

AN EVALUATION OF SOCIAL SUPPORT CHARACTERISTICS OF AFRICANS NURSING STUDENT LIVING IN NORTHERN CYPRUS DURING THE COVID-19 PANDEMIC

M.Sc. THESIS

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M.Sc. THESIS

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Approval

We certify that we have read the thesis submitted by Tohmukem Loveline Ntini titled "An Evaluating of Social Support Characteristics of African Nursing Students Living in Northern Cyprus During the COVID-19 Pandemic" and that our combined ideas are fully adequate in the scope of and quality, as a thesis for the degree of Master of Nursing specialized in public health (MSc in Nursing).

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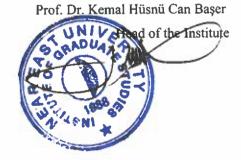
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I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that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

> Tohmukem Loveline Ntini 29/01/2024

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Tohmukem Loveline Ntini

Abstract

An Evaluation of Social Support Characteristics of African Nursing Students Residing in North Cyprus During The COVID-19 Pandemic

Ntini, Tohmukem Loveline MSc, Department of Nursing January 2024, 75 pages

This study was carried out to evaluate the social support characteristics of African nursing students who were residing in Northern Cyprus during the COVID-19 pandemic. Cross-sectional design was used in the research. The investigation was conducted in May-December 2022 during a period of 15 minute with a sample size of 205 African nursing students enrolled at Near East University Northern Cyprus. In this study, data were collected with the 'Multidimensional Scale of Perceived Social Support' and sociodemographic data questionnaire. After being collected via a Google Form, the information was uploaded to Statistical Analysis for Social Science 20.0 for statistical analysis, which was then utilized to display the sociodemographic and social support features of the participants. Using descriptive statistics like Independent T test, Pearson Correlation, mean, frequency, and percentage, the socio-demographic traits were examined. According to the findings of the study, the overall score of the participants on the Multidimensional Scale of Perceived Social Support was 50.33±14.97; the highest mean score was 18.22±7.08 from the family support sub-dimension. There was a significant difference between the significant other support received sub-dimension' and gender, marital status and people living at home (p<0.05). The results lead us to the conclusion that friend support and significant other support were the two types of social support that participants received the least of during the epidemic. Conforming to the findings, awareness on the importance of social support and its various sources for African or foreign students during dangerous crises or pandemics should be intensified by the powers that be. Public health nurses, community health nurses, and school nurses who are significant others should always assume their responsibilities to reach out to foreign students, especially during difficult crises.

Key words: Covid-19, Social support, African students

COVID-19 Pandemisi Sırasında Kuzey Kıbrıs'ta Bulunan Afrikalı Hemşirelik Öğrencilerinin Sosyal Desteklerinin Belirlenmesi

Özet

Tohmukem Loveline Ntini Yüksek Lisans, Hemşirelik Bölümü Ocak 2024, 75 sayfa

Bu calışma, COVID-19 salgını sırasında Kuzey Kıbrıs'ta ikamet eden Afrikalı hemşirelik öğrencilerinin sosyal desteklerini belirlemek amacıyla yapılmıştır. Bu araştırmada kesitsel desen kullanılmıştır. Araştırma, Mayıs-Aralık 2022 tarih aralığında Kuzey Kıbrıs, Yakın Doğu Üniversitesi'ne kayıtlı 205 Afrikalı hemşirelik öğrencisi ile 15 dakikalık bir sürede yürütülmüştür. Bu çalışmada 'Çok Boyutlu Algılanan Sosyal Destek Ölçeği ve sosyodemografik veri anketi ile veriler toplandı. Bilgiler Google Formu aracılığıyla toplandıktan sonra istatistiksel analiz için e yüklendi ve daha sonra katılımcıların sosyodemografik ve sosyal destekleri belirlendi. Ortalama, frekans, yüzde, Bağımsız T testi ve Pearson Correlation testi kullanıldı. Araştırmanın bulgularına göre, katılımcıların 'Cok Boyutlu Algılanan Sosyal Destek Ölçeği' genel puanı 50,33±14,97; en yüksek ortalama puan ortalaması ise 'aile desteği' alt boyutundan 18,22±7,08 oldu. 'Diğer destek' alt boyutu ile cinsiyet, medeni durum ve evde yaşalına kişi grupları arasında anlamlı fark bulunmuştur (p<0,05). Sonuçlar, katılımcıların salgın sırasında en az aldığı iki tür sosyal desteğin 'arkadaş desteği' ve 'diğer destek' olduğu göstermektedir. Bulgulara göre, krizler veya salgınlar sırasında Afrikalı veya yabancı öğrenciler için sosyal desteğin önemine ve çeşitli kaynaklarına ilişkin farkındalık, yetkili makamlar tarafından artırılmalıdır. Önemli diğerleri olan halk sağlığı hemşireleri, yabancı öğrencilere ulaşmak için her zaman sorumluluklarını üstlenmelidir.

Anahtar kelimeler: Covid-19, Sosyal destek, Afrikalı öğrenciler

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List of Abbreviation

ANOVA:	Analysis of variance
ARDS:	Acute respiratory distress syndrome.
BMP:	Basic metabolic panel
CDC:	Center of Disease Control
CBC:	Complete blood Count
CoV:	Coronavirus
CRTT:	Certified respiratory therapy technician
CK:	Creatine kinase
DVT:	Deep vein thrombosis
COVID-19:	Coronavirus 2019
EKG:	Electrocardiogram
ETT:	Endotracheal tube
EUA:	Emergency Use Authorizations
FAM:	Family
FRI:	Friend
FDA:	Food and Drug Administration
HIV:	Humanimminovirus
HCoV:	Human coronavirus
MSPSS:	Multidimensional scale of perceived social support
MI:	Myocardial infarction
MERS:	Middle East Respiratory Syndrome
MERS-CO:	Middle East Respiratory Syndrome Related Coronavirus
NGO:	Non-Governmental Organization
ORF:	Open Reading Frames
PCS:	Physical component score
PTT:	Prothrombin test time
PT/ING:	Prothrombin time/international normalization rate
PM&R:	Physical medicine and rehabilitation
PTSD:	Post traumatic syndrome disease
PE:	Pulmonary embolism

RNA:	Ribonucleic Acid
RTC:	Replication-transcription Complex
SARS:	Severe Acute Respiratory Syndrome
SARS-CoV:	Severe Acute Respiratory Syndrome
SARS-CoV 1:	Severe Acute Respiratory Syndrome1
SARS-CoV 2:	Severe Acute Respiratory Syndrome2
SCDs:	Sequential Compression Devices
SO:	Significant others
SD:	Standard deviation
SPSS:	Statistical Package for Social Sciences
US:	United State
UK:	United Kingdom
VOCs:	Variants of concern
VOIs:	Variants of interest
WHO:	World Health Organization

CHAPTER 1

Introduction

In 2019 December, a novel coronavirus with a name SARS-CoV-2 had consequently led to the outbreak of an illness which affects the respiratory system which was named COVID-19 (Amir et al., 2021). This virus can easily be spread from person to person (Lai et al, 2020). This new virus started in Wuhan Hubei Province, in China in 2019 and spread to other parts of the world at the conclusion of the year (Khan et al., 2021). In March 2020, the second heavy infection of COVID-19 began in Hong Kong, where the primary source of infection was imported cases (The Hong Kong Special Administrative Region Government, 2021). The World Health Organisation (WHO) was pushed by its spread to issue a global pandemic declaration in March 2020 (Wang et al., 2020; Sohrabi et al., 2020). The spread of the virus throughout the world raised concern among healthcare professionals globally. COVID-19 was not known to cause infection in humans in the past. However, it is presently known to be the infecting organism in some people, leading to a wide spread of autoimmune reactions in affected people. This eventually led to global pandemic as it is transmitted from human to human through coughing or sneezing (Correia., 2020).

The novel COVID-19 pandemic has challenged the globe for about two years now and has led to health emergencies around the globe. In January 14 2024, over 7m people have died globally due to the pandemic (WHO, 2024). The pressure from the pandemic consequently led to global concern not solely because of the number of deaths but equally due to the social and economic consequences which affected healthpromoting behaviors adversely in individuals around the world (Pinzaru et al., 2020). Especially students who are mostly dependent and vulnerable. Proactive measures were adopted to restrict the spread of the infection. Physical and mobility limitations were implemented globally, limiting people's movements and altering their behavior in an effort to minimize physical contact (Kevin, 2020).

In Northern Cyprus as well as other nations, a lot of activities came to a standstill. There were restrictions such as social isolation, travel bans, no schools, businesses closed, no major events and changes in job practices which had negative effects on the global economy (Cascella et al., 2022). This enormously affected the day

to day life of individuals, especially African students. This plan of action emulated by the government of Northern Cyprus, was to protect its citizens and others from the pandemic and also to stop the infection from spreading (Nedime et al., 2020). This consequently led to a rise in economic hardship especially among the African students who made a living from part-time jobs. Probably, it resulted in unhealthy behaviors that might have led to the onset or worsening of health conditions. This situation could be under control with the help of social support from different sources. The frustration from COVID-19 greatly affected individuals psychologically throughout the world. Furthermore, the restriction of movement, social distancing, and other outdoor recreational facilities might have contributed to an unhealthy lifestyle which can affect their quality of life (Kevin, 2020).

