NEAR EAST UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

DEPARTMENT OF NURSING

THE EFFECT OF CYBERBULLYING ON WELL-BEING OF ADOLESCENTS IN SECONDARY SCHOOLS DURING COVID-19 PANDEMIC

M.Sc. THESIS

HELEN .U. NSOLO KOMOLAFE

Nicosia

June, 2022

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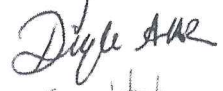**HELEN .U. NSOLO KOMOLAFE**

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Approval

We certify that we have read the thesis submitted by **Helen Nsolo Komolafe** (20186142) titled **" The Effect of Cyberbullying on Well-Being of Adolescents in Secondary Schools During COVIR-19 Pandemic"** and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master in Child Health and Diseases Nursing .

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I hereby declare that this thesis study is my own study, I had no unethical behavior in all stages from planning of the thesis until writing thereof, I obtained all the information of this thesis in academic and ethical rules, I provided reference to all of the information and comments which could not be obtained by this thesis study and took these references into the reference list and had no behavior of breeching patent rights and copyright infringement during the study and writing of this thesis

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ACKNOWLEDGMENT

I would like to give all the glory and thanks to the Almighty God, who gave me the grace, strength, power, protection and blessing all through the period of my studies.

I wish to thank my family and friends for all the help they rendered during the period of my studies and while writing my thesis.

My deepest appreciation goes to my professors, Dr. Candan Ozturk and Dr. Firdevs Erdemir who guided me throughout the study.

DEDICATION

I dedicate this thesis to my parents Chief and Chief Mrs M. O. Nsolo, and to my son Micheal for their prayers, moral support and endless love which they showered on me all through my studies most especially when I was on the verge of throwing in the towel.

I dedicate this thesis to The Almighty God for His protection, provisions, strength, power and a healthy life. Thank you Lord.

ABSTRACT

THE EFFECT OF CYBERBULLYING ON WELL-BEING OF ADOLESCENTS IN SECONDARY SCHOOLS DURING COVID-19 PANDEMIC

This study assessed the widespread of cyberbullying among adolescent students in secondary schools in Nigeria, especially during this covid-19 pandemic, and how cyberbullying has affected their mental health and wellbeing. The study was carried out among three secondary schools randomly selected in Lagos state, Nigeria. A questionnaire was adopted for data collection which was developed from the preexisting standardized instrument for measuring cyberbullying and depression, slightly modified to meet the purpose of this study.

Two hundred and thirty-three (233) students filled out the questionnaire. These participants, therefore, constituted the sample size of the study. The result of the study indicated that cyberbullying is not that rampant among Nigerian adolescents; though it exists, but only about 2% are very often bullied; 41.1% have never been bullied whereas about 56% have occasionally experienced some sort of cyberbullying. The result of this study also indicated that only 27.0% acknowledged that cyberbullying affects their academic performance. The finding of this study revealed that cyberbullying leads to depression and negative self-esteem among adolescents and is equally correlated with increased feelings of loneliness.

Keywords: *Cyberbullying, depression, self-esteem, loneliness, academic performance*

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CHAPTER ONE

1.0 INTRODUCTION

1.2 Background of the Study

The current trend of COVID19 which moves from one wave to another, with the latter waves more devastating than the former; attention have been shifted to secondary schools in Nigeria which have been facing occasional closure as a way to ameliorate the spread of COVID 19 among students, especially in Nigeria. Students now spend more time at home than in schools; even the so-called holiday coaching has been forced to close. Although some teachers and schools still engage their students in online learning, they are still vulnerable to idleness. To keep themselves busy, youths and adolescents now spent more time on the internet with both good and bad intentions. A good number of students used the online resources for self-studying in order to improve themselves; on the other hand, some utilize the internet to perpetrate crimes, crime of which cyberbullying is top of the list. The penetration of broadband internet and mobile phone technology, therefore, has not only increased the number of students owning their own laptops and smartphones for studying, but also lead to an increase in cybercrime. Recent studies such as Shin and Choi (2021) and Abaido (2020) revealed that the rate of cybercrime, especially cyber bullying since COVID19 pandemic has been on the rise as many adolescents/students now have so much free time to explore technological gadgets. While majority of the students are becoming innovative and creative, taking advantage of the technologies for self-discovery, there are also some sets of youths that seize the opportunity to commit crime such as cyberbullying.

Bullying is an intentional act of exhibiting aggressive behaviour or actions towards an individual that could be repetitive in nature (Bevilacqua et al., 2017). This form of behaviour is often targeted individuals that are defenseless or with lack or limited ability to resist such a projected behavioral actions. Among children, it has been reported to cause emotional distress, anxiety and social isolation (Stephens et al., 2018). Previously, bullying was not widely discussed, however, there are considerable number of studies that have enlighten the world about the concepts of bullying (Krešić & Kaštelan,2020; Méndez et al.,2019; Ferreira, & Deslandes, 2018). Conventionally, bullying takes the form of physical or verbal confrontations with victims directly or indirectly and considered a public health problem (Ferrara et al., 2018). However, due to the widespread of internet technology and mobile telecommunication that have shaped the way we communicate, bullying is taking a newer form. Electronic communication and online instant messaging systems using social networking websites continue to transform a new space for perpetuating abusive behaviours and attitudes against others in what is now called "cyberbullying" (Englander et al., 2017).

Cyberbullying could be defined as an aggressive and vicious behaviour expressed through messages, pictures, meme and so on towards another individual using the internet technology through internet enabled devices (John et al., 2018; Espelage et al., 2017). The conventional form of bullying is typified by a direct physical or verbal assault to victims but cyberbullying takes place through electronic communication. Victims of cyberbullying are targeted with vicious and caustic comments in what is called online "trolls" . Bullying is a psychosocial problem engenders negative feelings and at extreme could result into a suicidal action by the recipients of such behaviors and thus a grave concern in public health (Yang et al., 2016). The bully (aggressor) exhibit this attitude as form of power expression and domination while the

victim is targeted individuals perceived to be at the lower cadre or vulnerable state of response. Cyberbullying is presently regarded as a widespread problem. This practice of victimization others through electronic channels has attracted growing research interest in different countries and cultures.

Generally, researchers are coming to the conclusion that bullying and peer harassment occurs due to multifactorial reasons (Näsi et al.,2016) especially among adolescents in middle and high schools. Precipitating factors that engender cyberbullying are not tied to an individual attribute, poor home environments, ineffective parenting and school practices, "bad influences," peer pressure, or exposure to violent media are contributing factor to this public health challenge. This posits that cyberbullying is a complex interaction of socio-ecological factors such as the home environment, institution environment, health (Elsaesser et al.,2017).

1.3 Statement of Problem

Bullying and Cyberbullying is very predominant among adolescents especially among students. Adolescents are vast users of online communication tools and they are predominantly subscribers to various social networking sites which are often hotbeds for online bullying activities (Boer et al., 2020; Uludasdemir & Kucuk, 2019). The coronavirus of 2019 pandemic which resulted in many schools and other outdoor activities shutting door has increase the number of hours' adolescents' students spend online due to loneliness (Velotti et al., 2021). In a bid to counter the boredom associated with isolation engender by the pandemic restriction, many of these students participate in various socializing activities via their social media accounts and other interaction platforms. This makes them more susceptible to online bullying activities which invariably affect the mental health and general well-being of these adolescents. Adolescents are quite vulnerable

and could tend to under report any form of aggressions extended towards them. This behavioral tendency makes them predisposed to ill-health conditions such as anxieties, depressions and self-harm if such condition becomes extreme especially when they do not have anyone they could talk with. The problem of this study is to assess the widespread of cyberbullying among adolescents' students in secondary schools in Nigeria especially during this coronavirus of 2019 pandemic and how cyberbullying has affected their mental health and wellbeing.

1.4 Purpose of the study

The aim of the study is to examine the effect of cyberbullying on well-being of adolescents in secondary schools during coronavirus of 2019 pandemic. Specifically, the study seeks to investigate:

1. The prevalence of cyberbullying among adolescents' secondary school students in Nigeria

2. Whether or not there is any disparity in cyberbullying across the gender category

3. If cyberbullying leads to depression among adolescents' secondary school students in Nigeria

4. The roles of cyberbullying on student's self-esteem

1.5 Hypotheses

H1: Cyberbullying is prevalence among adolescents' secondary school students in Nigeria

H1:2 There is a significant correlation between Cyberbullying involvement and loneliness

H1:3 Cyberbullying leads to depression among adolescents' secondary school students in Nigeria

H1:4 Cyberbullying have negative impact on student's self-esteem

H1:5 There is a disparity in cyberbullying across the gender category

1.6 Significant of the study

Some teachers, parents or close friends and relative often wonder while a certain adolescent behaviour suddenly changed from the usual cheerfulness, easygoing and playful to a quiet, timid or aggressive and unfriendly; this study therefore will serve as an eye-opener to some parents who are not aware of cyberbullying and their characteristics effects on young adolescent as the study will explore cyberbullying among adolescents' students in secondary schools in Nigeria especially during this COVID-19 pandemic and how cyberbullying has affected their mental health and wellbeing. This research will recommend some measures that schools, parents and the society at a large could be adopted take in combating cyberbullying, Teachers will now enjoy the company of young students who will now be able to focus in the class activities and be more open to their parents and teachers in discussing or reporting the incident of cyberbullying with fear or guilt, knowing that what is happening to them is not their faults. The study will contribute to existing literature of cyberbullying and at the same time forms a framework from which further study on cyberbullying will be carried out.

