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ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

SCHOOL OF PSYCHOLOGY

**ASSESSMENT OF STUDENTS' PERCEPTION ON ADDICTION, COGNITIVE
DISSONANCE AND DISSONANCE BEHAVIORAL CHANGE TO THE EXPOSURE OF
TIKTOK SOCIAL MEDIA PLATFORM WITHIN HIGH SCHOOLS IN BOLE SUB-CITY**

BY

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This Thesis, Assessment of students' perception on addiction, cognitive dissonance and dissonance behavioral change to the exposure of TikTok social media platform within high schools in bole sub city is prepared by Eyerusalem Berhanu, is approved by;

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LIST OF ACRONYMS

COVID-19: Coronavirus -19

DIY: Do It Yourself

DV: Dependent Variable

EFA: Exploratory Factor Analysis

H_a: alternative hypothesis

H₀: null hypothesis

IV: Independent variable

PAS: Proportional Allocation to Size

PGC: Professionally Generated Content

SEC: Socio Economic Status

SPSS: Statistical Product and Service Solutions

SSM: Self – Standards Model

UGC: User-Generated Content

ABSTRACT

The urban cities of Ethiopia, particularly Addis Ababa youth students in high school often engage themselves with the new viral social media platform named Tik Tok. This frequent interaction with Tik Tok app is perusing a noticeable discrepancy on students' behavior. This study tried to answer whether there is an addiction among students, a presence of cognitive dissonance and does a noticeable cognitive behavioral change occurs among students due to exposure of Tik Tok. To address this, a priority cross-sectional quantitative study method was used followed by a sequential qualitative study of in-depth interview to explain the data collected on quantitative study. The researcher employed survey designed with an enumerator administered structured questioner to select 135 students through systematic random sampling technique and additional of 12 students for in-depth interview through convenient sampling method. The quantitative data was examined through cross-tabulation Pearson Chi-Square test method to measures and see the associations' of the independent and dependent variables toward addiction, cognitive dissonance and cognitive behavior change. And the qualitative data was analyzed by observing the common perception, behaviors and patterns. The Pearson Chi-Square findings shows addiction presence on Tik Tok is significant and the presence of cognitive dissonance is visible because students' reasoning to join Tik Tok as an entertainment is still considered to be aspiring and the perceived fake personalities and is being perused to be replicated in day to day lives. Also dissonance behavioral changes were observed on students' clothing style, attitudes change towards friends and academic performance decrease. This study shows awareness needs to be created particularly; families and schools need to be aware of the discrepancy that Tik Tok is perusing to

develop undesirable behavior over time. In addition further empirical studies need to be conducted to measure Tik Tok significant impact on students' psychological well-being.

Key Words: TikTok, Perception, Addiction, Cognitive-dissonance, and cognitive behavioral change

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

The 21st century is the era of the internet where any information is easily accessible at the palm of our hands on the smart phones we use. As per the report published in 2020 by Simon Kemp, there were more than 21 million internet users in Ethiopia. Out of these, about 6M use social media and this number keeps increasing by 237 thousand within a 9 months period of time (Kemp, 2020).

Nowadays high school students are the most often social media users in Addis Ababa. The viral trend platforms like Facebook, Instagram and Telegram are very popular among Ethiopian users. In 2016, another social media platform named Tik Tok was created by the Chinese company ByteDance. Tik Tok is a video-sharing social networking service that is used to make a variety of short-form videos, from genres like dance, comedy, and education that have duration from 3 seconds to 1 minute. (Wade, M and Shan, J. 2018).

Tik Tok took over the internet of the entire world at an overwhelming speed in the last couple of years. As per the researcher observation, in Ethiopia Tik Tok has become a very popular and trending social media platform in a very short period of time. Currently this platform is becoming so popular with the high school students of Addis Ababa and also in other major urban cities.

Tik Tok often displays contents that show characteristics like sarcastic humors, imitations of other people, silly and funny videos that are culture inappropriate and result in undesirable behavioral changes. Nowadays youths of Ethiopian on this platform upload contents that are

category of comedy (silly and funny), challenge videos (repost other viral videos by imitating and copying it) and free speeches that are unfiltered and filled with hate speeches with intolerable behavior.

In 2019 Tik Tok was the most frequently downloaded app on mobile phones through Google play store and apple store. People are becoming addicted to this social media platform day by day (Sabir, I. 2020). The researcher see the same behavior is happening in Ethiopia as Tik Tok is growing tremendously among youth particularly in high school students and is pleasant enough to be an addictive social media platform. Therefore, considering the use and familiarity of adolescents and youths aged from 13-22 with the application, this study examined the perception on addiction, cognitive dissonance and dissonance behavioral change among high school students to the exposure of TikTok by taking the cases of students at Bole Sub-city selected high schools. In this study, the researcher used a cross-sectional research design and quantitative approach, where a descriptive statistics was applied to measure the mean of each variable.