The age group involved with SARS-CoV-2 infection is most frequently found in adult male patients, with a median age ranging between 34 and 59 years (Bai et al., 2020). SARS-CoV-2 is equally having high chances to infect those who have chronic comorbidities like the cardiovascular and cerebrovascular diseases and diabetes (Chen et al., 2020). The greatest portion of the population severely infected by the virus are adults above 60 years old, and in individuals who have underlying illnesses like those mentioned above (Wang et al., 2020). Severity could equally manifest maybe in conditions accompanied with co-infections of bacteria and fungi (Chen et al., 2020).

Social Support is defined as "the family and friends." and other individuals who are available in moments of need to give support psychologically, physically, financially and others. Looking at the part social support plays during a pandemic, most of times people present with fear and anxiety not solely because of the illness but equally because of the uncertainty of the duration, restriction of social interactions, and monetary issues that might arise as a consequence (Akbar et al., 2021). Social support has three main characteristics or forms which are instrumental, emotional, and informational support (Cherry., 2023).

Taking into consideration that COVID-19 is extremely contagious, it has greatly threatened the healthcare system around the globe (Correia et al., 2020). In order to prevent the widespread of COVID-19, authorities around the globe have continued to encourage the use of surgical face masks, among other infection prevention and control

methods, by individuals washing and/or sanitizing of hands as well as maintaining social distancing. Adopting a single health-promoting lifestyle to prevent the spread of COVID-19 is not enough.so oftentimes people are motivated to practice all the abovementioned measures in order to prevent COVID-19 infection (WHO, 2021). For instance, wearing of surgical/medical face mask, and practicing physical or social distancing can be seen as the most important measure in preventing pathogen exposure (Kim et al., 2021). This is achievable with social support.

Statement of the Problem

The problem statement of this research is that optimum social support characteristics are of great need and importance to health-promoting behaviors of African nursing students who were living in Northern Cyprus during the COVID-19 pandemic. In order to enhance their health-promoting behaviors, most importantly, significant people like; community health nurses, Public Health nurses, school nurses, social support workers, non-governmental organisations (NGOs) and the government are good sources of social support and should take responsibility in role. This group of people is so vulnerable and needs full support from all dimensions during crises like pandemics in order to maintain a healthy state.

Hence, this research was done to highlight the importance of social support from all sources especially significant others support to African students during crisis.

Purpose of the Study

Examining social support and multidimensional perceptions of social support among African nursing students in Northern Cyprus during the COVID-19 outbreak.

Research Questions

RQ 1: What is the 'Multidimensional Scale of Perceived Social Support Scale" mean score of the African nursing student at Near East University North Cyprus *RQ 2:* Is there any relationship between the sociodemographic characteristics and the 'Multi-Dimensional Scale of Perceived Social Support Scale'?

CHAPTER II

Literature Review

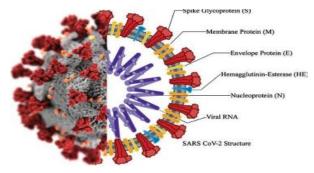
Corona Virus (COVID-19)

COVID-19 also known as Severe Acute Respiratory Syndrome (SARS-CoV-2), formerly known as 2019-nCoV, is a new (novel) coronavirus which is believed to be the source of the ailment known as Coronavirus disease (COVID-19) (David et al., 2022).

The WHO dubbed it SARS-CoV-2 disease, and the abbreviation COVID-19 stands for "coronavirus disease 2010" This name was chosen to prevent the stigmatization of the virus's origins as a matter of population, geography, or animal association (The New York Times, 2021; WHO, 2021). The Corovirus Study Group of the International Committee published a public statement on February 11, 2020, announcing the official name chosen for the novel virus: Severe Acute Respiratory Syndrome 2 (SARS–CoV-2) (Gorbalenya et al., 2021). SARS-CoV-2, like RNA viruses, is sensitive to genetic modifications in attempts to adapt to its new human hosts. Slowly developing mutations lead to mutant variations that may manifest with different features than their inherited strains. The virus mimics the solar corona when observed under an electron microscope, with spherical particles and a projecting rim that looks like a crown, hence the term corona, which has the same meaning in Latin. It was discovered in the 1960s that single stranded, encapsulated, positive sense RNA viruses were to blame. The coronavirus is a member of the Coronaviridae family, which is recognized as a cause of mild respiratory illnesses in people (Chowdhur et al., 2020)

Figure 1:

Structure Covid-19 Virus Adapted from



Chowdur et al., 2020

Only a small number of the SARS-CoV-2 variants that have been identified during the COVID-19 pandemic are considered viruses of concern (VOCs) by the WHO due to their potential impact on global public health (Chowdhur et al., 2020).

Transmission of COVID-19

COVID-19 is mainly transmitted through droplet transmission from presymptomatic, asymptomatic, or symptomatic individuals or by close contact exposure to infectious respiratory droplets (Lotfi et al.,2020).

Additionally, the airborne transmission of COVID-19 through the use of aerosolgenerating techniques has been related to its spread. Evidence of SARS-CoV-2 transmission in the air without the use of aerosol-generating techniques is however, emerging and being evaluated. But not everyone is aware of this method of transmission (Cascella et al., 2022). COVID-19 transmission can take place if an individual touches a surface that is contaminated with COVID-19 and thereafter the hands directly come in contact with the mucous membranes of the mouth, eye, and nose (McIntosh et al., 2019).

Under experimental conditions, it was discovered that COVID-19 was more stable on surfaces made of plastic and stainless steel that was on copper surfaces for about 72 hours after the virus was put on, with live virus discovered on the exterior (Van Doremalen et al., 2020). Viable viruses were isolated for up to 28 days at 20 °C using nonporous surfaces like glass and stainless steel. SARS-CoV-2 recovery on porous materials was lower than on nonporous surfaces (Riddel et al., 2020).

According to a study on the virus' persistence on objects and surfaces, COVID-19 can be found on plastic and stainless steel for up to 2-3 days, cardboard for up to 1 day, and copper for up to 4 hours. Additionally, COVID-19 has been found on floors, computer mice, trashcans, and sickbed handrails, indicating that ICUs were more contaminated than standard wards. Also personal protective equipment can be a route of transmission of airborne diseases (Liu et al., 2020). There was proof of nosocomial transmission in the air in addition to fomite transmission up to 4 meters away from the patients in the air (Guo et al, 2020).

According to epidemiologic evidence from numerous case investigations, people infected with COVID-19 contained live virus in their feces, suggesting that fecal oral

transmission was likely the source of their infection (Yeo et al., 2020). According to a meta-analysis made up of 936 infants from COVID-19-positive moms, vertical transmission is possible, but only in a small number of situations (Kotlyar et al., 2021).

Signs and Symptoms

The signs and and symptoms of COVID-19 range asymptomatic/moderate symptoms to severe illness and death. These symptoms may appear from two days to two weeks after being exposed to the virus (CDC, 2020). An analysis was conducted on 181 confirmed cases of COVID-19 out of Wuhan, China and the mean rate for the incubation period was ranging from 5.1 day and 97.5% of persons who had symptoms did so within the period of 11.5 days of infection (CDC, 2020). According to a report from Wu and McGoogan, in a sample of 72,314 COVID-19 cases who were reported to the Chinese CDC (CCDC) 81% had no pneumonia or mild pneumonia, and about 14% had severe hypoxia and dyspnea, Less than 50% had lung problems within 24-48 hours, 5% were critical, presenting with shock respiratory failure, or multiorgan dysfunction; and 2.3% were at the point of dead. Numerous reports from different parts of the world have subsequently supported these patterns of presentation (Wu et al., 2020).

COVID-19 may present with the following symptoms (CDC, 2020)

- Fever or chills
- Headache
- Cough
- Running nose or nasal congestion
- Shortness of breath or difficulty in breathing
- Fatigue
- Sore throat
- Body pain
- Loss of taste or smell
- Nausea and vomiting
- Diarrhea

Figure 2

Other symptoms that have been reported includes the following; Adapted from



(Salahshoori et al.,2021)

- Production of sputum
- Respiratory distress
- Neurological disorders such as, headache, altered mental functions
- Malaise and pneumonia seem to be the most common serious manifestations of COVID-19.

It has been reported that a total or partial loss of smell (anosmia) is a potential history to find with patients who are eventually diagnosed with COVID-19 (European Center for Disease Prevention and Control, 2020). A survey was carried out on outpatients with mild symptoms of COVID-19 through phone contact and it was discovered that 64.4%, which is 130 patients of 202 reported any altered sense of smell or taste (Hentsch et al, 2021). The C.D.C revealed that people who are at increased risk of being infected with COVID-19 are persons in areas with ongoing local spread, healthcare professionals caring for people who are sick of COVID-19, individuals with

close contacts to infected people, and travelers on return trips from places where there has been local spread of the disease. The CDC equally released a summary report of proof for comorbidities, which are championed by meta-analysis/systematic review that has a remarkable relationship with risk of contracting severe COVID-19 illness. The conditions are as follows (CDC, 2020).

- Cancer
- Chronic kidney disease
- COPD (chronic obstructive pulmonary disease)
- Diabetes mellitus, type1 and type2)
- Smoking, current or former
- Cerebrovascular disease
- Obesity
- Asthma
- Heart conditions (eg, heart failure, coronary artery disease, cardiomyopathies)
- Immunocompromised state from solid organ transplant
- Hypertension
- Pregnancy
- HIV
- Neurolog Neurological conditions, including dementia
- Other lung disease
- Sickle cell disease
- Solid organ or blood stem cell transplantation
- Substance use disorders
- Use of corticosteroids or other immunosuppressive medications
- Cystic fibrosis
- Thalassemia
- Immune deficiency
- Liver disease (CDC, 2020).

