not. Psychotherapy is a critical component of the COVID-19 crisis response. As psychotherapists, we are especially able to discuss the psychological consequences of social isolation, job loss, fear of infection, and grieving with our patients. It is both our privilege and job to assist patients who are experiencing huge life changes as a result of the pandemic, assisting them in coping with the chaos that has been foisted upon us all. They may be seen, heard, and remembered when they are with us (Swartz, 2020). On the other hand, in the pharmacologic treatment of panic disorder, selective serotonin reuptake inhibitors (SSRIs), and benzodiazepines (BZs) are beneficial to panic disorder (PD) (Quagliato et al., 2019). The research is restricted only to smartphone and internet users and, thus, during COVID-19, the result cannot be extended across all the population of the digital environment. The research mentions and reflects on fear and depression two psychological disorders among all psychological disorder that can be experienced by individuals as a side effect of COVID-19. Participants may also hesitate to discuss their psychological state, which may impact the study's outcomes and findings. The effect of the digital environment and perfectionism has been analyzed based on anxiety and depression levels during COVID-19 pandemic. This means that the aim of the study has been attained and recommendation were stated here. The following recommendation can be made on the study findings: Most importantly, an urgent investigation is required to investigate technical applications throughout the post-pandemic instead of throughout the early stages of the pandemic.

Strengths of the Study

A large sample size and analyzing big qualitative data with 980 participants by using coding from thematic approach are one of the strengths of this study. The method design for this study is both qualitative and quantitative. Explanatory design consists of gathering statistical information using quantitative data and qualitative data to explain the variable and combine with statistics collected from quantitative and qualitative analysis (Creswell, 2011). With that, choosing the education sector as the part of the population that

has been the most affected and most involved in this pandemic. When the entire world was shut down, they were doing the most work online; they try to deal with a new way of teaching learning-distance education.

Contribution of the study

This study makes several contributions to the literature. First, this study adds to the relatively small amount of psychology research that examines whether environmental change can effect or change psychological states especially anxiety and depression. while it is the first large scale study to investigate the effectiveness of digital environment on Anxiety and depression during corona pandemic. Second, the results of this study help provide a better understanding of the importance of managing perfectionism characterizes in reducing psychological problem. Here as previous research provides evidence that perfectionism can target depression and anxiety, this study reveals that such decisions also result from the desire to decrease the hours of Internet user among new generation. This investigation supplements the vast body of fundamental analysis research that identifies a set of variables that improves valuation the effectiveness of perfectionism on psychological states. Finally, evidence of certain firms that there a mild mood disturbance among student. So this gives opportunity to focus on this problem among students. Finally, study approach is distinct from similar studies looking at the relation between crisis and pandemic and psychological states. Therefore, these results imply that further tests are needed to determine whether these symptoms appeared to be mostly panic-related, autonomic, neurophysiologic-related, or subjective, both the students and non-students responded by suggesting that there is a relationship between digital environments, perfectionism, and anxiety and depression during COVID-19.

Definition Key Terms

Perfectionism: In psychology, perfectionism is the personality style described by the critical self-assessments and reservations about the judgments of others and the concern of an individual to seek faultlessness and perfection. (Yong and Stoeber, 2012).

Coronavirus: (COVID-19) is a group of respirational infection-causing viruses. COVID-19 is a respiratory tract septicity caused by SARS-CoV-2, a recently emerging

coronavirus first acknowledged in Wuhan, China, in December 2019 (International Planned Parenthood Federation (IPPF), 2020).

Anxiety: Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may also have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat. (APA, 2022).

Digital environments: data environments in which the World Wide Web or associated innovative applications have filtered. , In specific settings that facilitate the exploration and search for persons, documents, and services (Haase, Jacquelyn, Burkell & Rubin, 2015).

Depression: An everyday depressed mood mental disorder characterized by reduced focus, diminished motivation, lack of excitement or pleasure, sleep or appetite disturbance, and feelings of guilt or poor self-worth (World Health Organization, 2012).

CHAPTER II

LITERATURE REVIEW

This chapter consists of the existing literature and previous research on the topic. The assessment of the existing literature is fundamental to the significance of this study and helps determine future implications. This chapter also provides a background of the theoretical framework.

Theoretical framework

The word perfectionism is inclined to be one-dimensional and deliberated perfectionism to associate with maladaptive. For instance, initial views curtail from the cognitive-behavioral therapist, including Albert Ellis (1958), contributed by defining the word perfectionism as:

Many scholars like Ellis (1958) and Missildine (1963) provided a different definition of the word perfectionism that was suggested that it develops in reaction to reliant parental approval. In most cases, offspring develops a sense of perfection when things are done perfectly according to the dictates of the situation. Anything less than perfection causes someone to feel worthless.

Features that constitute the idea of perfectionism in the context of isolation and combination. Perfectionism develops negative outcomes in trying to achieve a set standard within a stipulated period due to intense pressure exerted on individuals to produce a specific aspect of perfectionism.

Hamachek's (1978) dual conceptualization of perfectionism

Hamachek (1978) suggested some essential concepts of perfectionists as usual and neurotic. In another sense, the latter states that perfectionist is ideally a system of striving for unrealistic and unattainable goals that involve self-critics in evaluating even a tiny performance error as a deserving punitive system. (Hamachek, 1978). Furthermore, there is an element of overgeneralization of mistakes that causes a feeling of worthless (Hewitt et al.,1991). Moreover, neurotic perfectionist forces one to be in an unhealthy situation caused by a fear of failure and creates unexpected intense pressure to achieve the standard to avoid performance errors (Hall, 2006). Due to the on-going process, neurotic perfectionists face

many incapacitating outcomes critically analysed by other theorists (Hollender, 1965). Projection is related to a perfectionist, believing that an individual has to strive for a high standard while maintaining self-esteem. In other words, their set standard is measured based on their limitations and strengths.

Models of Perfectionism

The model of perfectionism was developed by Frost et al. (1990) in a quest to analyse variables associated with human behaviour. Frost and colleagues' research and suggestion on usual perfectionism are more similar to Hamacheks, 1978 neurotic perfectionism. Frost et al. 1990 reiterate that the element of meeting a set standard of performance as an individual involves a system of self-evaluation of one own behaviour, and the incapacitating outcomes were drawn from critical evaluation of individuals rather than meeting set standards. Perfectionist involves a high standard of results obtained, accompanied by tendencies of overly critical behavioural evaluations. Moreover, the assumption of the setting of high standards was rejected by scholars by giving a different approach that compares those who are highly successful against perfectionist individuals. According to Frost et al. 1978 approach, the concept of a perfectionist is considered a dysfunctional construct.

The Multidimensional Perfectionism Scale (MPS-F) was developed by Frost and colleagues with 35 items and contained six subscales more aligned with their investigation of perfectionism. The approach involves parents having expectations and criticism that are perceived to be more demanding and imperfection as they involve a punitive and controlling system. Furthermore, doubts must be considered because the outcomes show that the results will never be satisfying. Another doubt is that the intended results can never be achieved perfectly (Frost et al., 1990).

Multidimensional Approach to Perfectionism

Hewitt and Flett (1991, 2004) depict the different dimensions of perfectionism that consists of intra-individual and inter-individual focus. The approach shared the same features as the historical definitions of the word perfectionism. The author's conceptual analysis avoids including the previously discussed maladaptive and adaptive perfectionism elements.

The initiative assertion suggested by Hewitt and Flett (1991) on the dimensions of perfectionism has a self-oriented approach with an intra-personal focus. Intra-personal focus involves the capacity and capability of individuals to enhance self-worth as dependent on the set standard for self –perfectionists and consists of the accountability in self-criticism in performance and self-blame when a mistake or error is incurred (Hewitt & Flett, 1991). The interpersonal dimension in perfectionism involves the aspect of social beliefs in setting high individual standards that are not attainable and unrealistic, and an individual critical evaluation is carried away. (Hewitt & Flett, 1991). Socially prescribed perfectionists have a detrimental effect on individuals by evaluating whether individuals are motivated with the performance as their self-esteem and worth are dependent on the social approval of others (Campbell & Di Paula, 2002).

The third dimension consists of other-oriented perfectionism that involves the element of interpersonal focus that points out individual approval when perfection is achieved, including punitive and strict evaluation of an individual's performance. (Hewitt & Flett, 1991). Moreover, all three dimensions mentioned above have become incapacitating and dysfunctional systems of destabilizing one's health (Hewitt and Flett, 1991).

Furthermore, from an analysis of the previous findings on the perfectionism dimension, other-oriented perfectionism consists of fear of failure that causes dissatisfaction in individuals (Flett et al. 1992) and nervousness disarrays, pressure, and paranoia (Hewitt & Flett, 2004). Other-oriented perfectionism is noted as contrariwise concomitant with thoughtfulness and directly related to meticulousness in students (Stoeber, 2014a). Meanwhile, Stoeber (2014a, 2014b) studied the correlation between the two construct interpersonal relationships and other-oriented perfectionism. A multiple regression analysis depicts all the harmful human torture, ill-treatment, and inhuman concept of mistreating people and the selfishness of individualism orientation.

According to Hewitt et al. (1991), socially prescribed perfectionism has diverse effects on individuals. The same authors, Hewitt et al. (2002), highlighted that socially prescribed perfectionism is associated with negative behavioral concepts that are maladaptive behaviors in nature. The dimension is known to be associated with anxiety, stress, and depression. Detrimental effects are caused by socially prescribed perfectionism that is negative and affects the self-esteem of individuals and dissatisfaction (Stoeber &

Childs, 2010), (Campbell & Di Paula, 2002). Moreover, the two-dimension other-oriented perfectionism and socially prescribed perfectionism reinforced the incapacitating nature, and more authors are debating self-oriented perfectionism (Flett & Hewitt, 2006).

Authors like Flett & Hewitt (2006) and Hewitt et al. (1991) supported the assertion that self-oriented perfectionism is characterized by maladaptive and some scholars recognized it as healthy. Frost et al. (1993), the above authors also reiterated that self-oriented perfectionism could be categorized as healthy and normal perfectionism.

Research findings on perfectionism gained recognition in the 20 century in the areas of adaptability and behavioral aspects. Hewitt and Flett (1989) developed the Multidimensional Perfectionism Scale (MPS). The dimension suggested did not differentiate the two elements of adaptation and maladaptive, yet they distinguished between a person's behavior and motivations.

Frost et al. (1990) used multidimensional models that explain the concept of perfectionism, while these authors, Frost et al. (1993), provided a different approach that consists of two substantial factor loadings. In their research, the findings are as follows. The first factors include other-oriented-perfectionism, personal standard, sections of the organization, and self-oriented perfectionism look, which symbolize the adaptive aspects of perfectionism. Ram (2005) reiterated the second-factor involving parental censures, parental prospects, fears about actions, anxiety over errors, and socially approved perfectionism, which apparently replicated the maladaptive aspects of perfectionism. Moreover, research was carried out to support the two factors that consist of evidence that states that self-oriented perfectionism was concomitant with adaptive aspects of perfectionism. In contrast, socially prescribed perfectionism, fear over faults, parental censures, and parental prospects were allied with the maladaptive aspects of perfectionism (Flett, Hewitt & De Rosa, 1996).

Other scholars further derive a perfect differentiation between adaptive and maladaptive perfectionism experience some learning curve theorem perspective Terry-Short et al. (1995). Furthermore, the authors observed various populaces recognized for their perfectionistic propensities. Female athletes, clinically disheartened female patients and females facing issues of eating disorders were equated to a control group. They discovered that athletes presented the utmost levels of adaptive perfectionism, whereas women with

eating disorders recorded utmost maladaptive perfectionism (Terry-Short and colleagues, 1995). The critical difference between these two aspects is mainly centered on behavioral reinforcement. Athletes are motivated to achieve personal goals that usually boost their self-esteem, whereas eating disorders make them realize they lack something. Terry-Short et al. (1995) developed a competitive analysis scale for multidimensional perfectionists called The Positive and Negative Perfectionism Scale (PNP), which is mandated to measure feelings and reactions such as cognitive dysfunction, strain, visor, dissatisfaction and satisfaction with life, eating and disorders (Burns, Dittmann, Nguyen, & Mitchelson, 2000).

Many researchers have different findings on the issue of perfectionism. Some point out that there is a negative correlation, and others strike a balance for both positive and negative correlations to perfection. This study analyses the finding of the model developed by Slade and Owen (1998), which consists of both adaptive (positive) and maladaptive (negative) perfectionism. The research model aims to find the correlation between negative and positive perfectionism, which appears to be similar behaviors. However, their dormant stimuli and consistent disturbing situations and cognitive practices are adverse. Negative perfectionism is more associated with emotional dominance that causes cognitive dysfunctions, regrets, and depression. Positive perfectionism provided a sense of following the feeling of life satisfaction.

Table 2.1.

Dual Process Model of Perfectionism by (Slade & Owens, 1998).

Convergence on the Nature of Perfectionism		
Author	Type 1	Type 2
Hamachi (1978)	Normal	Neurotic
Slade & Dewey (1986)	Satisfied	Dissatisfied
Owens & Slade (1987)	positive Striving	Maladaptive evaluation concerns
Frost et al. (1993)	Self-oriented	Socially prescribed
Hewitt & Flett (1991) (MPS)	Perfectionism	

Forest et al. (1990) (MPS) Personal standards concern over mistakes /parental
 Organization criticism /Expectations Doubts

About actions

NOTE: MPS=Multidimensional perfectionism scale

The first predominant element is a healthy or normal form that ensures positive benefits to the individuals. It is recommended and fostered for every individual. A pathological or unhealthy form is the second type that carries negative or disadvantages to the individuals, and people are encouraged to avoid it.

Hamachek (1978) described it as expected, and Owens and Slade, 1987 mentioned normal as satisfied perfectionism, while Frost et al. (1993) take further research on positive striving to analyze the other factors that can be measured as self-oriented perfectionism, personal standards, and organization.

Moreover, Hamachek (1978) described type two contracts as dissatisfied perfectionism and neurotic (Owens & Slade, 1987). however, Frost et al. (1993) have selected the maladaptive evaluation anxieties to pronounce a similar aspect, including scales measuring the negative traits that include actions and doubts.

Table 2.2.

Theoretical Feature of a dual process model of positive and negative perfectionism.

Area	Positive perfectionism	negative perfectionism
Type of behaviour	approach	Avoidance
Goals	pursuit of:	Avoidance of:
	Success	Failure
	Perfection	Imperfection

	Excellence	Mediocrity
	Approval	Disapproval
	Thinness	Fatness
Self-concept involvement	pursuit of ideal	self-Avoidance of feared self
Emotional Correlates	Satisfaction	Dissatisfaction
	Pleasure	Displeasure
	Euphoria	Dysphonia
Promoting environment reinforcement	positive and negative	history of no/conditional
Modelling history		

A twin procedure sample of perfectionism according to Skinnerian strengthening philosophy is illustrated in Table (2.2) in this sample; all kind of performance fundamental optimistic perfectionism is that of method (pursuit) performance, while undesirable perfectionism is reinforced by evasion (escape) performance. The aims of the two methods of perfectionism, consequently, originate from contradictory guidelines, though they are not mismatched. Hence, a great person at festive perfectionism will overall follow accomplishment, perfection, and distinction. In contrast, a great person with undesirable perfectionism will try to evade failure, flawlessness, and mediocrity. People are likely to be encouraged, through one or the other drive, together, or neither.

In collaborative also interactive working, the optimistic perfectionist usually tries to find endorsement from everybody. In contrast, the undesirable perfectionist is encouraged chiefly by the wish to evade the condemnation of anybody. In the region of consumption imbalance, the optimistic perfectionist will follow slimness for a personal favor. However, the undesirable perfectionist will be encouraged by a wish to dodge or escape from obesity. Moreover, the explicit conduct of the optimistic and undesirable perfectionist might seem alike; nonetheless, their fundamental aims are dissimilar. Failure to attain the aims might similarly contain very different outcomes for the two types of people. Research assumes that the two types of perfectionists are associated with diverse features of their self-concept. The separate great on optimistic perfectionism is encouraged by a wish to get as near as

likely to their model self. At the same time, the undesirable perfectionist is determined by a wish to get as far away as likely from their dreaded self. Researchers also suggest that the emotional outcomes of the two types of perfectionism would vary. The optimistic perfectionist succeeds, nonetheless, cannot be excessively impacted by the failure.

In contrast, the undesirable perfectionist will never be fulfilled by attaining their aim since failure might be just close to happening. That is, optimistic aims are attainable occasionally. Nonetheless, there is never any undesirable consequence for failing to attain them. On the contrary, undesirable aims are frequently attainable; however, they never confirm that disappointment will not happen in the future. Lastly, the types of atmosphere that are probable to substitute the two kinds of perfectionism are dissimilar. Succeeding Hamachek (1978), we recommend for the time that the surroundings most favorable to the growth of festive perfectionism are those that cause either near identification as well as an optimistic sample that reveals the price of being cautious also careful or to a response in contradiction of a messy sample. The surroundings most favorable to the growth of undesirable perfectionism are likely to include a history of either an entire nonappearance of strengthening or of all strengthening being restricted on the recital.

Operant conditioning models and environment

Operant conditioning model state that human behavior is subjected to situations and circumstances or consequences that impose some forces of continuous shaping. In psychology, understanding the process of human behavior and changes is very important. More relevant research about learning organism-environment is being carried out and depicted. Some authors argue that the environment has a sore influence inside the body, and others state that the environment is outside the body. According to B. F. Skinner (Skinner, 1981), those who imitated the idea of Skinnerian tradition have planned by gathering facts and ways in which behavior is shaped and maintained through prevailing consequences. Lieberman 2012 highlighted that many people tend to adapt to every environment unconsciously because of the sensitivity of the consequences. Scholars like Skinner developed analyses of the influence of the events and the relevant predictions and controls found outside and inside the body. The environment has a significant influence on behavior analyses. Skinner (1957, p. 1) develops the essence of behavioral analysts: "Men act upon the world, and change it, and are changed in turn by the consequences of their action."

Skinner (1957) illustrates the concept of operant behavior as a series of events that happens due to unavoidable circumstances with no clear beginning or end. For someone to understand the word behavior should consider all the events and conclude what causes them. Operant conditioning samples Operant conditioning considers the atmosphere that the organism functions inside and debates that conduct is adapted by its outcomes. The connection between the incentive, the reply also the outcomes are educated by the topic. Also, the reply is frequent plus superior or smaller regularity relying on the kind of outcomes, named strengthening. Secondary/Trained Reinforcements can upsurge the regularity of the conduct by improving or adding an enjoyable experience (optimistic reinforcement, or by eliminating or lessening a disagreeable one (undesirable reinforcement. A famous undesirable reinforcement sample is the 'self-medication theory.' This sample suggests that people deliberately apply materials to delicacy mental indications from which they agonize (undesirable reinforcement).

Classical condition theory states that the specific stimulus produces a known reaction. These theories emphasize the withdrawal symptoms and addiction, known as the cue-reactivity paradigm, to measure alcohol dependence. The classical conditional model has been used to explain the compulsive use of substances like drugs. The cue-reactivity paradigm covers the cue exposure and set cue observation and measurement of reaction. The cue can be both external and internal, such as sight, taste, smell, and moods and cognitive.

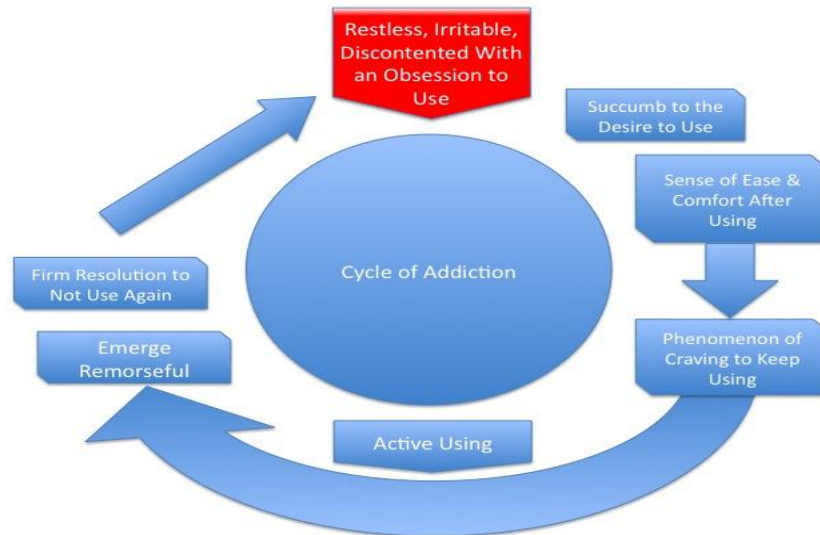
Drummond suggested three types of responses in the drug addiction research discussion. (i) Symbolic expressive, e.g., craving is a reaction to drug addiction; (ii) physiological, is the case whereby one will react through changes in heart rate, salivation, skin temperature, and conductance due to alcohol consumption. (iii) behavioral can be analyzed in terms of the speed of drinking or latency. Cue reactivity has got some demerits due to the relationship between the particular report of cravings and consequent substance use; and (iv) that physiological deviations are not mediators of influential behavior themselves, but a key of a central nervous system state, which may be a mediator of behavior or could be epiphenomenal.

Addiction has a significant effect on the body, mind, and spirit. Some adverse effects of addiction accumulate internal effects and suffer from anxiety, depression, pain,

and anger. The internal disturbance causes permanent injuries to some, and some managed to develop a self-medicating system that also provided a temporary solution.

Figure 2.1

Cycle of Addiction by (greateoaks, 2015).



Internet and Smartphone user

The World Stats (2017), by the end of June 2017, 50% of the people in the world had access to the internet. It took some years for the world population to adapt to the new technological development since Tim Bernes Lee programmed a website 25 years ago. The digital world has significant control over society through access to internet services. In 2007 smartphones have become popular due to the availability of online services and other technological devices. Software developers and programming imposed a significant change in society by shaping identity, social cohesion, and cognitive processes. Cell phones, iPhones and Black-Berry's, email, prompt messaging, twittering, and texting, which are an essential portion of my space generation's lives, form daily approaches, values, also dealings in important methods. In the eyes of its desktop members, what we have conventionally measured as "isolated behaviour" might signify a novel description of "connectedness." Technology is a tool used to shape people's beliefs and behaviour. Uncommon, even possibly unsafe, methods of thinking regarding others can develop

"normal" inside a virtual community (e.g., as inside online dislike groups). Technological advancement in the provision of the internet has offered some the delusion that they are in complete control and might lead all movements from the keyboard.