CHAPTER TWO

2.0 LITERATURE REVIEW

Introduction

The growth of information technology already attracted so many attentions from individuals, corporate firms, organizations, institutions, consultants, and many others who sees it as a tool to promote their businesses and gain wider market; there are also some set of individual or group who take advantage of the internet to perpetuate evil. This chapter of the study review similar subject matter as presented by other researchers across the world, their findings, and the literature gap which this study seeks to bridge. It embodies conceptual framework, theoretical framework, and empirical review as discuss subsequently.

2.1 Conceptual Framework

2.1.1 Cyberbullying: Description

Bullying of the weak has been common in human society even before the advent of technologies. When, without any justifying reason, one is being suppress verbally or other means just because they can. It is an intentional act of exhibiting aggressive behaviour or actions towards an individual that could be repetitive in nature (Bevilacqua et al., 2017). Those at the receiving ends are usually the weak or defenseless. Just like every other aspects of life including education, business, commerce, worship, communication is going digital, so also is the act of bullying. In other words, bullying is no longer limited to physical but has taken a virtual form where victims are being harasses, threaten, or blackmail and what have you. The definition of cyberbullying is controversial as many scholars have diverse opinions of what the concept represents. However, one could infer from their different definitions that cyberbullying is more of harassment using a

digital device or information platform. According to Hinduja and Patchin (2009) cyberbullying refers to abusive behaviour that occurs online, and it does not limited to degrading, but also to hate speech and slander. Cyberbullying refers to actions that are intended to harm others who are unable to protect themselves online or to use information technology ICTs (Langos, 2012; Ansary, 2020); and it involves the involvement of the new generation on the Internet because excessive use of the Internet can make cyberbullying more common than ever before. In a different study after several years later, Hinduja and Patchin (2013; p715) redefine cyberbullying as *"the act of harassing friends through chat rooms or social networking sites."* It sometimes comes in the form of blackmailing where the bully has sometime personal or private of the victim and threaten to broadcast it on social media, thus making the later become a slave to his every request. In Burgess-Proctor, Patchin and Hinduja (2009)'s opinion, some features of online bullying are not accidental and ephemeral but deliberate and persistent. Offline differs from physical bullying in that, the victims may not even be aware of who their villain is, which made it even more difficult and at high risks violence (You & Lim, 2016 and Varjas, Henrich, & Meyers, 2009). The nature of this abuse, for lack of physical contacts makes young adolescent unsuspicious and less aware of the danger involve in cyberbullying. To some, it seems like mere jokes and as such, the young adolescent failed to recognized how the abusive behaviours has undercurrent, violation of privacy laws, or constant mockery (Shariff, 2009). Kim (2016) elaborated that some online dating today first started once started by mere harassment, flirting, threatening, etch, whatever works better.

Cyberbullying has different manifestations; two of which include: direct bullying (Nelson, Loto & Omojola, 2018). Bullying is direct when the victim knows his or her attacker and is being confronted with verbal attack, physical attacks or mounting pressure that may affect the

psychology of the victim. Another type of cyberbullying is indirect bullying which is characterized by rumour or some sort of social exclusion. Arrival of the internet has led to the emergence of a new species called cyberbullying. Teens or children who are physically abused can also be exploited online.

There are no much differences between cyberbullying and traditional bullying. Perhaps, the differences between the two rests on the mood of operation and the channel adopted for the bullying. While cyberbullying is basically online through the use of computer, smartphones, but online; traditional bullying may take any forms from physical meetings, writing of letters and posting to the victim, showing illicit pictures, among others. Both cyberbullying and traditional bullying involves activities include: harassing the victim using harsh words, threatening, blackmailing, fake profile, embarrassing messages and pictures, emails, among others (Owolabi, 2020).

Existing literature shows that generally, very little studies have been done in Nigeria on cyberbullying which makes this study imperative. However, there are lots of studies from other countries that revealed that cyberbullying has been on the rise since corona virus of 2019 pandemic. For instance, recent worldwide studies support the increase in cyberbullying, with China having the highest rate (23.0%), when compared to other countries such as Germany (6.3%); Sweden (5.2%), and Australia (5.0%). Another 2021 review shows that China ranks fourth (44.5%) in the world in terms of cybercrime (Zhu et al., 2021). Internet access and cultural diversity can be the reasons for such differences, and online bullying methods may contribute to such fluctuations in frequency Brochado et al., 2017; Heu et al., 2019; Zhu et al., 2021). For example, with the rapid development of Internet infrastructure in China, 99.2% of children and adolescents have access to the Internet by 2020, and 78% of them had started using the internet

service for less than 10 years (Ji & Shen, 2020). The study by Zhu et al (2021) revealed the prevalence rates of cyberbullying preparation as 6.0 to 46.3%, and the rate of cyberbullying victimization to be13.99 to 57.5%. The result also showed that verbal violence was the most common type of cyberbullying. In the study about 14 risk factors were identified alongside 3 protective factors. When demographic features were considered, the study indicated that age, online behaviour, gender, race, impulsiveness, past experience of victimization, and health condition were the most risk factors that triggers cyberbullying according to the review. There were also situational factors that aided cyberbullying among which are parent-child relationship, geographical location, and interpersonal relationship.

2.2 The impact of cyberbullying on adolescent health

Anyone can fall victim to cyberbullying regardless of age, status, religion or belief system; however, this section focuses adolescent seining that this group of people is greatly affected. It is without doubt that both the one bullying and the victims that are being bullied suffer some sort of psychological breakdown, but with the victim suffering the worst health outcomes, including mental and physical decline in health (Kowalski & Limber, 2013; Bonanno & Hymel, 2013; Beckman, Hagquist, & Hellström, 2012; Sourander et al. 2010). Specifically, some studies on the effect of bullying on adolescent that these young people report who are victims of cyberbullying suffer increased in their levels of stress, some starts taking substances such as drug, and some starting showing some behaviour problems (Kowalski & Limber, 2013).

The perpetrators of cyberbullying are not spare as they also have their fair share of the suffering as they have been reported to suffer poorer relationships with their families, friends, and even their caregivers, as well as high levels of victimization and offline, compared to their peers

(Sourander et al. 2010). These results suggest that this group of young people (i.e., bullies / victims) may be in further danger related ill health the results, and thus, may require additional health support care professionals, teachers, and caring adults (Nixon, 2014). Several studies across the world supports that cyberbullying puts young people at risks and some the risk factors include depression, anxiety, suicidal ideation, and mental anxiety (Nixon, 2014; Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012). Other factors include insomnia, loss of communication from parents and peers given their tendency to isolate themselves from others (Nixon, 2014). This leads to the first hypothesis:

H1: *Cyberbullying is prevalence among adolescents' secondary school students in Nigeria*

2.1.2 CORONAVIRUS OF 2019 Pandemic and Cyberbullying

There have been several changes in life style since the advent of Covid-19 pandemic which the people are trying to adapt to as the 'new normal' such as social distancing and closing of schools or other business sectors from time to time, or sending some individual to isolation occasionally given their nature of work. The change that attracts the attention of this study is the social isolation adolescent experience during the period of social distancing as well as the loneliness that comes with it among children and adolescents, who by their nature are super-active (Smith and Lim, 2020; Loades et al., 2020). Such situation triggers different types of situation and health conditions including depressions as pointed out Okruszek et al. (2020); mental health related cases such as anxiety (Okruszek et al., 2020); some began taking drugs or using substances that are not good for their health (Loades et al., 2020; Dong et al., 2020; Chris et al., 2018); these are just few changes that came about as a result of Covid-19 pandemic. An empirical study by Bu et al (2020) revealed that social distancing and isolation policy place young adults at a risk of loneliness. It is therefore in the opinion of Zheng eat al., (2021), and

Owolabi (2020) that loneliness compel adolescent to engage in odd activities just for fun. One of such activities includes pranking others, or cyberbullying in as much as they receive some reactions that will keep their minds occupied. It is therefore in order to reinvestigate the impact of loneliness and cyberbullying given the increase in violence, hence the second hypothesis. Therefore, there is a solid need to re-investigate loneliness of children and adolescents, especially in the context of lockdown due to the pandemic (Loades et al., 2020). Engaging in cyberbullying can lead to a variety of mental, social, and emotional problems (Kwan et al., 2020), and loneliness can be one of the consequences (Segrin et al., 2012; Jiang et al., 2020). With online bullying in children and adolescents and the ongoing epidemic, there is a strong need to learn the connection between cyberbullying and loneliness. This need promoted the hypothesis:

H1: There is a significant correlation between Cyberbullying involvement and loneliness

Note: In the context of this study, cyber involvement embodies both the bully as well as the victim of bullying.