Management / Treatment

Early in the pandemic, knowledge on COVID-19 and its treatment was inadequate, prompting a rush to develop experimental therapeutics and repurpose drugs to combat this novel viral infection. Since then, because of the tireless work of clinical researchers around the world, substantial progress has been made, resulting in a greater understanding of not only COVID-19 and its management, but also the rapid development of innovative therapies and vaccines (Cascella, et al., 2022).

Antimalaria medicines from the past called hydroxychloroquine, have shown in vitro the capacity to prevent coronavirus proliferation. Real-world data are now incongruent with its purported anti-SARS-CoV-2 (Gendelman et al., 2020). It has been proposed that hydroxychloroquine may also interfere with ACE2 receptor glycosylation, preventing SARS-CoV-2 binding to target cells (Devaux et al., 2020), given that the virus was discovered to use the surface of the receptor angiotensin-converting enzymes (ACE2) seen in the lungs, heart, kidney and intestine. Additionally, hydroxychloroquine can prevent lysosomes and endosomes from becoming acidic, preventing the virus from fusing with the host (Zhou et al., 2020). Despite having more severe side effects than hydroxychloroquine, chloroquine, either alone or in combination with remdesivir and /or tocilizumab may be beneficial against COVID-19.

Statins (the most commonly administered being atorvastatin 20mg/d or same dose of rosuvastatin 40mg/d are among the medications that appear to have immunodulatory advantages and decrease SARS-CoV-2 cell difussion. Statin work by lowering release of chemokines and fixed molecules and by modifying T-cell activity. By interacting with and suppressing the primary protease enzymes (Mpro) of SARS-CoV-2, rosuvastatin in particular seems to have direct antiviral activities. In a retrospective research, discovered that statin treatment reduced the risk of all-cause mortality in 13981 individuals with COVID-19 (Zhang et al., 2020). Additionally, the study cohort's outcomes related to statin use were unaffected by adding ACE inhibitors or angiotensin II receptor blockers (Zhang et al., 2020).

A nucleoside analogue called Remdesivir has a potentially effective virusinhibitory effect. It has been demonstrated to reduce SARS brought on by COVID-19 infection in vivo (Sheahan et al., 2017) and to display antiviral action against coronaviruses in vitro (Al-Tawfig et al., 2020). The medication has the ability to prevent viral replication, which interferes with the developing viral-RNA chain and causes it to end prematurely (Agostini et al., 2018). The safety and pharmacological properties of remdesivir were evaluated in a Phase 1 clinical trial (World Health Organisation, 2018).

Clinical improvement was seen in 68% of the severe COVID-19 patients getting remdesivir (36 out of 53 patients) recently (Grein et al., 2020). However, remdesivir was not linked to statistically meaningful therapeutic improvements in a multicentered, randomly conducted, double-blind and placebo trial (Wang et al., 2020). Current clinical trials will offer more information on its efficacy.

With dosages comparable to those used in treating pneumonia caused by bacterial, azithromycin has been demonstrated in the literature to exhibit in vitro antiviral activity against SARS-CoV- (Touret et al., 2020). It is unclear how the action takes place. It is thought to disrupt the lysosome and endosome acidification processes or amplify the antiviral effects of interferon in the host (Li et al., 2019). The management of COVID-19 using azithromycin and chloroquine/hydroxychloroquine has been documented, however, the clinical data that is currently available comes from retrospective, observational, or uncontrolled studies (Gautret et al., 2020).

Protease inhibitors used in HIV infections include lopinavir and ritonavir. By enzymatic induction, their combined use enables an increase in lopinavir's half-life (Sheahan et al., 2020). There is currently no statistically significant proof that it is effective in vitro against SARS-CoV-2. It is challenging to assess the effectiveness of the lopinavir/ritonavir combination for the treatment of COVID-19 because the trials that are currently available are either reports or retrospective studies. There was no advantage to lopinavir-ritonavir treatment in a randomized, controlled, open-label Chinese trial (Coa et al., 2020). A small number of randomized clinical experiment are now being developed to assess the effectiveness and how safe is tocilizumab, either using it independently or alongside with other medications, in the management of severe pneumonia in COVID-19 admitted cases.

Another monoclonal antibody used to treat patients in severe conditions is anakinra. The medication may be able to lessen the cytokine storm brought on by the virus by blocking the IL-1 receptor (Mehta et al., 2020). This cytokine cascade may be lessened by the monoclonal antibody eculizumab, which blocks the cleavage of the C5 part of the complement in C5a and C5b.

The World Health Organization views the increased infections with the virus as a great danger to public health. Twenty years, a number of viral epidemics, such as the Middle East Respiratory Syndrome coronavirus (MERS-CoV) in 2012 and the Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) in 2002 and 2003, and have impacted health globally in a significant manner. The majority of COVID-19-related deaths and SARS-CoV-2 infections have occurred in the United States, Brazil, and India are the next in line. With approximately 375,000 recorded fatalities in 2020, COVID-19 ranked third in the United States behind heart disease and cancer (Ahmad et al., 2021). According to the WHO, COVID-19 case mortality rates are currently 2.2% worldwide.

The Impact of Comorbidities

This infection, which can result in serious sickness, is a threat to people of all ages. Patients above 60 years and those already suffering medical comorbidities like obesity, cardiac abnormalities, renal disease, diabetes mellitus, long standing lung disease, smoking, cancer etc are more likely to experience severe COVID-19 infection. Coronavirus infected cases that were recorded and sent to CDC between 22 January and May 30, 2020, people with prior medical conditions had a six-fold higher percentage of COVID-19 patients who needed hospitalization (Stokes et al., 2020).

The research equally found that the number of people who died from this infection was twelve times higher among people who had preexisting medical issues than in those who did not have. That is 19.5% vs. 1.6% (Stokes et al., 2020). Data on gender-based differences in COVID-19 suggests that male patients are more likely than female patients to suffer severe disease and die as a result of COVID-1 (Jin et al., 2020). Male patients had a greater mortality rate (12.5%) than female patients in a historical cohort analysis conducted between March 1 to November 21, 2020, analyzing the death rate in 209 US acute acute care hospitals which comprised 4260 individuals confirmed with COVID-19 infection scoring 9.6% (Finelli et al., 2021).

Prevention of COVID-19

Both pharmaceutical (such as immunization) and non-pharmaceutical interventions (such as masking, physical segregation, and hand hygiene) can prevent COVID-19. To prevent people from catching SARS-CoV-2 and spreading it, all of these precautionary measures should be implemented simultaneously (CDC, 2021).

People can take preventative measures, such as getting vaccinated, in order to prevent contracting COVID-19 and spreading the disease to others. Vaccines that are both safe and effective are a great way to prevent disease, but it's also important to keep up with other preventative measures like wearing masks, washing your hands, keeping physically distance from other people, and avoiding crowded areas and places with poor ventilation (Chen et al., 2020).

Another crucial COVID-19 prevention measure that should be kept up to date is the wearing of masks. Numerous factors should be taken into account when choosing a mask. 8 Masks must have a minimum of two layers of breathable, washable fabric Cover, the Mouth and nose entirely, Have a nose wire to stop air leaks from the top of the mask, fit snugly against the sides of the face, and not have gaps. Additionally, depending on your environment, it's critical to select and wear the appropriate kind of mask. For instance, wearing cloth masks in a public place is recommended, whereas doing so in a medical facility during aerosol-producing procedures is not (CDC, 2021).

Warning regarding contact and droplets Healthcare professionals are advised to wear Personal Protection Equipments (PPE) before going into a room with people suspected or confirmed with COVID-19. Healthcare professionals should receive training on proper use of PPE, including how to put it on and take it off. When there is a shortage of supplies, extended and repeated use of specific PPE items like masks and gowns may be an option. Healthcare professionals should;

- Use a medical mask, preferably one that is surgical and medical.
- Put on a face shield or goggles for your protection.
- Wear a long-sleeved, sterile-free gown that is clean.
- Put on hand gloves (CDC, 2021).

When removing PPE, there is a greater chance of self-contamination. It is advised that fitted respiratory masks rather than surgical or medical masks be worn by healthcare professionals performing any of the following aerosol-generating procedures on patients with COVID-19. Additionally, putting on a fitted respirator mask, healthcare workers should also put on PPE, including gloves, a gown, and eye protection (CDC, 2021).

CDC advises the following crucial COVID-19 preventative measures even in the presence of the introduction of vaccinations as a tool for prevention against the disease and the appropriate use of masks (Chen et al, 2020). Avoiding crowded areas and areas with poor ventilation; if necessary, wearing a mask in these areas; washing hands properly; keeping surfaces with a lot of contact clean; keeping an eye on symptoms; and getting tested if you feel unwell (CDC, 2021).

Infection Prevention and Control

Infection prevention and control (IPC) is the practice of preventing or halting the spread of infections from the provision of healthcare services in establishments like hospitals, outpatient clinics, dialysis centers, long-term care facilities, or traditional practitioners. IPC must be prioritized in order to protect patients and healthcare professionals and is a crucial component of strengthening the health system. The IPC's objective in the case of COVID-19 is to support the ongoing provision of essential healthcare services by containing and preventing COVID-19 transmission within healthcare facilities in order to protect the health and safety of patients and healthcare personnel (CDC., 2021).