Richards & Vigano (2012) state that cyber psychology includes investigating human practices (cognitive, demonstrative, and behavioural) connected to or affected by enhancing technologies, in another way, the mental investigation of human-technology communication. One part of cyber-psychology is virtual counselling. It is similarly mentioned as e-therapy, e-counselling, or cyber-therapy. Although the same system and description of virtual therapy have been discussed, we will apply the one used by Richards and Vigano (2012), which states that online counselling is the transport of therapeutic interferences in cyberspace where the message amid a qualified expert counsellor also the customer. However, another study found a statistically substantial difference in the engagement process of the client in distance therapy who were more active than those in face-to-face therapy.

Moreover, avoiding technology is impractical due to the availability of internet services that are easy to access for any use. It is now the responsibility of the users to take advantage of the positive advantages and work on its limitations depending on the users. Technology advancement facilitated easy access to internet services, and it is the responsibility of everyone to ensure well-being which encourages social cohesion. The social dimension encompasses many aspects like a culture that constitute social settings that encourage the use of technology without invading people's private lives and maintain a favourable business culture setting through technological integration. (Diefenbach, Christoforakos & Ullrich, 2017).

Internet provided easy access for communication and human interaction from all walks of life through multiple devices on social media. In 2022, smartphone users are estimated to reach 6.8 billion (Ericsson Mobility Report,2019). Social networking sites have experienced high growth, especially Facebook, WhatsApp, Twitter, and Instagram (Settanni, Marengo, Fabris & Longobardi, 2018). Specifically, there is a noticeable data increase on Facebook (Facebook Newsroom: Company Info.,2019). Followers: "as of December 2018, there were around 1.52 billion daily active users on Facebook (Fb) and 2.32 billion active users on the site per month" (Stannic et al., 2018) (p.226).

Worldwide total population is 7.219, and most of the people are active on the internet, amounting to a 3.038 billion. Those who are very active on social media are 2.126 billion, accounting for 29% of the world's population (Internet Live Stats, 2015). Meanwhile, there are 1.44 billion people who are accessing the Facebook account in the world. More than 936 million users open their Facebook accounts daily. More than 50% of young people open their Facebook daily in the morning from the age group of 18-24 years (World Facebook Statistics, 2015)

Technology advancement is changing types of prevailing problems (Young, 1996). There is particular unbearable behaviour that the accessibility of the internet can cause due to the inability to control its use and portray fake behaviour. (Young, 2007). Besides the negative effects imposed by the internet, some positive aspects can be drawn from using technology, for instance, entertainment, information, fun, resourcefulness, and convenience, but most internet users abuse the services. In the end, it appears to be useless. Some people are taking advantage of the internet to manage their businesses online positively. Researchers reiterate that an excess of something will negatively impact the users. For instance, those who use the internet to an excess they suffer from psychological problems (Griffiths & Greenfield, 2000). Some individuals who adopted a system of using the internet for acquiring academic knowledge, financial knowledge, social issues, and relationships are likely to stay online as new models are emerging concerning these aspects (Chou, 2001).

Internet is now a day-to-day business as many people have gained accessibility even from remote areas of every country. A Diana (2010) state's that the number of internet users was increasing. Moreover, more than 230 present in the USA since 2007 was increased. Globally there is also an increase in internet users by 82% since 2009, and most of them are on social media and other internet site. (Nielsenwire, 2010). Many people are now addicted to the internet, and it is difficult to control the habit (Young, 2007). There is also a tendency to develop a psychological dependence on using the internet for both research and entertainment purposes (Kandell, 1998).

Moreover, the internet tends to cause a preoccupation system that will lead to disorder through continuous using computers. (Martha, 2008). There is a widespread use of

video conferencing for interactions during meetings and conferences that lead to pathological symptoms that show a sign of addictive disorder. (Rehbein, 2013).

Some scholars highlighted the issue of using a smartphone, called problematic mobile phone use (PSU). This problem is associated with both physical and psychological problems for the users. There is a direct effect on the individual, interpersonal relationships in the business, and socialization that, in the end, will cause physical health issues. Moreover, there is a difference between the available smartphone and the traditional phone that people use. Kim, Jang, Lee, Lee & Kim (2018) suggested that there are negative effects imposed by PSU than mobile phones. Age plays an important role in using mobile phones for internet purposes as statistics show that young people have developed a dependent syndrome of using these devices compared to older ones. (Smetaniuk,2014). Gender is also considered in using these devices, as many researchers mentioned that females are more addicted to the internet than their male counterparts (Kawasaki, Tanei, Ogata, Burapadaj, Loetkham & Nakamura, 2006).

People have to deal with the following anxiety disorders Post-traumatic stress disorder PTSD, Generalized anxiety disorder GAD, Specific Phobia SP, Panic disorder PD, and Social anxiety disorder SAD. These are well known in the USA as mental disorders (Kessler, Berglund & Demler, 2005). There is no evidence of how many people benefited from the information they find on the internet to solve mental disorder issues. A participant provided evidence about how they benefited from researching on the internet about the SAD disorder. Through browsing, some information was helpful in medical treatment and the use of psychotherapy (Erwin, Turk & Heimberg, 2004). Some internet information needs to be verified, as some will post without a clear understanding of the concept and ways of treating these disorders. Internet browsing can be time-consuming as many sites give relevant and irrelevant information, and trusting the sources of information might impose risk rather than a person-to-person interaction or contact.

Some internet users tend to visit many sites, which causes disappointment to the extent of becoming addicted to using social networks for entertainment. Time play and wastage will be a sign of addiction that cage people on the internet for social purposes than business (Brailovskaia, Margraf & Köllner, 2019 & Lu et al.,2018) argue that excessive internet causes the advent of psychological syndromes such as anxiety addiction to

networks is comorbid with other pathologies. Many people have developed Facebook addiction disorder (FAD) which is connected to anxiety, stress, depression, restlessness, and stress (Brailovskaia, Margraf & Köllner, 2019).

Mobile and Smartphone User's Addiction

Smartphones have some attractive features that cause people to acquire them rather than a standard phone that differs from smartphones in terms of the operating system. Some have 3G,4G, and 5G internal memory. Smartphones provide facilities for watching videos on Facebook, YouTube, and other social platforms (Bian & Leung, 2014). According to the Statist (2013a) mentioned that in the future, many people will own these smartphones estimating 37% worldwide growth, 65.8% users in the United Kingdom, 63,5% in the United States, and 49% in China by the end of the year 2007. Smartphones are handy for reading books online, shopping online, social networking, emailing, and playing games. Moreover, some are relived from accessing smartphones for entertainment (Lee, Chang, Lin, & Cheng, 2014) because they can yield immediate gratification. However, sometimes spending time on a smartphone is now imposing problems the internet users as it affects face-to-face contact and interactions (Thomee, Harenstam, & Hagberg, 2011). Many smartphone users are now suffering from mental disorders because of addiction to intense some are facing psychological distress, sleep disturbances, and stress (Chesley, 2005; Thomee, Eklof, Gustafsson, Nilsson, & Hagberg, 2007; Thomee et al., 2011).

Many authors have done some research concerning smartphones facilitating the use of the internet and other technologies (Bener, Al-Mahdi, Vachhani, Al-Nufal, & Ali, 2010; Buckner, Castille, & Sheets, 2012). Moreover, Young 2004, (Chen & Kim, 2013 problematic use of smartphones. Martinotti et al., 2011), excessive use of smartphones. Young (2004) reported that smartphone addiction is different from alcohol addiction as it involves intoxication, whereas Kuss and Griffiths (2011) reiterate that smartphone has an addiction to incorporating all forms of technology and are time-consuming. The use of smartphones has the effect of causing problems or mental disorders to an extent than addiction, according to Peters and Malesky (2008).

Many researchers have discovered that smartphone use has been shown from the views of analytical psychological aspects (Beranuy, Oberst, Carbonell, & Chamarro, 2009;

Bianchi & Phillips, 2005; Chiu, 2014; Ehrenberg, Juceks, & White, 2008; Ha, Chin, Park, Ryu, & Yu, 2008; Hong, Chiu, & Huang, 2012; Jenaro, Noelia, Maria, Francisca, & Cristina, 2007; Walsh, White, Cox, & Young, 2011), projecting social elements (Walsh et al., 2011), and family environmental issues (Toda et al., 2008). Furthermore, there is no adequate research about the positivity of smartphone as it plays a role that facilitates interaction between psychosocial well-being aspects and motivation. Some studies have been carried out to find out the problematic uses of the smartphone as an interaction outcome between motivation and stress. Considering the following variables motivation, psychosocial well-being, and stress in problematic smartphone use, it is to evaluate the relationship between the predictors and the impact of problematic use (Kardefelt-Winther, 2014a). It is also unclear to evaluate a personal well-being. The motivation for using a smartphone determines the phone's usefulness by serving the purpose (Katz, Blumler, & Gurevitch, 1974), and the ultimate results are the problematic effects (Kardefelt-Winther, 2014b). Numerous studies are needed to analyze the psychosocial well-being, predictors of problematic use, and motivation to understand the underlying mechanisms and the realistic of the complex matters of interactive nature.

Moreover, one of the problematic uses is to go online just to solve life problems underlying in the theory of problematic technology use. (Kardefelt-Winther, 2014a, 2014b, 2014c). Their correlation between internet use and life problems is determined by the challenges that threaten life and how best the user can address life challenges, experience, and motivation to access the internet. These issues were discussed in the Compensatory Internet Use theory (Kardefelt-Winther, 2014b). People experiences 'difficulties in life that can be addressed as high and low psychosocial well-being that require the use of smartphones to provide entertainment to reduce stress and depression. The study analyses a situation whereby entertainment and escapism are types of motivation for using smartphones and the relationship with the problematic smartphone use.

Compensatory Internet use Theory

The compensatory measure is employed in a difficult situation to tackle. In short, well call the scenario low psychosocial well-being and the motivation to use the internet to solve the problem. These scenarios force some people to spend many hours in their lifetime on smartphones, which can turn out to be a problematic smartphone use. There is a

misunderstanding of the usefulness of smartphones in trying to compensate for difficult moments with the internet that turned to create addictive behaviours (Kardefelt-Winther, 2014). There are many reasons why some people are involved in online gaming. For instance, some are suffering from stress, self-esteem, and depression. Gaming is used to solve problems, but in case of negative results obtained, disappointments cause problematic outcomes because playing was used as escapism. The motivation behind this was to escape from challenges through gaming, whereas those who play for entertainment have high psychosocial well-being. Any adverse outcome will result in less stress because they have got high self-esteem (Kardefelt-Winther, 2014). Meanwhile, when there is a combination of stress and escapism, interaction on the internet causes more problems and becomes problematic smartphone use (Wang et al., 2015).

A significant upsurge in the application of smartphones, tablets, and other gadgets in the latest years enabled prompt admission to the internet and learning its use for both social and business. Approximately 50% of Europeans aged 16–24 could access the internet on their mobile phones in 2012. also, these numbers are probable to produce (Eurostat 2014). Meanwhile, internet overdoing is a rising community health issue among parents and clinicians. Furthermore, young people are appeared as a weak group regarding developing challenging forms of Internet application as they are abusing the opportunity through an intensive operation., many of them being day-to-day online, in comparison with the typical population, frequently more included in a restricted quantity of laborious online happenings like playing games also applying social networking sites for interactions and entertainment (Livingstone et al., 2011).

Moreover, children in adolescence are formative life times, and misapplication of the media might be more damaging than in future times (Kaltiala-Heino, Lintonen & Rimpelä, 2004). It has been defined that excessive spending of time online might negatively influence some social ties. Also, that opened a gap of failing to know the realities of life, especially in their age group (Beard,2011). While the younger generation seems to be continuously online, minor is recognized regarding if continuous mobile admittance to the internet raises the danger of extreme patterns of Internet application. Investigations on extreme forms of Internet application among adolescents frequently agonize from unreliable conceptualisation plus measurements, and have restricted illustration (Ko et al. 2012; Kuss

et al. 2013). The findings signify the first effort to explore alterations in the prevalence of extreme Internet application (EIU) in large and illustrative cross-national models of adolescents over time and to degree the future endeavour of a smartphone application.

Excessive Internet Use

The scientists are still looking for an agreement in the context of extreme Internet application systems. The notions differ with the theoretical reinforcements. Certain writers mention that compulsion also grows the element of substance application disorders (Griffiths, 2000). However, others commence from impulse-control disorders and also apply terms like 'pathological' or 'compulsive' Internet application (Rooij et al., 2010). Understanding the usefulness of the internet through theoretical reinforcement, there is an element of obsession in the application that causes.

- (1) Ineffective efforts to get rid of unbearable behaviour,
- (2) Undesirable mood in time of failure to be online. And
- (3) Unbearable behaviour that still changes interpersonal skills as a result of ignoring other duties.

It is mainly the attendance of battle that seems to be public to all methods to the problematic (Weinstein et al. 2010). Advanced stages of using internet exposed person to danger of undesirable outcomes (Škařupová et al., 2015) and of a general reduction in comfort on bodily (repetitive strain injuries also lower excellence plus amount of sleep), mental (augmented nervous, anxiety, plus depression), also social cohesion (augmented family disagreements) (Kalmus et at, 2014). Extensive use of the internet is not undesirable; different operators differ in their application designs, motivation, self-regulation, and actual outcomes (Dreier et al, 2013). Not all extreme Internet operators grow pathological indicators (Charlton et al, 2010). In contrast, augmented familiarity and technology might bring chances like augmented digital literacy (Blinka et al, 2015). To evade needless over anthropologizing of the subject, we apply a traditional context of extensive internet use according to five criteria (salience, tolerance, battle, withdrawal symptoms, relapse, and reinstatement).

Internet Overuse and Smartphones

The danger of Internet-connected problems appears to increase availability (Durkee et al., 2012). also, bright, handheld devices deliver prompt admittance. Specific effects of compulsion are defined in youths; smartphones have advantages of good-looking purposes (Choliz, 2010). Moreover, applications like social networks (Salehan & Negahban 2013) and games (Lapointe et al., 2013) increase the probability of extreme application of both the internet and smartphones. Munezawa et al., (2011) state that several negative impacts of extreme mobile phone applications have been recognized, e.g., sleep turbulences, chronic stress, and low emotional constancy (Augner & Hacker, 2012). Dissimilar to extreme or pathological online gaming impose some group at, danger includes particularly young reclusive also communally working males (Kuss & Griffiths, 2012), and the extreme operators of smartphones are frequently young extroverted girls (Augner & Hacker 2012). Moreover, Andreassen et al., (2012) depicts appears that extreme smartphone application shares these features with extreme applications of social networking sites (SNS)

Mobile phones have increased in the 21st century as many people have smartphones for socializing and business communication. According to OFCOM (2016), there has been a significant increase in adult mobile ownership in the UK from 82% in 2005 and an increase of 8% within ten years to 90% in 2015. Due to technological advancement, there is an essential increase in smartphones with features that allow access to the internet and other applications and GPS navigation. Smartphones are now manufactured with a well-advanced operation system and cameras. Furthermore, smartphones are now user-friendly interfaces as they have features that allow sharing of information with other devices like computers and other phones (Wang et al., 2014). According to Leung and Wei (2000), mobile phones provide an easy access to contact details and communication with everyone, depending on the availability of the network.

Moreover, Walsh et al., (2008) supported the notion of using mobile phones for communication purposes through contacting one another and failed to provide a sense of relaxation to the users. However, people developed a psychological attachment to their devices as it is a tool that shapes attitudes and behaviour, and it takes more research for users to understand the impact or consequences of this new development. Many researchers took their time to study the effects of the advent of smartphones on the users. Their finding

is most centered on the issue of addiction that causes mental health and adverse effects on the well-being of people, for instance, stress, depression, anger, dissatisfaction, poor academic performance, and other dysfunctional behaviour (e.g., see Choi et al., 2012; Haug et al., 2015; Samaha & Hawi, 2016). Other research includes the young people's perspectives and perceptions on using a smartphone through individual responses and focus groups.

Smartphones Functions

According to the following authors, the most well-known purpose of owning a smartphone is communication capacity as the essential function (Aoki et al., 2003; Chen et al., 2009; Walsh et al., 2008, 2009). Mobile phones facilitated the contact system with people from all walks of life. College students are now taking advantage of the availability of smartphones to communicate with their families and friends (Chen & Katz, 2009), and another student from Japan, Toda et al. (2006), carried out a study about the uses of mobile phones and came out with a positive result that smartphones reduce the level of stress. Mobile phones facilitate easy communication systems through text messages for social interaction with people (Madell & Muncer, 2007). Social interaction through text messaging does not require an instant response as users take their time to think about the message they want to convey to people (Fullwood, 2015). People have got the liberty to reply "whenever and wherever" they feel like, and some people feel like they are missing out or disconnected from their family and friends (Walsh et al. 2008) or feeling lost (Tian et al., 2009). Some are developing a dependence on their smartphone (Aoki & Downs, 2003; Jarvenpaa & Lang, 2005), which negatively affects the users by developing an addictive system to the smartphones (Kwon et al., 2013).

Meanwhile, the issue of addiction is still subjected to debate as researchers are coming out with different findings on what causes addiction; for instance, smartphones allow the use of different applications whereby one can get attached to (Lopez-Fernandez, 2015; Meschtscherjakov, 2009) and many findings have been provided to explain the addictive tendencies of smartphones (Van Deursen et al., 2015). Some authors came up with other notions of emotional attachment caused by activities and services provided by smartphones (Meschtscherjakov, 2009; Venta et al., 2008). The use of smartphones' inaccessibility to the social media like Facebook and YouTube exerted some effects on the

addictive aspect (Salehan & Negahban, 2013). The internet availability on smartphones has caused many addictive aspects to the users (Kwon et al., 2013). A good design research for the effect of smartphones on the psychological impact on the users through an analysis of their functionality will give a clear picture of the Uses and Gratifications (U&G) framework (Katz et al., 1974).

U&G theory is a theory that looks at what is the motivational factor which makes someone to choose a specific media. People tend to select certain media to gratify a person's wants. Any further gratification of the personal needs will give an option of selecting the same media to continue benefiting from it (Katz et al., 1974). U&G theory supports that the key motivational factor for choosing smartphone services is to benefit from instilling a sense of relaxation, solving negative moods and boredom, and escaping from problems (Pew Research Centre, 2015; Smetaniuk, 2014). The services provided by smartphones differ from person to person needs depending on the gratification aspect of personal needs. For example, playing games and visiting entertainment sites is a strategy to reduce boredom and stress.

Moreover, Joo and Sang (2013) suggested that there is a strong connection between U&G and Technology Acceptance models as they both explain the essence of adoption and use. The use features determine the adoption of new technology to enhance one satisfaction and problematic solution. The Technology Acceptance Model (Davis, 1986) adoption of new technology is determined by the degree to which the technology gives value to people's lives, for instance, achieving personal goals like good grades and executing duties. Joo & Sang, (2013) mentioned that TAM addresses extrinsic motivations for using smartphones, like achieving business goals, whereas U&G addresses intrinsic motivations for using smartphones either for entertainment or feeling good. Some studies highlighted that in Korea, Smartphones are used for goal-oriented motivation than a habitual system of using the device. Purchasing of smartphones is determined by the motivational factor, which encourages one to check certain specifications and features that meet individual goals and needs. Some people will choose smartphones that can carry certain apps and tools for communication (Head & Ziolkowski, 2012). The researchers' findings suggested that many users prefer smartphones that facilitate "Instant Communicators" and photographs and text messaging services. The influence of purchasing

smartphones is determined by the utilitarian or positive attitude for the purpose of enjoyment and assessing information from friends and family (Aoki & Downs, 2003; Pew Research Centre, 2015).

Me, My Phone and I

Smartphones are very user-friendly, providing platforms to customize and personalize information. There is a psychological perspective on acquiring smartphones for personal information storage, which defines the users' behaviour and attitude. (Meschtscherjakov, 2009). Smartphones have different facilities and features that are used for personal identification and social identities. Tian et al., 2009 suggested that certain classes of people purchase certain types of devices. Some people belong to specific groups of people through membership as they associate themselves with certain device specifications (Tajfel et al., 1979).

Furthermore, Walsh et al. (2009) depicted that young people aged 16-25 years use certain phones to belong to a social identity. Peer pressure determines choice in line with certain specifications, especially for gaming and social applications. Some of the young people consider the speed of the smartphone in text messaging and the storage space (Abeele et al., 2013). Moreover, Srivastava, (2005) reiterates that certain mobile phones symbolize status and personal identity, which is connected with the emotional aspect of self-conceptualization. According to Fullwood et al., 2017, psychological experiences realized by using smartphones are very complex depending on individuals' needs and goals. People have different perspectives and perceptions over a product by analysing the nature of complexity in use and its value (Fullwood et al., 2017).

The investigation of the compulsion to smartphones has conventionally concentrated on the descriptive devices of compulsion and its outcomes for operators' psychosocial comfort. Though, the compulsion to the smartphone similarly carries possibly damaging outcomes for the safety of the devices themselves that has undesirable implications for the security of operators. Despite its harmful outcomes, the investigation of the consequences of smartphone compulsion on the operator's security has been conventionally deserted. The current investigation examines the relationship between the widespread application and smartphone compulsion shown as a sample of Internet users in Spain of 526 smartphone

operators. Additionally, analyse the association amid wide applications plus compulsion to mobile phones and dangerous behaviours of users. Moreover, dangerous behaviours are related to the susceptibility of the gadgets and security intimidations to users.