1.2. Statement of the Problem

High school students use their free time on a school break, bedtime and in the morning and meal times to browse and spend significant time on Tik Tok app. These frequent participating and use of social media platforms are becoming an issue in their day-to-day life engagement. This noticeable undesirable behavior changes being noticed among students are depression and anxiety because the app was not opened and contents was missed. Other changes are like developing low self-esteem and less interest and lack of motivation created on the schooling activity as continuously engaging on the platform. (Samaha M. 2017).

The above issues faced by students' are impacting negatively the mindset of students and expose to a discrepancy of their cognitive process that leads to a dissonance and behavior change. It's a considerable thought that Tik Tok platform is aggressively becoming an addiction and obsession with all inappropriate posts that seems to clash with the cognitive process of these youth students and perceived to develop a dissonance.

These created discrepancies of a cognitive dissonances were long-standing beliefs and principles that were passed on to youth through their family, relatives, teachers that are embedded with Ethiopian culture and heritage is gradually shifting to un-desirable behavior changes where students alter their mindset by reducing the discrepancy so later on it is easier to evolve and attain undesirable behavior change. If this high school students continued to engage immensely on Tik Tok platform, Tik Tok may not only impact today's students' day-to-day activity but also their whole being from becoming a person with a desirable good behavior.

Obtaining published literature/documents to further understand the problem in the area of addiction, cognitive dissonance, and cognitive-behavioral change on Tik Tok was limited at the

global and particularly to Ethiopian case. This is due to the fact that the Tik Tok social media app is a recent phenomenon that was launched 5 years ago. This inadequacy on research paper on the topic put an edge for the researcher as real gap seen that encouraged the researcher to conduct the thesis on this subject. Not finding well researched and published documents of addiction, cognitive dissonance and cognitive behavioral change on social media use specifically to Ethiopia encouraged and motivated the researcher to work on this problematic issue highly being noticed in couple of years.

Thus, this study did assess the possible addiction and the perceived thought of students' on the possibility of cognitive dissonance presence among themselves as they endure to engage on Tik Tok. This study did try to evaluate whether Tik Tok platform is really an addictive social media app that causes a discrepancy on the attitude and behavior of students and their cognitive process. This study is designed to answer the following research questions.

1. Are high school students at Bole sub city area addicted to Tik Tok app or platform?
2. Is there a presence of cognitive dissonance among high school students after the use of Tik Tok platform; if so what are these patterns and associations that measure dissonance?
3. What are the indicators and explanation of a noticeable cognitive behavioral change among high school students due to the discrepancy created via Tik Tok?

1.3. Objectives of the Study

1.3.1. General Objective

The overall objective of this study was assessing students' perception towards Tik Tok and explains whether the app is addictive and peruses toward a cognitive dissonance resulting to noticeable undesirable cognitive behavioral change.

1.3.2. Specific Objectives

Having the above general objective, the study aimed at addressing the following specific objectives:

- Identify the presence of addiction due to Tik Tok.
- Assess the perceived existence of cognitive dissonance due to Tik Tok.
- Explain the perceived the cognitive behavioral changes due to Tik Tok.

1.4. Significance of the Study

Conducting this research on the use of Tik Tok social media platforms on students did help to understand how social media platforms, particularly strategically positioned platforms like Tik Tok impact youth thoughts or the cognitive process negatively. This study shows how Tik Tok social media platform is affecting the cognitive process of youth and is becoming a reason for students to develop undesirable behavior in the long run. This research paper shows similarly identify key contents or characteristics on Tik Tok that is already creating a cognitive dissonance among students so a reader will be aware of these contents.

1.5. Delimitation of the Study

During research design phase, this entire study design was aimed to be a qualitative study through a diary methodology approach to fully understand and capture the dissonance that may exist on students that would explore the study area. Accordingly, at the beginning of the study willing participants were asked to write a journal daily for two consecutive weeks where they will record their experience with Tik Tok and after the completion of the two weeks the research will sit with each of them and interview them to fully understand the adverse impact of Tik Tok on students. However, the first few attempts couldn't be achieved because participants were very casual of the study and keeping journal daily couldn't pass a couple of days and some of them get loss interest on the subject. Such trial and challenge direct the study design approach and forces the priority design method to be a quantitative study and gain perspective of students on the Tik Tok app and followed by in-depth interview of qualitative approach.

1.6. Limitations of the Study

The first limitation of this study was the sample was limited to only represent a define area of Bole sub-city that covers less than 50 km radius. Another limitation was findings good on instrument tool that measure variables against Tik Tok. Such limitation of instrument imposes on the developed instrument to be used on certain perspectives of students. The study shows a snap view of students' perception that helps to measure the presence of cognitive dissonance and dissonance behavior change with narrowed responses. This study doesn't show the wholesome of the discrepancy existed among students' cognitive process neither change encountered after.

1.7. Operational Definitions

Tik Tok: a social media application for sharing short videos on social networking and focuses on different type of genres or categories with duration from 15 seconds to one minute.

Contents /videos: it is posts of various types of genres like comedy, speeches, and dance and similar other posts uploaded on Tik Tok app

Addiction: addiction is a condition where someone is drawn or attracted to something or activity immensely as often as possible. In this study addiction variable is defined as students' continues engagement and obsession with Tik Tok social media platform where students' frequency of browsing Tik Tok is significantly high. And when it is missed there is an adverse effect of bad emotion felt by students.