2.1.3   Effect of Cyberbullying on Victim

Symptoms of cyberbullying on victims include fear, depression, and psychosomatic disorders like recurrent abdominal pain, headache, and sleep problems. Other dangers are: the student's mood neglect of teachers, emotionally problems with peers, high level apparent weight loss, somatic illness, high moral level problems, regular smoking, obesity, alcoholism, and drug abuse (Owolabi, 2020; Sourander et al, 2010). Hinduja and Patchin (2010), also identify some of the dangers of cyberbullying which involves suicide, in serious cases. From these risk factors, cyberbullying is considered the worst social, psychological, and health problems by many researchers (Owolabi, 2020). Health disruptions and school closures put children and young

people at greater risk of exposure to violence, such as domestic violence and cyberbullying (Fore, 2020; and Babvey et al., 2020). Two hypotheses were brought forth as such:

H1: Cyberbullying leads to depression among adolescents' secondary school students in Nigeria

H1: Cyberbullying have negative impact on student's self-esteem

2.1.4   Cyberbullying and Gender

Analyzing gender differences in cyberbullying has taken the effects of traditional cyberbullying as a starting point. In general, studies have reported that boys are more likely to engage in specific forms of physical or verbal abuse than girls on a larger scale (Lucy, et al 2012). In contrast, however, girls are reported to be more likely to use indirect violence, when the victim is excluded from the peer group or whose personal and social dignity is violated (Owens, Shute & Slee, 2004; Crick, Casas & Nelson, 2002). These findings support the view that direct abuse is more closely related to masculinity, whereas indirect abuse more strongly reflects female gender.

A number of factors have been used to explain these differences between the types of male or female aggression, including natural causes (e.g. physically, girls are assume to be weaker than boys), reasons for human interactions, e.g. intimacy compared to groups of boys, which can make indirect attacks a more effective strategy. Finally, there are aspects of sexual orientation, e.g., adults are less tolerant of girls becoming aggressive, which mean they have to take subtle and subtle forms (Kistner, et al, 2010).

These definitions, along with the results of numerous studies, have led to a general consensus on girls using unconventional methods of aggression during traditional bullying (Kowalski,

Giumetti, Schroeder & Lattanner, 2014), making them a hotbed of attention when it comes to violence in analyzing the prevalence of cyberbullying. This phenomenon is hardly surprising considering that cyberbullying has been described as a form of psychological and emotional abuse, perpetrated by gossip or online propaganda when the attacker attacks the privacy of the victim or make intimate advances, yet remains anonymous (Beran & Li, 2008).

Similar factors and traditional indirect bullying have led early research into online bullying to assume that girls are referred to at the same level, or to a greater extent, as boys. However, proof of performance is not always available to support this foundation. In fact far from finding a clear sexual pattern in engaging in themselves as abusers or victims, research has provided very contradictory information.

In general, some researchers have found that boys act more aggressively than girls, but girls suffer more than boys (Walrave & Heirman, 2011). One study reported that boys acted as aggressors, but found no significant difference in bullying (Smith, Thompson & Bhatti, 2012). Other studies have shown that girls act more as aggressors than victims than boys (Lauren,Katherine & Ratliffe, 2011), or that boys act as aggressors and victims (Fanti, Demetrious, & Hawa, 2012). Many studies have not found gender differences in victims and abusers (Griezel, et al., 2012; Hinduja & Patchin, 2008), and some studies have suggested that gender differences depend on analytical forms of cyber bullying (Monks, Robinson & Worlidge, 2012).

These mixed results may be down to the differences in the ideas and methods used to produce online research. For example, the definitions of cyberbullying have varied from one study to the next; different types of Internet scams have been tested, e.g., using cell phones (e.g. calls and text messages) or through social media (e.g., Facebook, Twitter); different measuring tools have been

used, and different procedures have also been followed, in which victims are separated from the attackers. However, even in studies conducted a few years ago in Spain, which followed the same measurement tool, with the same definition of online bullying and the same classification process, mixed results were also obtained as one study showed gender differences was absent(Navarro, Larrañaga, Yubero & Martínez, 2012), while another showed that girls were more abused than boys (Navarro, Serna, Martínez & Ruiz-Oliva, 2018). Inconsistency between studies has led some authors to conclude that gender-based research on cyberbullying is a fruitless area of research (Tokunaga, 2010), and has reduced the importance of gender analysis on cyberbully.

The question about whether or not there is a disparity in cyberbullying across gender category is not yet conclusive as many studies are still in conflict on this subject which leads to hypothesis:

H1: There is a disparity in cyberbullying across the gender category

2.1.5 Cyber bullying and psychological well-being of adolescents

No form of bullying is as harmless as cyber bullying especially since it does not involve personal contact between perpetrators and victims, however, one cannot de-prove the fact that it does have psychological and emotional harm to young people (Okoye, Nwoga & Onah, 2015). Many of those who have been exploited may have experience one form of depression or another (Dilmac, 2009; Aricak, 2009). Studies have revealed that cyberbullying may lead to difficulty with relationships, substance abuse, suicide to some extremities, and dropping out of school (Padget & Notar, 2013). Juvonen and Gross (2008) reported that victims of cyberbullying often experience symptoms such as depression, anxiety, loneliness, social stigma, poor academic

performance and some in extreme cases have suicidal thoughts and attempts (Hindiya & Patchin, 2012).

Symptoms are determined by the level of self-efficacy (Bandura, 1997). To victims with low self-esteem, their tolerance level of cyber bullying is extremely low (Bandura, 1997). Cyber bullying has been implicated in the development of common depression and negative psychological adjustments such as the development of low self-esteem (Raskauskas & Stolz, 2007). In a study involving victims of cyberbullying, 31% of victimized students reported being very angry or irritable, 19% were extremely fearful or overbearing, and 18% were very ashamed of cyberbullying (Raskuaskas et al., 2007). A similar study by Patchin and Hinduja (2006) reported that adolescents' victims of cyberbullying feel frustrated. About 40% were angry and over a quarter (27%) felt depressed. Not only that, if an Internet site sends something embarrassing or insulting to a social networking site, everyone is aware of it. The victim will not only fight the embarrassment of being a victim, but also the knowledge that everyone who has access to the internet can see this shame. Shocking and negative comments about ICTs can be maintained and disseminated a few times which increases its harmful effects. It has also been found that repeated acts of cyberbullying are life threatening developing self-esteem in adolescents and contributing to school failure and quitting and increasing psychological symptoms such as depression and anxiety (Raskauskas & Stoltz , 2007). Cyberbullying can cause great emotional and psychological damage effects on young people develop low self-esteem, and poor functioning in their relationships with the environment (Sourander, et al 2010). According to Belnap (2013), cyberbullying is far more dangerous than traditional bullying as it allows for "gradual growth" of cruel and depressive behaviour and may trigger extreme emotional reactions,

for example a suicide victim (suicide); and that female victims of cyberbullying are more likely to have emotional symptoms than male victims (Rosander et al.,2020). However, women often ask for help more than men.

Hinduja and Patchin (2012) reported that victims of cyberbullying may be at risk of other negative consequences for development and behaviour, such as school violence and delinquency; and or criminal conduct. Some of the negative effects of cyberbullying, especially the emotional consequences of cyberbullying on adolescents include: academic poor performance and withdrawal from school, frustration, embarrassment or fear, anger and aggression, substance abuse, school use of weapons (Ybara & Mitchel, 2007; Rigby, 2013); and the development of somatic complaints such as headaches, abdominal pain and sleep loss (Kowalski, Limber, & Agatson, 2005). In addition, Hay, Meldrum, and Mann (2010) reported that these feelings can have such a lasting effect that even after a year and a half the victim still avoids the perpetrator at anytime and anywhere he or she has ever seen.

2.3 Theoretical Framework

Social Disorganization Theory by (Shaw & McKay, 1942)

This study was developed on the basis of two social theories: Social Disorganization Theories of (Shaw & McKay, 1942) and (Sutherland's Differential Association theory, 1939-1947). The theory of social disorganization believes that there is a link between nature and criminal tendencies. It focuses on the relationship between neighborhood building, community governance, and crime. The theory of social unrest was first proposed by (Shaw and McKay, 1942), who suggested that as the increase in social and family ills increased, so did social ills such as criminal harassment and harassment. According to the theory of social disorganization,

there are environmental factors that lead to high crime rates in these communities, and these factors are often linked to high levels of "unemployment, many school dropouts, poor infrastructure, and household with just a single-parent" (Lanier & Huff-Corzine, 2006). Theory directly links crime rates with environmental factors; the basic premise of the social disorganization theory is that space is important. In other words, the place where a person lives is an important factor that creates opportunities for that person to engage in illegal activities. The theory suggests that, among the decisions of a later illegal occupation, occupation is more important or more important than individual characteristics (e.g., age, gender, or race). For example, the vision suggests that young people from poor communities participate in a less tolerant culture, and that these young people thus experience crime in this social and cultural environment. This theory has been proven to be true by researchers such as (Bellair, 2000); (Elliott et al, 1996); (Markowitz et al, 2001) and (Sampson, 1997). The theory is applicable to the current study in that, during COVID19, the school environment that would have proved an escape place to youth people was lockdown which leaves them idle in their homes. In search of a little bit of entertainment, the youth people occupy themselves with several activities online. Because of their frequency on the internet, they began exploring, exploiting, pranking, which later turn into cybercrime, cyber bullying, among others. In other words, there was drastic change in their 'environment' due to COVID19. The time that would have spent in school teaching them things that will have improves their knowledge, moral standard, etc was spent in another environment "home" aware from friends and family.