COVID-19 IPC Priorities:

- 1. Identifying suspect cases quickly
 - Screening/triage at the time of the patient's first visit to the hospital and swift source control implementation
 - Limiting access for healthcare personnel and/or visitors who may have COVID-19, whether they are suspected or confirmed cases
- 2. Isolation right away and refer for testing
 - Group patients with suspected or confirmed COVID-19 separately
 - Test all suspected patients for COVID-19
- 3. Safe clinical management

- Immediate detection of patients and healthcare professionals suspected of having COVID-19
- 4. Observance of IPC guidelines using personal protective equipment (PPE) in the right circumstances
 - Unvaccinated healthcare personnel, patients, and visitors should be provided with resources and given advice regarding the value of vaccination (CDC, 2021).

COVID-19 IPC in the Context Vaccination Delivery

There are some recommendations and principles that should be put into practice and taken into consideration for vaccine administration as long as safe and effective COVID-19 vaccines are still being distributed. Consultations and consensus between WHO, the United Nations Children's Fund (UNICEF) and the ad hoc WHO COVID-19 IPC Guidance Development Group have led to the development of a document that outlines key IPC principles and recommended proper precautions for safe administration of COVID-19 vaccines (CDC, 2021).

The key IPC principles for COVID-19 vaccine deployment set out in the document include:

- 1. Applying standard precautions during any vaccination activity
- Performing additional IPC precautions mask use in the context of the COVID-19 pandemic
- 3. Offering specialized training to healthcare workers and supplying the public with targeted information regarding IPC measures for safe vaccine delivery
- 4. Having a spotless, sanitary, well-ventilated setting with suitable waste disposal and sufficient spaces that support best IPC practices like physical distancing
- Ensuring discussion and compliance with national guidelines and protocols for IPC measures, including those connected to COVID-19 (CDC, 2021).

Standard and Transmission-Base Precautions

Precautions are a set of guidelines that must always be followed when caring for patients in all healthcare settings. Standard precautions continue to be the foundation of infection prevention and control. The way in which a healthcare worker interacts with a patient and whether or not they are likely to be exposed to a known infectious agent will determine whether or not these pre-standard warnings are applicable. Standard Precautions are as follows;

- Hand washing
- Personal protective equipment
- Coughing manners and respiratory hygiene
- Environmental surfaces and equipment need to be cleaned and disinfected.
- Precautions for injection
- Good medication storage and handling (CDC, 2021).

Unless an aerosol-generating procedure is being performed, in which case airborne precautions are required, current WHO guidance for healthcare workers caring for suspected or confirmed COVID-19 patients advises the use of contact and droplet precautions in addition to standard precautions (WHO, 2020). It is best to use disposable or specially designed medical equipment for patients, such as stethoscopes and blood pressure monitors. If patients must share equipment, it should be cleaned and sanitized after each use for each patient using disinfectants that contain no less than 70 percent ethyl alcohol (CDC, 2021).

Additionally, single rooms or wards with sufficient ventilation are advised. The recommended ventilation rate for COVID-19 patients in general ward rooms with natural ventilation is 60 L/s per patient. According to WHO recommendations, patients suspected of having COVID-19 should be admitted collectively in one room with beds at least one meter apart from one another, though some member countries, like the United States, have suggested keeping distances as wide as possible. Separate bathrooms, which should be cleaned and disinfected at least twice daily, should be provided in COVID-19 isolation rooms or wards (CDC, 2021).

In addition, healthcare facilities may think about assigning staff members to care for patients with COVID-19 and restricting the number of visitors allowed in the facility. Unless absolutely necessary for medical reasons, people infected with COVID-19 should not be transported. People suspected or confirmed with COVID-19 should wear a mask if transportation is really medically necessary. When transporting patients, medical personnel should also be wearing proper PPE (CDC, 2021).

COVID-19 Racial and Ethnic Differences

The degree of contamination and death associated with SARS-CoV-2 differs by ethnic group. According to a latest update from CDC analysis of hospitalizations from a giant administrative database which involved approximately 300,000 COVID-19 cases admitted from March to December 2020, racial and ethnic minority groups had a higher number of COVID-19 associating to hospital admissions than white infected individuals. A higher risk of exposure to SARS-CoV-2 and a higher chance of acquiring severe COVID-19 disease drove the high percentage of COVID-19-related hospitalizations among racial and ethnic groups (Romano et al., 2020). Black people, Hispanic, and minority people from Asia have a greater risk of being infected with COVID-19 virus and dying, according to the findings of a meta-analysis of 50 studies conducted by US and UK researchers (Sze et al., 2020). Hispanic people had the highest COVID-19related death rates. From COVID-19 were higher among Hispanics (Ahmad et al., 2021). Another CDC study on COVID-19 risk in sexual minority adults discovered that, both in the overall population and within specific racial/ethnic groupings, sexual minority persons were more likely than heterosexual people to have underlying medical comorbidities that increase the likelihood of acquiring severe COVID-19 (Heslin et al., 2021).

Social Support

Support made available to a person via social connections to other people, groups, and the community at large is referred to as social support. The National Cancer Institute's Dictionary of Cancer Terms describes it as "A network of family, friends, neighbors, and community members that is available in moments of need to offer emotional, physical, and monetary assistance" (www.cancer.gov, 2023). Social support is another name for the emotional and material support that a social group provides to help people deal with difficult situations. Various sorts of social assistance are available. When a person is ill, help them with countless everyday tasks or give them monetary support in times of need. Offering counseling to a buddy who is experiencing a difficult situation will be of assistance to them. Empathy, compassion, and interest in others in need are helpful. Additionally, studies have linked social connections to a variety of other areas of health and fitness (Cherry, 2020).

It has been demonstrated that lack of social support alters brain function, raises the risk of the following conditions, and it is associated to sadness and loneliness:

- Alcohol use
- A cardiovascular condition
- Depression \ Suicide

Social support networks may help cope with challenging circumstances, whether it's a bad day at work or a year defined by loss or chronic illness. Lack of social support may also lead to feelings of social isolation and loneliness. A substantial body of research has shown favorable connections between low social support and physical and mental health, as well as plausible processes behind these relationships. Folkman and Finch give comprehensive reviews of these fields of study, while Holt-Lunstad et al. conduct a meta-analysis of prospective studies demonstrating a relationship between social isolation and mortality risk (Yuan et al., 2018).Student social support has been studied previously, and the results show that male students receive significantly more social support than female students, and that social support's impact on mental health is closely tied to the personality traits of the person receiving it (Elmer et al., 2020).

Since the COVID-19 pandemic started to spread in the spring of 2020, universities in the US have implemented lockdown orders on campus. For example, inperson classes have been converted to virtual classes, extracurricular activities have been suspended, and various social distancing measures have been put in place throughout the fall semester of 2020 (College students' quality of life was negatively impacted by increased anxieties and fears about the unprecedented pandemic, severe disruption of regular academic and social activities, and financial and living circumstances (Chou et al., 2020). The COVID-19 had an impact on college students' levels of anxiety and depression during the fall semester of 2020, according to the majority of them (Huckins et al., 2020). They also reported being less physically active. They felt overwhelmed by their growing anxiety about their health and academic performance (Wang et al., 2020). The increased mental burden and health concerns resulted in difficulties in concentrating, sleeping, and socializing. It is urgently necessary to investigate the relationship between college students' perceived social support and the COVID-19's impact on quality of life in order to provide insightful information for more effectively handling extremely trying circumstances (Zhang et al., 2020).

Regulations designed to combat pandemics may disrupt social ties, which raises the risk of psychological problems (Holt-Lunstad et al., 2015). During these times, one particular topic has been the focus of interest, which is the role of social support as a psychosocial protective factor. Numerous studies have looked at the connection between social support and mental health and discovered that having social support is a protective factor that predicts better mental health functioning and aids in delaying the onset of mental health problems (Silva et al., 2017).

College students are more likely than non-college students or the general population to experience mental health issues (Auerbach et al., 2018), and depressive symptoms are more common in them than in non-college students or the general population. When compared to healthy college students, depressed students are less likely to engage in organized activities, which could have a negative impact on their standing in social networks and even heighten suicidal thoughts (Verboom et al., 2014). College students' mental health has been said to be protected by social support, and its lack may make them more susceptible to developing depressive symptoms (Cao et al., 2020; Rankin et al., 2018).

Research has long shown that international students who study in a host country away from home have more mental health issues than those who study in their home country, and this has already brought attention to the significance of social support, which can help international students with their mental health issues (Rekenyi et al., 2023).

The hypothesis is that students away from home receive less social support, and this may be related to the degree of depression and vital exhaustion. It is believed that the presence of social support can act as a protective factor against the onset of mental health difficulties, and that examining these relationships can provide insights into the potential impacts of social support on mental health outcomes during the COVID-19 pandemic. We also hypothesized that higher levels of vital exhaustion would be positively correlated with higher levels of depression (Rekenyi et al., 2023).

Different Forms of Social Support

Supportive social networks come in a wide range of sizes and shapes, and they can serve a wide range of purposes in your life.

Emotional Support

This involves giving comfort to someone by physically touching them. This could be done by hugging, or patting the back while listening and empathizing with them (Scott, 2020). There may be instances when the people in your life help you emotionally by giving you encouragement during a time when you needed someone to run to when things didn't go according to plan (Cherry, 2023). When people are lonely or under stress, this kind of help is very important.

Instrumental support

People in your social network could be able to assist you in other situations. They offer you care for your physical requirements and render assistance during times of need (Morelli et al., 2015). This could be serving you a good meal on your sick bed or driving you around when your car gets bad. This kind of help is essential during moments of urgent requirements that must be satisfied (Cherry, 2023).