Cognitive Dissonance: a cognitive dissonance is a discrepancy that is created in the mind set of person of confused and contradictory thought on a given subject. In this study, a cognitive dissonance is where students pervious perceived thought or believed practice difference from the current preference and attempt act on given characteristic due to Tik Tok.

Dissonance Behavioral Change: a noticeable behavioral change or an intended behave act of a person due to discrepancy within the mindset is a dissonance behavioral change. For this study, the operational definition of the third variable is students' attempt to participate in Tik Tok platform against the old parameter believed and/or a noticeable behavioral change within students after use of Tik Tok.

CHAPTER TWO: LITERATURE REVIEW

In this chapter critical reviews of various concepts and research findings related to cognitive dissonance, cognitive dissonance theory, social media usage, and related issues are presented.

2.1. Cognitive Dissonance

As presented by Leon Festinger, people who hold two or more cognitions (elements of knowledge) are psychologically inconsistent and that person will experience a state of psychological discomfort, which is called cognitive dissonance (Cooper, 2019).

“Cognitive dissonance is explained as the mental stress or discomfort that one feels when having to act in a way that is contradictory to the individual belief system, or having to harbor two contradicting thoughts, or being introduced to new information that is thoroughly the opposite of what one has believed so far.” (Jones, E.M and Mills, J., 2019. P-4)

Cognitive dissonance creates a need for a person to justify his or her actions that are contradictory to his or her belief. This is because when two cognitions are relevant to one another, they either are consonant or dissonant. This way the existence of dissonance on one’s self will become uncomfortable psychologically and stimulate such a person to reduce the dissonance that is created. When the scale of the dissonance is great, then the greater it is to reduce such created dissonance. (Jones, and Mills, J., 2019).

Cognitive dissonance describes the unbalanced state of mind when an individual is faced with inconsistent cognitions, such as receiving new information and leads to the creation of “discrepancy reduction,” which is shaped by the inner pressure of being mentally consistent and the mind takes effort to change the unbalanced state.

Individuals attempt to maintain and keep their cognitive dissonance at the minimum and ensure to avoid a situation that possibly causes these individuals to experience a cognitive dissonance. To treat such created cognitive dissonance, individuals either need to change their old perception or beliefs to match their action or change their action to match their old perceived thoughts or beliefs. The following example shows explain cognitive dissonance for the reader; a student taking necessary examinations with no preparation as he should be in order to pass. He recognizes that cheating in an examination is not correct and is an unethical way to achieve good results. Yet, he hides a paper in his pockets that contain some answers in them and uses them to pass the exam. It is the student belief that cheating is wrong and when he passes the exam; his action will contradict his thoughts and create cognitive dissonance. To reduce the mental conflict, he tells himself that he 'had' to cheat because his professor had deliberately set it in the most challenging timing or another reason where he may tell himself that since this was the first time he cheated, it was okay as he never had done it before. In such a case, his excuse for cheating is a method for reducing the dissonance that he is feeling.

2.1.1. Cognitive Dissonance Theory

The cognitive dissonance theory is good at modeling psychological changes for individuals in multiple situations. Thus, it is widely used to explain human behaviors.

Since proposed, the cognitive dissonance theory has been extensively studied from the perspective of both theoretical research and practical application. A series of works have been proposed to extend and clarify the cognitive dissonance theory.

The Self-standards Model (SSM) is where the role of self-relevant thought is explained by the various perspectives on dissonance involving different types of self-attributes. The competing viewpoints of SSM within the element of self-standard are the distinction between

discrepancies that involve representations of actual self-attributes and self-standards. (Jeff and Joel, 2000).

The distinction between discrepancies is defined as “personal” versus “normative” self-standards for behavior. By focusing on how the accessibility of relevant self-attributes and self-standards influence perceptions of the quality or appropriateness of behavior, the SSM can specify how and when self-concept differences like self-esteem intermediate dissonance processes. Specifically, the model can predict;

- The conditions under which self-attributes will operate as an expectancy and cause more dissonance among people with high versus low self-esteem,
- The conditions under which most people, regardless of their self-esteem, will feel the “bite” of dissonance arousal,
- The conditions under which most people will be motivated to reduce dissonance via self-justification processes, and
- The conditions under which self-esteem differences will moderate the reduction of dissonance arousal using a direct (i.e., justification) or indirect (i.e., affirmation) strategy.

The action-based model explains the motivation of reducing dissonance, which is to remove the conflicting action tendencies. The action-based model states that the negative affective state of dissonance is not always produced by cognitive conflict; rather it is created when cognitions do conflict with each other, and is making it difficult for the individual to act. This model presumes that cognition’s most critical purpose is to guide behavior and influence action to some degree. Nonetheless, some cognition has instant action consequences than others, and is expected to produce more significant dissonance in the face of inconsistency. Meaning this action cognition is perceived as important. (Jhons and Levy, 2015)

Think of an individual who makes a difficult decision of start walking every day after work. The health benefits of walking, such as burning calories and losing weight, and improving mood, are consonant cognitions. The drawbacks of walking, such as the long time it will take instead of taking transportation, uncomfortable wardrobe and muscle soreness, are dissonant cognitions. The unpleasantness of dissonance motivates the individual to decrease the cognitive discrepancy. The more the individual can reduce the number of dissonances and their importance of dissonance and flip it with constant thought then it's more likely that this individual will continue to walk and receive the health benefits.