Smartphone possession rates have been increasing since the development of the device, as many people have realized the importance of using it for communication and other things (Poushter, 2016). Meanwhile, the research started in Spain in order to record the number of people in countries in the European Union who possess smartphone possession of the smartphone (Deloitte, 2015; Poushter, 2016)

The World Health Organization (WHO,2015) states that most people who excessively use smartphone applications on the internet have got the chance to develop physical health issues (Dong et al.,2012).damage plus accidents, or infections. Among the psychosocial outcomes, WHO, (2015) highlighted the existence of issues in parts like ferocity, for instance, cyber-bullying, destructive behaviours, social development, for instance, social withdrawal, sleep deficiency, dangerous sexual behaviours, or other social or mental issues such as poor psychological comfort, family, or work issues.

Smartphone Addiction Correlation

Personality features and poor social cohesion are among the most related danger factors affecting smartphone compulsion (WHO,2015). Persons categorized by low agreeableness, great extraversion, low thoroughness, or high neuroticism have been liable to cell phone and Internet compulsion (Andreassen et al., 2013; Yao et al., 2014). In their assessment of 68 large-scale experiential studies on Internet Compulsion since 2000, Kuss et al., (2014) discovered that inadequate social provision was expressively related to Internet addiction. Based on Billieux et al., (2015), persons low on social provision would make a widespread application of smartphones to attain reassurance in affective and close interactions, isolation, and low gratification with life-associated psychological correlates (Wang et al., 2015). This can be in tune with the reliance on the user (Lu et al., 2011), who displays poor adult connexion models and also significant levels of problematic application of mobile phones. It is also in harmony with research discovered that people who expansively apply their use of smartphones for social purposes cause people to adopt

smartphone habits faster. As a result, the aspect of addictive smartphone behaviour was developed. (Van Deursen et al., 2015).

Harm and Addictive of Smartphones

Despite the growing attention researchers have dedicated to investigating psychosocial smartphone correlation wide application plus compulsion, few scholarly considerations has been focused on the safety outcomes of smartphone compulsion. Moreover, Pramod and Raman, (2014) have recommended that in an age of smartphone compulsion, the safety aspects may become a reason for apprehension (Urueña & Hidalgo 2016). As Herrero et al., (2019) have suggested, despite safety cautions, operators placed themselves and equipment in danger, compromising not merely the safety of their smartphones but also their personal security because of potential cyber-victimization. In their investigation of danger attitudes and perceptions toward computer applications, Herrero et al., (2019) discovered that both overall and domain-specific imposed dangers were positively linked to the presence of operators' computer harm. Risk-taking inclination has been applied to clarify why some people can favour dangerous choices and participate in dangerous activities. This common propensity to danger was positively linked to both complex Internet applications (Ko et al., 2007; Lin et al. 2002; Velezmoro et al., 2010) and problematic application of mobile phones (Billieux et al.,2008). In this respect, Billieux et al. (2015) defined a type of problematic mobile phone operator with high levels of sensation-seeking and an augmented likelihood of carrying out mobile danger behaviours (Herrero et al., 2019).

Hewitt et al., (1991) defined the word perfectionism as one of the systems that describe individual behaviour by self-evaluation of actions, beliefs, and norms. It is also known for the self-oriented aspect that prefers to meet self-standards of performance. Yong and Stoeber ,(2012) defined perfectionism as a personality feature often characterized by a person's striving for imperfection and setting extremely high-performance standards, supplemented by overly critical self-evaluations and concerns concerning others' assessments (Yong et al., 2012).

Furthermore, the mandate is to identify whether perfectionistic internet and Smartphone users may be uncertain about evolving anxiety and depression during Covid -

19 and whether perfectionism is associated with depression and anxiety . It examines how covid-19 moderates such a relationship between perfectionism and anxiety and depression and between the digital environment and depression and anxiety.

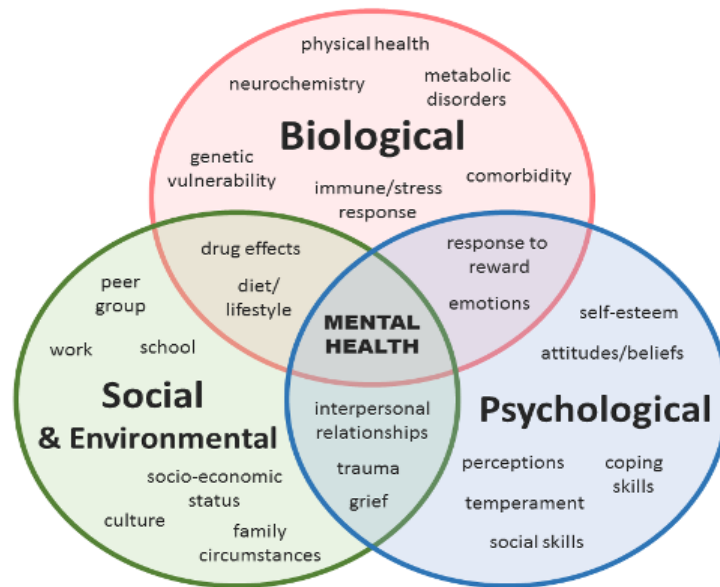
The COVID-19 pandemic affected almost every country. Many people are concerned about their mental health situation as some are suffering from trauma due to loss of life, fear, stress, and depression as life disruption is the order of the day. The adjustment might be very difficult or unrealistic during perfectionism when the unrealistic standard is set for achievement and "a tendency to engage in all-or-none thinking whereby only total success or total failure exists as outcomes" (Hewitt et al., 1991). Perfectionism is associated with negative traits in human living like depression and stress, low self-esteem, and failure. The COVID-19 pandemic affected all the people directly or indirectly through the sickness of economic depression. The pandemic imposes mental health cases that affected many during the period of finding ways and means of containing the pandemic.

Emotion is a compassionate issue to consider in studying perfectionism as these two elements correlate depending on the situation. A dual-process model was developed to deal with perfectionism correlates with adaptation (Slade et al., 1998). A further investigation of the dual model of adaptive, and maladaptive in perfection was done by Bergman et al., (2007). Bergman et al., (2007) suggested that the outcome of their study discovered that many adverse effects are associated with maladaptive perfectionism that, including depression, anxiety, and failure

The assumption associated with the bio-psycho-social model, which includes human beings' mental, consists of the social factors, psychological aspects, and biological. These three elements of biological, psychological, and social factors need to be examined according to the relationship underlying with the mental health, and that 'the bio-psycho-social model is debatably more "integrative, non-reductionist clinical and theoretical" model that "honors the importance of all relevant domains of knowledge, not just the 'biological" (Benning, 2015). In Figure 2.3, including some elements of the environment as a social factor that influences society as a whole. This bio-psycho-socio-environmental (BPS-E) model consists of the environmental aspects associated with other variables culture, peer groups, and the surroundings.

Figure 2.2

The Bio-Psycho-Socio-Environmental Model for Mental Health (Benning, 2015).



Perfectionism

Alfred Adler suggested that the notion of perfection was derived from the individual or personal traits in the human development aspect (Ansbacher & Ansbacher, 1956). Many authors have different perspectives about perfectionism, to the extent of perceiving it as a negative trait in human development that is associated with guilt, depression, and stress (Stoeber & Otto, 2006 & Hewitt & Flett, 1991). Perfectionism has many multidimensional constructs that can be used to measure the resultant outcome from each scale for the new perfectionism-developed scales (Flett & Hewitt, 2002 & Frost et al., 1990).

Perfectionism is a way of adjusting for satisfaction and achieving the intended goal through the adaptability of perfectionism that brings positive results. The negative results can be obtained through maladaptation of perfectionism that causes stress and distress.

Another observation from Hall 2018 mentioned that most people from the age of 18-25 are more inclined to take a selfie from an estimate of one picture for every three pictures taken is a selfie. Nowadays, taking a selfie is a widespread practice that developed into a personal trait in most young people (Weiser 2015).

Depression and Anxiety Disorder

Wang et al. (2014) carried out a study that shows a link between personality traits and problematic smartphone use that causes addictions to the users. Moreover, impulsivity (Billieux, 2012) highlighted the importance of identifying the potential risk factors that are caused due to the ways of trying to cope with psychological symptoms such as depression and anxiety.

According to (Kelese, 2019), Results were categorized into four factors time-consuming social media, mental disorders, depression, and anxiety. The research was cross-sectional, and some disadvantages were discovered because of the period taken for carrying out the study. Some limitations of the design and sampling method distorted the results obtained about the effect of social media on the user's mental health. The researcher opted to use a longitudinal study to achieve favourable results by carrying out the study for an extended period while monitoring all the variables and their relationship.

The results obtained were associated with mental health disorders like anxiety, depression, stress, addiction, and alcohol abuse (Maria, 2011). These factors are psychopathological symptoms related to internet-related disorders and smoking (Mckenzie, 2010; Akin and Iskenderr, 2011). Some research shows that mobile phones have a substantial effect on human behavior associated with depression and anxiety. (Enez Darcin, 2015). Moreover, various scholars' findings indicated that there is some relief element for those who suffer from the harmful effects of using smartphones. However, the addictive pattern of the users causes problematic smartphone use (Demirci, 2015).

Some evidence has shown that over-usage of digital communication has negative effects on the users. They are most likely to suffer from depression and anxiety due to addiction. According to Demirci et al. (2015), most people who constantly use digital channels on their smartphones will experience depression or ADHD. Facebook and other social media platforms give a sense of belonging or companionship but can be addictive due to overusing the platforms.

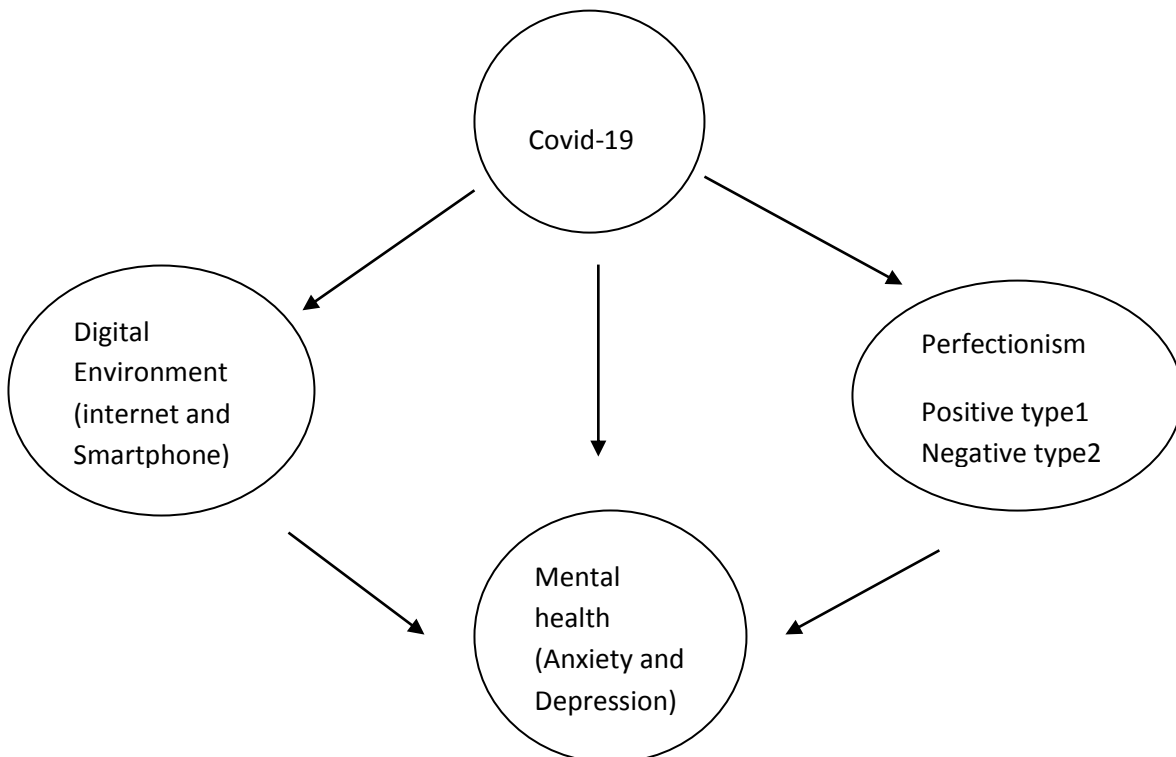
Other authors highlighted the consequences of using Whatis app for a long time or over-usage causes low conscientiousness (Montag, 2015). Other social media users will suffer from depression due to the phantom vibrations that occur when they get

disappointment due to emotional effects caused by a lack of messages received. Some people develop psychological effects due to a lack of messages received. They get depressed and feel rejected (Drouin et al., 2012).

Given the above ideas viewed, the following conceptual framework will be used to analyse the role of the Digital environment in the psychological state of internet and smartphone users during Covid-19. Based on the developed conceptual framework, it can thus be established that depression and anxiety role perfectionism role in target depression and anxiety provided by the digital environment during coronavirus.

Figure 2.3

Impacts of the COVID-19 Pandemic on Mental Health (Perfectionism, Digital Environment and Mental Health during Covid -19)



Relate Research

Covid-19 Coronavirus

Lei, Huang, Zhang, Yang, Yang & Xu, (2020) found the prevalence of anxiety and depression to be around 8.3% among 1,593 respondents. Chew, Lee & Tan, (2020) conducted a study on health professionals (n = 906). The results showed that 8.7% (n = 79) of respondents suffered from highly severe anxiety, while Ahmed, Aibao, Hanbin, Siyu & Ahmad (2020) discovered a higher anxiety rate (29%). Another research shows that 124 questionnaires were distributed, and the response rate is 29% and the severe anxiety was 18%.

One of The studies the research is cross-sectional for the Internet Survey on Emotional and Mental Health (SMH), which investigates the psychological behavior of the Chinese public. The survey was carried out for the population that uses WeChat and Weibo and the respondents. The link was sent to the targeted population of participants aged 18 and above. The scales used are as follows self-rating depression scale and self-rating anxiety scale. The questionnaire was distributed to the voluntary people to provide information about Covid-19, anxiety, depression, stress, and sleep quality. Other health organizations like Generalized Anxiety Disorder-7 (GAD-7), Centre for Epidemiology Scale for Depression (CES-D), and Pittsburgh Sleep Quality Index (PSQI) were used to investigate the anxiety symptoms, depressive symptoms, and quality of sleep, respectively. The investigation that was carried out was mainly looking at the time spent thinking about COvid-19 and the knowledge of the Covid-19 outbreak. The outcome shows that the most affected people are the health professionals who spend more time taking care of the Covid-19 patients. Young people who spent more than three hours reading breaking news about covid-19 suffered from anxiety and depression, and sleeping problems. One of the studies done by Yuan R et al. shows that 100 parents of child patients in a hospital in a cross-sectional study using the Hospital Anxiety and depression scale. The study's outcome was obtained after dividing the respondents into two categories, namely children in no epidemic hospitalization (NEH) and epidemic hospitalization (EH). The parents of these two groups were used as respondents to find out the results about depression and anxiety. The demographic information of both parents and children was recorded for analyses and comparison of the findings.

The results were obtained from the two groups of 100 participants from NEH and EH. However, the anxiety and depression scores show that parents with hospitalized children in the (NEH) non-epidemic. They were less affected than those in the epidemic (EH). The study's outcome shows that there is a correlation between depression, stress, and sleep scores. Yuan et al., (2020) noted that parents with children of both EH and NEH suffered from post-traumatic pressure disorder and mental health problems.

The study done by Nguyen and his colleagues collected data from Vietnam hospitals and health centers. The respondents were 3947 from outpatient clinics. The data was collected through using printed questionnaires conducted in a cross-sectional study. The questions covered quality of life, depression, health knowledge, characteristics of respondents, clinic boundaries, and health-related behavior. The results obtained from the research were examined through the health-related quality of life as a guideline for proper conclusion and analysis of the variables. There is a high probability of depression as many people were affected by the Covid-19 pandemic. Most of the participants acquired knowledge on health issues; their health literacy was very high, and it happened to act as an advantage in working against depression (Nguyen, Nguyen, Do, & Tran, 2020).

Another cross-sectional study was done in the UK through online research about personality and disease attitudes and the impact of the pandemic on the people. The pandemic has an impact on socio-economic infrastructure, safety, and security issues. Some variables on the Beck Depression Inventory I was used on the questionnaire to assess the pandemic's impact. Generalized Anxiety Disorder 7 was also used to examine the pandemic's effects through the distribution of questionnaires to the respondents. The results obtained mainly highlighted the respondent's conflict between staying safe and practicing normal like that was pleasurable to them (Bacon & Corr ,2020). Maghadasi ,(2020) collected data from 33 patients with multiple sclerosis (this type of disorder that face human tissue). The study was also cross-sectional that concluded on the issue of the anxiety level of patients. A Beck Anxiety Inventory was used to measure the variables under study and assess the level of anxiety for those with multiple sclerosis. A scale was used to divide the level of anxiety from severe, moderate, low, and none. The results show that most people with multiple sclerosis fall under the section of severe and moderate anxiety levels. The statistics show no correlation between the level of anxiety and the patient medication.

Another study was done by Moghanibashi-Mansourieh (2020), and the data were collected through a cross-sectional study from 31 provinces in Iran. The study was carried out in Iran by collecting data from 10754 participants from 31 provinces. The questionnaires were distributed through Instagram and telegram to reach the respondents. The questionnaires included a demographic characteristic of the respondents and other sections covering anxiety, coronavirus, and skeletal muscle effects. The data obtained were presented in graphs, tables, and charts through a descriptive statistics analysis of mean, median, frequency, and standard deviation.

Digital Environment

The world is being diverted from a manual to a digital environment whereby computers and other electrical devices for communication are used for disseminating information from one person to the other. Many researchers have raised awareness of the dangers of using the internet for communication (Kraut et al., 1998). The study was carried out by targeting respondents of 169 people from 73 households. The results were not favorable as communication decreases at the family level, peers, and social circles due to depression, anxiety, and loneliness. Some students from Kraut and colleagues have come up with disadvantages of using the internet for communication as it reduces face-to-face interaction and weakens social relationships among people. After three years of studying human behavior on internet usage, some negative effects were recorded as they continued with the research (Kraut, Patterson, Lundmark, Kiesler, Mukhopadhyay, & Scherlis, (1998; 2002).

One of the studies investigating computer-mediated communication of psychotherapeutic services obtained some positive results in reducing the feeling of loneliness among people suffering from physical disabilities. Moreover, the outcome indicates that recoveries were obtained at a four-month follow-up and displayed major recovery for contributors on items concerning individual emotions or social emotions and loneliness. Furthermore, the consequences recorded were limited by the sampling size and particular population studied online CBT treatments for depression (Hopps, Pepin, and Boaster, 2003). It shows the same result as Richards and Richardson's 2012 study on counseling online. The results were obtained from 123 participants about online counseling.

Many other factors that affect online counseling were debated: anonymity, suitability, disinhibiting, social signaling, and cyberspace. Some other influences in online counseling, like the therapist's attitude, professionalism, ethical behavior, and client suitability, were revised through experience. Some authors argued that there is a big difference between online and face-to-face counseling techniques as the platforms differ. The results differ depending on the level of prevailing facilitative circumstances.

The investigation done by (Azher, Khan, Salim, Balal, Hussain, and Haseb, 2014) shows that the study respondents were Masters's students picked through a cluster sampling. The study focused on 300 students as the respondents to the variables on the Internet Addictive Scale. Some questions were centered on the Beck Anxiety Scale for assessing the effects of anxiety on students. A regression analysis was used to conclude the correlation between internet addiction and anxiety, of which a positive result was obtained from the respondents. The study was done at the University of Sargodha to conclude the issue of internet addiction and anxiety. The results show that most students suffer from internet addiction, and there is a correlation between the two variables and students' anxiety.

Ithnain, Ghazali, and Jaafar ,(2018) state that there is an effect on students' use of smartphones. Smartphones imposed some negative effects on the students at universities where the study was carried out. It was a matter of concern for the student's health through experiencing depression and anxiety.

The study mainly focused on the undergraduate students at the University of Malaysia, where data was collected from 369 students (299 females and 70 males). The study used a Smartphone addiction Scale to measure the variables. SPSS was used for data analysis and presentation. The outcome shows a positive correlation between the following variables depression and smartphone addiction, anxiety and smartphone addiction, anxiety, and depression.

Perfectionism

Hankin et al., (1997) provided their evidence after studying the behavior of high school students from grades 9 to 12. The study was mainly centered on setting personal standards and the experiences of emotional distress caused by adolescents studied 115 high school ninth and twelfth-grade students. The students were given some questionnaires to be completed with a Multidimensional Perfectionism Scale. Another drafted paper called the Beck Depression Inventory was also distributed with some questions to be answered. The last draft was the State-Trait Anxiety Inventory, which was a set of questions used to measure students' anxiety.

The outcome shows some discrepancies and self-perfectionism through holding one factor; for instance, the depression symptoms were controlled, and the anxiety symptoms came out as a result. The depression symptoms were drawn as the end results when the anxiety symptoms were controlled. A further study was carried out on socially prescribed perfectionism which was mainly examined with the element of distress. This study was carried out by considering the gender of the respondents as the impact depends on the caring mental capacity of individuals. The inconsistency of the effects mediated by gender is associated with depressive symptoms.

Flett et al., (2004) examined the correlation between perfectionism and the elements of anxiety. The author decided to investigate 177 undergraduate students. Results obtained show that an automatic thought is associated with perfectionism, and the individual, interpersonal traits that are directly linked to perfectionism causes anxiety. All the respondents were required to complete the Multidimensional Perfectionism Scale validation of the correlation of the construct.

Another inventory called the Perfectionism Cognitions Inventory was used to examine the outcome of the study in order to measure the variable. Furthermore, a Self-Presentation Scale with some questions and items was used to measure the construct of the study for analysis and comparison of the findings. Taylor and Cox, (1998) drafted the Expanded Anxiety Sensitivity Index for measuring and identifying the association of the construct. After all these scales and indexes were used, the results show that perfectionism is associated with anxiety and involves fear of cognition.

Moreover, another study on the correlation between depressive syndrome and maladaptive perfectionism was carried out by (Harries et al., 2008). The study targeted a population of 96 college students. Frost et al., (1990) state that there is an association between the two variables, maladaptive perfectionism and depressive symptoms. The elements of including rumination components in analyzing the relationship between the variables depression and maladaptive shows that the mediates play an essential role in construction. The respondents completed the Response Styles Questionnaire to measure the level of rumination (Nolen-Hoeksema, 1991).