Informational Support

Individuals may as well offer informational support. This can include things like mentoring, advice, guidance, and wisdom. Support of that sort can be quite helpful while making important decisions or adjustments regarding someone's life (Scott, 2020). If they have such assistance, individuals might experience less anxiety and worry less about the issues they are struggling to handle thanks to the advice of a reliable buddy, adviser, or a close friend. As you may know, individuals you are socially connected to, can serve a variety of purposes. A teacher may offer informative assistance, whereas a parent may offer all three sorts. You are more likely to obtain the sort of help you require when you actually need it if you have a strong social support network (Cherry, 2023).

Healthy Habits and Decisions

Social group membership has a normative effect on behavior whether or not people consume healthy food, carry out physical activities, smoke, drink, or consume illicit drugs (Crookes et al., 2016). Clearly, peer pressure and influence may have a detrimental impact in this area when they result in risky or even harmful health decisions. Pressure and assistance from a group, on the other hand, might encourage people to engage in healthy activities. If you've ever attempted to quit a terrible practice, like smoking, then you will know how vital social support is. It might be far more difficult to succeed if your social ties do not support you. If you have the support and encouragement of your friends and family, you may discover that attaining your objective is much easier (Cherry, 2023).

Stress Management

People with social support are also better able to handle stressful situations. Stress has been linked to a variety of negative health outcomes, including decreased immunity and an increased risk of heart disease. Being around kind and helpful individuals might help people feel stronger enough to handle the challenges of life. In addition, studies have indicated that possessing good social support during a crisis might help to lessen the effects of trauma related to diseases such as PTSD (Gros et al, 2016).

Improves Motivation

People's social ties can also help them stay motivated while they work toward their goals. Connecting with others who are actively attempting to reduce weight or quit smoking, for example, is often beneficial. Talking to others who are going through the same thing may provide a lot of encouragement, empathy, and drive (Cherry, 2023).

The Impact of Social Support on Students

Both the physical and mental health of the students as well as their academic attention have suffered severe consequences. People's psychological welfare is dramatically, brilliantly, and overwhelmingly enhanced when such activities are held for the benefit of all. This leads to both acute and continuous tension and happy feelings (Haj-Yahia et al., 2019). The duration of time spent living with watchmen has increased, which has made it more challenging for pupils to finish their everyday assignments. A poor score on the adaptation scale could be attributed to students' challenges adjusting to the pandemic, their lack of preparation for school, and other issues.

Understanding how students perceive and respond to crisis situations, such as the COVID-19 pandemic and other times when they require social assistance, may help create a more supportive and socially adept group of people (Yiheng, 2022). However, when the researchers examined the relationship between students' tendencies to adjust and observable social support, they discovered a strong correlation between the two. Increases in perceived social impact directly correlate with changes in the degree of both positive and negative transformation. Students often turn to shoddy survival strategies because they are unaware of the options that are at their disposal, including the assistance of a friend. (Yiheng, 2022). Despite the lack of a specific source of social support in 86 percent and 75 percent of cases, respectively, children in the ELPSSG and LPSSG were likely to employ negative transformation tactics (Saltzman et al., 2020). In light of the COVID-19 pandemic, this study also examines how well-adjusted kids are to the emotional support of their friends and family. Future research should focus on explaining why and how these two forms of social support could actually benefit students' mental health. According to Lipp et al. (2020), there is a positive correlation between academic success and the provision of emotional support by family members to pupils (Lipp et al., 2020). Promoting improved parent-child communication is essential, among other things. It is crucial to be able to communicate openly and honestly with one another when you are feeling anxious, agitated, or tense. As your friendship develops and becomes stronger, you will gain from this (Yiheng, 2022).

Strong familial relationships and a sense of need as people age require families to stay in touch with one another. The results of the study suggest that students can decide to stay at home if they don't think their academics are helping them. According to a well-known theory, teachers may be able to effectively assist students by using social media (Yang et al., 2019). With the school functioning as the centre and the activities as the supporting framework, students can receive academic support as well as spiritual enrichment through online instruction, tutoring, courses, themed activities, and

psychiatric consultations. Finally, youth can gain the friendship, understanding, support, and trust of their teachers by engaging in class activities and exchanging ideas with their peers (Folkman et al., 2018). Those who can clearly perceive the basic comfort of friends and family as a reduction in opportunity that persons in MPSSG and HPHHG acknowledge cynical strategies for are less likely to make real-life adjustments (Yiheng, 2022). Experts claim that pupils' positive reactions to challenging circumstances are correlated with their degree of social help adapting tendency (Yuan et al., 2018).

Given that many individuals are coping with the aftereffects of trauma amid the pandemic in some capacity, the following suggestions are provided to increase social support. Social support isn't just for people who interact with each other. According to studies, having a pet can provide us with the same advantages that having a human friend would (Allen et al., 2002). To find the newest member of your family, check your local newspaper for adoption-related events in your area, visit a shelter, or use online adoption websites.

Get involved with new clubs or classes. Check out your local. A great way to begin developing your social network of like-minded people is by learning new skills and discovering new passions alongside others who share your interest (Beard, 2021).

Our way of life has not been the only thing affected by the pandemic. Widespread job loss, food insecurity, homelessness, and mental health issues have been brought on by COVID-19. There are many organizations looking for volunteers right now more than ever. You might consider volunteering at crisis hotlines, or perhaps your neighborhood soup kitchen or shelter could use some help. In addition to improving your community, volunteering is a wonderful way to meet people who share your principles. A lot of people use their religious community to feel truly connected. Think about locating a spiritual home if you don't already have one. If you are already a part of a group, consider how you could become more active (Beard, 2021).

A stroll through your neighborhood is a great way to get to know your neighbors, whether you live in a large city or a small town. Similar to step 1, walking your dog in the morning can introduce you to a lot of people in the community. Find out the name of your barista, say hello to your neighbors as they head out to work, or just make a note of upcoming community events or tag sales you might go to (Beard, 2021).

Each of us has been guilty of either not responding to a text or promising to call someone back the following day. It's been difficult for many of us to find the energy to do the most basic things, like staying in touch with our loved ones, because the past year has been so exhausting. One relatively easy way to improve your social support is to get back in touch with your current friends and family (Beard, 2021).

There are many people who have struggled during this pandemic, so you are not alone. Support groups are a great way to get help for specific stressors, like managing our mental health, dealing with chronic illness, or grieving the loss of a family member. Additionally, these groups offer a special chance to practice helping others. According to research, giving others around you practical support may actually be more advantageous than receiving it (Brow et al., 2003).

Covid-19 and Health-Promoting Behaviors

Health promotion is defined as self-initiated actions with intention to control, improve and prevent disease occurrence (Mirghaouryand et al., 2015). Health-promoting behaviors is defined as self-initiated measures taken with the aim of controlling, and improving health as well as preventing diseases. Taking into consideration that covid-19 is extremely contagious, it has greatly threatened the healthcare systems around the world (Correia et al., 2020). However, in order to stop and manage the widespread of COVID-19, authorities around the globe had to motivate people to practice infection, prevention and control actions like putting on recommended mask, washing /sanitization of hands, and maintaining social distancing. Adopting a single health-promoting lifestyle is not enough to prevent covid-19. So oftentimes, people are motivated to practice all the above mentioned preventive measures to prevent covid-19 infection. (WHO, 2021). For instance, wearing of surgical/medical face masks and adopting physical or social distancing have been seen as the most important measures to prevent pathogen exposure (Kim et al., 2021). Furthermore, adopting some health-promoting lifestyles, such as eating healthily and exercising to be healthy, helps individuals cope with stress and build their immune system. Equally, it will reduce the rate of negative impact on wellness stemming from various infection-prevention practices, including quarantine and selfisolation (Chowdhery et al., 2020; Ranasinghe et al., 2020; Mattioli et al., 2020). Healthpromoting behaviors can be achieved through social support networks.

CHAPTER III

Methodology

Research Methodology

In this study, a cross-sectional study design was used.

Place of Study

The study place was at Near East University (Northern Cyprus). To be precise, only the nursing department was used with respect to cost and time. The research study targeted African nursing students in the Near East University Nursing Department. Data collection took place at Near East University Nursing Department.

Population and Sampling

The population of the study consisted of N=380 students in the nursing department at Near East University. The sample of the study population was calculated according to the known sample formula and was determined as n=205 students which makes 53.95% of the population. This sampling method was adopted in order to represent all the African nursing students in Northern Cyprus which were the targeted population of study.

Study Time

This research study started on May 2022 and finished on December 2022.

Inclusion Criteria

The criteria applied in including study subjects in this research study was the condition of being an African nursing student in the department of nursing at Near East University and living in Northern Cyprus during the pandemic. Also participants must be above 18 years of age.

Research Variables

Dependent and independent variables are used in the investigation. A dependent variable is one that depends on or is dependent upon other factors in the study. This indicates that the dependent variables are significantly influenced by the independent factors. The Multidimensional Scale Perceived Social Support (MSPSS) total and subdimensions' score averages are the dependent variables in the study, while sociodemographic parameters are the independent variables. This study intends to investigate the respondents' social support features amid the COVID-19 pandemic. Consequently, in this research study, social support sources are dependent variables. This is so that the respondents' social support can be evaluated according to how Covid-19 and the epidemic are affecting them. This indicates that Covid-19 affects the traits of social support.

Covid-19, on the other hand, is the study's independent variable, and the pandemic is equally an independent reason being that it has the potential of having both a positive and a negative impact on the dependent variables which this study is trying to identify. The demographic variable represents the traits and qualities shared by all respondents. The demographic factors are significant because they have an impact on how respondents interpret the questionnaire's questions. Age, gender, and marital status are the demographic factors in this study.