This action-based model reflects that the inconsistency between action tendencies is important. Because the cognition is consistent with the decision of walking, the contradiction of this will have the opposite effect. Reducing the created inconsistency will not only reduce the negative feeling of dissonance but also impels individuals to follow through with their decisions. (Jhons and Levy, 2015)

2.2. Social Media

The development of media is divided into two different stages, the broadcast and the interactive stage. In the broadcast stage, media are exclusively centralized where one entity such as a radio or television station distributes messages to many people. Whereas in the interactive stage, interactivity is placed at the center of a new media platform as one can speak to the many, and instant feedback can be gained, which is often referred to as social media.

One of the most consumed interactive stages of media in our time is social media platforms. Social media provides individuals to seek information from several sources and be able to dialogue with others via message forums about the information posted. (Manning, J. 2014).

All social media contain some sort of digital platform, whether that be mobile or stationary. The core characteristic of Social media is that social media allows some form of participation as it's never characterized as a completely passive medium and with their participatory nature, social media also involve interaction. This interaction can be established with friends, family, or acquaintances or with new people who share shared interests or even a common acquaintance circle. (Manning, 2014)

Typical forms of social media are used primarily for recreation or personal connections, and others for work or professional reasons. Social media platforms that are standard forms and considered as traditional mediums that are mainly used for professional interaction are Email, LinkedIn and Twitter. And the most popular and socially interactive platforms are Facebook, Instagram, Youtube, Tik Tok, and snap chat. According to the London School of Science and Economics guideline, the most popular platforms are briefly described below;

Facebook: Facebook is the largest social media platform with two billion users. And it said that 1.2 billion users are active every day, where 175 million people share a 'Love' reaction to a post of others and another 800 million people share a 'Like' button on Facebook.

Instagram: Instagram is another popular social media platform that is owned by Facebook. There are 600 million monthly active users on the site and out of this 150 million people post on the site every day.

YouTube: YouTube is another largest media platform in the world with over one billion. On a daily basis over a billion hours of video are being watched on the platform, and more than half of all viewers are using their mobile phones. YouTube was able to provide local versions for more than 88 countries around the world so people can easily navigate YouTube in 76 languages.

Tik Tok: Tik Tok is a social media app that was introduced in the mid of 2016. It is a social media platform for short videos and focuses on vertical reading. (Sabir, 2020) According to recent sources, China has 150 million daily active users of this social media app. In 2019 Tik Tok was the most frequently downloaded app from the play store and apple store in the global world. In February 2020, Tik Tok had 800 million users worldwide. This trend shows that with the passage of time people are addicted to this social media app day by day.

The popularity of Tik Tok has in large measures been explosive in countries like Cambodia, Japan, Indonesia, Malaysia, Thailand, and Vietnam. In relation to Tik Tok Instagram social media platform has taken about six years to achieve the same number Tik Tok has over take under three years of its being launched and Facebook platform took over four years to match the number of Tik Tok. (Dilon, 2020). Tik Tok is the next big thing that is created and will certainly overwhelm the entire world in a very short period of time and exceed the other social media platforms.

The Chinese did a fantastic work on the design of Tik Tok app, as it bases and precedes user experience. The design line and its communicability are dependable with the positioning and taste of the app users. During the content production model, the app combined User-Generated Content (UGC) and Professionally Generated Content (PGC) mode that generates massive contents to reach diverse needs of immense users all over the world. Meaning the contents of Tik Tok has a propensity to disperse with a recommended content to users with a continues feed of many videos. Tik Tok ensures to pay attention to its user's engagement and participation on the platform that bases commercial value and loss social value guidance. (Yu, Jiang. 2019).

2.2.1. Social Media Users in Ethiopia

There aren't many scholars who publish work on Ethiopian social media users. However, a trusted website source Hootsuits, founded by Ryan Holmes that has more than 18 million customers does publish a Global Digital Report every year of social media for every country.

According to the Hootsuits's January 2020 report on Ethiopia, there are 21 million internet users within the country and out of this 6 million of them are active social media users. 97 percent of these users use social media via their mobile phone. There are around 6million Facebook where 68 percent of them are male and 31 percent are female and whereas 290 and 111 thousand are on Instagram and on Twitter respectively. On this report or on other published documents, the researcher couldn't find the accurate number of users of the Tik Tok platform in Ethiopia.

Through personal observation, the researcher perceived there are many active Ethiopian Tik Tokers pages to even some of them are very influential, and each has more than 100 thousand followers on their pages.

2.2.2. The Use of Social-Media and Demographics.

In the past decade, the use and part of the internet playing in people's lives has changed significantly. With the frequent use of smartphones and tablets and with the accessibility of Wi-Fi with 3G and 4G technology, and expansions in social media platforms - such as Facebook and Tik Tok and apps - more and more people are accessing the internet to do more things.