2.4 Empirical Review

There have been several studies across the globe on cyber bullying and its effect on the victims. Some of these studies are review in this section. For instance, Zhu, Huang, Evans and Zha (2021)

having recognize the adverse effect of cyberbullying on public health carried out a systematic study of selected literatures in cyberbullying globally with attention given to the risk factors, the preventive method to be adopted to protect the victims and to avoid its devastating effect on youths and children, especially adolescents. The study covered a span of four years between 2015 and 2019. The researchers searched materials from eight databases meant for purely academic. Among these were PuBmed, Web of Science, Google Scholar, Science Direct, ProQuest, CINAHL, Communication & Mass Media Complete, and PsycArticles to collect data that are related to public health, psychology as well as and communication. Their search resulted in selecting 63 literatures that were reviewed from a total of 2070. Their analysis was based on the 63 selected literatures because these literatures met their inclusion criteria. The outcome of the analysis placed the prevalence rates of cyberbullying preparation between 6.0 to 46.3%, and the rate of cyberbullying victimization between 13.99 to 57.5%. The result also showed that verbal violence was the most common manifestation of cyberbullying. In the study about 14 risk factors were identified alongside 3 protective factors. When demographic features were considered, the study indicated that age, online behaviour, gender, race, impulsiveness, past experience of victimization, and health condition were the most risk factors that triggers cyberbullying according to the review.   There were also situational factors that aided cyberbullying among which are parent-child relationship, geographical location, and interpersonal relationship. The study found emotional intelligence, empathy, and school climates as protective factors against cyberbullying. Based on their results, the study concluded that for the past five years, there have been steady increased in the prevalence rate of cyber bullying which is peculiar among adolescents and children.

In another study, Ibrahim and Phuong (2021) observed that many studies have revealed that young people in many countries around the world are engage in different types of cyberbullying or are victims to cyberbullying. However, these studies paid little or no attention to the effects of gender and peer pressure in cyberbullying in Nigeria. Ibrahim and Phuong (2021) deem it fit to fill the gap and thus engaged into investigating the use of the internet pattern and peer pressure among 992 high school students in fourth to sixth grade using questionnaire for data collection with the highest alpha coefficient $\alpha = .92$. The findings revealed a surprisingly high rate of incidence (76%) and additional male adolescents were involved in cyberbullying and more young women were identified as the cyber predation (victims). Research findings highlight the importance of gender differences, peer pressure and the level of internet use as potential dangers of cyberbullying among Nigerian school-going youths.

Shin and Choi (2021) observed the decline in face-to-face interaction following the outbreak of coronavirus of 2019 pandemic which has given rise to more and more people utilizing the social networking services, especially among young people. They thus investigated strategies of cybercrime especially during post-coronavirus of 2019 period. The study also involves identification of factors that lead to major attacks on young people in South Korean during the 2020 pandemic period. Essentially, the analysis of the study was based on carried out cyberbullying technology situational analysis of data collected between 2019 and 2020 from the Korean Communications Commission involving the aggregate participants of 9737 between 2019 and 2020. The result based on the data collected indicated that the average age of individual who engaged in cyberbullying dropped during the 2020 compared to 2019. Similarly, online bullying awareness in school as well as the school's ability to control it made essential

contribution to the decrease in the number of online bullies from mathematical foundation, which can only be found in the 2020 database. How to create policies in schools to contain measures to protect and increase online bullying awareness proposed to prevent such errors in the post-period.

Owolabi, (2020) investigates the size of Nigeria with experiments results of online coping strategies for 1,000 students at six Nigerian universities. The findings show that the population figures greatly contributes to the adoption of coping strategies of cyberbullying (F (1,814) = 45.232, Adj. R2 = 0.246, p <0.05). One of the recommendations made for messages against cyber bullying and prevention campaigns from university administrators should focus on individual students as well new students on campus as they are at risk of being attacked. This step aids will also help in eliminating the dangers of cyberbullying and youth vulnerabilities as an effects on the mental and physical development of young people.

Amalu (2018) assessed cyberbullying and psychological well-being among students who were studying in the University of Calabar was guided by three research questions and three vain ideas. The population in the study was made up of 8,240 second year students at the University of Calabar from where a sample of 824 respondents were selected using a randomly stratified study. A 35-item questionnaire entitled "Cyber   bullying and Psychological Well Being Scale (CBPWBS)" was used for data collection and questionnaire reliability determined using the Cronbach Alpha reliability method which provided a reliability coefficient of 0.77 for cyberbullying and 0.75 for mental well-being. Pearson Product Moment Relative analysis and statistical analysis of the independent t-test used in data analysis and the result reveals that there

is an important relationship between cyber bullying and mental health among students at the University of Calabar. The result also showed that male and female students at the University of Calabar are very different from Cyber-bullying and their mental health. Based on the findings, it was recommended among other things that ethics education should be taught as one of the GSS courses as this may teach them better behaviour and promote healthy online relationships.

Nixon (2014) observed that cyberbullying has become a global public health problem for young people, and as a result, it requires further study. The study updates the current publication related to the effects of cyberbullying on the lives of young people in many studies around the world and provides guidelines for future research. A review of the evidence suggests that cyberbullying is dangerous in the health and well-being of young people. Many relationship studies have been shown the strong relationship between teen involvement in cyberbullying and poor health indices. Teens targeted by cyber bullying increase stress, anxiety, loneliness, suicidal behavior, and somatic symptoms. The perpetrators of cyberbullying are they are more likely to report an increase in drug use, aggression, and promiscuous behavior. Mediation /management practices have been found to affect the relationship between cyberbullying and youth health. More longitudinal work is needed to increase our understanding of the results of online bullying in the lives of young people over time. Prevention and related interventions reducing cyberbullying and related injuries is discussed.

CHAPTER III

Methodology

3.1 Research Design

This chapter provides information about the research design, participants/sample, data collection and analysis procedures as well as how the findings are analyzed, and the ethical considerations for the study

Not many studies have been carried out on cyberbullying in Nigeria, especially as related to the impact of post coronavirus of 2019 pandemic, thus the need for this study. This chapter of the study presents the research method adopted by the researcher in her investigation of the effect of cyberbullying on wellbeing of adolescents in secondary schools during coronavirus of 2019 pandemic.

Research design accounts for the procedure or step by step activities carried out by the researcher in search for answers to the questions formulated to guide this study. The study adopted a cross sectional, descriptive survey approach to collected data for a sample from a larger population with the aim to relieve responses meant to answer the research questions. In this study, samples were collected from selected secondary schools in Nigeria and the result of this study is generalized to the other secondary schools that shared similar characteristics.

3.2 Participants/Population and Sample

The study population is all public secondary schools in Lagos. Public senior secondary schools and the total of 254,771 number of senior secondary school students. Stratified random sampling was adopted in selecting three schools, one from every fifty (50) schools in a section. The three

schools selected for this study were achieved using nonprobability sampling technique. Since the research is using online survey, the analysis will be based on the actual data collected after running for about a month.

3.3 Data Collection Tools/Materials

The study adopted primary source of data in the form of questionnaire for data collection. How the questionnaire was developed, its contents, reliability and validity are discussed in more details in subsequent sub-sections.

The study requires data that accounts for all research questions:

1. What is the prevalence of cyberbullying among adolescents' secondary school students in Nigeria?
2. Is there any disparity in cyberbullying across the gender category?
3. Does cyberbullying leads to depression among adolescents' secondary school students in Nigeria
4. What roles does cyberbullying have on student's self-esteem?

The researcher adapted items from existing questionnaire from other researchers on the subject matter. The structured questionnaire designed was administered to targeted participants that meet the study requirements. The study adapted items from the questionnaire already made in on Cyber Bullying Victimization (CBV) scale, as well as the World Health Organization (WHO) wellbeing to evaluate the general wellbeing of the study participants (Topp, et al., 2015).

3.4 Data Analysis and Procedure

The questionnaire was distributed by means of online survey and the link sent to the respect participants. The questionnaire automatically filled by the respective participants will be saved to

the researcher email box. The link will be sent to the students through the representative who signed the approval forms for the study. The anticipated response rate was 80%. All questionnaire retrieved were subjected to descriptive and inferential statistics. Descriptive statistics such as frequency distributions and inferential tools such as independent Chi-square, Analysis of Variance (ANOVA) and T-test methods will be used to evaluate the gathered data.

3.5 Study Plan

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┌──────────────────────────────┐        ┌──────────────────────────────┐
│ Background to the Study among│        │                              │
│ which are problem statement, │        │   Reflections (chapter 6)    │
│ objectives and significance  │        │                              │
│ of the study  (Chapter 1)    │        │                              │
└──────────────────────────────┘        └──────────────────────────────┘

┌──────────────────────────────┐        ┌──────────────────────────────┐
│ Literature Review . this     │        │                              │
│ embodies three frameworks:   │        │ summary of findings,         │
│ conceptual, theoretical and  │        │ conclusions and              │
│ empirical review             │        │ recommendations  (Chapter 5) │
│ (Chapter 2)                  │        │                              │
└──────────────────────────────┘        └──────────────────────────────┘

┌──────────────────────────────┐        ┌──────────────────────────────┐
│   Research Methodology       │        │ Data Collection, presentation│
│   (Chapter 3)                │        │ and analysis                 │
│                              │        │ (Chapter 4)                  │
└──────────────────────────────┘        └──────────────────────────────┘
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Figure 1:Research Process (Researcher's conceptualization,2021)

The step by step action taken in the course of finding answers to the research questions formulated in this study constitute the research process. It reports how the researcher identifies, locates, assesses, as well as analyzes data needed in the study to provide answers to the research question. As indicated in the structure above, the process comprises six steps. The researcher

began by identifying the problem that the study intended to investigate – effect of how cyberbullying on wellbeing of adolescents in secondary schools during COVID19 pandemic. From the problem identified, brief background information was provided to give an overview of the study. Likewise, the statement of problems was stated from where emerged objective formulation and research questions.