Data Analysis

For statistical analysis, Google Forms data was imported into statistical package for social science. The demographic and social support characteristics of the participants were presented using the descriptive analysis, and additional statistical analysis was done using SPSS. The data collected was analyzed for frequency and percentage. The Cronbach alpha test was used to measure the reliability and internal validity of the survey instruments. The Cronbach alpha coefficient of the scale for data was calculated and it showed that all the item in multidimenssional scale of perceived social support are closely related to each other (See table 3). Number and frequency were used for descriptive data, parametric analysis (t-test, one-way ANOVA, Pearson rank correlation) was used for data conforming to normal distribution, and nonparametric analysis was used for data not conforming to the normal distribution. The data was evaluated with a 95% confidence interval and p<0.05 margin of error.

Data Instruments and Application of Study

Socio-demographic Form

The researcher created this form with the intention of recording participant demographic data in an anonymous manner. Age, gender, marital status, employment position, and other details were noted. The sociodemographic factors let the investigator divide up the targeted population of study into smaller categories. To gain a better idea of your target population, you might combine responses with comparable sociodemographic traits (Appendix A).

Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support (MSPSS) (Zineet al., 1988) was used to question participants about social support characteristics and their experiences during the COVID-19 pandemic, with 12 items derived from three characteristics of social support: informational, instrumental, and emotional social support, which are split based on sets of variables related to the source of social support, such as: family (FAM) friend (FRI) significant others (SO). The items were scored on a 7-point likert scale ranging from; strongly agree to strongly disagree. Scoring ranged from 1 to 7. The reliability of the measure was examined by internal consistency Chronbach alpha method. The Alpha coefficients for FA, FRI and SO were 82, 86, and 86 respectively (Appendix B).

Questionnaire Survey

The method of collecting data was via self-delivery and internet delivery of questionnaires to the study participants (African nursing students in Near East University). This is a very efficient way of reaching a large study subject for a wide range of feedback and data. A questionnaire is created with a good number of questions, and correspondents give answers in order to deliver information about the topic under study. Google Doc Forms is an online software program that was used to design the questionnaires, to collect data, compile them, and perform other additional analyses. Google Docs Form is user-friendly and provides a clear structure for questioning. It eases the collection and structuring of large amounts of data, as well as easy transfer of data for potential analysis of statistics. A link was made available for the study subjects as well as their responses were imputed after they had accessed the link provided. The link was made available to the study subjects where their feedback was imputed when they must have had access to the link. WhatsApp and Facebook were the media through which the link was sent to study subjects.

Data Analysis Technique

Using data analysis methods Data was transferred into SPSS version 20.0, the statistical package for social sciences, for analysis after being obtained through Google Forms. The information given to the website is collected and compiled more easily using Google Forms, whereby the investigator can view the research statistics by signing in. Tables were used to present the information when the data was later examined. As it is explained in the chapter, it leaves potential for more analysis. The participant demographics and attributes were displayed using the descriptive analysis. Using SPSS, more analyses were conducted. A correlation test of the distribution of the demographic data of the study respondents was conducted after calculating the mean frequency and percentage analysis of the data that had been collected. To determine the association between the variables, an ANOVA t-test was used.

Research Ethics

The Near East University Health Science Ethics Committee approved (YDU/2022/102-1545) (Appendix C) the study in writing. The school and the volunteers gave their agreement; however, this research does not use any dangerous materials. As the study's goal was to evaluate honesty, no force of action was employed during the investigation. If a participant decides they are no longer interested in the trial, they are advised to withdraw from participating in the study without incurring any fees, and their information is kept private.

Research Limitations

The study only included African nursing students in the department of nursing at Near East University who resided in Northern Cyprus. Studies have shown that the Covid-19 epidemic has impacted people's social support and health-promoting habits all around the world. However, the research was restricted to African nursing students living in Northern Cyprus for the sake of specificity, though sample collection was only at Near East University; hence, further research can be done in order to completely generalize the findings.

CHAPTER IV

Findings

Table 1.

Distribution of Socio-demographic Characteristics of the African Nursing Student (n=205)

Socio-Demographic Va	Frequency	Percentage	
	Female	166	81,0
Gender	Male	39	19,0
Marital status	Married	15	7,3
	Single	190	92,7
Job Status	No	180	87,8
	Yes	25	12,2
Household	Friend	108	52,7
	Family	19	9,3
	Alone	78	38,0
Age	Minimum	Maximum	Mean ±
			Standard
			Deviation
	18	36	22,74 ± 3,53

The demographic factors used throughout the entire investigation are shown in Table 1. Age (on average), gender, marital status, employment position, and housemates were the factors provided in the analysis. As evidenced by their given agreement in the survey, participants answered the anonymous questionnaire voluntarily. The sample group, which consisted of 166 out of the study's 205 participants, was predominantly female (81,0% of the total study population). The percentage of male participants in this study group was 39 (19%), which may have had the effect of affecting more female nursing students in this sample group than male students. With respect to the outcomes

shown in the table, the minimum age that was noted was 17 years while the maximum was 36 years scoring a mean and standard deviation of $22,74\pm3,53$. Only 39 individuals (or 19%) were of the male gender, with a frequency of 166, or 81% of the participants, being female. Furthermore, the marital status of the study subjects was analyzed. The survey's options were as follows: if married OR single and 190 participants were single scoring a percentage of 92,7% with married participants making up just 7,3% (15) of the population study.

In addition, the table showed that n=25 (12.2%) were employed in various job sectors whereas n=180 (87,8%) were jobless based on the replies received. When the study subjects were asked who they lived with in their Northern Cyprus home, n=78 (38%) said they were alone, n=108 (52%) said they were with friends, and n=19 (9%) said they were with their relatives.

Table 2.

Mean Score of	f Multidimensional Scale	of Perceived Social S	Support (MSPSS) $(n=205)$

Scale and	Sub-	Minimum	Maximum	Mean	Std.
dimension					Deviation
Family Suppor	rt	4,0	28,0	18,22	7,08
Friend Suppor	·t	4,0	28,0	15,84	5,12
Significant		4,0	28,0	15,26	6,54
Total Score		12,0	84,0	50,33	14,97

Table 2 shows the mean scores of Multidimensinal Scale of Percieve Social Support scale used in this research to measure th respnses of participants' about sorces of social support on a scale of 4 to 28 where 4 indicates 'strongly disagree' and 28 for strongly agree. The minimum number of all variables is 4 while the maximum is 28. Family Support, Friend Support, and Significant Others Support all had mean scores that were calculated. The results are shown in a table together with the average, minimum, and maximum values. The total number of variables ranges from 4 at the minimum to 28 at the greatest. The mean and the standard deviation of the variables are then shown in Table 2 as follows: for Family Support it is 18,22±7,08; for Friend Support it is 15,84±5,12; while for significant others support is 15,26±6,54; This reveals that most participants had social support from their families during the pandemic as the mean value is the highest mean while social support from significant others scored less meaning support from this was minimal during covid-19 pandemic. Table 3.

Mean Score of Multidimensional Scale of Perceived Social Support (MSPSS) Cronbach Alpha

Variables	Scale	This Study
Family Support	0,82	0,80
Friend Support	0,86	0,77
Significant other support	0,86	0,77
MSPSS	0,91	0,85

The MSPSS Cronbach Alpha scale of this study shows that all items in the MSPSS are closely related to each other with acceptable internal consistency. Family support scored 0,80, Friend support scored 0,77 same with significant others support while MSPSS scored 0,85. This is to confirm that sources of social support are related to MSPSS and rely on each other.

Table 4.

MSPSS Scale and Sub-Dimension Means and Statistical Analysis between the Descriptive Statistics (n=205)

Variables	Family	Friend	Significant	Total Score
	Support	Support	Other	
			Support	
Gender				
Female	$17,96 \pm 7,36$	$15,74 \pm 5,38$	$15,95 \pm 6,81$	49,66 ± 15,84
Male	$19,30 \pm 5,66$	$16,25 \pm 3,84$	$17,\!61 \pm 5,\!07$	53,17 ± 10,16
t	-1,062	-0,558	-1,433	-1,320
р	0,290	0,577	0,040	0,188
Marital				
Status				
Single	$18,30 \pm 7,03$	$16,02 \pm 5,00$	15,81 ± 6,31	$50,14 \pm 14,93$
Married	$17,26 \pm 7,81$	$13,53 \pm 6,16$	$22,00 \pm 6,85$	52,80 ± 15,83
t	0,543	1,826	-3,628	-0,661
р	0,588	0,069	0,001	0,506
Job Status				
Yes	$18,25 \pm 7,33$	$16.,4 \pm 2,72$	$17,96 \pm 4,52$	$52,\!20\pm9,\!88$
No	$18,0 \pm 5,0$	$15,78 \pm 5,37$	$16,03 \pm 6,75$	$50,07 \pm 15,55$
t	0,169	-0,412	-1,383	-0,663
р	0,866	0,681	0,168	0,508
Household				
Alone	$18,\!48 \pm 6,\!29$	$15,24 \pm 4,28$	$14,97 \pm 5,57$	$48,70 \pm 12,25$
Friend	$18,40 \pm 7,18$	$16,37 \pm 5,47$	$16,80 \pm 6,60$	51,58 ± 15,83
Family	$16,10 \pm 9,30$	$15,31 \pm 6,05$	$18,52 \pm 8,85$	49,94 ± 19,69
F	0,940	1,210	3,083	0,842
р	0,392	0,300	0,048	0,432

t; Independent T test; F; One Way ANOVA; *p value* < 0.05

The One Way ANOVA results are shown in table 4. The outcome demonstrated

that there was a statistically significant difference between the participant's sources of social support which are: family support, friend support, and significant other support and their demographic data. Some of the p values of ANOVA test were less than 0,05 as seen under social support from significant others. Gender: t (-1,062, -5,558, -1,433) with p = [0,290, 0,577, 0,040]) proving a statistically significant difference from support from significant others scale for gender. Marital status: t (0,543, 1,826, -3,628) with p = [0,588, 0,069, 0,001]). This proves that there is a statistical significance from friend support and support from significant others scale for marital status. Job status: t (0,169,-0,412,-1,383) with p = 0,866, 0,681, 0,168 p: 0,04 < 0.05. Household: f (0,940; 1,210, 3,083) with p = [0,392, 0,300); **0,048** which is still lower than **0,05.** This shows that social support from significant others scale for job status is statistically significant.