Social media usage has exponentially grown to the extent of one-third of the world's population, as of January 2016. In addition, social media statistics have been reporting an average annual increase of 10 percent in the total number of users. (Samaha M. 2017).

The most significant proportion of users of the internet is people aged fewer than 44 (with use correspondingly high among 16-24-year-olds and 35- 44-year-olds). This trend is also reflected in the use of social media and apps - with the mainstream of young people aged between 16 and 24 (87 percent) reporting using social media sites and apps in the previous three months.(Mason, 2017)

2.2.3. The Positive and Negative Effect of Social-Media on Youth

Social media has positive effects on people such as stronger relations, fostering empathy, and speedy communication. Also, adverse effects of social media on teenagers are anxiety, depression, cyberbullying, lower self-esteem, sleep deprivation, social isolation, internet addiction, and suicidal tendencies. (Samaha M. 2017). As per the study paper conducted by Gabor in 2020 on the perceived positive and negative effects of social media platforms on the grade 12 senior high school students shows that social media affected the students in a negative way on their self-esteem but on the other hand, had a positive effect on how content they are with their lives.

In this study, more than 90 percent of the respondents think Social Media usage would help to make new friends and connect to the world whereas 80 percent of the respondents also think that Social Media usage is caused or will cause unhealthy sleeping patterns to students. More than 50 percent of asked students also perceived that Social Media usage provides people new opportunities to grow to prosper and allows society to evolve as it inspires and motivates people in many ways. 50 – 70 percent of the respondents in the same study think that Social

Media usage will cause people to become addicted to it and give people unrealistic expectations of life and friendship as it will cause depression, anxiety problems, and poor mental and physical health.

2.3. Cognitive Dissonance and Social Influence

Cognitive dissonance theory states that under conditions of insufficient justification, people are more likely to internalize their behavior compared to when they can attribute it to an external source (Festinger and Carlsmith 1959). When people acquire more information, let say on social media platforms, people can validly reduce cognitive dissonance or increase consumer confidence to be consumed with a preferable subject. If after experiencing cognitive dissonance, users on social media will match their practices with other users that impact their psychological cognition thoughts.

When individuals are uncertain about their decisions or beliefs, then they try to make social comparisons with other people so they can adopt other people's experiences as guidelines to there's decision. "Social comparison theory explains that individuals have an internal drive to uphold outside images with which they evaluate their own opinions and abilities." (Liu el.,2014).

There are upward and downward social comparisons: an upward comparison is when a thing is compared to something else that is better than itself. And when the compared tings perform worse than it supposed to do then it's referred as a down ward comparison. (Festinger, 1957). For example, if a secondary high school student who wishes to be a dancer as a career tries to convince himself that he needs to improve his dance skills in order to be a better dancer and dance in music videos; however, the conflicting feelings do not disappear immediately. He then searches the social media platforms like Tik Tok for more information about other users' dancers' techniques and experiences. The problem here with this strategy is that people cannot

predict what information they will find on Tik Tok to generate mass content to meet the diverse needs of users at a time. This student will be forced to browse a significant amount of time to find and refer to the most liked dance moves that he will imitate or learn from. In this case, the cognitively dissonant of this student will face an upward social comparison as he quickly learns a technique that would add a skill to his moves. In contrast, if he later discovers that this dance move was just viral and trend for a short period of time and that it was created accidentally by famous artists and is not considered a dance technique by professional dances, and then this student will experience a downward social comparison.

2.4. Tik Tok and Cognitive Dissonance

For this study, the researcher looks for published literature documents to review on cognitive dissonance and the Tik Tok relationship, where the researcher finds documents on this area to be limited. One possible reason for this is because Tik Tok is a new platform that was created less than 5 years ago, so finding well researched and published documents on cognitive dissonance where users compare their experiences on Tik Tok with others then later change their psychological cognition is limited. However, there were some published documents on Tik Tok and addition disorder explained briefly as follows; In the study conducted on Tik Tok addiction and disorder in 2020, the writer explains how Tik Tok did create different kinds of conflicts among youths, I.e., inferiority complex and superiority complex and beauty complex in other parts of the world where Tik Tok addictions are affecting people who are inspired by Tik Tok videos. And there have been many cases where people have hurt themselves seriously while making videos for Tik Tok. To even some of these cases lead to severe injuries even resulted in deaths. (Sabir, I2020).

In the United States of America, 60 percent of the Tik Tok active users are within the age of 16-24 years olds (Reuters, 2019). Tik Tok users in America open the applications eight times during the day and spend an average 46 minutes (Kerry Flynn, 2019). Because of the usual trendy and popular posted contents, users of Tik Tok are trying to create and upload more content than other social media platforms. Also these users have a habit of copying, repeating and imitating contents produced on Tik Tok by others.

Another journal by Dr. Irfan and his colleagues show that one of the barriers of Tik Tok use on adolescent youths or students is spending most of their quality time on social media and ignoring their studies. Because they surf most of the time on social media like Tik Tok, they get an insight into others personal life that is not even the accurate picture. So, by getting influenced by others' fake lifestyles, they will develop some insecurity that leads them to disorders.