This leads to step two where relevant literature of similar studies were review in order to help the researcher understand what has been studied on the study matter which gives the researcher an idea of what others have done in the topic and the gap which the present study is expected to fill. The literature review covered conceptual framework, theoretical framework as well as empirical studies on the topic. The third step as indicated in the process is to discuss the methodology for data collection, study design, instrumentation, and sampling size and sample design, amongst others. The fourth step in the process is to collect the necessary data, which in the case of this study was achieved by means of questionnaire. The data collected were presented in tables and the percentages and frequencies determined. Other analysis was carried out and the results presented and discussed. The fifth step in the process is to discuss summarize the findings, draw necessary conclusions based on the outcome of the result, and finally, make recommendations for improvement of the dissatisfying conditions or problems identified in the study. The final stage in the process is the interpretation of the result as well as report of the findings which ends with a reflection highlighting the researcher experience all through the study, challenges met, how she was able to overcome the challenges and the knowledge gain from these experiences.

3.6 Ethical consideration

Ethical consideration considers the researchers' integrity, competence, reliability, ethical practice. It ensures that research is conducted devoid from errors and form of unfairness. This implies that

this study was carried out devoid of any form of manipulation, falsification, and misrepresentation of data. The respondents were not coerced or deceived in to answering the questionnaire as their consents were duly sought for. Every material consulted in the course of the study was fully referenced with proper citations. This study was subjected to internal ethical procedures and approval received before survey was carried out.

The study is a non- biological study; hence it does not require biological specimens. The Cyberbullying victimization (CBV) scale and the WHO wellbeing scale does not require permission and thus a creative common licensed made available for public use. The Consent also would be required from participants before participants respond to the questionnaire instrument.

CHAPTER IV

4.0 Findings and Discussion

Introduction

This chapter presents the analysis of the data collected from the online survey carried out in this study. The questionnaire was uploaded using Google form and the link was distributed to the students through their respective class teachers. Students were told to answer the questionnaire at their convenient time and after about two weeks from the date it was first uploaded, the researcher collected the data for analysis. Two hundred and thirty-three (233) participants took part in the study and thus constitute the sample size of which this analysis was based upon. The first section is the demographic data meant to describe the characteristics of the participants. The subsequent part comprises items meant to provide answers to the research questions formulated to guide the study. The final section in this chapter is a discussion of the result.

Descriptive Statistics

Table 1:Socio-demographic distribution

Variable	Frequency	Percentage
Gender		
Male	130	56.0
Female	92	39.0
Unanswered	11	5.0
Ethnic Group		
Igbo	69	30.0
Hausa	38	17.0
Yoruba	65	28.0
Delta	33	14.0
Others	24	11.0

Age		
10--14	65	29.0
15-19	149	65.0
20-24	8	3.0
Others	6	2.5
Class		
Junior secondary school 1:	10	4.0
Junior secondary school 2	23	10.0
Junior secondary school 3	33	15.0
Senior secondary school 1	35	16.0
Senior secondary school 2	53	23.0
Senior secondary school 3	72	32.0
School Attended		
Private	146	63.0
Government	87	37.0
Living with		
Parent	130	50.0
Relative	74	32.0
Non-relative guardian	29	12.0

Deleted[HP]:

The table presents the overall demographic information of the respondent in the study. As indicated in the Table, both male and female participated in the study with majority coming from the male gender (130 representing 56%) while the remaining 92 (39%) were female. The result is graphically presented in pie chart as indicated subsequently.
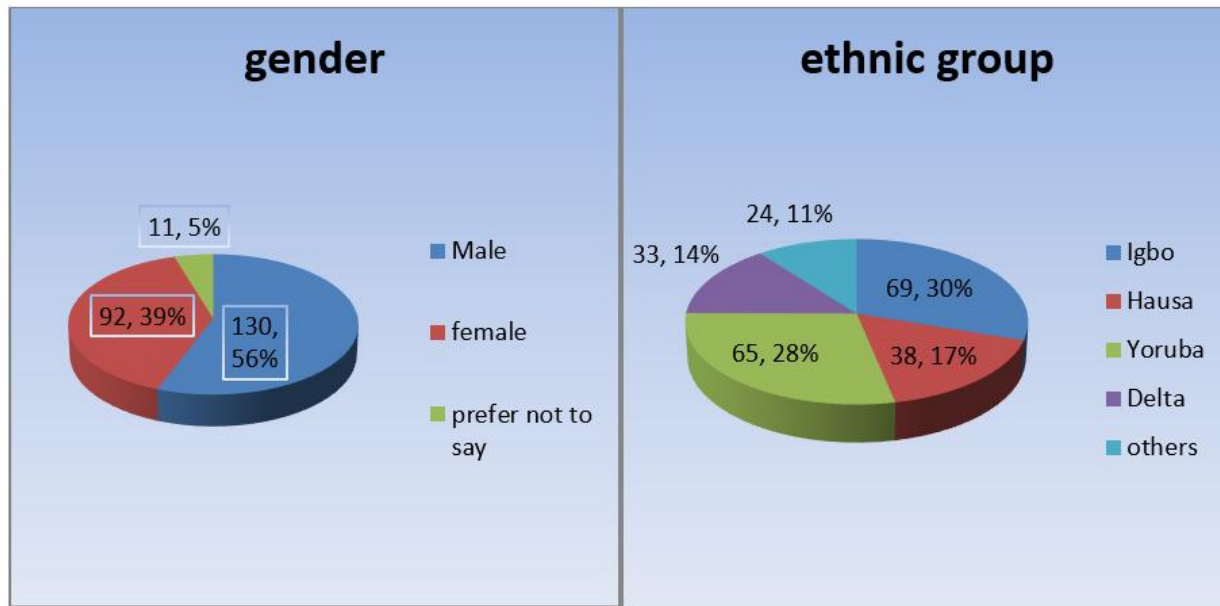
Figure 2:Gender and Ethnicity Distribution

The charts above present the gender and ethnic group of the respondents in the study. From the chart, it is obvious that most of the participants in the study were male population which constitute about 56% of the total population, female students were constitutes 39% where as those who preferred not to say their gender made up 5% of the study. The result also indicates that majority of the participants came from the Igbo ethnic group (30%); this was followed by the Yoruba (28%), then the Deltan (17%); whereas the Hausa constitute 14%. Other tribes or ethnic group which took part in the study constitute 11% of the population. Based on the multiple characteristics of the respondents, the data could be said to be a representative sample in terms of gender and ethnic group.
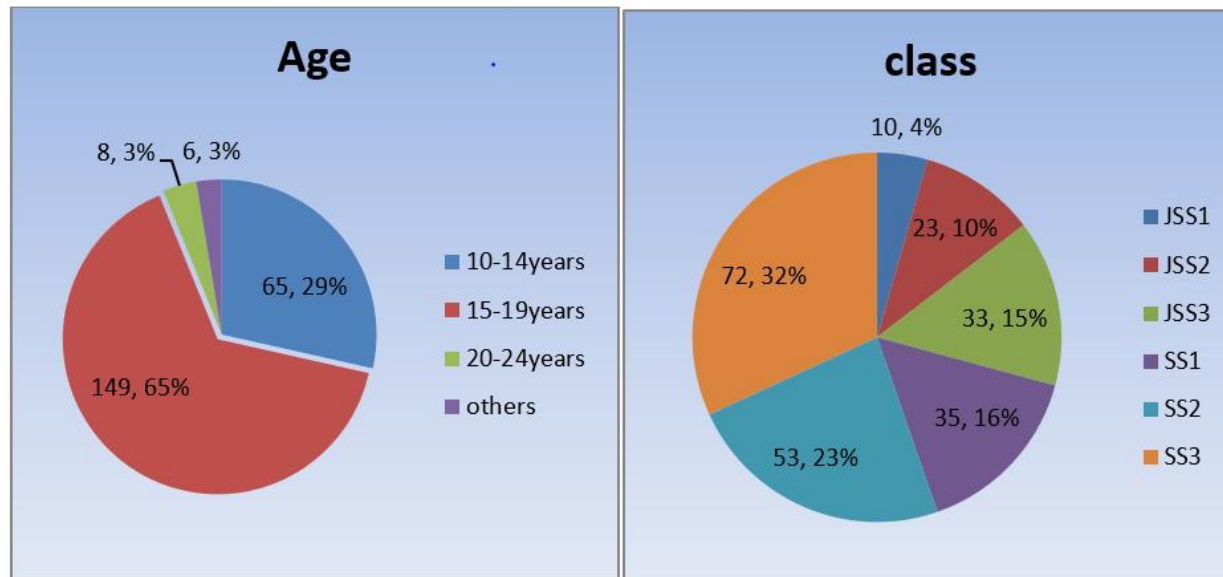
Figure 3:Age and Class of the participants