Table 5.

Correlations Analysis of MSPSS Scale and Sub-Dimensions Means to Age

	Family	Friend	Significant	MSPSS Scale
	Support	Support	Other	
			Support	
Age	r = 0,20	r = -0,120	r = 0,048	r = -0,011
	<i>p</i> = 0,744	<i>p</i> = 0,086	<i>p</i> = 0,496	<i>p</i> = 0,880
MSPSS Scale	r = 0,847	r = 0,690	r = 0,832	1
	<i>p</i> = 0,001	<i>p</i> = 0,001	<i>p</i> = 0,001	

r; Pearson Correlation

The correlation analysis of the MSPSS scale is displayed in Table 5. Family support, friend support and significant other support showed a weak and negative relationship for age, and was not statistically significant r(0,20); p(0,774); r(-0,120); p(0,086); r(0,048); p(0,496). And lastly, age was negatively correlated and not statistically significant to MSPSS); r(-0011); p(0,880). MSPSS was positively correlated to family support, friend support, and significant other support and statistically significant to them. family support r(0,847), p(0,001), friend support r(0,690), p(0,001) significant other support r(0,832), p(0,001) and MSPSS scale r was positively correlated to MSPSS scale and was not statistically significant.

CHAPTER V

Discussion

This chapter presents the discussion of these findings in comparison to the studies in the literature.

COVID-19 and Social Support

COVID-19 pandemic actually touched a good number of different forms of social support by escalating emotional and social problems for people suffering from depressive disorders, which were seen to be the main contributing factor to the burden of diseases throughout the world by 2030 (Ruppanner et al., 2020; WHO, 2021). Despite ranking to be among the ten most global health risk factors in 2021. This shows that social support in all its forms and from all sources especially from the significant others, for oftentimes social support from this source is insignificant, is very important. The present study shows that participants received less social support from significant others wherein their support is of prime importance during a crisis. The proactive measures which were adopted to reduce the transmission of SARS-CoV-2, affected the population and students negatively around the globe. The social, economic, and health interactions were affected tremendously in particular on quality life and mental health (Tran et al., 2021). When faced with an unpleasant situation, someone who has the support and backing of others is fearless and less anxious than someone who does not (Li, 2022). Another benefit of having a solid social network is that it helps people to nurse positive self-perception of mindfulness while avoiding bad interaction with others (Yi et al., 2022).

Information that was recorded related to age, gender, marital status, employment status, household status are the socio-demographic variables of this study. In addition, sources of social support such as, family support, friend support, and support from significant others were measured, and the total mean value of MPSS was determined whereby family support topped the list followed by friend support, and significant other support scored the least. These findings match with findings from other past studies. The mean age and standard deviation of this study were determined. The minimum age represented in this study was 17 and the maximum age was 36 with females having a

larger representative than male. The lager representation by female gender might be an indication that the female participants were more affected than male participants in this study, though caution needs to be taken when concluding these findings as many studies have not been carried out on COVID-19 and social support sources with gender.

Comparison of This Study with Others

A research was conduted on 'Social support among persons with depressive disorders during the COVID-19 pandemic' and found that a greater portion of the participants were unemployed, just same as a larger portion of this study was unemployed meaning it was an indicator for social support during the pandemic (Dan, V. Hubbert et al., 2022). The socioeconomic level and level of education of the patients or general population are reflected if the practices and models for community health /mental health approaches are included, which covers the mental health of everyone thereby giving the chance for continued follow-ups through community health approaches (Sagar et al., 2020, Gautham et al.,2020, Registrar General of India, 2021). The unemployment rate can be linked to the present social and economic nature of the country, as was announced during the outbreak of the COVID-19 pandemic, which led to a decrease in mental health status and symptoms of depression (Saito et al., 2021; Achdut et al., 2020).This indicates the need for providing community health promotion, and promotion of mental health lifestyles in the community and universities, which may help to build their healthy lifestyles, especially during crises.

Universities or other significant bodies can offer financial packages to students who do have part time jobs during a crisis. This might also help to boost the therapeutic factors in clinical settings, and this can be more possible with social support from primary care/ significant others not living out support from family members, which was enormous in this study.

Female participants experienced the lowest social support from friends and significant others support with a lower mean value than male participants, contrary to a research which was done by Alsubaie and colleagues in 2019 on' the role of sources of social on depression and quality of life for university students 'whereby female students recorded a higher level of social support from friends and significant others than male

participants. This might explain why the female participants in this study had a fear of opening up to significant people in their settings for help during the difficult moments of the pandemic or that there was limited accessibility, whereas the male gender had more courage to seek help from significant others. This study revealed that the female participants had less social support compared to the male participants, contrary to a study carried out by Alsubaie et al in 2019 where by the female participants (students) had higher levels of social support than the male participants (Kugbey, 2015). This is an assumption, which means more studies need to be done on sources of social support and gender during the pandemic.

This research found support from family and support from friends to be the most similar, like other studies. These findings are consistent with the previous studies and highlight the importance of family in providing support to protect the mental health of students. Also in Alsubaie et al in 2019 study, there were more female participants than male participants, just like in this study.

Interestingly, another study carried out by Ana and colleagues in 2023. Also experienced the majority of the participants being female, with a percentage of 70 over the male participants, which is similar to this study. This imbalance may have biased the result of this study, particularly to those with gender differences. Furthermore, the study found that female participants had higher levels of family support than the male participants which is contrary to this study (Ana et al., 2023). In addition, the study found that the female participants experienced more support from significant others and friends than the male participants, which is also contrary to this study. Therefore, future researchers should investigate how an in sources of social support plays during the pandemic.

Furthermore, a study carried out by Namuna et al in 2023 on perceived social support and compliance on stay-at-home order during COVID-19 emergency in Nepal which presented the age range of the participants from 18 to 62 years which is higher than that of this study and the total mean score of the MSPSS was two times lower than that of this study with more than half of the participants being male which is contrary to this study as more female were represented. Also about one third of the participants were unemployed though the unemployment rate of this study was more than two times

higher. The total mean score of the perceived social support was determined with a high mean score for support from family which is in line with this study. The mean score for support from friends was lower than that of this study.

Another earlier study indicated that COVID-19's effects on the overall Vietnamese population resulted in significant income losses and a decline in several dimensions of quality of life. This was equally seen in this study as most of the participants were unemployed during the pandemic may be as a result of lockdowns in a bid to limit the virus's rate of spread. This was seen as a strong indicator for social support especially from significant others, in order to enhance quality of life and to promote health. Although this study was conducted as a cross-sectional survey and not a longitudinal study, I was able to examine sources of social support for African students during the pandemic for a reasonable duration of time. Additionally, the sample size was not big enough for the results to be generalized, and students from other departments and other universities were not included. Therefore, more can be done in order to generalize the findings.

Social Support and Statistical Analysis

From the MSPSS scale of this study, it was seen that social support from the family recorded the highest mean score, followed by support from friends, and lastly by support from significant others. The lowest score of support from significant others affirms that there was limited availability of social support from significant others (Null hypothesis). Social support from significant others seems not to always attain its peak during a crisis probably because those responsible for this service under-estimate the importance of this service. Social support from significant others has been seen to have a good remark on the mental health of university students (Kugbey, 2015). Therefore, more emphasis is needed on this aspect because it improves the health and quality of life of the people affected. Population. Quality of life is a multidimensional concept that assesses the good and bad aspects of emotional, social, environmental, and physical health. Some findings have been done which revealed that quality of life is influenced by social support and has a good and serious effect on university students, including their social, academic and emotional health, whereby it can amount to a successful university life (Hubert et al., 2022). Quality of life is equally impacted by diverse social aspects

inclusive of relationships with friends, teachers, relocating from home, expectations from father and mother and peer pressure. Social support has a significant role on mental health and quality of life by assisting people to feel good to link-up with social groups. This feeling of being supported by loved ones can be linked to reducing the degree of mental health issues and may play the role of a protective factor against depression and other mental abnormalities in the communities (Camara and Pedilla, 2017).

Results from the past studies relating to social support theory indicates that social support, being a vital environmental resource in the social life of individuals is closely linked to controlling and preventing negative emotions (Yingpin et al., 2021). Good social support can protect individuals experiencing stressful situation and has a good effect on maintaining and stabilizing the mood of individuals (Martin-Albo et al., 2015, Hou et al., 2020). Stress can have varying effects on o different individuals (Guay et al., 2013). In a general context, people who are provided with more social support from family or friends have a stronger mental capacity and are mentally and physically healthy (Cao et al., 2020). Contrary, those who rarely get the same support have decrease mental capacity and are mentally and physically poor in health (Elmer et al., 2020; Li et al., 2020). The MSPSS Cronbach Alpha scale of this study shows that all items in the MSPSS are closely related to each other with acceptable internal consistency. This is to confirm that sources of social support are related to MSPSS and rely on each other.