In this study paper, the researcher will try to understand and explore which of the cognitive dissonance model is being used and is explained by the high school students on their behavior and thought alteration with the use of Tik Tok social media platform.

The Operant condition theory where the behaviors that follow results or consequences of a satisfied organism would possibly be repeated and characteristics that are followed by unpleasant consequences that are less likely to be repeated (Thorndike, 1911). This theory is used to discuss the findings on this thesis, where Tik Tokers are posting contents within undesirable behavior and are getting more like and followers that is incentivize them popularity among viewers and even to earn cash from the Tik Tok Company itself for most view and liked page.

On a normal given day an individual can choose or prefer which thought or act he or she can be exposed to and avoid or limit other thoughts that resulted in undesirable behavior. Nevertheless, a social media platform, especially Tik Tok, takes away this option from an individual and endures him or her for an act that resulted in undesirable behavior. This happens

because posted videos on Tik Tok are not filed as per user preference. Even though there is categorical preference a user will select when an account is created, this does not ensure only those selected categories will be visible on the platform. On top of that even such category options contain these viral undesirable contents as they are also labeled within the given set of contents that automatically appear on the platform. These viral videos are decentralized through user-generated methods that are recommended based on likes and comments to the viewer.

In another study exploring cognitive dissonance on social media, the researchers used two ways to validate the cognitive dissonance theory to the social media users. The data was collected in form of FDG sessions with social media users, and the findings shows users who participated in the experiment discussion after the truth was revealed didn't participate after and those who did behaviors were significantly abnormal. Also the study further investigated the response of the users, and found that the social media users' attitude afterwards tends to maintain the previous behaviors from multiple perspectives. Both empirical analyses the researchers used on the study proved to them the existence of cognitive dissonance on social media users. (Kong, et.al. 2019)

CHAPTER THREE: RESEARCH METHODS

In this chapter design of the study; population and scope of the study; sampling, instrument, validation of instrument, data collection procedure, and data analysis as well as ethical issues are presented.

3.1. Study Area

Addis Ababa is an Amharic word which means “new flower”. The total surface area of the city is 54,000 hectares (AACAA, 2008) [2]. Addis Ababa is located at 9° 2' N, 38° 42' E. The city possesses a mix of highland climate zone. The high elevation moderates temperatures year-round, and the city's position near the equator means that temperatures are very constant from month to month (Tsutsumi & Bendewald, 2010).

Addis Ababa was established in the late 19th century and comparison, to other capital cities it is relatively young. Addis Ababa has evolved from a small rural settlement up to the 1950s into a vibrant modern metropolis today. In the late 19th century, Emperor Menelik II and his wife Empress Taitu founded the City of Addis Ababa (Addis Ababa means ‘New Flower’ in English). The emperor selected the Finfinne area for its fertile land, mild climate, geographically strategic and defensive position, and ancestral history.

Addis Ababa is the diplomatic capital of Africa. More than 92 embassies and consular representatives cluster in the city where the Organization of African Unity and the UN Economic Commission for Africa have their headquarters. Addis Ababa covers about 540 Km² of which 18.2 Km² are rural. Addis Ababa lies between 2,200 and 2,500 meters above sea level. The city lies at the foot of the 3,000 meters high Entoto Mountains. Despite its proximity to the equator, Addis Ababa enjoys a mild, Afro- ([Addis Ababa City Administration](#), 2019). (A.A BoFED,

2011/12). Addis Ababa is not only the largest city in Ethiopia but also a textbook example of a primate city, as it is at least 14 times as large as Dire Dawa, the second-largest city in the country. As a result, Addis Ababa's share of the total urban population was 23.8 percent in 2007(CSA 2007).

The current total population of the city is estimated to 5,006,000, a 4.42% increase from 2020, the largest and urbanized city in the country. According to Central Statistics Agency of Ethiopia and the world bank report (2017), there are about 686,000 children age from 7 to 20 years in Ethiopia and out of this number 61 percent of them are in secondary school and 53 percent of these students' enrolment is in government (public) schools and 46 percent are in private schools.

In another report by the Central Statistics Agency of Ethiopia (2015), there are 302,704 people lives within the Bole sub city and 79,420 are in secondary high school students. And there about 20 - 30 of secondary high schools in Bole sub city with an average of 2500 -3000 students each.

Thus, the study was conducted in defined population area of Addis Ababa city at Bole Sub city on secondary school students who are exposed and actively engage to social media platforms.

3.2. Research Design

To answer the research questions and address the designed objectives, the researcher used a cross-sectional research design on the quantitative approach and to explain the qualitative findings the researcher used in-depth interview method. As explained by Bryman (2004), unlike a longitudinal design, cross sectional research design involves the collection of data at a single

point in time. Therefore, taking in to account the time and cost of undertaking the study, a cross-sectional research design was used for this study since the data from students was collected in one set of time. The researcher examined the associations of the responses on the computed means value and the frequencies of Tik Tok against the variables of addiction, cognitive dissonance and dissonance behavioral change.