Depression and Anxiety

In one of the paper reports, a study gives an account of the effects of the internet on the users by considering gender. The following variable was included in internet identification, internet anxiety, and gender in the study. The study was carried out at a college and involved 490 female undergraduate students and 118 undergraduate students, to give a total of 608 undergraduate students.

The results were centered on the students' experience of using the internet and the correlation of the other two variables, namely internet identification, and internet anxiety. Gender differences were considered to see the participant's experience in using the internet. Males students are dominating in creating websites than their female counterparts. Furthermore, male students visited the internet game websites more often the female students. Males students downloaded more things from the internet than female students. Male students did more internet communications than female students. There is an accessible analysis of the internet identification in relationship with the total use of the internet as well as the internet anxiety and the total use of the internet, which is a negative relationship (Joiner et al., 2005).

According to Wheeler et al. ,(2011), for understanding the critical samples in perfectionism by measuring maladaptive cognitive personality dimensions is depicted, The author decided to consider a quiet number of scales to measure the variables; for instance, the Evaluative Concerns Perfectionism Scale was used to measure the variables that consider the element of evaluative concerns of individuals. Furthermore, a Self-Critical Perfectionism Scale to measure the self-critics of individuals as far as perfectionism is concerned. Other variables considered in this study include panic disorder and anxiety disorder to measure the association of depression in outpatients.

CHAPTER III

Methodology

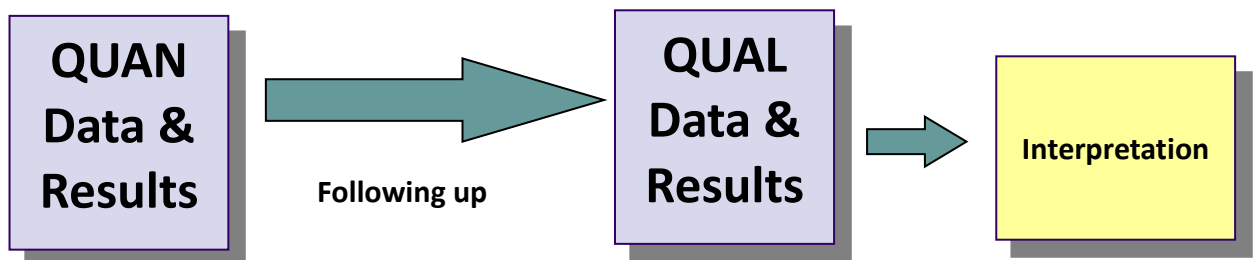
This chapter consists of the methodology and research design of the research. The chapter will discuss the materials used and the data collection procedure. In addition, it will also elaborate on the data analysis procedure and ethical confirmation.

Research design

The mixed research methodology was used Sequential Designs In Explanatory Design, select qualitative sub-sample from quantitative sample data and (In Explanatory Design consists of gathering statistical information using quantitative data and use qualitative data to explain the variable under study then combine with statistics collected from quantitative) as Creswell, (2011) state. See figure (3.1).

Figure 3.1

Explanatory Sequential Design by (Creswell, 2011).



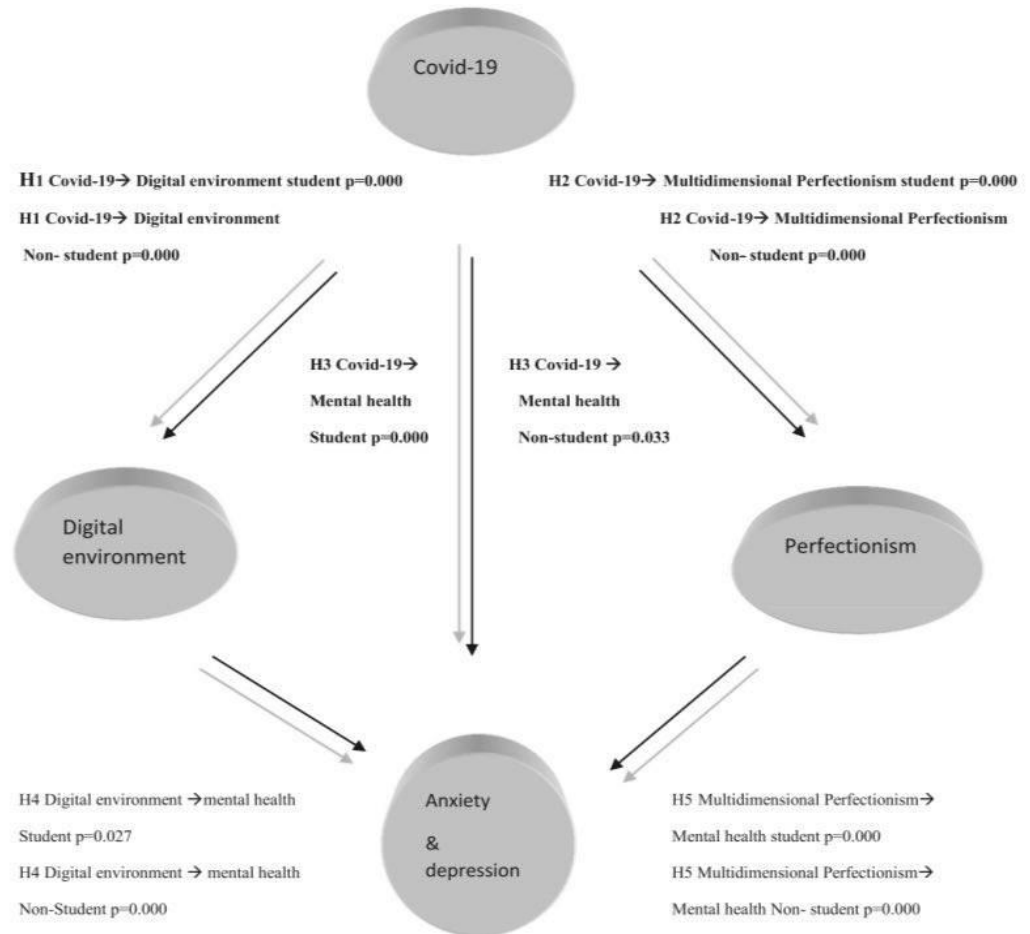
Quantitative data from a structured survey questionnaire (Scale) will divide among Internet and smart-phone users at northern Iraq and Descriptive statistics (Frequency, standard deviation and mean) were applied to the collected data that was gathered through the use of questionnaires (scale).

Qualitative data from a self-report interview with Internet and smart-phone users at northern Iraq and descriptive statistics was used to analyze. The research questions were answered by using the collected data.

Model of the study and Proposed Model

Figure 3.2

Proposed Model of the Study.



Sample and Population

The population represents the entirety of people the researcher seeks information on. However, it is impossible to conduct such a study; hence the researcher chooses a target population which is used to generalize results on the whole population. The population for this study was internet and smartphone users affected by the COVID 19 pandemic. The target population for this research was students and non-student in northern Iraq.

The education sector is one of the sectors that has been the most affected and most involved in this pandemic. When the entire world was shut down, they were doing the most work online, and they tried to deal with a new way of teaching: learning-distance education. On the other side, how can different personality trite (perfectionism) be effective? All these reasons are why the researcher chose to focus on the education sector and not any other. In addition, the education sector is still the pioneer sector during the pandemic, which is related to the research topic.

A sample is needed to determine the number of people that will respond to the questions and represent others. The researcher conducted the study on a sample of 980 student and non-student Smartphone and internet users. The sample size used was determined by the sample population. The study population includes student and non-students who have access to Internet and smartphones from Northern Iraq. Inclusion and exclusion criteria for the study are shown in Table 3.1.

Table 3.1: Inclusion and exclusion criteria

Inclusion	Exclusion
Adults ≥ 15 years of age	any acute or chronic condition That would limit the ability of the patient to participate In the stud
Smartphone user	Refusal to give informed consent
Minimize use internet for 1 h each day	Diagnosis of anxiety and depression Disorder

The study sample consists of the student and non-student internet and smartphone users in northern Iraq. The participants can be from any culture, nationality, and gender that were selected randomly. It is necessary to choose a sampling technique that determines how the research will come up with the participants for the research. A simple random sampling technique was selected whereby everyone will have an equal opportunity to participate in the research. There are many advantages of using a simple random sampling method as it increases the probability of every participant being selected and represents the population size. Everyone has got an equal chance to be selected and represent the population. This sampling method was straightforward, and errors can be reduced during the data collection process. The sample size was selected according to the guide by Israel (1992) which provided numbers to be sampled according to different populations. Populations above 100000 were given samples of 400 on a 95% confidence interval.

First, researcher divided the questionnaires by a random sample sampling technique consisting of 1000 questionnaires among student and non-student internet and smartphone users. That 980 completed the questionnaires for the quantitative method.

Second step, the researcher collected 100 self-reports; they answered ten sub-questions for five major research questions prepared by the research to collect qualitative data.

Demographic profiling

The 497 students comprised 264 male students and 233 female students, while the 483 non-student respondents were comprised of 251 male non-students and 232 female non-students. A significantly higher number of students (n=239) and non-students (n=223) were between the age group of 19-30 years. 12.5% of the students and 10.8% of the non-students were at least 41 years old. 43.9% of the students and 42.9% of the non-students were graduates, while 18.9% of the students and 16.6% of the non-students were drop-outs. Students have relatively high internet usage levels (7-9 hours=180, 10-12 hours=82, and 12 hours and above=32). There are also relatively high internet usage levels among non-students (7-9 hours=144, 10-12 hours=43, and 12 hours and above=14). 167 students had Covid-19, 330 students were Covid-19 free, while 178 non-students had Covid-19, and 305

students were Covid-19 free. 166 students lived in the city center, while 331 lived outside of the city. On the contrary, 182 non-students lived in the city center while 301 non-students lived outside of the city. As seen in table 3.2.

Table 3.2

Demographic Profiling

Variable	Description	Students		Non-students	
		Frequency	Percentage	Frequency	Percentage
Gender	Male	264	53.1	251	52.0
	Female	233	46.9	232	48.0
	Total	497	100	483	100
Age	15-18	60	12.1	71	14.7
	19-30	239	48.1	223	46.2
	31-40	136	27.4	137	28.4
	41-above	62	12.5	52	10.8
	Total	497	100	483	100
Education level	High school	29	5.8	43	8.9
	B.Sc.	156	31.4	153	31.7
	Graduate student	218	43.9	207	42.9
	Drop out	94	18.9	80	16.6
	Total	497	100	483	100
Hours spends on internet in 24 hours	1-3 hours	57	11.5	136	28.2
	4-6 hours	146	29.4	146	30.2
	7-9 hours	180	36.2	144	29.8

	10-12 hours	82	16.5	43	8.9
	12 hours and above	32	6.4	14	2.9
	Total	497	100	483	100
Use of online education	Yes	327	65.8	318	65.8
	No	170	34.2	165	34.2
	Total	497	100	483	100
Covid-19 illness	Yes	167	33.6	178	36.9
	No	330	66.4	305	63.1
	Total	497	100	483	100
Residential location	Centre of the city	166	33.4	182	37.7
	Outside of the city	331	66.6	301	62.3
	Total	497	100	483	100

Data Collection Tools

Data were collected from the three variables, one independent variable, perfectionism, and two dependent variables (anxiety and depression). The researcher collected data using a question that explains each variable by distributing some questionnaires to the respondents.

Beck Anxiety Inventory

The researcher adopted a scale for measuring Anxiety levels among the respondents (Beck et al., 1988). See (Appendix B1). The scale is a set of self-report scales. The instrument used for this study is the questionnaire that measures the level of anxiety, consisting of an initial number of 21 items with four options that list common symptoms of anxiety. The participants are asked to indicate their agreement according to their feeling and experience during the past month. The researcher decided to measure the outcome by using scores Beck Anxiety Inventory (BAI) to measure the level of participants' anxiety.

Beck Depression Inventory

Although the researcher adopted a scale for measuring depression levels among the participants, the scale is a set of self-report scales (Beck et al., 1961). The instrument used for this study is a questionnaire that measures the level of depression. This consisted of an initial number of 21 items with four options that measure depression. The participants are asked to indicate by marking the agreement according to their feeling and experience during the past month. The researcher measured the outcomes through scores using the Beck Depression Inventory (BDI) to gather respondents' information.

Multidimensional Perfectionism

On the other hand, the researcher adopts the Multidimensional Perfectionism Scale from (Hewitt & Flett, 1991) as a measure of perfectionism traits: (Self-Oriented Perfectionism, Other-Oriented Perfectionism, and Socially-Oriented Perfectionism). With 35 items and make 5 point ratings for gathering data that can be analyzed to identify the correlation of the variables indicating the one with the highest score. (See Appendix C).

Self-report interview

The researcher designed a self-report interview for the quantitative part that contained five major questions and ten sub-questions. That six experience in psychology shows their acceptance of it. The questions need a descriptive and deep answer to explain and give us the complete answer for our aim of the study the effectiveness of the digital environment and perfectionism during covid-19 on anxiety and depression.

Data Collection Procedure

On March-May 2021 researcher conducted a sample study from Iraq Internet and smartphone user after ethical community acceptance with the application number YDU/EB/2021/619 has been evaluated by the Scientific Research ethics committee and granted approval as see in the appendix F.

The study uses both primary and secondary data to provide sensible responses to the research question and find ways to achieve this research's aim. The study is a mixed-method that focuses on using primary data collected through questionnaires for the quantitative

method and self-report interviews for the qualitative method. Data collection tools are administered to student and non-student internet and smartphone users who live in Northern Iraq's digital environment. The data collection tools are separated into two units in which the first section copes with demographic elements and the second section is the informative section. The researcher collected primary data to provide more information for the literature review and future studies. The researcher will read secondary data sources, namely books, journal articles, and other publications.

The study is quantitative and qualitative to address the effectiveness of the digital environment and perfectionism during Covid-19 on depression and anxiety. An explanatory mixed methods design was used. In the first quantitative phase of the study, a questioner's instrument was used. The questionnaire was divided among 1000 students and non-student Internet and Smartphone users, and the research collected 980 forms. The data was used to analyze the digital environment and perfectionism effectiveness related to depression and anxiety during Covid-19. The second phase is the qualitative phase. It was conducted to better understand the effectiveness of the digital environment and perfectionism on depression and anxiety during Covid -19. In this exploratory follow-up, the effectiveness will be explored by using self-report interviews with participants from northern Iraq. The exploratory follow-up is to understand better how and why Digital Environment and perfectionism can be effective. After acceptance from the ethical committee. The data was collected from Internet and Smartphone Users in Northern Iraq. The participants can be from any culture, nationality, and gender that will be selected randomly.

Data analysis methods

Quantitative gathered data were examined by means of descriptive statistics to determine the magnitude of effect of the variables. The data analysis measures that were implemented comprised the application of descriptive statistics, like mean and standard deviation (SD), the goal of which was to evaluate the magnitude of influence, and also the responsiveness of the variables, respectively (Neuman,2013). Pearson correlation coefficient tests were used to test the proposed hypothesis. The data were scrutinized by means of Statistical Packages for Social Sciences (SPSS), version 22. The researcher analyzed the data using various statistical tests. The reliability of the data was determined using Cronbach's Alpha and the validity using construct reliability and Forknell-Lacker.

The heterotrait-monotrait ratio was used to check similarities between items in the variables. Structural Equation Modeling (SEM) was applied to define relationships between the variables with Path analysis being used for the purpose of identifying the direction of the relationships.

The qualitative data was collected to provide answers and was represented in a descriptive statistics way and coding. A thematic approach was applied to code and analyze the self-report results using the NVivo program. The report result process sought to establish the views of internet and smartphone users about the effectiveness of the digital environment on anxiety and depression during Covid-19. To be associated with serving the aim of the research.

Structural Equation Modeling

Model The statistical approach of SEM is used to quantify and analyze the relationships between observable and latent variables. It explores linear causal links between variables, while accounting for measurement error, similar to but more powerful than regression analysis (Beran and Violato, 2010). The multivariate analysis technique's SEM is commonly employed in the social sciences (González et al., 2008). Its applications span from simple connection analysis to complicated measurement equivalence analyses for first and higher order entities (Cheung, 2008). It provides a flexible framework for constructing and analyzing complicated interactions between various variables, allowing researchers to use empirical models to test the validity of theories. The capacity to manage measurement error, which is one of the most significant drawbacks of most studies, is maybe its most significant advantage. Although it has been utilized in variety of fields, it has, yet, to be widely adopted in medical research and epidemiology.

Path Analysis

Path analysis is a method for determining and assessing the impacts of a collection of factors acting on a defined outcome via numerous causal routes. It is a forerunner to and subset of structural equation modeling. A statistical technique for analyzing and testing links between a set of observed variables is path analysis. Path analysis allows for the simultaneous investigation of several direct and indirect interactions between variables

(Valenzuela and Bachmann, 2017). The qualitative data gathered for answering the research questions were examined by means of plain descriptive statistics and coding, and a thematic approach was applied to code and analyze the self-reported results using Nvivo software. The reported result indicates the views of internet and smartphone users about the effect of the digital environment on anxiety and depression during COVID-19, in line with the goal and objective of the research. Tables, graphs, and pie charts were used to show the results.

Validity and Reliability test

The questionnaire validity and reliability were tested to achieve good results for analyses. Rosenthal and Rosnow (1996) state that the validity and reliability of the questionnaire are of paramount importance in ensuring that the research instruments are relevant in collecting information and addressing the subject under study. It will help the researcher reduce errors that distort the findings (Creswell & Creswell, 2017).

The reliability of the research is that it provides information about the variable by using SPSS and Cronbach's Alpha Coefficient technique. Moreover, the system introduced by Lee Cranach in 1951 depicts measures of internal consistency of the method used for gathering information represented by numbers 0 and 1 (Tavakol & Dennick, 2011). The alpha value for multidimensional perfectionism is (0.865) for students and (0.933) for non-student, and the alpha value for the Beck Anxiety Inventory scale is (0.836) for students and (0.820) for non-student. The alpha value for the Beck Depression Inventory scale is (0.793) for students and (0.868) for non-student. No item deletes in scales because the percentage is significant. Cohen gave the guideline of 0.2 as small, 0.5 as a medium, and 0.8 and higher as a large effect size (Denis, 2012). "Validity A test is valid for measuring an attribute if (a) the attribute exists and (b) variations in the attribute causally produce variation in the measurement outcomes" (Borsboom & Mellenbergh, 2004).

Meanwhile, at all scales, the researcher discovered that a language barrier might distort the results as all the three languages were used that is English and Kurdish. Most of the responses were translated from Kurdish to English. After translation, the researchers reduced errors by translating English responses to Kurdish and vice versa. To know the content validity of the Kurdish version, the researcher gave the Kurdish version to six experts who have Doctorate and above degrees in clinical psychology and Social

psychology to look at the scales and give their opinion on the appropriateness of each item for measuring variables.

The study proceeded to determine the variables' construct reliability and validity. Multidimensional perfectionism, BAI, and BDI had high internal consistency as denoted by their respective Cronbach's alpha values of 0.865, 0.836, and 0.793, respectively. All the variables had rho_A, and the composite reliability value exceeded 0.80. Furthermore, the variables' Average Variance Extracted (AVE) was above 0.50, and this signifies that all the variables had acceptable levels of internal consistency, construct reliability and discriminate validity (Zaiř & Bertea, 2011). Hence, it can be established that the variables are significant in examining the effectiveness of the digital environment and perfectionism on psychological disorders (anxiety and depression) during coronavirus (COVID-19) among students (see Table 3.3).

Table 3.3.

Students Construct Reliability and Validity Tests.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
MD. perfectionism	0.865	0.867	0.899	0.597
BAI	0.836	0.837	0.884	0.604
BDI	0.793	0.800	0.867	0.621

Multidimensional perfectionism and mental health had high internal consistency as denoted by their respective Cronbach's alpha values of 0.933, 0.820, and 0.868. All the variables had rho_A and composite reliability values exceeding 0.80. Furthermore, the variables' Average Variance Extracted (AVE) was above 0.50, which signifies that all the variables had acceptable levels of internal consistency, construct reliability, and discriminant validity (Zaiř & Bertea, 2011). Hence, it can be established that the variables are significant in examining the effectiveness of the digital environment and perfectionism

on psychological disorders (anxiety and depression) during coronavirus (COVID-19) among non-students (see Table 3.4).

Table 3.4.

Non-Students Construct Reliability and Validity Tests.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
MD. perfectionism	0.933	0.936	0.949	0.788
BAI	0.820	0.824	0.873	0.580
BDI	0.868	0.869	0.894	0.585

Researcher role

In begin of the study the researcher prepare a proposal and submitted to Guidance and psychological department from Near East University. In the proposal the aim, research objectives was indicated also identify research methods. While there is enough information about variables and data collection techniques and analysis methods also a researcher first duet during this study was getting permission to start working on this area. After submission of study document to Near East Ethical Community, after ethical community acceptance with the application number YDU/EB/2021/619 has been evaluated by the Scientific Research ethics committee and granted approval researcher stared to collecting data. During Researchers monitor the project to make sure it follows the requirements and standards. The data interpret, produce reports discussing research findings and provide recommendations at the end of the project were indicated after third monitoring.

Near east ethical community is educational sciences ethics committee, social sciences ethics committee, and applied sciences ethics committee, which operate under Near East University's Ethics Review Board, meet regularly to evaluate the applications.

This community responsible for review all applications according to scientific way. They have a huge role in scientific roles.

Researcher skills are important factors to the contribution of this study, researcher qualified Master's degree in the research field and has years of teaching experience ,Proven knowledge of data collection methods, Know process of data analysis tools and statistical applications qualified in written and verbal communication skills has a Knowledge of project management.

Every Researcher has duties according to this study researcher determined areas of research to increase knowledge in a particular field by researcher also collected data, record and analyze data. During data collecting process researcher tried to focus on ethical consideration .While Interpret data analysis results and draw inferences and conclusions in other hand Present research results to committee.