The two charts above present the respondents age and class. As indicated in the charts, majority of the participants were from the age range 15-19 years who were majorly from SS2 and three. Another strong participant was students from the age group 10-14years. These are students from the junior secondary school section. There were a number of students who were above 20years, representing 3% of the study population. About 3% of the population selected others with no indication if there were below 10years or above 24years. All the classes were represented in the study with majority coming from SS3 (32%), followed by those from SS2 (23%) and then SS1 (16%), followed by JSS3 (15%), JSS2 (10%) and finally JSS1 (4%). The result shows higher participation from the senior classes than the junior classes. Perhaps, the reason is because most of the students in senior classes have smart phones and was able to response to the questionnaire as soon as they were asked to do so unlike the junior that may need to borrow phones from their parents to be able to access the online questionnaire. Other reasons may be those in senior classes understand the questionnaire better as well as the subject matter compare to the students

in junior classes. Regardless of the number of students from each class, the result indicates that all the classes were represented, thus making the sample a representative sample.
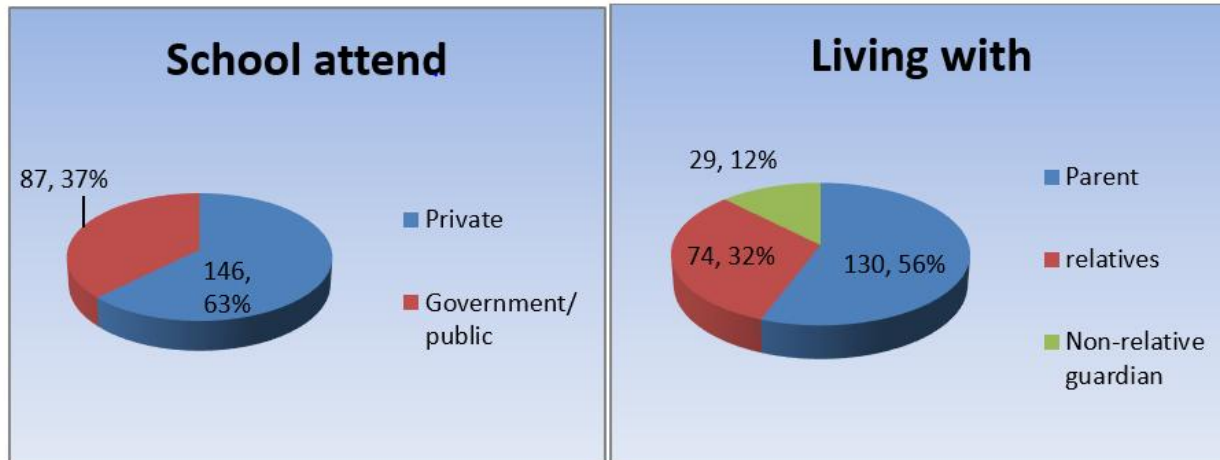
Figure 4: School attended and living housing

The charts above present information of the school category attended by the study participants as well as the person they are living with. As indicated in the charts, more of the student attended private schools (63%) than public schools. This is so because people value private schools down here more than they do with government schools (37%). The study indicated that 56% of the students live with their parents; 32% live with their relatives different from their parents while the remaining 12% lives with non-relative guardian.

Table 2:The most frequently used social media

7. What social media account do you mostly use?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	.4	.4	.4
) Facebook	117	50.2	50.2	50.6
Instagram	35	15.0	15.0	65.7
Others	5	2.1	2.1	67.8
Twitter	14	6.0	6.0	73.8
WhatsApp	61	26.2	26.2	100.0
Total	233	100.0	100.0	

The result from this study indicated that majority of the students have Facebook account (50.2%); followed by WhatsApp (26.2%); 15% uses instagram; 6% uses Twitter while 2.1% selected others.

Table 3:Part 1; Do you have anyone in school you talk to when you are sad?   Part 2;Do you have anyone at home you talk to when you are sad?

8. Do you have anyone in school you talk to when you are sad?

9. Do you have anyone at home you talk to when you are sad?

		Frequency	Percent	Valid Percent	Cumulative Percent		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Valid	3	1.3	1.3	1.3		2	.9	.9	.9
	No	53	22.7	22.7	24.0	No	65	27.9	27.9	28.8
	Yes	177	76.0	76.0	100.0	Yes	166	71.2	71.2	100.0
	Total	233	100.0	100.0		Total	233	100.0	100.0	

Source; SPSS output (2021)

Of the number of students who took part in the study, 71% have someone to share their sad moment with at school whereas 27.9% do not have who to talk to at school in their sad moment. The same table shows that 71.2% have people to share their sad moment with at home and 27.9% does not.

Table 4:Who do you mostly talk to when you feel unhappy or sad?

10. Who do you mostly talk to when you feel unhappy or sad?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.4	.4	.4
	Brothers	31	13.3	13.3	13.7
	Father	25	10.7	10.7	24.5
	Friends	73	31.3	31.3	55.8
	Mother	49	21.0	21.0	76.8
	Neighbors	4	1.7	1.7	78.5

	Frequency	Percent	Valid Percent	Cumulative Percent
Others	7	3.0	3.0	81.5
Sister	33	14.2	14.2	95.7
teachers	10	4.3	4.3	100.0
Total	233	100.0	100.0	

The table above shows the category of people the students feel comfortable to share their share moment with. As indicated in the table, 31.3% of the students talk to their friends; 21.0% prefer to talk with their mothers; 14.2% share how they feel with their sisters; 13.3% share their unhappy moment with their brothers; 10.7% shares with their brothers; 4.3% share with their teachers; and 1.7% share with their neighbour and the remaining 3.0% selected others.

Answering of research questions and testing of Hypothesis

What is the prevalence of cyberbullying among adolescents' secondary school students in Nigeria?

Table 5:What is the prevalence of cyberbullying among adolescents' secondary school students in Nigeria?

11. Has anyone ever abuse you, or say offensive thing or comment using negative words on your posts or pictures, or threaten you on the internet before (cyberbullying)?

12. Have you ever reported your cyberbullying experience(s) to anyone like your parent or guardian?

	Frequency	Percent	Valid Percent	Cumulative Percent	Frequency	Percent	Valid percentage	Cumulative Percent
Valid	3	1.3	1.3	1.3	3	1.3	1.3	1.3
No	98	42.1	42.1	43.3	140	60.1	60.1	61.4
Yes	132	56.7	56.7	100.0	90	38.6	38.6	100.0
Total	233	100.0	100.0		233	100.0	100.0	

13. Do you think your academic performance is affected because

of been bullied online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	.9	.9	.9
	No	168	72.1	72.1	73.0
	Yes	63	27.0	27.0	100.0
	Total	233	100.0	100.0	

The tables above indicate that 56.7% have experience one type of cyberbully or the other; whereas 41.1% or 42.1% have never witness such. Again, the table revealed that of those who experienced cyberbully, only 38% or 38.6% reports the incident to their parents or guardians. The study also revealed that only 27.0% are of the opinion that cyberbully affects their academic performance. 72.1% believe that cyberbully has nothing to do with their performance.

Table 6:Cyberbullying measures

	Verbal / Written Victimization		Not at all	Rarely	Sometimes	Often	Very often
1	I have received mean text messages on the mobile phone which made me uncomfortable	Freq	50	99	75	7	2
		%	21.5	42.5	32.2	3.0	0.9
2	Someone has said mean things about me on instant messengers or in chat rooms to upset me.	Freq	50	97	79	6	1
		%	21.5	41.7	33.9	3.9	0.4
3	Someone has posted hurtful messages about me on Facebook or Twitter to damage my reputation	Freq	64	89	76	4	0
		%	27.5	38.2	32.6	1.7	0.0
4	I have been sent threatening statements via e-mail or text message which made me insecure.	Freq	79	88	65	1	0
		%	33.9	37.8	27.9	0.4	0.0
5	Someone has never said mean things about	Freq	1	2	63	88	78

#							
	me to my friends on instant messengers or in chat rooms to damage my relationship.	%	0.4	0.9	27.0	37.8	33.5
6	People have spread rumors about me online to damage my reputation	Freq	65	87	77	3	1
		%	27.9	37.3	33.0	1.3	0.4
7	I have received insulting online messages from someone repeatedly	F	87	77	65	2	2
		%	37.3	33.0	27.9	0.9	0.9
8	I have continued to receive mean text messages or e-mails even after I have asked the sender to stop	F	55	85	77	6	10
		%	23.6	36.5	22.0	2.6	4.3
9	People have said mean things about me on websites repeatedly to embarrass the person	F	57	88	76	12	0
		%	24.5	37.8	32.6	5.2	0.0
10	I have received intentional messages from someone which made me upset	F	44	34	77	10	68
		%	18.9	14.6	33.0	4.3	29.2
	Social Exclusion Victimization						
11	I have been blocked in a chat room by other people who want to make me angry.	F	97	1	70	57	1
		%	43.8	0.4	30	24.5	0.4
12	Someone has blocked me on an instant messenger to upset me	F	83	1	67	79	2
		%	35.7	0.4	28.7	33.9	0.9
13	. I have been excluded from online community groups which made me feel left out	F	110	3	4	77	39
		%	47.2	1.2	1.8	33.0	16.8
14	. I have never been excluded from online group activities which made me feel left out	F	107	5	78	33	10
		%	45.9	2.1	33.5	14.2	4.3
15	People have cooperatively excluded me from online community groups to make me feel left out.	F	117	4	81	28	3
		%	50.2	1.7	34.8	12.0	1.3
16	Someone has led members of the online community in excluding me to make me feel left out	F	120	77	2	31	3
		%	51.5	32.9	0.9	13.3	1.3
17	I have been excluded from online group	F	125	3	75	24	6

activity or social community online repeatedly which made me feel left out	%	53.7	1.3	32.2	10.3	2.6