3.3. Research Approach

In this study both a quantitative approach and a qualitative approach was used with the intention of collecting quantified data and in-depth rich data to measure and produce factual and reliable analysis for the three variables of the study. To the quantitative research approach, sample survey method was deployed by acquiring real, valid, and accurate data from students. The researcher used a descriptive statistical to quantify and measure the central tendency of the study population to reflect the scores of students within the collected data. And for the qualitative approach, the researcher used explanatory sequential design where the data is collected first to identify and analysis the pattern of the variables followed by elaborating the quantitative results. The result of the quantitative findings provides a general overview of the research problem and present it numerically while the qualitative data collection is deign to extend and explain the three variables more in depth.

3.4. Study Population

The target population of this study was High Scholl students that were being enrolled at four schools in Bole sub-city in 2020-2021 academic calendar of Ethiopian ministry of education. A total of 6631 high school students were available in the selected schools during the data collection time and each of the students were given equal chance of being a sample for this study, using a probability sampling technique.

3.5. Data Collection Techniques and Instruments

For the **quantitative study**; the researcher collected the data using survey technique and questionnaire as an instrument. Questionnaires/structured interviews are the most commonly used technique of data collection in social science surveys. The prepared instrument has met the defining features of questionnaire; highly structured and that the same instrument is administered to all the participants in the survey.

The questionnaire was composed of close-ended questions, where a total of 22 questions that are structured to measure the three variables. Nine of the questions were structured in a Likert scale. A structured, interviewer administered questionnaire was deployed to collect data from voluntary respondents (high school students).

The following table shows in shows both independent and dependent variables used to measure addiction, cognitive dissonance and dissonance behavioral change.

Table 1: Variables with each item to be measured for quantitative data

Independent variables	Dependent variables
Independent variables – to measure Addiction	
<ul style="list-style-type: none"> • Demographic – Gender, Age, School type and school grade (Q1, Q2, Q3, Q4) • Reason for joining Tik Tok (Q9) • Time since students joined Tik Tok (Q8) 	<ul style="list-style-type: none"> • Time spent on Tik Tok (frequency and duration) (Q10 & Q11) • Perceived addictive contents (Q15) • Emotion felt when Tik Tok is missed (Q12)
Independent variables – to measure Cognitive Dissonance	
<ul style="list-style-type: none"> • Demographic – Gender, Age, School type and school grade (Q1, Q2, Q3, Q4) • Reason to join Tik Tok (Q9) • Perceived personality of Tik Tokers as real or not (Q18) 	<ul style="list-style-type: none"> • Aspired contents (Q17) <i>SPSS 45- 51</i> • Attempt behaviors students desire to replicate from Tik Tok (Q19) <i>SPSS 64-67</i> • Agreeing to the possibility of cognitive dissonance

Independent variables – to measure Dissonance leading to a Behavioral change

- Demographic – Gender, Age, School type and school grade (Q1, Q2, Q3, Q4)
- Reason to join Tik Tok (Q9)
- Perceived personality of Tik Tokers as real or not
- Noticeable behavioral change (Q21)
- Attempt behaviors students desire to replicate from Tik Tok (Q19)
- Agreeing to the possibility of cognitive dissonance presence among students (Q22)

And for the **qualitative approach**; the data collection method used to collect information that explains students' behavior, attitude and perception toward Tik Tok is in-depth interview method. The researcher used behavioral questions that are open-ended arranged for the research to probe more on questions so students' aptitude and practice on Tik Tok are evaluate and explained on the presence addiction, cognitive dissonance and dissonance behavior.

3.6. Sampling Techniques and Sample Size

A sample design is a definite plan for obtaining the sampling frame to the technique or the procedure that researcher would adopt in selecting some sampling units from which inferences about the population is drawn (Latpate, Kshirsagar, Gupta, & Chandra 2021).

Quantitative Sampling: the researcher used both probability and non-probability sampling techniques to select a representative sample from the targeted population. Purposive (judgmental sampling) was applied when the researcher selected four schools reside at Bole sub-city, within 50 KM radius to its center. The researcher selected the four schools by composing public, private and community schools, considering proximity of the schools to the center of the city and researcher's preliminary information about the school regarding the issue under study.

Then, after selecting the four schools a sampling frame that has a total list of 6631 high Scholl students was generated from four schools. In order to determine the sample size for the survey, the researcher used "the simplified formula to calculate sample sizes", which is

formulated by Yemane (1967). I.e. $n = N / (1 + N(e)^2)$ where n is the sample size, N is the population size, and e is the level of precision (where a good precision study should include 20 to 50 replicates of the total population or “ N ” and in this study the researcher used a 0.085 precision value). Moreover, since the target population has high degree of homogeneity, the lower precision level had no a significant negative impact on the sample size.

When this formula applied to the target population of this study, the sample size became 135 respondents. I.e., $6631 / (1 + 6631(0.085)^2) = 135$.

On top of this, random systematic sampling technique, another probability sampling technique was applied to determine each respondent from the overall sampling frame. In systematic sampling techniques the researcher divides the number of total population of the schools by the number of proposed sample size to find fitting certain interval number. The first student of the sample will be randomly selected as a starting point to continue and down the following student basing the interval distance number (Latpate, Kshirsagar, Gupta, & Chandra 2021).