Ethical consideration

The research ensures that all participants have got the liberty to accept or deny if any form of research is a threat to their lives. The research considered all ethical and moral issues that needed to be given attention before carrying out the study. The researcher ensures that all sensitive issues are not included in the questionnaire to achieve the research objective. Any form of biased is dealt with by considering ethical rules to ensure that findings are distorted.

CHAPTER IV

Findings and Results

This chapter focused on the analysis of the data collected. The researcher conducted various searches relevant to the study like the tests to determine which of the independent variables affected the dependent variable the most, and the model fitness. The researcher also conducted tests to determine the relationship between the independent and dependent variables. For this proposes 1000 questionnaires were distributed to equal respective totals of 500 questionnaires to students and non-students. 497 and 483 questionnaires were retrieved from the participants coded into SPSS and Smart PLS for further examination. SPSS and Smart PLS are vital for conducting a quantitative analysis of the findings. Thus, this chatter offers a detailed insight of the analyzed 980 responses with the aim of addressing the effectiveness of digital environment and perfectionism through Covid19- on anxiety and depression.

Findings related to research questions one

Is there a significant relationship between gender, anxiety, and depression?

Table 4.1.

Independent Samples T-Test for Anxiety and Depression and Gender

Scale	Categorize	N	Mean	Std	t	d	sig. (2-tailed)
BAI	student: Male	264	42.68	12.08	3.76	495	0.02
	Female	233	45.75	8.83			
	Non student: Male	251	40.45	10.87	0.811	481	0.754
	Female	232	44.11	7.65			

Table 4.1 (Continued).

BDI	student: Male	264	52.68	12.08	2.78	495	0.04
	Female	233	45.75	8.83			
	Non student: Male	251	50.45	10.78	2.11	481	0.011
	Female	232	46.11	7.65			

Results obtained depict that there is a significant difference between the anxieties in terms of gender for the student. $P < 0.05$, $t = 3.76$. On the other hand, anxiety does not have any difference in terms of gender for non-student participants $p < 0.05$, $t = 0.811$, as seen in Table 4.1. Moreover, the results highlighted a significant difference between the depression in terms of gender for students and not students as $P < 0.05$, $t = 2.78$ and $P < 0.05$, $t = 2.11$.

Findings related to research question two

Is there a significant relationship between age with anxiety and depression in digital environment usage?

Table 4.2.1.

ANOVA for Anxiety in the Term of Age.

Anxiety		Sum of Squares	df	Mean Square	F	P
Age	Between Groups	74.304	2	40.101	2.06	0.0408
	Within Groups	7270.55	978	58.247		
Total		7 344.854	980			

The findings from the respondents mentioned that there was a positive effect between anxiety in terms of age as illustrated in Tables 4.2.1, The $P < 0.05$ and $F(2,978) = 0.408$.

Table 4.2.2.

ANOVA for Depression in the Term of Age.

Depression		Sum of Squares	df	Mean Square	F	P
Age	Between Groups	44.789	2	36 .101	.219	.548
	Within Groups	8648.550	978	40 .247		
Total		8693.339	980			

The findings from the respondents show that there is no significant effect between depression in terms of age, as illustrated in Tables 4.2.2, The $P < 0.05$ and $F(2,978) = 0.219$.

Findings related to research questions three

Is Location effects on digital education, perfectionism and mental health?

Studies barely consider the influence of location on aspects like digital education, perfectionism, and mental health, and the study intends to fill these gaps. Such is vital for addressing questions and problems related to the effectiveness of the digital environment and perfectionism through Covid19- on mental health (anxiety and depression). Subsequently, examinations of such influences were carried out regarding how location influences digital education, perfectionism, and mental health.

Location effects on digital education

Studies barely consider the location effects on sociological, cultural, and educational aspects. One of the investigation questions of this research was to inspect if location

influenced the adoption of digital education between students and non-students in the Kurdistan Region of Iraq. Such denotes the study's novelty and originality and applying an independent t-test accomplished this. The computed independent t-test results that location had no influence on the use of digital education by both students (p -value < 0.05) and non-students (p -value < 0.05). Therefore, these findings imply that the adoption of digital education in the Kurdistan Region of Iraq was primarily influenced by economic development, technological innovation, and structural factors like Covid-19 (Siron, Wibowo & Narmaditya, 2020). Such is an actual reflection of practical situations prevalent in a country because studies consider the adoption of digital education to be influenced by economic development (Szopiński, 2016) and technological innovation (Salinas et al., 2017).

Table 4.3.1.

Location Effects on Digital Education.

	Students			Non-students		
	F	df	p-value	F	df	p-value
Location ; Digital education	2.259	495	0.756	4.620	481	0.344

Location effects on multidimensional perfectionism

Study attention was also given to analyzing if location effects influenced multidimensional perfectionism. The following arguments show that multidimensional perfectionism varies significantly according to social structures, values, and norms. The extent to which socially prescribed, self-oriented, and other-oriented perfectionism vary according to location (Hewitt & Flett, 1991). Study findings presented in Table 4.3.2 showed that the students' multidimensional perfectionism was not influenced by their location (p -value = 0.446). Such findings contradict Hewitt and Flett (1991). This can imply that family values and individual differences significantly affect multidimensional perfectionism among students.

Meanwhile, differences between students and non-students were observed as location significantly influenced multidimensional perfectionism among non-students (p -value = 0.089). This aligns with Hewitt and Flett's (1991) self-oriented and other-oriented propositions influenced by cultural and religious orientation factors. Such is considerably accurate in Kurdistan, which is composed of various ethnic and religious groups like Suni, Kurdish Bandini, Sorani, Yazidi, etc.

Table 4.3.2.

Location Effects on Multidimensional Perfectionism.

	Students			Non-students		
	F	df	p-value	F	df	p-value
Where did you stay: Covid-19	2.216	495	0.446	4.620	481	0.089

Location effects on mental health

Both students' and non-students' mental health was similar irrespective of differences in their geographical locations. The composited independent t-tests revealed that there were considerable differences in depression levels among students (p -value = 0.888). However, the students were significantly anxious about Covid-19 as the results show that the students' anxiety levels measured by the Beck Anxiety Inventory (BAI) are significantly different (p -value = 0.03). Such is valid as Kurdistan people and the world remain anxious about the development of practical solutions that will end Covid-19 (He, Zhnag & Li, 2021).

Table 4.3.3.

Location Effects on Mental Health.

Where did you stay: Covid-19	Students			Non-students		
	F	df	p-value	F	df	p-value
BDI*	1.451	495	0.888	0.003	481	0.590
BAI*	2.511	495	0.003	0.004	481	0.233

* *BDI = Beck depression Inventory and BAI = Beck Anxiety Inventory*

Relatively similar observations were observed for non-students (BDI: p-value=0.590). This reveals that there were considerable differences in depression levels among non-students. Different results were observed regarding the location consequences of Covid-19 on non-students anxiety levels. That is, the location consequences of Covid-19 on non-students anxiety levels were insignificant (BAI: p-value=0.233). This possibly implies that uncertainties surrounding Covid-19's prevalence of a new variance, effects, and eradication cause students to be anxious compared to non-students.

Findings related to the research questions four

Is there a noteworthy dissimilarity between Anxiety and Depression in terms of hours they spend in the digital environment?

Table 4.4.1.

ANOVA for Anxiety in the Term of Hours They Spend in the Digital Environment.

Anxiety		Sum of Squares	df	Mean Square	F	P
Internet	Between Groups	66.680	2	45.101	3.089	.041
User hour	Within Groups	7562.880	978	39.247		
Total		7629.56	980			

The research outcome depicts the significant effect of anxiety in terms of hours they spend in the digital environment as mentioned in Tables 4.4.1, The $P < 0.05$ and $F(2, 978) = 3.089$.

Table 4.4.2.

ANOVA for Depression in the Term of Hours They Spend Digital Environment.

Depression		Sum of Squares	df	Mean Square	F	P
Internet	Between Groups	56.202	2	32.212	2.001	.011
User hour	Within Groups	8275.55	978	35.358		
Total		831.752	980			

The research outcome shows a significant effect between depression in terms of hours they spend in the digital environment as mentioned in Table 4.4.2, The $P < 0.05$ and $F(2, 978) = 2.001$.

Findings related to the research questions five

Is there a significant difference in perfectionism regarding their hours in the digital environment?

Table 4.5.

ANOVA for Perfectionism in the Term of Hours They Spend in the Digital Environment.

Perfectionism		Sum of Squares	df	Mean Square	F	P
Internet	Between Groups	82.860	2	55.328	.389	.807
User hour	Within Groups	9858.22	978	43.542		
Total		9941.08	980			

The results obtained show that there is a negative effect between perfectionism in terms of hours they spend in the digital environment as illustrated in Table4.5, The $P < 0.05$ and $F(2,978) = 0.389$.

Findings related to the research question six

Is Correlation effects between the digital environment, perfectionism, and mental health?

Pearson correlation coefficient test, was computed to examine how digital education, perfectionism, and mental health correlate. Table 4.6 results denote that the digital environment is significantly correlated with multidimensional perfectionism in a low positive manner by 0.453 for students. However, the correlation effects for non-students were significantly high, as evidenced by a significant positive correlation of 0.722. This suggests that the digital environment enhances more non-students' awareness of socially prescribed and other-oriented perfectionism than students.

Table 4.6.

Correlation Effects between digital environment, perfectionism and mental health

		Students			Non-students		
		DE	MP	MH	DE	MP	MH
DE	Pearson	1			1		
	Correlation						
	Sig. (2-tailed)	-			-		
	N	497			483		
MP	Pearson	.453**	1		.722**	1	
	Correlation						
	Sig. (2-tailed)	.000	-		.000	-	
	N	497	497		483	483	
MH	Pearson	.358**	.621**	1	-.089*	0.005	1
	Correlation						
	Sig. (2-tailed)	.000	.000		.049	.912	.-
	N	497	497		483	483	483

** . Correlation is significant at the 0.01 level (2-tailed).

Improvements or the adoption of a digital environment were positively connected to improvements in both students' mental health by 0.358. because the digital environment helps students acquire more information about Covid-19, anxiety, or depression, this causes them to adopt effective measures to reduce them and improve their mental health. On the contrary, a significant negative correlation of -0.089 was observed between non-students digital environment and mental health. This suggests that digital environment improvements were being used for non-productive activities or adversely affecting non-students mental health. For instance, non-students can take substantial amounts of time on social media playing games and other irrational activities, which deprive them of enough sleep and thus, negatively affect their mental health.

Significant and non-significant positive correlations of 0.621 and 0.912 were observed between multidimensional perfectionism and mental health among students and

non-students, respectively. This suggests multidimensional perfectionism, especially in self-orientation individuals, in awareness of issues and events that affect their well-being and happiness (Gnilka, Ashby & Noble, 2012). They can take appropriate steps to ensure that these circumstances do not undermine their mental health. More so, studies have shown that multidimensional perfectionism aspects like socially prescribed and other-oriented perfectionism aids individuals in avoiding circumstances that adversely affect their mental health (Liley, Siros & Rowse, 2020; Mathew et al., 2014). Gnilka, Ashby, and Noble (2012) established that multidimensional perfectionism helps people cope with anxiety.

Findings related to the research question seven

Is there a significant correlation between perfectionism with Anxiety and Depression at the time of coronavirus?

Table 4.7.

Correlation Analysis for perfectionism with Anxiety and Depression in the time of corona.

		Perfectionism	Anxiety	Depression
Perfectionism	person correlation	1		
	Sig.(2-tailed)			
	N			
Anxiety	person correlation	0.270**	1	0.408**
	Sig. (2-tailed)	0.02		0.01
	N	980		
Depression	person correlation	0.346**	0.408**	1
	Sig. (2-tailed)	0.00	0.01	
	N	980		

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The study's findings suggest a significant correlation between perfectionism, depression, and anxiety $P < 0.05$, $r = 0.408$ and $P < 0.05$, $r = -0.270$, as seen in Table 4.7.

Findings related to research questions eight

Insights of students' mental health aspects

The BAI and BDI examinations were conducted on a random sample of 10 students to determine their anxiety and depression levels triggered by Covid-19 and understand how digital education and multidimensional perfectionism would influence their mental health.

Insights of students' anxiety aspects

Overall scores for all the 21 anxiety symptoms were computed and 3 student had "minimal" level of anxiety (0 – 7: score 3; score=4; score =5), 5 students had "mild"; anxiety levels (8 – 15: score=9; score =9: score 10; score=12; score=13). On the other hand, 1 student was discovered to have "Moderate" anxiety levels (16 – 25: score =23). Only 1 student has severe anxiety levels (26 – 63: score=29). These results are relatively the same because some students were reported to have been infected with Covid-19 while others were free from Covid-19 infections. Therefore, these results imply that further tests are needed to determine whether these symptoms appear mostly panic-related, autonomic, neurophysiologic-related, or subjectively. The results are presented in Table 4.8.1

Table 4.8.1.

Insights of Students' Anxiety Aspects.

Symptoms	Scores									
Numbness or tingling	0	0	0	0	0	0	0	0	0	0
Feeling hot	1	0	0	1	0	0	1	1	0	2
Wobbliness in legs	0	0	0	1	0	0	0	0	0	1
Unable to relax	2	2	1	1	1	0	1	1	0	2
Fear of worst happening	3	2	0	1	0	0	1	0	2	1
Dizzy or lightheaded	1	0	0	1	0	0	1	0	0	2
Heart pounding / racing	1	0	1	1	0	0	0	0	1	1
Unsteady	0	2	0	1	0	0	0	0	1	2
Terrified or afraid	1	0	0	0	0	1	0	0	1	2
Nervous	2	1	1	1	0	2	0	0	1	2
Feeling of choking	1	0	0	0	0	0	0	1	0	0
Hands trembling	0	0	0	0	0	0	0	0	0	0
Shaky / unsteady	0	1	0	0	0	0	0	0	0	1
Fear of losing control	1	1	0	1	0	0	0	0	0	2
Difficulty in breathing	0	0	1	0	0	0	0	0	0	2
Fear of dying	3	1	0	0	1	3	1	1	3	3
Scared	3	0	0	0	1	3	1	0	2	2
Indigestion	0	1	1	0	0	0	0	0	0	0
Faint / lightheaded	2	0	0	0	0	0	1	0	0	2

Crying	0	0	1	1	1	0	0	0	0	0
Agitation	0	1	0	1	0	0	1	0	3	2
Interest in people	0	1	1	1	0	0	0	0	0	1
Decision making	0	0	1	1	0	1	0	1	1	0
Worthiness	0	0	0	0	1	1	1	1	1	1
Working abilities	0	1	1	0	0	0	0	0	0	0
Changes in sleep patterns	0	1	2	1	2	2	0	0	0	0
Fatigue or tiredness	0	2	0	2	0	1	1	2	3	0
Changes in appetite	1	1	0	1	0	0	0	0	1	0
Weight	1	0	1	1	1	0	2	2	3	2
Health	1	0	0	1	0	0	1	1	3	2
Loss interest in sex	1	0	1	0	1	1	0	0	0	0
Total	12	12	12	14	13	11	15	11	29	21

Findings related to the research question nine

What is the level of Anxiety and Depression among Internet and smartphone users in COVID-19?

Table 9.

The Level of Depression and Anxiety BAI and BDI.

Scales	Categorize	N	Mean	Std
BAI	Student	497	12.77	7.11
	Non student	483	14.56	7.76
	Total	980	13.67	7.50
BDI	Student	497	15.67	9.85
	Non student	483	13.25	9.06
	Total	980	14.46	9.45

Mild mood disturbance was observed (BDI: 11-16: score). Were classified as a Mild mood disturbance band or range (Beck et al., 1996). The findings presented in Table 4.9 also showed that the students required special attention in dealing with depression linked to happiness, pessimism, success/past failure, satisfaction, punishment feelings, disappointment, blame/self-criticalness, agitation, interest in people, worthiness, fatigue or tiredness, weight, and health. This is because they were linked to depression (Beck et al., 1996).

"Mild" anxiety levels (8 – 15). This result was relatively different because some students were reported to have been infected with Covid-19 while others were free from Covid-19 infections. Therefore, these results imply that further tests are needed to determine whether these symptoms appear mostly panic-related, autonomic, neurophysiologic-related, or subjectively. The results are presented in Table 4.9.

Factor analysis results

Factor analysis was employed to find out the factors that affect the variables Covid-19, digital environment (DE), multidimensional perfectionism (MDP), Beck Anxiety Inventory (BAI), and Beck Depression Inventory (BDI).

Factor analysis results for students

BDI, Covid-19, DE, and MDP variable elements were recognized to be having strong effects on the other aspects in question. Moreover, the factor loadings were recorded as above the standard 0.70 required to warrant a variable element as having a substantial effect on a significant variable (Peterson, 2000). The outcome is illustrated in Table 4.10.1.

Table 4.10.1.

Students Factor Analysis Results.

	COVID-19	Digital Environment	Mental Health	Multidimensional Perfectionism
BDI14			0.797	
BDI17			0.667	
BDI19			0.852	
BDI20			0.825	
COVID1	0.733			
COVID4	0.825			
DE3		0.808		
DE4		0.774		
MD1				0.806
MD2				0.842
MD3				0.807

MD4	0.846
MD7	0.763
MD11	0.800
MD12	0.825

BDI= Beck Depression Inventory; DE= Digital Environment; MD= Multidimensional Perfectionism

Factor analysis results for non-students

BAI, Covid-19, DE, and MDP are some elements that strongly affect other elements under study. However, the factor loading was recorded as above the standard 0.60 wanted to warrant a variable as having a strong effect on another variable (mental health). The outcome of the study is illustrated in Table 4.10.2.

Table 4.10.2.

Non-Students Factor Analysis Results.

	COVID-19	Digital Education	Mental Health	Multidimensional Perfectionism
BAI3			0.756	
BAI4			0.721	
BAI5			0.673	
BAI6			0.734	
BAI7			0.695	
BAI8			0.724	
BDI3			0.694	

BDI4		0.662
BDI6		0.595
COVID2	0.847	
COVID3	0.906	
DE3		0.755
DE4		0.752
MD20		0.892
MD30		0.913

BAI= Beck Anxiety Inventory, DE= Digital Environment; MD= Multidimensional Perfectionism

Model fit

The outcome shows that 0.05 while the Chi-square values were significant and the NFI values were above 0.70 and this depicts that the model was useful for serving the purpose of examining the effectiveness of digital environment and perfectionism on psychological disorders (anxiety and depression) during coronavirus (COVID-19) among students and non-students.

Table 4.11.

Model Fit.

	Students		Non-students	
	Saturated Model	Estimated Model	Saturated Model	Estimated Model
SRMR	0.059	0.059	0.109	0.109
d_ULS	0.888	0.891	0.786	0.776

d_G	0.310	0.309	0.420	4.183
Chi-Square	900.408*	898.477*	436.106*	432.563*
NFI	0.845	0.846	0.845	0.846

* *Significance at 0.05 level*

Path analysis

The mandate of this research was centered on Covid-19's effects on the digital environment. The presented findings show that Covid-19's has significant positive effects on the digital environment among students ($\beta=0.747$; $p\text{-value}=0.000$) and non-students ($\beta=0.432$; $p\text{-value}=0.000$). this implies that Covid-19 causes students to adopt online learning platforms and non-students to adopt online work-from-home platforms. Such is relatively true and aligns with several studies showing that Covid-19 has caused a significant adoption of internet-based applications by educational institutions (Siron, Wibowo & Narmaditya, 2020; Salinas et al., 2017) and business organizations to avoid getting Covid-19 (He et al.,2021). Thus, research question Q1 was valid for both students and non-students.

Table 4.12 path analysis results also show that research question Q2 was valid for non-students, adversely affecting their mental health by -0.288. However, contrasting results were observed for students as Covid-19 could positively affect students' mental health by 0.378. This suggests that non-students could have been worried more about family obligations, increased burdens, and other related responsibilities, which were adversely affected by Covid-19, than students who might bear the same responsibilities and consequences (see Table 4.12).

Table 4.12.

Path Analysis.

	Students		Non-students	
	Coefficient	P-value	Coefficient	P-value
Covi-19 -> Digital environment	0.747	0.000	0.432	0.000
Covi-19 -> Mental health	0.378	0.000	-0.288	0.033
Covi-19 -> Multidimensional perfectionism	0.285	0.000	0.857	0.000
Digital environment -> Mental health	0.181	0.027	0.717	0.000
Multidimensional perfectionism -> Mental health	-0.544	0.000	0.636	0.000

Table 4.12 shows that Covid-19 positively affected students' and non-students' multidimensional perfectionism by 0.285 and 0.857. Thus, research question Q3 was accepted, and this implied that the prevalence of Covid-19 caused students and non-students to improve their socially prescribed, self-oriented, and other-oriented perfectionism (Hewitt & Flett, 1991). Such is vital in guarding against the spreading of Covid-19.

The students' path diagram is shown in Appendix 1, and research question Q4 was accepted. This implied that digital environment improvements help improve students' and non-students' mental health by 0.181 and 0.717, respectively. This also shows that digital environment improvements greatly enhanced non-students' mental health during Covid-19 compared to students. Thus, the adoption of digital platforms by individuals, educational institutions, and business organizations assist in avoiding getting Covid-19 (He et al., 2021; Siron, Wibowo & Narmaditya, 2020; Salinas et al., 2017). As a result, this deals with the fear of having to get Covid-19, thus improving their mental health. The student's and non-student path analysis results were summarised using Figures 4.1 and 4.2., respectively.