Still on the prevalence of cyberbully, the result indicated that cyberbully comes in different manifestation in Nigeria. It could be through verbal or written threats as indicated in items 1-10 of the above table or Social exclusion victimization as indicated in item 11 to 17 in same table. The result shows that 0.9% of the students 'very often' received mean text messages that made them feel uncomfortable; 3% received such 'often'; 32.2% received such messages some times, 42.5% do receive such messages but not too often; but 21.5% had never receive such messages. Again, according to the result, 0.4% very often has someone saying a very mean thing about them in messenger or chat rooms, 3.9% often experience that; 33.9% sometimes experience that; 41.7% rarely experience that whereas 21.5% has not experience that at all. Similar result is shared among all the other items in the table in the table. On average, one can deduced that cyberbully is not yet severe among Nigerian secondary school; though it exists, but its existence is not too severe to the extent that it will affect the victims to the extent that their academic performance is affected. This deduction is based on the outcome of this study as the result clearly indicated that some students have never been bullied online at all, while only 2% had very often been bullied. Others are rarely bully or are sometimes bullied.

Research Question: Is there any disparity in cyberbullying across the gender category?

Table 7:disparity in cyberbullying across the gender category

What is your gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.4	.4	.4
	Female	130	55.8	55.8	56.2
	Male	92	39.5	39.5	95.7
	Unanswered	10	4.3	4.3	100.0
	Total	233	100.0	100.0	

Hypothesis*: H1: There is a disparity in cyber bullying across the gender category*

Table 8:Hypothesis result on disparity in cyber bullying across the gender category

Source	DF	Sum of Square (SS)	Mean Square (MS)	F Statistic (df_1,df_2)	P-value
Between group	1	0.8419	0.8419	0.6572	0.4201
Within group	74	94.7931	1.281		
Total	75	95.635			

The result shows that, the *f*-ratio value is 0.65741. The *p*-value is 0.420075. The result is *not* significant at $p < .05$. As a result, we accept the alternative hypothesis that sates that there is a disparity in cyber bullying across the gender category. For instance, while sending porn to men may be regarded as enticement to male, female may see it as bullying. A little chat with some of the late adolescent who took part in this study revealed that male do not mind getting nudge pictures whereas the female sees it as 'eyesore'. In other words, the perception of what could be categorized as cyberbullying differs between male and female.

Research: Does cyberbullying leads to depression among adolescents' secondary school students in Nigeria

Table 9:Cyberbullying effects on depression

			All the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1	I feel cheerful and in good spirits	F	5	128	36	58	6	0
		%	2.1	54.9	15.5	24.9	2.6	0.0
2	I feel calm and relaxed	F	60	114	38	9	12	0
		%	25.7	48.9	16.3	3.9	5.2	0.0
3	I feel active and vigorous	F	61	109	49	7	5	2
		%	26.1	46.8	21.0	3.0	2.1	0.9
4	I wake up feeling fresh and rested	F	51	110	51	13	6	2
		%	21.9	47.2	21.9	5.6	2.6	0.9
5	My daily life is filled with things that interest me	F	57	100	54	14	6	2
		%	24.5	42.9	23.2	6.0	2.6	0.9
	Average in percentage		**16.72**	**40.12**	**16.32**	**7.23**	**2.95**	**0.3**

The result as from this study revealed that a few number of students, about 0.3% suffer some sort of depression as they are at no time cheerful, feel calm, active and vigorous, or feel rested and interested in their daily lives. Also some of the respondents, about an average of 2.95% do feel depress at times. An average of 7.2% students indicated that they do feel depress but only less than half the time. About an average of 16.72% feels happy all the time; 40.12% feel happy,

refresh, rested, cheerful calm, vigorous and interested in their daily lives more than half the time. These are no signs of depression.

Hypothesis: H1: Cyberbullying leads to depression among adolescents' secondary school students in Nigeria

Table 10:Chi-square result on Cyberbullying leads to depression output

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	707.647[a]	49	.000
Likelihood Ratio	201.832	49	.000
N of Valid Cases	233		

a. 55 cells (85.9%) have expected count less than 5. The minimum expected count is .00.

The outcome of the hypothesis test carried out using Chi-square indicated that the probability value is less that the level of significance (0.05). As a result , null hypothesis is rejected. The alternative hypothesis is therefore accepted which implies that cyberbullying leads to depression among adolescents.

Research questions: What roles does cyberbullying have on student's self-esteem?

H1: Cyberbullying have negative impact on student's self-esteem

Table 11:Chi-sqaure Cyberbullying have negative impact on student's self-esteem output

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	57.370[a]	4	.000
Likelihood Ratio	28.220	4	.000
N of Valid Cases	233		

a. 5 cells (55.6%) have expected count less than 5. The
minimum expected count is .03.

The table above indicates that the P value (0.000) is less than the proposed significant value

(0.05). As a result, the null hypothesis is rejected; this means that we accept the alternative

hypothesis which states that cyberbullying have negative significance impact in students' self-

esteem.

H1: There is a significant correlation between Cyberbullying involvement and loneliness

Table 12:Chi-square result on Cyberbullying involvement and loneliness output

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	464.484ᵃ	54	.000
Likelihood Ratio	130.080	54	.000
N of Valid Cases	233		

a. 62 cells (88.6%) have expected count less than 5. The
minimum expected count is .00.

Symmetric Measures

		Value	Asymptotic Standardized Errorᵃ	Approximate Tᵇ	Approximate Significance
Ordinal by Ordinal	Kendall's tau-b	.378	.060	6.256	.000
N of Valid Cases		233			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

The result presents in both tables above revealed a probability values (0.000) that are less than the significant level (0.05) which means that we reject the null hypothesis. This shows that there is a significant correlation between Cyberbullying involvement and loneliness.

CHAPTER V

DISCUSSION

The discussion is based on the different findings in this study. For the purpose of clarity, the discussion is carried out according to research questions and hypotheses result as presented subsequently

What is the prevalence of cyberbullying among adolescents' secondary school students in Nigeria?

The result from the analysis of data collected in the course of this study revealed that about 56% of the participants have experience some form of cyberbullying of which implies that about 41.1% has never experience cyberbullying at all. Of those 56%, it could be a one-time thing, or a rare experience since from the outcome of the study, only 2% reported frequent cyberbullying. Of the populations that experienced some sort of cyberbullying, only 38% reported the incident to their parents or guardians. This may be because it is not considered serious as to disturb the other family members with it. The study also revealed that only 27.0% are of the opinion that cyberbullying affects their performance. 72.1% believe that cyberbullying does not affect their academic performance. This result does not present cyberbullying as a serious issue in Nigerian secondary schools. Contrary to what is obtainable to other developed countries where cyberbullying is rampart such as Boer et al., (2020) and Uludasdemir Kucuk (2019) who

respectively found cyberbullying as prevalence among adolescent in China. More so, Velotti et al., (2021) revealed that the trend of cyberbullying increases during COVID19 pandemic and was more among adolescents. On the contrary, our findings show that cyberbullying is low in Nigerian secondary schools; though it exists, but its existence is not too severe to the extent that it will affect the victims' academic performance. This deduction is based on the outcome of this study as the result clearly indicated that some students have never been bullied online at all, while only 2% had very often been bullied. Others are rarely bully or are sometimes bullied.

Research Question: Is there any disparity in cyberbullying across the gender category?

Hypothesis*: H1: There is a disparity in cyber bullying across the gender category*

The result of this study showed that there is a disparity in cyberbullying between male and female as the result of the ANOVA test shows the *f*-ratio value of 0.65741 and a *p*-value is 0.420075. The result is *not* significant at $p < .05$ which led to the rejection of the null hypothesis. This implies that there is a disparity in cyber bullying across the gender category. This result supports that of earlier studies that also found differences between cyberbullying across gender. For instance Walrave and Heirman (2011) revealed that girls suffer more than boys in bullying. Smith, Thompson and Bhatti (2012) and Mark and Ratliffe (2011) respectively showed that boys act as aggressors while the girls are usually the victims of cyberbullying. Fanti, Demetrious, and Hawa, (2012), Monks, Robinson and Worlidge, (2012), and Griezel, et al., (2012) also found gender differences in cyberbullying.

Like the aforementioned studies, the finding of this study also revealed differences in gender in cyberbullying. What some female may considered as cyberbullying may be seen as enticing my

male. For instance, while sending porn to men may be regarded as enticement; the female may see it as bullying. A little chat with some of the late adolescent who took part in this study revealed that male do not mind getting nudge pictures whereas the female sees it as 'eyesore'. In other words, the perception of what could be categorized as cyberbullying differs between male and female. However, there is lack of proof for this assumption given that the scope of this study did not allow such in-depth information.