Relationship between Socio-Demographic Characteristics and MSPSS

This study revealed from the Pearson correlation test that age had a negative relationship with MSPSS evident by the scores on the table. Furthermore, it was seen from the One Way ANOVA test that household, that is whether living with friends, alone, or with family, was positively related to support from significant others evident by these scores f and p values which were statistically significant. This means that the findings in this study would not have been a success if household variables were left out from the MSPSS. In addition, marital status, that is, single or married were measured and married participants were negatively related to support from significant others

proven by t- and statistically significant proven by p- value from the findings of this study. A study was carried out on 'The effects of percieved social support on psychological distress and life satisfaction among Nepalese migrants in Japan'with a similar finding as marital status was negatively related with support from significant other subscale of MSPSS where married migrants had low level of social support from significant others (Khadiwada et al., 2021).

Thus, marital status is related to MSPSS in this study because it showed the degree of social support from different sources received by both married and single participants. Gender that is whether female or male, was equally related to MSPSS in this study in that it recorded low t-values from all sources of social support with statistically significant p value. This indicates that the findings of this study would not have been more meaningful if social support received by male or female was not measured. Therefore, socio-demographic characteristics of this study had a relationship with the MSPSS.

CHAPTER VI

Conclusion and Recommendations

This chapter presents conclusions based on the research findings according to the objective and sub objectives of the research and gives recommendations accordingly.

Conclusion

- The sample group, which consisted of 166 out of the study's 205 participants, was predominantly female (81,0%) and single (92,7%).
- The average age of the participants was 22.74± 3.53, it was determined that the majority of them (87.8%) were not employed and more than half of them (52.7%) lived with their friends.
- In this study most participants had social support from their families during the pandemic as the mean value is the highest mean while social support from significant others scored less meaning support from this was minimal during COVID-19 pandemic.
- The MSPSS Cronbach Alpha scale of this study shows that all items in the MSPSS are closely related to each other with acceptable internal consistency.
- The outcome demonstrated that there was a statistically significant difference between the participant's sources of social support which are: family support, friend support, and significant other support and their demographic data (*p*<0,05).
- When descriptive statistics were compared with MSPSS Scale and Sub-Dimension Means, there was no difference between the total score, but a statistically significant difference was found between significant other support and gender, marital status and household (*p*<0,05).
- When looking at the correlation between the participants' ages and MSPSS scale and subdimension averages, a statistically significant difference was found between family support, friend support and significant other support (p<0,05).

Recommendations

Increasing awareness on specific sources of social support (significant others support) will be protective of the social, physical, emotional, and mental health of African students residing here in Northern Cyprus.

Academic Recommendations

Since this study was conducted only at a certain time and with a group, it is recommended to study it in another universe and center.

Academic support groups for African students can be organised. These can offer an opportunity to share difficulties in joint courses, to help each other and work together.

Lecturers or more experienced students can provide lessons to African students using monitoring programs to boost academic performance admidst pandemic. These support programmes can offer students academic advising, assistance with career plans and selfdevelopment.

Language assistance programmes can be provided to African students, in particular to help them with the language barriers. These can improve academic performance and social inclusion of students.

Suggestions for Daily Life

- Cultural activities and societies can be established for African students. This can give them the opportunity to share their own heritage and connect with others with similar experiences.
- Social inclusion can be fostered by providing students with chances to interact and culture exchange with the community. Events with the locals can promote mutual understanding.
- Attendance at social activities for African students encouraged. Events that are organised by the school can reinforce social bonds and help the students to build up a closer relationship with each other.

Recommendations from the Clinical Manager

• African students can be provided with some training in coping with stereotypes

in the community. This may help students to deal with such circumstances more productively.

- Students can be offered training by expertist from the university by creating and linking them to support groupes and providing resources to strengthen their social network of support. This can make receiving help in dealing with adverse personal experiences and forming healthy social relationships more effective.
- Students can be given access to mental health support services. This allows them to seek help from professionals to deal with stress, anxiety or other types of emotional difficulties.

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APPENDICES

Appendix A: Informed Consent Form for Students

Bölüm 1/2				
An evaluation of social support characteristics and health- promoting behaviors of African nursing students living in Northern Cyprus during the COVID-19 Pandemic	*			
Dear participant, your answer will remain anonymous. By submitting your answer, you are consenting for you data to be used in my project. thank you for your time and participation.				
Loveline Ntini TOHMUKEM Dilay NECIPOĞLU (05488385800)				
I approve of voluntary participation *				
O Yes				
Νο				

Appendix B: Socio-demographic Form

An evaluation of social support characteristics and health- promoting behaviors of African nursing students living in Northern Cyprus during the COVID-19 Pandemic

Dear participant, your answer will remain anonymous. By submitting your answer, you are consenting for you data to be used in my project. thank you for your time and participation.

Loveline Ntini TOHMUKEM Dilay NECİPOĞLU (05488385800)

Age.....

Sex

- 1. Female
- 2. Male

Marital Status

- 1. Single
- 2. Married

Job Status

- 1. Part time job
- 2. Full time job
- 3. No job

Who do you live with in Northern Cyprus?

- 1. Family
- 2. Friend(s)
- 3. Alone

Appendix C: Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you Very Strongly Disagree

Circle the "2" if you **Strongly Disagree**

Circle the "3" if you Mildly Disagree

Circle the "4" if you are **Neutral**

Circle the "5" if you **Mildly Agree**

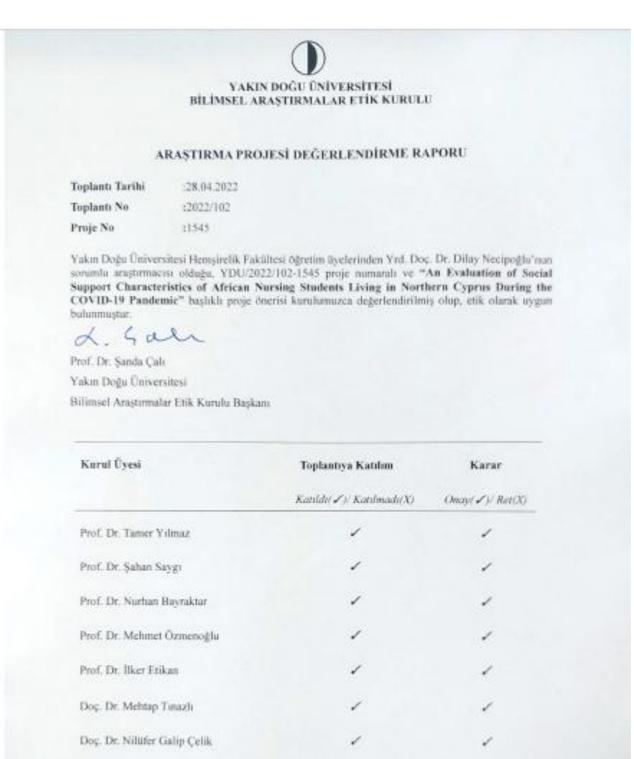
Circle the "6" if you **Strongly Agree**

Circle the "7" if you Very Strongly Agree

		Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrow	s. 1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Doc. Dr. Emil Mammadoy

Doç. Dr. Ali Cenk Özay

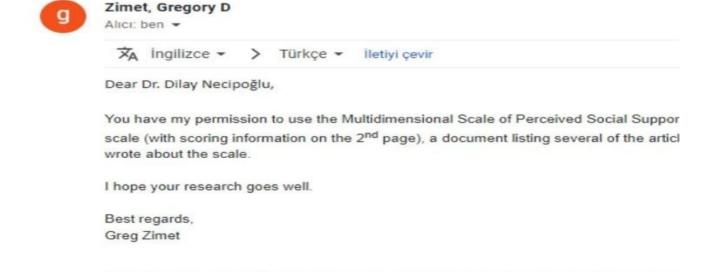


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Appendix E: Scale Permission



Gregory D. Zimet, PhD, FSAHM Professor of Pediatrics & Clinical Psychology Co-Director, IUPUI Center for HPV Research Division of Adolescent Medicine | Department of Pediatrics Appendix F: Turnitine Similarity Report

LOVELİNE

ORIJINALLIK RAPORU	
%19 BENZERLİK ENDEKSİ %18 INTERNET KAYNAKLARI %15	% öğrenci ödevleri
BİRİNCİL KAYNAKLAR	
1 docs.neu.edu.tr Internet Kaynağı	_% 2
2 kclpure.kcl.ac.uk Internet Kaynağı	%2
3 sciencescholar.us Internet Kaynağı	%1
4 www.ijsred.com	%1
5 www.researchgate.net	<‰1
6 dergipark.org.tr	<‰1
7 int-jecse.net Internet Kaynağı	<%1
8 www.coursehero.com	<%1
9 apps.who.int Internet Kaynağı	<%1

Appendix G: Curriculum Vitea

1.Personal Information

NAME, SURNAME: Tohmukem Loveline Ntini				
DATE of BIRTH and PLACE:	8/8/82 Mankon, Cameroon			
CURRENT OCCUPATION: Student				
ADDRESS of CORRESPONDENCE: Near East University African nursing students				
TELEPHONE: +905338662532				
E-MAIL: lovelinentini@gmail.com				

2. ACADEMIC EXPERIENCE

PERIOD	TITLE	DEPARTMENT	UNIVERSITY
2009-	Bachelor of	Nursing	National Polytechnic University
2013	science		Bamenda
2020-	Master of	Nursing	Near East University
2024	Science		