Figure 4.1

Students' Path Analysis Results

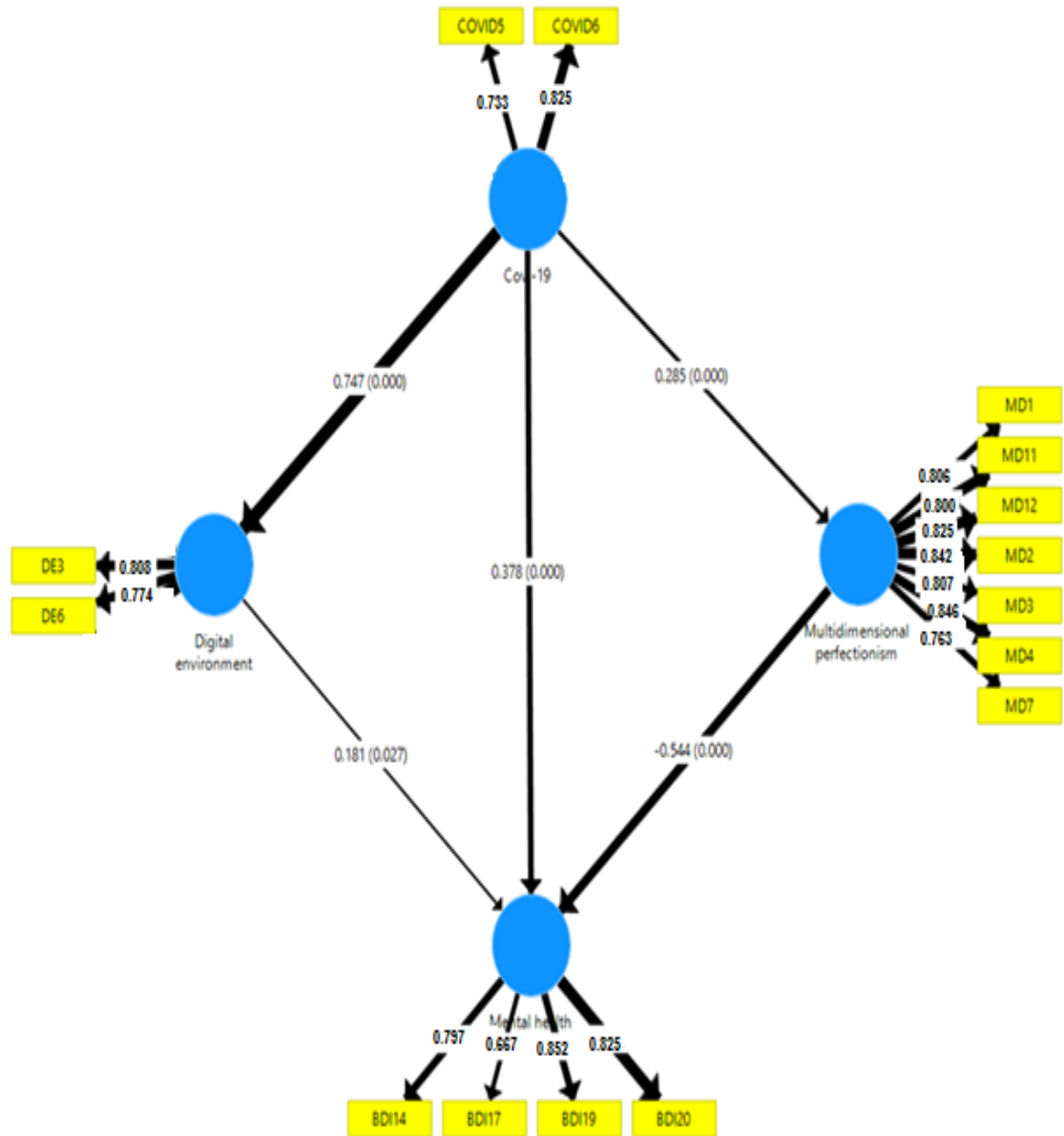
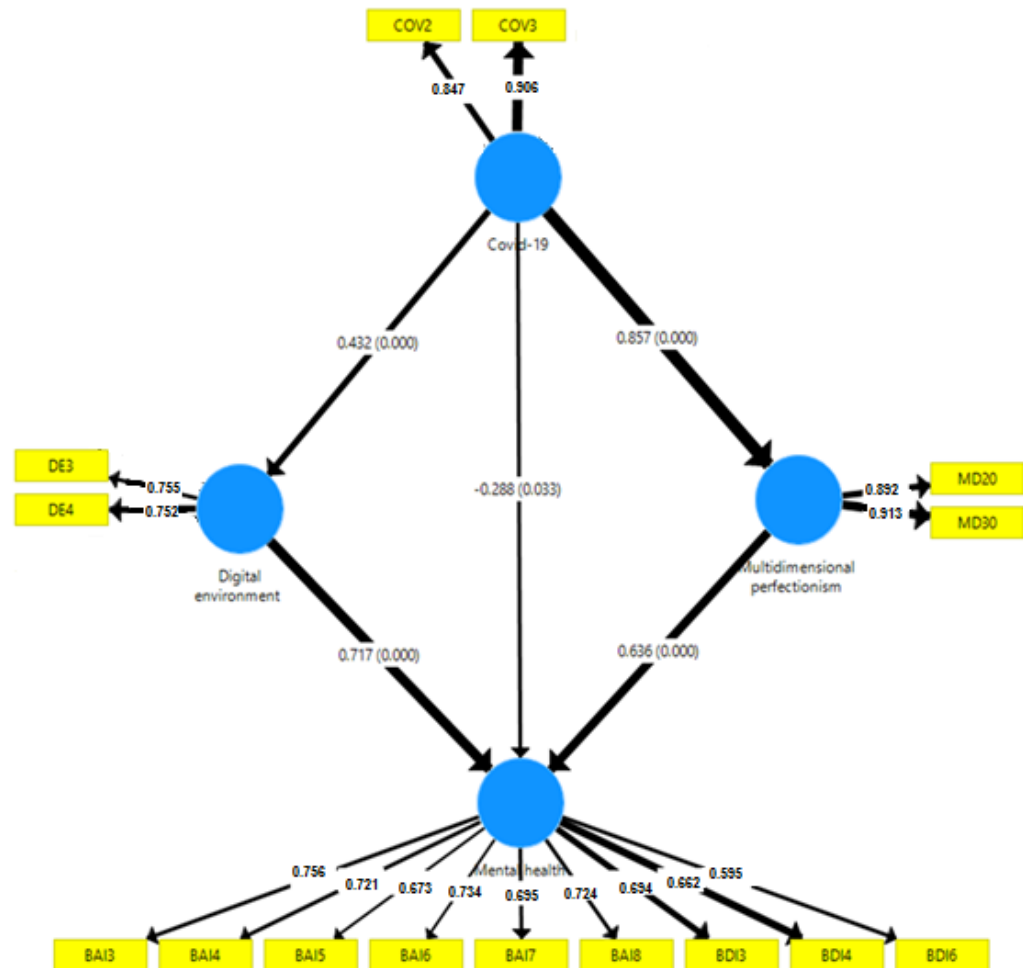


Figure 4.2

Non-Students' Path Analysis Results

Improvements in multidimensional perfectionism adversely affected students' mental health by -0.544 and positive effects on non-students mental health by 0.636. This positively indicates that the students' socialization abilities were negatively affected, and they were prevented from getting access to classroom learning platforms and personal interactions with their teachers. Besides, getting used to online learning platforms requires adjustments that most students were not used to and thus, adversely affect their mental health. The opposite is valid for non-students who used socially prescribed, self-oriented, and other-oriented multidimensional perfectionism aspects to their advantage and avoided

getting Covid-19. This was vital for enhancing their mental health, and hence research question Q5 was accepted for non-students and rejected for students' scenarios. The non-student path analysis results can be summarised using Figure 4.2.

Findings related to research questions Ten and Eleven.

Indirect or mediating effects

Indirect properties were computed with the aim of the mediating effects of the digital environment and multidimensional perfectionism on students' and non-students mental health. Alternatively, this was accomplished by examining Covid-19's indirect effects on students' and non-student mental health.

Covid-19's indirect effects on students' mental health

A significantly low and positive coefficient of 0.135 linking Covid-19, digital environment, and mental health was observed. This denotes that the digital environment positively influences the affiliation between Cov-19 and mental health among students. However, it was noted that multidimensional perfectionism has negative mediating effects on the affiliation between Cov-19 and mental health among non-students ($\beta=-0.155$; p -value=0.000).

Table 4.13.1.

Covid-19's Indirect Effects of Students' Mental Health.

	Original Sample	Standard Deviation	T Statistics	P Values
Covid-19 -> Digital environment -> Mental health	0.135	0.061	2.199	0.028
Covid-19 -> Multidimensional perfectionism -> Mental health	-0.155	0.028	5.474	0.000

Covid-19's Indirect effects of non-students' mental health

Covid-19's Indirect effects on non-students' mental health

A low positive and significant indirect effect of 0.310 was observed in Covid-19, digital environment, and mental health (p -value <0.05). Therefore, this concluded that the digital environment positively affects the correlation between Cov-19 and mental health among non-students. On the other hand, a relatively high and significant indirect effect of 0.545 was observed in Covid-19, multidimensional perfectionism, and mental health (p -value <0.05). Hence, it was accepted that multidimensional perfectionism has positive mediating effects on the correlation between Cov-19 and mental health among non-students.

Table 4.13.2.

Covid-19's Indirect Effects of Non-Students' Mental Health.

	Original Sample	Standard Deviation	T Statistics	P Values
Covid-19 -> Digital environment -> Mental health	0.310	0.039	7.987	0.000
Covid-19 -> Multidimensional perfectionism -> Mental health	0.545	0.147	3.708	0.000

Self-report results

Findings related to research questions one

A thematic approach was applied to code and analyze the self-report results using the NVivo program. The report result process sought to establish the views of internet and smartphone users about the effectiveness of the digital environment on anxiety and depression during Covid-19. 45 students and 41 non-students indicated that they had good assumptions about the role of the digital environment during Covid-19 in targeting anxiety and depression. On the contrary, 3 students and 4 non-students highlighted that they had terrible assumptions, and 2 students and 5 non-students had mixed assumptions about the role of the digital environment during Covid-19 in targeting anxiety and depression. It suggested that both students and non-students relatively anticipated that digital environment improvements would play a vital role in avoiding Covid-19 infections and dealing with problems posed by Covid-19. It can be supported by other obtained interview results in which both students and non-students were asked if they thought that the digital environment would change their thoughts and emotions. All the students and non-students agreed and thus, further reinforced that digital environment improvements are essential and were greatly welcomed in Kurdistan. See tables (4.14.1 and 4.14.2).

Question one: What are the views of internet and smartphone users about the effectiveness of the digital environment on Anxiety and Depression during Covid-19?

1-how is your assumption about the role of the digital environment During Covid-19 in targeting anxiety and depression?

Table 4.14.1.

Participant Respondents About First Self-Report Question.

Responses	Frequency	Percentage
have effective role	75	75%
Not agree nor disagree	15	15%
Haven't effective role	10	10%

The above table (4.14.1) outlines the respondent's assumption about the role of the digital environment during Covid-19 in targeting anxiety and depression. The results outline that 75% of respondents mentioned that they have an influential role, 15% of respondents have no assumption, and 10% have determined that the digital environment has no influential role on depression and anxiety during the pandemic. Though becoming complicated in our everyday lives, online social media are answerable for augmenting mental health issues in younger people. It is because almost all participants follow up on the situation by Mobile or TV. Because of the quarantine, they did not have a chance to go out, so they watched TV and used social media to get new news about the situation. The research findings confirm that Kim's result comprehending the influence of social media on adolescents' comfort has become necessary because of a concurrent upsurge in mental health problems (Kim, 2017). The research outcome shows that there is a relationship between social media applications and psychological issues. A systematic review of 11 investigations gauging social media application and depressive symptoms in children and adolescents presented a minor nonetheless statistically important association (McCrae, Gettings, & Purssell, 2017). A meta-analysis of 23 studies presented an association between problematic Facebook use and psychological suffering in adolescents also young adults (Marino, Gini, Vieno, & Spada, 2018). Other systematic reviews have also discovered a significant association between social media application and depression (Hoare, Milton,

Foster, & Allender, 2016). With this preview explanation, we can note this from the participant's speech:

Participant I: yes, the digital environment affects; for example, let me talk about my situation. Whenever I read the news about covid-19, especially when they indicate a number of deaths, I feel sad and do not see any chance to live.

Participant II: sometimes, my anxiety increased when I saw hot news about this pandemic. When you read the news or see all posts about this illness and its effect on life, you do not know how many things come to your mind.

2-Do you think Digital environment can change your thoughts and emotions?

Table 4.14.2.

Participant Respondents About Second Self-Report Question.

Responses	Frequency	Percentage
Yes a lot of time	75	75%
According to situation	10	10%
No I don't think	15	15%

Table (4.14.2) represents the thought of participating during covid-19 about the effect of the digital environment on thought and emotion or a person's view. The results of the study outline that 75% of participants think that a digital environment can be effective in a person's view. Just 10% percent of them mentioned that might affect the effectiveness of it depending on the situation, and last 15% percent of participants do not agree with other 75% percent they mentioned digital environment have not any effect on persons view .this is because digital environment gives this chance to user expires their feeling and thinking indecently. We know to act and react when we share how others react and how this reaction affects them. Moreover, the opposite is the same when others share their post, affecting viewer view. The result of this study shows similarity with Serrano-Puche (2015) that,

which mentioned technology influences arousing users' emotions and, in the end, creates affection which usually is displayed. As one of the participants mentioned:

Participant III: In the beginning, I thought whenever you got covid-19, you would pass, but when I saw many posts about people who got covid-19, and now they strongly passed the situation, and now they feel better, and I have a friend he has a very old grand mom she passed covid-19 .when he posted on FB that now his grand mom is better I was shocked, I do not know how but one day I changed my mind.

Participant IV: When I was busy in my room, I felt nothing and comfort. However, when I watched the news with my dad in the evening, all news was about one thing covid-19. I escaped, and when using my mobile and checked my phone also all about covid-19, after my emotion was changed and it is not stable some time without anything I lose hope and felt sad and anxious.

Moreover, depending on the above explanation, on the other hand, Coviello and his friends highlighted that online social networks might amplify the strength of global emotional synchrony' (Coviello et al., 2014). There is a vice versa between positive expressions and negative expression; when negative expression decreases, the positive increases, and when the positive post increases, the negative post decreases (Kramer et al., 2014: 8788).

Findings related to research questions two

Secondly, the interview process sought to determine the views of internet and Smartphone users about the influence of perfectionism in the time of the coronavirus. Both students and non-students agreed that we numerate perfectionism as the way to protect ourselves during health crises Covid-19. It highlights the importance of socially prescribed, self-oriented, and other-oriented perfectionism in curbing Covid-19 infections (Hewitt & Flett, 1991). Besides, both interviewees agreed that perfectionism does not lead to any form of psychological disorders during Covid-19. This suggests that encouraging individuals to adopt perfectionism is crucial for dealing with Covid-19 infections and related psychological effects. See tables (4.23.1 and 4.23.2).

Question Two: What are the views of internet and Smartphone users about the influence of perfectionism in the time of corona-virus?

1- Can we numerate perfectionism as the way to protect ourselves during the health crisis covid-19?

Table 4.15.1.

Participant Respondents About Third Self-Report Question.

Responses	Frequency	Percentage
Yes	70	70%
I am not sure	20	20%
No	10	10%

Table (4.15.1) represents how participants numerate perfectionism as a way to protect themselves during a health crisis. The results outline that mostly %70 thought perfectionism was the protective way to protect self. Just 10% of them indicate that perfectionism can't protect the individual from health problems. Moreover, other remaining 20% percent of participants mentioned they are not sure of the answer to these questions. However, it is essential to assess the outcome of every research. For instance, a researcher might decide to conduct research about perfectionism against chronic conditions like chronic fatigue syndrome (Kempke et al., 2014), fibromyalgia (Molnar et al., 2012), and inflammatory bowel disease (IBD; Flett et al., 2011). It is essential to consider the finding of other

Authors on issues chronic health conditions as a result of consequences of perfectionism on chronic illness, very essential to recognize the effects of perfectionism on the different chronic health conditions which may attenuate or amplify the effects of

perfectionism. Molnar et al. mentioned certain chronic conditions, such as IBD, caused by poor social connection through perfectionism. In the end, some people will suffer from stress and other physical conditions. One of the participants mentioned that:

Participant V: If you are not perfect, you never use masks and wash your hand frequently.

Participant VI: If I am a perfectionist or not, when I hear of a pandemic, I try to protect myself according to the information published by the health ministry. So to protect ourselves from illness was no need to be perfectionism.

2- During covid-19 doe's perfectionism can lead to other psychological disorders?

Table 4.15.2.

Participant Respondents About Fourth Self-Report Question.

Responses	Frequency	Percentage
No	75	75%
Yes	25	25%

The above table (4.15.2) outlines the respondent's ideas about can perfectionism lead to other psychological disorders? The results outline that 75% of respondents predict perfectionism can't lead to other psychological disorders, and 25% of respondents believe that perfectionism can lead to other psychological disorders. The invalidation of parental experience in perfectionism induced a sense that other people have high standards that are difficult to meet. This causes them to experience feelings of unworthiness, hopelessness, and low self-esteem. There is evidence that maladaptive perfectionism negatively impacts society and individuals (Drieberg et al., 2019; Kehayes et al., 2019; Starley, 2019). Perfectionism increases vulnerability to mental illness, and its crafty nature makes mental health diagnoses more challenging to manage as it persists (Hewitt & Flett, 2002). Hewitt et al. (2017) suggested that from the finding, people with other-oriented perfectionism had

negative interpersonal styles that instilled a level of dissatisfaction with relationships with other people feeling a sense of punitive and unfair interactions. Some researchers discovered a connective link between depression and perfectionism (Besser et al., 2020). Issues acknowledged are as follows social, cognitive, behavioral, personality traits, and environmental influences (Park & Jeong, 2015). A study by Asseraf and Vaillancourt (2015) and Limburg et al. (2017) acknowledged that when someone is having perfectionistic strivings is not a sign of depression; other authors highlighted that perfectionism and anxiety are linked, and anxiety sensitivity is a predictor of pathology both as a primary and secondary diagnosis (Diaz, 2018; Smith et al., 2018). Furthermore, the dynamic nature of these cognitive and behavioral forces can then transform into clinically diagnostic syndromes such as obsessive-compulsive disorder (OCD), panic disorder, and specific phobia (Dodd et al., 2019). We can note this from the participant's speech:

Participant VII: we know perfectionism one sets a high goal in everything. This trait can lead to other psychological problems and disorders. Nevertheless, during covid-19, in my opinion, nothing changed for them .they have this trite behavior that they do it before.

Participant VIII: during covid-19, everything was changed. In my opinion, perfectionism has a much more chance of facing other psychological disorders because, at this time, humanity is trying to face this pandemic, and we know that covid-19 can lead to psychological disorders. It is hard for someone who is trying to control everything.

Findings related to research questions Three

Thirdly, The other aim of the interview was to establish the views of internet and Smartphone users about the digital environment through Covid-19. As such, it was noted that all the students and non-students regarded or evaluated the role of the digital environment during Covid-19 as positive. This is aligned with the previous aim's findings and can be supported by related findings showing that digital environment improvements are vital and will go a long way in halting both the spread and effects of Covid-19 (He, Zhnag & Li, 2021; Siron, Wibowo & Narmaditya, 2020; Szopiński, 2016). Additional information obtained revealed that the digital environment was regarded as beneficial for

avoiding Covid-19 infections (S=41; NS=39), for convenience purposes (S=9; NS=5), and for innovative purposes (NS=6). However, the findings showed that the digital environment was disadvantageous because of the cost related to its adoption (S=24; NS=28); interruptions (S=17; NS=15); and causing unproductiveness (S=9; NS=7). See Tables 4.16.1 and 4.16.2.

Questions three: What are the views of internet and Smartphone users about the digital environment through covid-19?

1-how you evaluate the role of the digital environment during covid-19?

Table 4.16.1.

Participant Respondents About Fifth Self-Report Question.

Responses	Frequency	Percentage
I think it good because give us new detail	75	75%
Still not decided	15	15%
I think is not enough good Because publish wrong info.	10	10%

Table (4.16.1) represents how participants evaluated the role of the digital environment during covid-19. The results outline that mostly they thought the digital environment was functional and gave new detail and information about everything, including 75% percent of the participant. While 10% percent of participants mentioned that digital environment like smart phone-TV-social media was not helpful because some time published wrong and stressful event or information, other remaining participant measured 15% percent they were not decided because they think they have advantage and disadvantage. Everything shifted from offline to online, like shopping, learning, meeting, etc. Consequently, record changes in human behavior. Furthermore, for those requiring

clinical services in remote areas, the following equipment was available for synchronous and asynchronous for the Covid-19 patients: chest x-rays, computer and mobile applications services (Keesara et al., 2020). More technology grudges were used in remote areas to record video; for instance, Voice heard was used for the same purpose (Gewin, 2020). Moreover, social media, including Twitter, Instagram, Facebook, and YouTube; systems and applications such as Google Trends and Geographic Information Systems, work to help to track, locate, and analyze outbreaks in daily life (Vargo et al.,2021).as the participant mention that:

Participant IX: during covid -19, one of the valuable and effective ways is the digital environment because this subject control all area in life like education and health .student still can study and continue in education, and still patient can see doctors and someone can buy things online so technology can be effective and show a good side of technology and digital environment.

Participant X: still, I cannot decide, and covid-19 continues. This subject has advantages and disadvantages. We cannot totally be refused or accept it because sometimes social media and TV are a fast way to publish bad news. Covid-19 is not a monster as dangerous as TVs talk about it. We can protect ourselves and live our life. On the other side, when the government decided to quarantine mobile and social media showed a good side. I can call my son and mom by messenger and Viber. I watched many documents on YouTube.

2-what are the advantages in disadvantages of digital environment during corona-virus?

Table 4.16.2.

Participant Respondents About Sixth Self-Report Question.

Responses	Frequency	Percentage
As the source for all type information (protect and health care)	40	40%
As the source for passing time and make yourself busy	15	15%
As the source to communication	20	20%
As the full risk atmosphere for psychology health	10	10%
As the risk for health	10	10%

The above table (4.16.2) outlines respondents' thinking about the advantages in disadvantages of the digital environment during corona-virus. The results outline that 40% of respondents mentioned that during covid-19, we could use the digital environment as the source of information, mainly that information about protecting oneself from coronavirus, and obtained information about eating that food and nutrition that is valuable for our body during this virus. While, 15% percent of participants mentioned that a digital environment could be a way to pass the time (watching TV, listing to music, or some learning program or online courses). At the same time, 20% percent of respondents determine digital technology as the source of communication during quarantines to contact friends, family members, and

relatives. However, just 10% percent of participants mention the digital environment's risks like the risk to psychology and health (physically). The result of this study confirms other preview research results. According to Ai (2020), the radiologists acquired special skills in holding the computerized chest tomography during covid19 to ensure that correct results were obtained. During the pandemic, some computerized tomography machines were used, and video-based communication machines for recording purposes as a remote working system. These devices were digital technology devices that make work easier for the health sector. Sun, Tang, & Zuo (2020) can summarize previous information in participant speech:

Participant XI: 100% percent I agree with the advantage of technology and the digital environment. I am a student. I continued my study during this cerise online, and I always use technology to continue my communication with friends and teachers. It is a basic example of the advantage of this functional area.