Research: Does cyberbullying leads to depression among adolescents' secondary school students in Nigeria
Hypothesis: H1: Cyberbullying leads to depression among adolescents' secondary school students in Nigeria

The descriptive analysis of this study shows that only a few numbers of students, about 0.3% suffer some sort of depression since this number of students revealed that they are at no time cheerful, feel calm, active and vigorous, or feel rested and interested in their daily lives. About 2.95% revealed that they do feel depress at times. An average of 7.2% students indicated that they do feel depress but only less than half the time. The rest of the respondents could not be classified as depress since they feel happy, refresh, rested, cheerful calm, vigorous and interested in their daily lives more than half the time, some all the time. On this premise it is difficult to conclude that cyberbullying result in depression to Nigerian secondary school students. Perhaps because there is limited number of cyberbullying cases among the respondents of this study. However, the result from the testing of hypothesis using Chi-square revealed that cyberbullying leads to depression among adolescent. This was so because the probability value (P-value 0.000) is less that the level of significance (0.05). As such the null hypothesis was rejected in favor of implies this that cyberbullying leads to depression among adolescents. The result of this study

supports that of some earlier studies such as Raskauskas and Stolz (2007) who found common depression and negative psychological adjustments such as the development of low self-esteem as consequences of cyberbullying. Similarly, the result of this study supports Patchin and Hinduja (2006) whose study revealed that victims of cyberbullying feel frustrated and depressed. Sourander, et al (2010) and Belnap (2011) also revealed that cyberbullying leads to depression and exposes more adolescent into suicide behaviours.

Research questions: What roles does cyberbullying have on students' self-esteem?

H1: Cyberbullying have negative impact on student's self-esteem

The result of this study supports that cyberbullying leads to negative self-esteem. This result supports that of previous studies like Okoye, Nwoga and Onah (2015) whose study revealed that cyberbullying destroys the self-esteem of the victims; and in extreme case resulted in introverted behaviours. In similar studies such as, Dilmac, (2009) and Aricak, (2009) revealed that cyberbullying emits negative self-esteem to adolescent leading to difficulty with relationships, substance abuse, suicide to some extremities, and dropping out of school. Padget and Notar, (2013) also share similar findings in their study. In same vein, the study is in agreement with Juvonen and Gross (2008) and Hindiya and Patchin (2012) who revealed that victims of cyberbullying often experience symptoms such as low self-esteem, depression, anxiety, loneliness, social stigma, poor academic performance and some in extreme cases have suicidal thoughts and attempts.

H1: There is a significant correlation between Cyberbullying involvement and loneliness

Finally, the result from this study revealed that there is significant correlation between cyberbullying involvement and loneliness. The result of this study is in agreement with that of

some previous studies who also shared that cyberbully results in loneliness. For instance Loades et al., (2020) revealed that what led to cyberbully in the first place is loneliness and boredom; and the perpetuator see some sort of entertainment in bullying others online. However, the study also revealed that while the perpetrator find bullying entertaining, the victim goes into isolation which triggers loneliness. The study also supports Kwan et al., (2020), Segrin et al., (2012); Jiang et al., (2020) who in their respective studies found loneliness as a consequence of cyberbullying, and thus concluded that there is a strong connection between cyberbullying and loneliness.

CHAPTER VI

Conclusion and **Recommendations**

VI. Conclusion

It is important to note that one of the aftermaths of COVID19 pandemic is the increase in online activities which included online shopping, online learning, and other activities including the not so acceptable activities like cybercrime and bullying. A good number of students used the online resources for self-studying in order to improve themselves; on the other hand, some utilize the internet to perpetrate crime of which cyberbully is top of the list. The penetration of broadband internet and mobile phone technology therefore has not only increases the number of students to own their own laptops and smartphones for studying, but also lead to increase in cybercrime as indicated in some recent studies such as Shin and Choi (2021) and Abaido (2020) who indicated the revealed that the rate of cybercrime, especially cyber bullying since COVID19 pandemic has been on the rise as many adolescents/students now have so much free time to explore technological gadgets. While majority of the students are becoming innovative and creative, taking advantage of the technologies for self-discovery, there are also some sets of youths that seize the opportunity to commit crime such as cyberbullying. This study assessed the widespread of cyberbullying among adolescents' students in secondary schools in Nigeria especially during this covid-19 pandemic and how cyberbullying has affected their mental health and wellbeing. The study was carried out among three secondary schools randomly selected in Lagos state, Nigeria. Questionnaire was adopted for data collected which was developed from preexisting standardized instrument for measuring cyberbullying and depression, slightly modified to meet the purpose of this study. The questionnaire was uploaded online using Google

form and the link was distributed to the students through their respective class teachers. Students were given two weeks to answer the questionnaire at their convenient time. By the end of two weeks, two hundred and thirty-three (233) students filled the questionnaire. These participants, therefore, constitute the sample size of the study. All data collected were first subjected to descriptive analysis using charts, frequency tables, and percentages while the hypotheses formulated were tested using chi-square, ANOVA and correlation.

The result of the study indicated that cyberbullying is not that rampant among Nigerian adolescents; though it exists, but only about 2% are very often bullied; 41.1% have never been bullied whereas about 56% have occasionally experienced some sort of cyberbullying. Some of the prevalent cyberbullying include hostile text messages, nude pictures, threats, etc. The result of this study also indicated that only 27.0% acknowledged that cyberbullying affects their academic performance whereas 72.1% believe that cyberbullying does not affect their academic performance which contradicts the result from other countries where cyberbullying is prevalence among adolescence and has adverse effects on the students' performance as it is with the case of China according to the study by Boer et al., (2020) and Uludasdemir Kucuk (2019).

The result of this study also indicated a disparity in cyberbullying between genders. The result supported previous findings such as: Walrave and Heirman (2011); Smith, Thompson and Bhatti (2012); Mark and   Ratliffe (2011); Fanti, Demetrious, and Hawa, (2012); Monks, Robinson and Worlidge, (2012), and Griezel, et al., (2012).

Again, the finding of this study revealed that cyberbullying leads to depression among adolescent, thus confirming the result from earlier studies such as: Raskauskas and Stolz (2007); Patchin and Hinduja (2006); Sourander, et al (2010) and Belnap (2011) respectively.

Again, the result of this study shows that cyberbullying leads to negative self-esteem thus confirming the findings of some previous studies such as Okoye, Nwoga and Onah (2015; Dilmac, (2009) and Aricak (2009); Padget and Notar, (2013); Juvonen and Gross (2008) and Hindiya and Patchin (2014).

Finally, the result from this study revealed a significant correlation between cyberbullying involvement and loneliness; which confirms the study by Loades et al., (2020)' Kwan et al., (2020), Segrin et al., (2012); and Jiang et al., (2020) respectively.

The findings from this study as presented above have led to the conclusion that cyberbullying is not rampart in Nigerian secondary school, although it exists. However, despite the fact that it is not rampart, its effects remain the same. This implies that the effects of cyber bullying to the victims include depression, loneliness, and negative self-esteem. The result also led to the conclusion that cyberbullying differs according to gender. With this conclusion, the study supports the findings of some earlier studies from different parts of the world which reported the prevalence on cyberbullying and its impact on adolescents. The impact ranges from depression, social isolation, stress, anxiety, loneliness, suicidal behaviour, and somatic symptoms (Sourander, et al, 2010; Belnap, 2011; Okoye, Nwoga and Onah, 2015; Padget and Notar, 2013; and Hindiya and Patchin 2014).

6.2 Recommendations

The overall findings of this study have indicated that cyberbullying have the same consequences on the victims.

One of result of this study indicated that cyberbullying is not rampart but exist nonetheless. Based on the result, the study recommends that parents, teachers, and guardian should pay close attention to the children's behaviour to detect any change and reason for the change for immediate help.

The result of this study also indicated a disparity in cyberbullying between genders. However, regardless of the percentage, the fact remains that both genders are bullied and at such, both should be given attention and encouraged to speak out. There should be regular awareness creation of the existence of cyberbullying and how to react to it if one becomes a victim.

Another result of this study indicated that cyberbullying leads to depression among adolescents. We recommend constant counselling to help victim curb when found in such situation.

The study showed that cyberbullying leads to negative self-esteem. This study recommends a reverse psychology that will educate victims to have confidence in themselves regardless of what negative words they have been forced to belief by the about themselves.

According to our research findings, we recommend that students clubs that emphasis life skills acquisitions such as public speaking, personal development, communication etiquette should be incorporated into school curriculum in order to help boost students esteem and improve interpersonal relationships among students

We also recommend that schools should have counselling units where troubled students or bullied students can access. Trusted counsellors should be recruited to oversee these units in order to strengthen students' interaction and healing process for bullying victims.

For future studies, we recommend researchers to examine cyberbullying disparity between rural and urban communities. Since in rural communities, technology penetration is still in the infancy or non-existent, thus other form of bullying could be prevalent among students in rural school communities in comparison to their counterparts in the urban schools' areas. Also, we encourage future researchers to incorporate teachers' view in the study of cyberbullying in schools. Since this is a quantitative study, we also recommend that qualitative study approach should be considered in future study as students could vocalize their experiences in a clearer manner and approach.

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