Participant XII: because we have been in quarantine for a long time, we still do many things in quarantine, so I think we wasted our time in front of the TV. Mobile million times we check our Facebook and Instagram, we watch many videos. After the coronavirus, I checked my weight, and it increased, and I felt pain in my neck.

Findings related to research questions four

Fourthly, the goal of conducting the interviews was to understand how perfectionism influences anxiety and depression during Covid-19. The interviewees responded that self-evaluation done by perfectionism leads to anxiety and depression (S=22; NS=21); self-evaluation done by perfectionism does not lead to anxiety and depression (S=20; NS=23). We are uncertain that self-evaluation done by perfectionism leads to anxiety and depression (S=8; NS=6). Nevertheless, this suggests that there is a relative agreement among students and non-students that self-evaluation done by perfectionism leads to anxiety and depression. On the other, perfectionists were established as having been considerably some people who were worried and anxious about the

pandemic categorized in (S=44; NS=48) against related contrary suggestions (S=6; NS=2).see tables 4.17.1 and 4.17.2

Questions four: How does perfectionism influence anxiety and depression during Covid-19?

1-Self-evaluation that done by perfectionism led to anxiety and depression?

Table 4.17.1.

Participant Respondents About Seventh Self-Report Question.

Responses	Frequency	Percentage
Yes I think	65	65%
It depend on the time and situation	25	25%
No ,I don't think so	10	10%

Table 4.17.1 represents how participants' assumption Self-evaluation that perfectionism led to anxiety and depression. The findings indicate that they mostly agree with the statement that perfectionism led to depression and anxiety 65%of participants, while just 10% percent of them refuse this idea. On the other hand, 25% of participants have a different idea. They mentioned it depends on the time and situation. This is because perfectionists set high goals and standards. After not meeting this standard, they may have a negative self-evaluation that affects their emotion. Individuals with maladaptive expressions of perfectionism are clarified as "unable to feel satisfaction because in their own eyes they

never seem to do things good enough to warrant that feeling," failure leads to negative emotions (Hamachek, 1978, pp. 27).

Furthermore, some authors suggest that perfectionism is associated with black and white thinking, for instance, Antony & Swinson (2009). Individuals' perfectionism is governed by the standard that needs to be met (Shafran, Cooper, & Fairburn, 2002). Moreover, perfectionism can obstruct treatment for depression and causes some poor interaction between client and therapist (Zuroff et al., 2000).as the participant mentioned:

Participant XIII: whenever people enter the self-evaluation process, excite in it two-direction negative and positive; if the process ends with a negative evaluation, of-course change in emotion will happen. So this change may make you feel sad, depressed, hopeless, fearful, and anxious.

Participant XIV: we can see self-evaluation as the way to change your way of thinking at the end of something, .not as the cause for depression or any psychological disorder.

2-Are Perfectionists substantially over-represented among the people who are very anxious and worried about the pandemic and the situation they find themselves in?

Table 4.17.2.

Participant Respondents About Eighth Self-Report Question.

Responses	Frequency	Percentage
Yes	75	75%
NO	25	25%

The above table (4.17.2) outlines respondents' think about Are Perfectionists substantially over-represented among the people who are very anxious and worried about the pandemic and the situation they find themselves in? 75% percent of the participant agreed and gave Yes to answer this question. While 25% percent they are not agreed and did not answer this question. Perfectionist follows all the instructions from the health authorities of wearing gloves and observing social distance. The novel coronavirus disease 2019 pandemic (COVID-19; World Health Organization (WHO), 2020), the organization announced that the pandemic situation is a global health crisis as it spread across all countries. According to the Stress Theory (Norris et al., 2002), some disorders like mental disorders were recorded because of depression and stress. Perfectionism causes failure to meet targeted goals under stressful scenarios (Hasel and Besharat, 2011). Furthermore, some research shows that perfectionism people face high levels of distress than others, and their strategies tend to be ineffective (Wagner, 2016). Their more excellent acuity of stress is spawned by the pursuit of unrealistic standards that lead to failure (Flett et al., 2020).

Some people with high perfectionism perceive stress, and they are exposed to psychopathological problems like anxiety (see Burgess and Di Bartolo, 2016), depression (Flett et al., 2016), and eating disorders (e.g., Mello, 2016).

Participant XV: In my opinion for this question, yes, because non-perfectionist people follow government guidelines but not seriously, they may use the mask but not always that opposite of someone who are perfectionist they set a goal to protect themselves .and they follow all information and health care guideline and if a day they not do or follow those things may they feel more anxious.

Participant XVI: in some situation like that, every people feel anxious about other relatives, friend, and family's health, life, and future, so in my opinion is not needed to classify. However, some people feel more anxious, and others little bet.

Findings related to research questions five

Lastly, the goal was to explore further the views of internet and smartphone users about the relation between digital environments, perfectionism, and anxiety and depression during Covid-19. Both students and non-students responded by suggesting that there is a correlation between digital environments, perfectionism, and anxiety and depression during covid-19. This supports argument put forward by this study and justifies its academic and practical necessity and importance. This can further be supported by the established views regarding the interviewees' assessment of the connection between digital environments, perfectionism, and anxiety and depression during Covid-19, which were as strong (S=46; NS=46);and weak (S=2; NS=3); See tables (4.26.1 and 4.26.2).

Questions five: What are the views of internet and Smartphone users about the relation between digital environments, perfectionism, and Anxiety and Depression during covid-19?

1-Do you think there is a correlation between digital environments, perfectionism, and Anxiety and Depression during covid-19?

Table 4.18.1.

Participant Respondents About Ninth Self-Report Question.

Responses	Frequency	Percentage
Yes (perfectionism, and Anxiety and Depression)	35	35%
Yes (digital environments, and Anxiety and Depression)	25	25%
Yes (digital environments and perfectionism)	25	25%
Yes	85	85%
No	15	15%

Table (4.18.1) represents participants' assumptions of the relation between digital environments, perfectionism, and Anxiety and Depression during covid-19? The answers to these questions have a more than one assumption 35%percent of a participant thinks there is a relation between perfectionism with anxiety and depression. With that, 25% percent of the respondents think there is a relation between the digital environment and anxiety and depression. At the same time, the last 25% percent of participants indicate that there is a relation between the digital environment and perfectionism. Totaly85% percent mentioned that there is a relation between those four variables. At the same time, just 15%percent of participants refuse the idea that there is no relation between those variables .this because the digital environment has a significant role in today's world. Nowadays, many people use technology of all types, whatever hardware or software. Among software, people use social media ups and all the day they check and update to know new feeds and new posts .and after people try to follow some people and look at them as the model and repeat their behavior .and try to live like them or in their posts and feeds try to show people perfect

image. When they cannot live like them, they may feel depressed and sad or sometimes lose their hopes. Moreover, they may feel stressed and anxious about people's reactions to their posts and feeds when they share. As the participant mentioned:

Participant XVII: as I understood from your questions, my answer is yes, there is a relationship between them. They are like a net, each of them has a relation with the other .digital environment gives us 100 reasons to get depressed, not just depression all psychological disorders and problems.

Participant XVII: I agree with this statement that technology and mobile phones make people lose minds. It couches both your hand and directs you, so we can say there is a relation between the digital environment and all areas of life. Because of perfectionism, world imagination, and thought, they are always at risk of being depressed and anxious.

The relationship between perfectionism and social media (SM), Social judgment was concerned with Facebook fatigue (Cramer et al., 2016), and perfectionism was used to predict social judgment on Instagram and Facebook (McComb & Mills, 2021), perfectionism on SM consist of the physical appearance of the human being (McComb & Mills, 2021), and parenting (Padoa et al., 2018). Other authors mentioned that the SM comparison is associated with a sense of satisfaction through comparison with other people, depressive symptoms, negative body image, well-being, and happiness (Latif et al., 2020; Wang et al., 2020; Tiggemann & Anderberg, 2020; Wirtz, Tucker, Briggs, & Schoemann, 2020).

2-How do you assess the connection between digital environments, perfectionism, and Anxiety and Depression during covid-19?

Table .4.18.2.

Participant Respondents About Tenth Self-Report Question

Responses	Frequency	Percentage
In my view connection between all subject are strong and can effect each other	75	75%
In my opinion relation among those are strong but other factor can be effective. Like gender-career-age.	25	25%

The above table (4.18.2) outlines the respondent's assessment of the connection between digital environments, perfectionism, and Anxiety and Depression during covid-19. 75% percent of participant indicates that connections between those variables are strong and can affect each other. While 25% percent of respondents mentioned that the relation among those variables is strong, another factor can be influential. All participants agree that all variables can affect each other .and have a connection between them. However, 25% percent of them indicate that this connection can be affected by many factors like age, gender, career and education, and other factors. Of course, any demographic information can be practical, for example, age .there is a difference between thinking in childhood and adulthood or between men and women.

Participant XIX: Every relationship can be effective by many factors, sometimes make this relationship strong and sometimes distribute this

relationship. We can say there is a connection between this variable that you talk about it, but, in my opinion, factors can be effective.

Participant XX: when we hear perfectionism, of course, we consistently predict depression and anxiety because perfect peoples always try to reach the higher goal and get it sometime impossible, so as a result, this person experiences the emotional problem, and all people on social media post their perfect life. This also gives a bad feeling to other people, especially when they start comparing her life with life on social media.

The study done by Yang et al. 1 (2021) explored the mediating effect of depression between perfectionism and IA and validated whether this effect concerns gender. The results show that perfectionism significantly affects the students' performance and causes some depression that leads to IA being more powerful in males than in female counterparts (Yang et al. 1, 2021). other researchers pointed out that depression and stress are the predictors of problematic internet use Dutta& Chye, (2017). Those studies show a similar result to the current study.

CHAPTER V

Discussion

This is the discussion chapter for the whole study. It provides interpretation and discussion of the findings and results of the study obtained through this study and highlights the significant findings.

Discussion of the findings

Through Covid19- on anxiety and depression, this research will address the effectiveness of the digital environment and perfectionism. The use of an explanatory mixed method design will be made to ensure a clear follow-up system on the data obtained through the quantitative section. It will require the gathering of qualitative data subsequently in relation to the quantitative section. In the study's first quantitative phase, data will be collected to analyze the digital environment and perfectionism effectiveness and its relation to depression and anxiety throughout the time of coronavirus by the questioner's instruments. The second phase, the qualitative phase, will be conducted to better our understanding of perfectionism during covid-19 on anxiety and depression and the effectiveness of the digital environment. The effectiveness of this exploratory follow-up will be explored by using semi-structured interviews with smartphone and internet users in northern Iraq, furthermore to have a better analysis and understanding of how perfectionism and the digital environment are effective in the course of coronavirus is the reason for the exploratory follow-up.

The goal of this study is to look into the effects of perfectionism on psychological disorders (anxiety and despondency) as well as the effectiveness of the digital environment during the coronavirus COVID-19. Overall, the findings show that high levels of perfectionism are linked to high scores on a broad measure of psychological distress markers in this population. Perfectionism was found to have a significant positive relationship with (a) sadness, (b) anxiety, and (c) stress in studies. This link existed regardless of where we were. Furthermore, in this sample, one perfectionism facet, Doubts about Actions, was consistently linked to psychological suffering and negative affective states.

Similarly, the study discovered that both students and non-students in Iraq's Kurdistan Region suffer from moderate to high degrees of depression, anxiety, and stress,

which is greater than normal levels. The figures indicate a risk of psychological disorders and suggest that academic and psychosocial performance will deteriorate throughout the quarantine time at home. One cause could be the unexpected onslaught of academic online assignments and sessions, compounded with the social anxiety of death and the COVID-19 outbreak. Another factor could be related to students' anxieties about their grades and graduation-related issues, as suggested by Sahu (2020), who has highlighted fear issues among college students. In an everyday context, academic work is a cause of concern (Shehadeh et al., 2020); however, COVID-19's global apprehension and anxiety may have exacerbated the psychological status of both students and non-students. Students who do not have access to the necessary information technology to complete their online academic obligations are more likely to experience depression, anxiety, and stress. This has also been demonstrated by the negative connections of sadness, tension, and anxiety with students' income levels, implying that their financial status impacts their psychological well-being.

Depression was shown to be higher in this study than in previous studies conducted before COVID-19 and even during COVID-19 (Astutik et al., 2020; Dalky & Gharaibeh, 2019; Hamaideh, 2018). The findings are consistent with WHO's (2020b) concerns that psychosocial well-being should be prioritized for COVID-19 isolated populations. It has also been proven that psychosocial well-being was not prioritized among healthcare workers during the COVID-19 pandemic (Hamdan-Mansour et al., 2020). On the other hand, anxiety levels in the category of non-student were lower than in the student category the populations. One explanation could be that students believe their anxiety is linked to their academic obligations. In contrast, non-students attribute it to other factors such as smoking status, students, and family history of long-term illness/enduring illness, rather than being anxious about the situation in general. The study found a positive and significant link, demonstrating that anxiety, sadness, and stress are caused by various factors in both students and non-students.

Shehadeh et al. (2020) confirmed this by reporting that students were able to identify sources of anxiety connected to their academic requirements and assignments. Students were aware of their talents and could link their anxiety to their academic self-efficacy. The ability to complete an academic activity is linked to a reduced level of worry.

Nonetheless, compared to earlier studies, university students are almost at the same stress level in this study (Bahhawi et al., 2018; Choudhary et al., 2019). This implies that stress and anxiety among students are influenced by a variety of factors such as their socioeconomic situation and lifestyle; nevertheless, high levels of stress, anxiety, and depression are quarantined.

A variety of things contribute to university students' psychological well-being. We discovered that satisfaction with online learning, "home quarantine," sleeping and eating disturbances, fear of declining academic grades, loneliness, and a family history of chronic illness were factors that predicted depression, anxiety, and stress among university students in this study, which adds to the body of knowledge. The findings supported the impact of physical and psychological deterioration. They suggested that physical and psychological disturbances play a role in developing more severe kinds of psychological disturbances, including despair and anxiety. The findings corroborated prior research indicating sadness, anxiety, and stress is linked to physical and psychological problems (e.g., Hamdan-Mansour et al., 2018; Tee et al., 2020). Indeed, such parameters overlap with symptoms of sadness and anxiety, supporting the view that stress, depression, and anxiety have several causes.

Students' socio-demographic characteristics are significant influencing variables on their psychological well-being. This study validated this effect and added to the body of knowledge that personal and demographic traits remained key contributors even during home quarantine and close to family members. One important factor was that students scored higher on sadness, stress, and anxiety than non-students, even before the epidemic (Lim et al., 2018). These data suggest that students, in general, have used a variety of coping and adaptation strategies that have failed to assist them in controlling their psychological problems. Previous research has indicated that students in Iraq's Kurdistan Region experience greater levels of anxiety and tension (Hamdan-Mansour et al., 2018; Shehadeh et al., 2020). This may explain why students experienced higher levels of depression, anxiety, and stress during the quarantine period, as they were likely more concerned, worried, and focused on their academic performance, given the students learning process in Arabian culture, which assigns so many commitments and dedication to students while waiving such responsibilities for their non-student counterparts. We did not evaluate

the influence of the types and sources of social support students got in this study, which could help us better understand the role of social support in buffering the effects of academic anxiety during "home quarantine."

More than half of those who described coping techniques highlighted support from family and friends, which is consistent with earlier findings. Several respondents noted the use of technology, such as smartphone applications and other digital platforms, as a way of positive coping strategies, such as meditation, reflecting previous findings on the favorable influence of a mindfulness app on the mental health of college students. It suggests that mobile-based technologies could help with mental wellness. Such forums may also benefit from assisting in overcoming the social stigma associated with obtaining therapy services. It is critical to identify such good coping practices to facilitate them through symptom-level support.

Psychological comorbidities are also present in those exposed to life-threatening events such as illness or solitude. Feelings of being trapped, restricted access to outer space, not being able to go to work, the economic deficit, alterations in routines, separation of family and friends, having a family member at risk, scarcity of daily needs, wage reductions, social isolation, and the closure of educational institutions have all been linked to the development of depressive symptomatology in the COVID-19 pandemic. Similarly, belonging to a socioeconomic category with lower wages and limited savings is linked to being 1.5 times more likely to have depression symptoms. Similarly, it has been discovered that countries with higher degrees of rigorousness had higher instances of depression.

According to several studies, the prevalence of depression among students and non-students due to the COVID-19 pandemic currently ranges from 14.3–to 24.3 percent. COVID-19-related depressive symptoms are more common among female students, students with poor socioeconomic position, and non-students with low socioeconomic status, with the latter category having a prevalence of 2.3–46 percent due to various reasons, including workload.

According to lifecycle studies, non-students are more prone to acquire attachment and worry associated with the fear that family members would contract the disease and opposition-challenging behaviors. Younger students have higher levels of depression, which has been linked to the deprivation of liberty and school closures. In contrast, older students have depression linked to decreased activity level, sleep quality, well-being, and cognitive functioning. Widowers and separated people have a higher risk of developing emotional disorders during the COVID-19 pandemic.

Another probable explanation for the lower mental health during COVID-19 is COVID-19 information overload, which has been marked by collecting information from various international and local agencies, experts and scientists from various backgrounds, and the media. COVID-19 information is frequently updated and obtained via social media platforms such as Twitter and Facebook. On the other hand, people have been overwhelmed by the amount of COVID-19 information they have received.

According to a recent study conducted in mainland China, more social media exposure increases the risk of feeling anxiety. In fact, past research has demonstrated that media exposure to mass trauma can result in post-traumatic stress disorder. Furthermore, during a Middle East respiratory syndrome coronavirus outbreak in South Korea, a recent study indicated that social media exposure was positively connected to creating risk perceptions (Choi, Yoo, Noh, & Park, 2017). It is a two-edged sword when it comes to social networking. They can quickly distribute critical information so that individuals can take proper public precautions to protect themselves. However, rumors, misinformation, and fear can also readily spread through social media, further heightening fear and anxiety.

As expected, people who were more concerned about contracting COVID-19 were more likely to have poor mental health. During a pandemic, people are afraid that they or their family members may become ill, and they are unsure of the epidemic's consequences. Furthermore, stigma and discrimination associated with infectious disorders may cause people to be afraid of infection, affecting their mental health (Person et al. 2004). Fear of COVID-19 was found to be significantly correlated with depression and anxiety, as measured by the hospital anxiety and depression scale, in recent studies among Iranian

(Ahorsu et al., 2020) populations; the authors also explained that fear of COVID-19 may be exacerbated by coexisting depression and anxiety disorders.

One of the study's key findings was that non-students who were upset by not being able to work from home were more likely than students to suffer from sadness and anxiety. People in Northern Iraq choose to stay at home during the COVID-19 pandemic to reduce the risk of infection. Although the government encouraged businesses to create work-from-home policies, it was up to the employers to decide whether or not to do so. When the number of COVID-19 cases in Iraq continued to rise, it is logical that those who could not work from home became despondent and anxious. Furthermore, some were concerned that taking public transportation would increase their risk of contracting the disease. As a result, we advise that people who work from home cannot be given priority during the pandemic. Protective equipment, such as medical masks and hand sanitizers, should be offered to them, for example, to protect them and reduce their worry.

Furthermore, the current study shows that not only the frequency of media exposure but also the daily duration and diversity of media exposure are all significantly positively correlated with global symptom severity, emphasizing the significance of mental distress associated with COVID-19 media coverage, particularly once a "critical load" has been reached. Both a recent study that identified media coverage as one of the most potent emotional stressors in the context of the current pandemic and the data from the current trial confirm this conclusion. Although it is unclear whether the psychological strain is a result or cause of excessive media consumption, we discovered that the frequency and duration of COVID-19-related media exposure were positively correlated with the emotional need for it to be reduced due to a significant amount of topic-induced stress. This finding could be construed to mean that a significant percentage of people are aware of "information overconsumption" as a risk factor for mental health in the current situation.

The current study discovered that students who had proven instances in family members and relatives were three times more likely to develop depression symptoms than students who did not. Similarly, having a family member or relative with a suspected illness raised the chance of depression symptoms among college students. Furthermore, students

who resided in provinces with a cumulative number of confirmed cases ranging from 1000 to 9999 had 0.25 times higher risk of depression symptoms than those who lived in provinces with a cumulative number of confirmed cases ranging from 1 to 499. These findings suggested that the COVID-19 outbreak may considerably impact the risk of depression symptoms among Chinese college students. It matched the findings of a prior study done in China's Chengdu and Chongqing. (Tang et al., 2020), which suggested that the COVID-19 could have severe psychological implications for university students. Severe communicable diseases, such as severe acute respiratory syndrome (SARS) and Ebola Virus Disease (EVD), have been linked to mental health issues.

Studies barely consider the location effects on sociological, cultural, and educational aspects. One of the investigation questions of this research was to inspect if location influenced the adoption of digital education between students and non-students in the Kurdistan Region of Iraq. Such denotes the study's novelty and originality and applying an independent t-test accomplished this. The computed independent t-test results that location had no influence on the use of digital education by both students ($p\text{-value} > 0.05$) and non-students ($p\text{-value} > 0.05$). Therefore, these findings imply that the adoption of digital education in the Kurdistan Region of Iraq was primarily influenced by economic development, technological innovation, and structural factors like Covid-19 (Siron, Wibowo & Narmaditya, 2020). Such is an actual reflection of practical situations prevalent in a country because studies consider the adoption of digital education to be influenced by economic development (Szopiński, 2016) and technological innovation (Salinas et al., 2017). The mental health of both students and non-students was largely the same, irrespective of differences, due to geographical location. The independent t-tests revealed that there were insignificant differences in depression levels among students ($p > 0.05$). However, the students were significantly anxious about COVID-19, as the results of Table 3 shows that the students' anxiety levels measured by the Beck Anxiety Inventory (BAI) were significantly different ($p < 0.05$). This result is valid not only to people in Kurdistan, but the world, in general, remains anxious about the development of effective solutions that will end COVID-19 (He et al., 2021). Relatively similar observations were observed for nonstudents [Beck depression Inventory (BDI): $p\text{-value} = 0.590$]. This reveals that there were insignificant differences in depression levels among non-students. Different results

were observed regarding the location effects of COVID-19 on non-student's anxiety levels. In other words, the location effects of COVID-19 on non-student's anxiety levels were insignificant (BAI: p-value = 0.233). This possibly implies that uncertainties surrounding COVID-19's prevalence, as well as new variants, effects, and eradication caused students to be more anxious compared to non-students. While, another research in Iraq displays the percentages of possible anxiety measured by HAQ concerning COVID-19 among the samples of three geographical parts of Iraq: northern, middle, and southern. The possible health anxiety diagnosis was more prevalent in the southern governorates (59.1%) compared to the northern and middle parts of Iraq (45.1% and 43.8%, respectively). (Karim, et al, 2020).

Aside from epidemic-related characteristics, the current study found that traditional factors like self-reported health status and educational level were highly linked to the likelihood of anxiety and depression symptoms, which was consistent with earlier research. In Shenzhen, China, a previous study found that poor health in the previous two weeks increased the likelihood of common mental health disorders in rural-to-urban migrant workers (Zhong et al., 2018).

This study discovered that post-graduates have a reduced risk of anxiety and depressive symptoms than undergraduates, which contradicted earlier research. According to a recent meta-analysis, the prevalence of depressive symptoms among post-graduates was similar to that of undergraduates (30.8 percent and 27.0 percent, respectively). We hypothesized that the disparity could be due to post-graduates and undergraduates having different levels of concern about the COVID-19 outbreak. Post-graduates were more likely than undergraduates to focus on their research ambitions and less likely to focus on the COVID-19 outbreak. As a result, post-graduates may be less concerned about the COVID-19 outbreak than undergraduates. While another study indicated that Respondent Iraqi students expressed a modifiable fraction (43%) of possible anxiety, especially college students, during the span of extending outbreak. To some degree, parallel results were shown in a survey from Changzhi Medical College, which indicated that 24.9% of the students were impaired with received anxiety over the COVID-19 outbreak era (Cao et al, 2020). Of these students, 0.9% experienced severe anxiety, and 21.3% experienced mild anxiety. Accordingly, college students who experienced anxiety undoubtedly will have a

negative impact on the educational process and possible delays in education. Likewise, our study showed that health care professionals have a higher percentage of health anxiety next to the student group. This is consistent with previous studies which showed that health professionals are suffering from mental health problems during outbreaks.(Karim et al,2020).

According to the COVID-19 outbreak, college students had a significant demand for psychological knowledge and interventions during the current study. More than 40% of students said they needed psychological information, and about 10% of students said they needed psychological intervention. In this study, 87.2 percent of students said they needed to know the common symptoms of anxiety and depression, and 70.0 percent said they needed to know how to deal with the negative psychological impacts. All of the rates listed above were greater in students with anxiety and depression symptoms than in those who did not—indicating that universities should pay more attention to students with anxiety and depression symptoms and provide more mental knowledge, such as common symptoms of anxiety and depression, and common ways to alleviate negative psychological effects, by opening online training courses or creating one-to-one online counseling channels for students.

Finally, this study found that university students in Iraq's Kurdistan Region experienced high anxiety levels during the COVID-19 pandemic. The student's anxiety levels were significantly reduced by quarantine and switching to a distance learning technique. As a result, legislators should examine student mental health to develop a support program to help students improve their mental health. Students must undergo screening before enrollment in order to detect risk factors. We discovered that sleep and eating disorders, anxiety over academic results, and feelings of loneliness are all key factors that mental health nurses and counselors at academic institutions and counseling departments must address and care for. Faculty and administrators must also provide proper psychological support and avoid overburdening students during quarantine periods.

CHAPTER VI

Conclusion and Recommendations

This is the concluding chapter of the whole study. It provides a detailed analysis of the results. The study also provides the conclusions and confines of the study and recommendations for future studies based on them.

Conclusion

More information was provided about the current knowledge of digital environment use and perfectionism in the existing literature on different areas: Anxiety, depression, and education. It suggests the following significant findings: digital environment and perfectionism have a low and significant correlation between anxiety and depletion for students and a high correlation for non-student.

The study revealed exciting components about the effectiveness of the digital environment and perfectionism through anxiety and depression in times of crisis. The study revealed that the digital environment and perfectionism affect anxiety and depression during Covid-19. However, the studies also showed that participants have a mild level of depression and anxiety. As other studies pointed out, these two variables may create an environment that unprompted individualism and discourage the sharing of knowledge amongst the student and non-student.

Previous studies mention the relation between gender and anxiety. The current study's findings suggest that there is a difference between the anxieties in terms of gender for the student. On the other hand, anxiety has not any difference in terms of gender for non-students. However, the level of depression significantly changed according to gender. The findings suggest a significant difference between the depression in terms of gender for students and not students. On the other side, another research question tries to explain the relationship between age with anxiety and depression. The finding suggests that there is a noteworthy dissimilarity between age and anxiety that is the opposite of age and depression that is not significant. Indirect or mediating effects results show a significantly low and positive coefficient linking Covid-19, digital environment, and mental health was observed.

This study managed to fill the gap in the literature. The literature has no studies focusing on the relationships between the variables included in this study. As a result, all the material about that, as highlighted by the results of this study, is new material to the literature.

Summary of Findings

In this section of the research, a summary of all the analysis was presented below. Findings show that the adoption of digital education in the Kurdistan region of Iraq was primarily influenced by economic development, technological innovation, and structural factors like COVID-19. Also, the findings in this study, presented in the analysis above, show that the students' multidimensional perfectionism was not influenced by their location. While, considerable differences between students and non-students were observed, as location significantly influenced multidimensional perfectionism among non-students. On the other side, the independent t-tests revealed that there were insignificant differences in depression levels among students. However, the students were significantly anxious about COVID-19 as the results show that the students' anxiety levels measured by the BAI were significantly different. In other words, the location effects of COVID-19 on nonstudent's anxiety levels were insignificant. Because the digital environment helps students to acquire more information about COVID-19, anxiety, or depression. This causes them to adopt effective measures to reduce them and subsequently improves their mental health. The study suggests that digital environment improvements were being used for non-productive activities or purposes that adversely affected non-students' mental health. This suggests that multidimensional perfectionism aspects, especially self-orientation of an individual's this issue affect their well-being and happiness. The findings showed that the students with depression linked happiness, pessimism, success/past failure, satisfaction, punishment feelings, disappointment, blame/self-criticalness, agitation, interest in people, worthiness, fatigue or tiredness, weight, and health and this result was relatively different because some students reported that they had been infected with COVID-19, while others reported that they had not. Therefore, these results imply that further tests are needed to determine whether these symptoms appeared to be mostly panic-related, autonomic, neurophysiologic-related, or subjective, both the students and non-students responded by

suggesting that there is a relationship between digital environments, perfectionism, and anxiety and depression during COVID-19.

Clinical Implications

Perfectionism was strongly connected with the Digital environment, thus, this personality characteristic should be addressed in the creation of tailored treatments to avoid overuse of the internet and Smartphone users, according to the findings of the current study. Perfectionism is said to be formed during the socialization process and is regarded to be a stable personality trait in adulthood (Flett et al., 2011). Furthermore, the significance of despair and anxiety in mediating the relationship between perfectionism and excessive internet and Smartphone usage led to the conclusion that mental health education for college students is crucial in preventing excessive internet and Smartphone use. Additionally, therapy interventions could be developed to improve students' ability to cope with negative emotions, thus, preventing the self-medication process. Stress Temperament Coaching is an intervention model that might be customized and utilized in (Munakata, 2007). It has been shown to be helpful in reducing psychological discomfort by encouraging active coping. According to the internet use standard, participants use the internet for nearly 9 h per day, which is a significant amount of time. As a result, it is critical to raise awareness about internet risk factors for health and psychological issues. Additionally, it is critical for the ministry of health and higher education to use this data to develop a strong program to combat internet addiction. Another finding indicates that participants with mild depression and anxiety, which provides a good reason for other organizations, foundations, and the government to work on this issue among the population during COVID-19 to prevent or minimize psychological problems through special programs for parents, educators, and families.

Recommendations

As things change every few years in education studies, it is necessary to have new studies time and again to determine and note ongoing changes in phenomena. Future studies can focus on more than one city for their studies. Based on the finding of the study they can also collect data from a different places and make a comparison. Utilize the different method designs of data analysis or, better yet, employ a different mixed approach to get

more in-depth information. In addition, at some point, when the pandemic is over, future studies can fully incorporate the aspect of the psychology area in its entirety in the study.

The research pointed out some critical areas that need more attention during Covid-19 and required technology that facilitates proper communication in the health sector. For example, in the ending period of the pandemic, to help individuals and societies deal with lasting impacts such as Post Traumatic Stress Disorder and other psychological disorders .with that further efforts should be made to study and understand. Narrow various types of the digital divide and help more users, especially from developing countries, poor areas, and challenging groups, to access and use digital technologies .because as the research findings indicate that student levels of anxiety and depression are significant in the term of gender and age so we can say that northern Iraq one of the developing country there is an inadequate education system and program, especially during covid 19 there is not a unique app and platform. Future research should examine various effects of technology use, especially various negative effects, including misinformation and disinformation. Because, as we know, wrong news and information publish quickly and sometimes have side effects on people's psychology and physiology, it is essential to obtain more studies on people's beliefs on social media news.

Understanding the influence of perfectionism and the cost associated with dealing with mental disorders and depression and stress is paramount in this study (Fry & Debats, 2009), .so it is important to gain more knowledge about this area primarily to examine how perfectionism will develop. Is it genetic? Alternatively, it is a kind of learning behavior. Moreover, essential to know other combinations of perfectionism with other psychological disorders rather than anxiety and depression during covid - 19. instead, researchers have the mandate to figure out the correlation between perfectionism and psychological health.

This is the first study that we know that assesses anxiety among students in Iraq's Kurdistan Region during the COVID-19 outbreak. This study showed that students are a particularly vulnerable population with a high risk of experiencing psychological distress during the present epidemic. Furthermore, the findings of this study give policymakers in Iraq's Kurdistan Region's higher education area fresh insights on how to monitor students' mental health during such emergencies. In addition, the findings of our study shed light on mental health issues that are frequently disregarded among the students.

Psychiatric nurses must create and apply screening methods to detect psychological problems among students. Because the causes of psychological problems in students are multifaceted, psychiatric nurse practitioners must conduct a thorough assessment and tailor their interventions accordingly. During "home quarantine," psychological interventions such as online mindfulness and other easy relaxation techniques can be beneficial (Sidi, 2020). Furthermore, even after the quarantine and lockdown were removed, the rates of sadness, stress, and anxiety remained high (Woon et al., 2020). One method uses mental health and psychosocial support to screen, identify, and give appropriate psychological interventions. Depression, anxiety, and stress are serious mental illnesses that require the attention of a mental health counsellor in an academic setting. Students require high-quality, crisis-oriented psychological assistance (Cao et al., 2020). To reduce the impact of psychological discomfort on students undergoing "home quarantine," programmes encouraging students to seek treatment anytime they feel anxious, depressed, or stressed should be developed. Such programmes will enable psychiatric nurse practitioners to detect depression, anxiety, and stress early and respond appropriately to prevent the development of these disorders.

Furthermore, administrators should pay greater attention to the public, particularly students, and provide necessary mental health treatments timely (Zhai & Du, 2020). Furthermore, during the COVID-19 pandemic, cognitive behavior therapy (CBT), particularly Internet CBT, is the best cost-effective, evidence-based treatment for psychiatric symptoms, including sleeplessness. CBT can also help prevent the transmission of illness (Ho et al., 2020; Soh et al., 2020; Zhang et al., 2017). Religiosity and spiritual practices may also help to relieve emotional stress.

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APPENDIX – A: Demographic information

Section A: Demographic details

1. Please indicate your gender; Male Female

2. Please indicates your age;

15-18	19-30	31-40	41-above

3. Education level

High school	B.Sc.	Graduate student	Drop out

4. Number of hours spends on internet in 24 hours:

1-3 hours	4-6 hours	7-9 hours	10-12 hours	12 hours and above

5. Did you use online education?

Yes	No

6- Where did you stay?

Centre of the city	Outside of the city

7-Did you have covid-19 illness?

Yes	No

APPENDIX –B: Multidimensional perfectionism scale

Section B: Multidimensional Perfectionism: This section seeks to assess your views on the aspects of perfectionism:

Please indicate to what extent you agree with the statement given by circling or striking through as the following scale:

(1) Strongly disagree (2) disagree (3) neither agree nor disagree (4) agree (5) strongly agree

Item	Strongly disagree	disagree	Neither agree nor disagree	Agree	Strongly Agree
1. My parents set very high standards for me.					
2. Organization is very important to me					
3. As a child I was punished for doing things less than perfect					
4. If I do not set very high standards for myself, I am likely to end up a second rate person					
5. My parents never tried to understand my mistakes					
6. It is important to me that I am thoroughly competent in everything I do					
7. I am a neat person					
8. I try to be an organized person					
9. If I fail at work or school, I am a failure as a person					
10. I should be upset if I make a mistake					
11. My parents wanted me to be the best at everything					
12. I set higher goals than most people					
13. If someone does a task at work or at school better than I, then I feel like I failed the whole task					
14. If I fail partly, it's as bad as being a complete failure					
15. Only outstanding performance is good enough in my family					
16. I am very good at focusing my efforts on attaining a goal					
17. Even when I do something very					

carefully, I often feel that it is not quite right					
18. I hate being less than the best at things					
19. I have extremely high goals					
20. My parents have expected excellence from me.					
21. People will probably think less of me if I make a mistake.					
22. I never felt like I could meet my parents' Expectations.					
23. If I do not do as well as other people, it means I am an inferior human being					
24. Other people seem to accept lower standards from themselves than I do					
25. If I do not do well all the time, people will not respect me					
26. My parents have always had higher expectations for my future than I have					
27. I try to be a neat person					
28. I usually have doubts about the simple everyday things I do					
29. Neatness is very important to me					
30. I expect higher performance in my daily tasks than most people do					
31. I am an organized person					
32. I tend to get behind in my work because I repeat things over and over					
33. It takes me a long time to do something 'right'					
34. The fewer mistakes I make, the more people will like me					
35. I never felt I could meet my parents' standards					

APPENDIX –c: Beck depression Inventory

Section c: Beck depression Inventory: This section seeks to assess your views on the aspects of Depression: Please Indicate to what extent you agree with the statement given by circling or striking through as the pre following scale:

1.	0	I do not feel sad
	1	I feel sad
	2	I am sad all the time and I can't snap out of it
	3	I am so sad and unhappy that I can't stand it
2.	0	I am not particularly discouraged about the future
	1	I feel discouraged about the future
	2	I feel I have nothing to look forward to
	3	I feel the future is hopeless and that things cannot improve
3.	0	I do not feel like a failure
	1	I feel I have failed more than the average person
	2	As I look back on my life, all I can see is a lot of failures
	3	I feel I am a complete failure as a person
4.	0	I get as much satisfaction out of things as I used to
	1	I don't enjoy things the way I used to
	2	I don't get real satisfaction out of anything anymore
	3	I am dissatisfied or bored with everything
5.	0	I don't feel particularly guilty
	1	I feel guilty a good part of the time
	2	I feel quite guilty most of the time
	3	I feel guilty all of the time
6.	0	I don't feel I am being punished
	1	I feel I may be punished
	2	I expect to be punished
	3	I feel I am being punished
7.	0	I don't feel disappointed in myself
	1	I am disappointed in myself
	2	I am disgusted with myself
	3	I hate myself
8.	0	I don't feel I am any worse than anybody else
	1	I am critical of myself for my weaknesses or mistakes
	2	I blame myself all the time for my faults
	3	I blame myself for everything bad that happens
9.	0	I don't have any thoughts of killing myself
	1	I have thoughts of killing myself, but I would not carry them out

	2	I would like to kill myself
	3	I would kill myself if I had the chance
10.	0	I don't cry any more than usual
	1	I cry more now than I used to
	2	I cry all the time now
	3	I used to be able to cry, but now I can't cry even though I want to
11.	0	I am no more irritated by things than I ever was
	1	I am slightly more irritated now than usual
	2	I am quite annoyed or irritated a good deal of the time
	3	I feel irritated all the time
12.	0	I have not lost interest in other people
	1	I am less interested in other people than I used to be
	2	I have lost most of my interest in other people
	3	I have lost all of my interest in other people
13.	0	I make decisions about as well as I ever could
	1	I put off making decisions more than I used to
	2	I have greater difficulty in making decisions more than I used to
	3	I can't make decisions at all anymore
14.	0	I don't feel that I look any worse than I used to
	1	I am worried that I am looking old or unattractive
	2	I feel there are permanent changes in my appearance that make me look unattractive
	3	I believe that I look ugly
15.	0	I can work about as well as before
	1	It takes an extra effort to get started at doing something
	2	I have to push myself very hard to do anything
	3	I can't do any work at all
16.	0	I can sleep as well as usual
	1	I don't sleep as well as I used to
	2	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
	3	I wake up several hours earlier than I used to and cannot get back to sleep.
17.	0	I don't get more tired than usual
	1	I get tired more easily than I used to
	2	I get tired from doing almost anything
	3	I am too tired to do anything
18.	0	My appetite is no worse than usual
	1	My appetite is not as good as it used to be

	2	My appetite is much worse now
	3	I have no appetite at all anymore
19.	0	I haven't lost much weight, if any, lately
	1	I have lost more than five pounds
	2	I have lost more than ten pounds
	3	I have lost more than fifteen pounds
20.	0	I am no more worried about my health than usual
	1	I am worried about physical problems like aches, pains, upset stomach, or constipation
	2	I am very worried about physical problems and it's hard to think of much else
	3	I am so worried about my physical problems that I cannot think of anything else
21.	0	I have not noticed any recent change in my interest in sex
	1	I am less interested in sex than I used to be
	2	I have almost no interest in sex
	3	I have lost interest in sex completely

APPENDIX –D: Beck Anxiety Inventory

Section-D: Beck Anxiety Inventory: This section seeks to assess your views on the aspects of Anxiety: Please Indicate to what extent you agree with the statement given by circling or striking through as the following scale:

Not at all (1) Mildly, but it didn't bother much (2), moderately- it wasn't pleasant at time (3) and Severely-it bothered me a lot (4).

N		Not at all	Mildly, but it didn't bother me much	Moderately – it wasn't pleasant at times	Severely – it bothered me a lot
1-	Numbness or tingling				
2-	Feeling hot				
3-	Wobbliness in legs				
4-	Unable to relax				
5-	Fear of worst happening				
6-	Dizzy or lightheaded				
7-	Heart pounding / racing				
8-	Unsteady				
9-	Terrified or afraid				
10-	Nervous				
11-	Feeling of choking				
12-	Hands trembling				
13-	Shaky / unsteady				
14-	Fear of losing control				
15-	Difficulty in breathing				
16-	Fear of dying				
17-	Scared				
18-	Indigestion				
19-	Faint / lightheaded				
20-	Face flushed				
21-	Hot / cold sweats				

APPENDIX – E: self-report questioners

SECTION– E: self-report questioners

Research questions one: What are the views of internet and Smartphone users about the effectiveness of digital environment on Anxiety and Depression during Covid-19?

1-how is your assumption about the role of Digital environment During Covid-19 to target anxiety and Depression?

2-Do you think Digital environment can change your thoughts and emotions.

Research questions Two: What are the views of internet and Smartphone users about digital environment thought covid-19?

1-how you evaluate the role of Digital Environment during covid-19

2-what are the advantages in disadvantages of digital environment during coronavirus?

Research questions Three: What are the views of internet and Smartphone users about the influence of perfectionism in the time of coronavirus?

1- Can we numerate perfectionism as the away to protect our self during health crisis covid-19?

Research questions four: How perfectionism influences Anxiety and depression during Covid-19?

1-Self-evaluation that done by perfectionism led to anxiety and depression

2-Are Perfectionists substantially over-represented among the people who are very anxious and worried about the pandemic and the situation they find themselves in?

Research questions five: What are the views of internet and Smartphone user about relation between digital environments, perfectionism, and Anxiety and Depression during covid-19?

- 1- Do you think there is a relationship between digital environments, perfectionism, and Anxiety and Depression during covid-19?
- 2- How do you assess the connection between digital environments, perfectionism, and Anxiety and Depression during covid-19?

APPENDIX –F: Ethical committee approval
**BİLİMSEL ARAŞTIRMALAR ETİK
KURULU**

23.02.2021

Dear Shahla Ali Ahmed

Your application titled **“The effectiveness of digital environment and perfectionism during COVID-19 On Depression and anxiety: An Implementation of student and non-student Internet and Smartphone User from northern Iraq”** with the application number YDÜ/EB/2021/619 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

A handwritten signature in cursive script that reads 'Direnç Kanol'.

Note:If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

APPENDIX –G: Curriculum Vitae**CURRUCULUM VITAE**

I'm, Shahla ALI AHMED was born on 1/1/1994 in Iraq. I started my studies from 2000-2006 and obtained my first school certificate, on 2007 – 2012 I attended high school and obtained my Secondary School Certificate. I graduated from Koya University, and obtained a B.Sc. degree on 2016 in Clinical Psychology. On 2018-2019 academic years I attended Near East University, Northern Cyprus to obtain a Master's degree in Guidance and Psychological Counseling. After that I started PHD at same university and same department in 2019-2022 academic year to obtain Doctoral Degree.

APPENDIX –H: Plagiarism Report

thesis

ORIJİNALLIK RAPORU

% **12**

BENZERLİK ENDEKSİ

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İNTERNET KAYNAKLARI

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