Accordingly, having a total target population of 6631 students and a sample size of 135, the interval rate for sample selection was 49. However, to determine distribution of sample respondents from the selected four schools, the researcher used Proportionate Allocation to Size (PAS) technique, where each school was represented as per the total number of students being enrolled by the time of data collection. As per the information gathered from the four schools’ record office, while the two public schools; Lem secondary high school and Bole Secondary High School has a total student population of 1583 and 3528 respectively, the community and private schools; Bole community school and Glory secondary high school have a student population of 870 and 650 respectively.

PAS formula was applied as follow: $n_k = \frac{n \times N_k}{N}$ where,

n_k is the required sample size from each school,

n is the total sample size=135,

N_k is the total number of students at each school.

N is total number of students at the four schools=6631.

Therefore, n_k for Lem secondary high school was ≈ 32 , for Bole Secondary High School was ≈ 72 , for Bole community school was ≈ 18 , and for Glory secondary high school was ≈ 13 respondents.

Even though at first data collection from the allocated 135 samples 17 questions were invalid and reduced to 135, during the grace period to re-write this research paper, the researcher did collect additional new 17 sample interviews as per the proportioned above to meet the original design 135 total sample size. And the final analysis is conducted on base of this sample number.

Qualitative Sampling: The sampling frame for the qualitative study is from the target population of secondary high school students. The researcher used convenient sampling method to find suitable students that highly participate on Tik Tok and are willing to provide interviews for the researcher. The researcher interview willing students' from selected four schools till the data becomes saturated and the characteristics of homogeneously of the population did also help to reduce the risk of bias. Accordingly, 12 samples of students were interviewed of three students from each school. These students were from grade 9 – 12 school grade.

3.7. Inclusion Criteria

In this study, the inclusion criterion for the respondents of the survey was being a student at one of the selected high schools. Moreover, the students were expected to attend schools

during the data collection period. And for the qualitative study, students' who are highly engaged with Tik Tok platform that and are willing for interview were asked for in-depth interview.

3.8. Data Collection Procedures

For the purpose of conducting the survey, the researcher had prepared a questionnaire and translated it to the local language, Amharic to avoid ambiguities in responses. Then, an enumerators' administered questionnaire was distributed in a face-to-face approach in school break time and after school timing. The data was collected by two experienced enumerators after proper study briefing, training and testing being made to assure the questionnaire was understood seemingly by both. For the qualitative approach, the researcher did prepare open-ended question and schedule a preferable time with each respondent around their village and conduct in-depth interview face to face.

3.8.1. Validity & Reliability of the instrument

To ensure the accuracy of the questionnaire and be able to measure the three variables; it was piloted. After the pilot test and advice gained from the researcher advisor, it was necessary to revise the original instrument into more quantifiable responses.

Accordingly, the questionnaire was revised for the second time and piloted for reliability and validity check. The overall total pilot was made on 45 samples of students, out of these 20 were female and 25 were male respondents. IBM Statistical Package for the Social Sciences (SPSS version 20.0) was used to analyze the data in the exploratory factor analysis (EFA) method. Validity was checked on selected questions that are structured and have a defined value set. These items were finally produced to measure addiction, cognitive dissonance and dissonance behavioral change.

After completing the validity check, the research continues and ensure the consistency and the reliability of the questionnaire using alpha method for all 45 items on the instrument and the reliability of the instrument is at 0.790 (> than 0.6). The internal consistence reliability as this study involves only one version of instrument and is administered once to all 45 items.

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
.790	45

To assure the validity of the qualitative data, a moderator was used so the collected data is genuine and is not influenced from what the researcher want to see or hear from the interviews. And by triangulating the data of the two moderators in collected in different location within Bole sub city helps the researcher to analysis from different angles and help validate the data collected.

3.9. Data Presentation, and Analysis

Quantitative data: The data was collected hard copy questionnaire method and after the collection was done the responses was grouped and coded before its entry for analysis. The researcher scripts the questionnaire on SPSS software version 20 to enter the data collected. Data screening, editorial checking and testing model assumptions was made prior to conducting the analysis. This was done to ensure all data are entered correctly and to check for missing values, and deciding how to deal with missing values.

The result of SPSS then processed through a descriptive statistics that helps to summarize the collected perceived data on the three variables and be comprehended easily. The findings

were then presented in frequency distribution and computed mean table format and in word formats.

Then, the presented data is analyzed for each variables addiction, cognitive dissonance and cognitive behavior change through cross-tabulation Pearson Chi-Square test. This method was used instead of MANOVA (considering there are three variables) because the independent variables and the dependent variables for all three variables do vary and are not consistent. Meaning both the independent and dependent variables used to measure and tests the addiction and cognitive dissonance levels of students' are not the same. And such variance makes it challenging and statically un-acceptable to conduct a MANOVA analysis even it seems it can be processed. Accordingly, each variable was cross-tabulated and run a Pearson Chi-Square to analyzed significant rate each variable do have against the dependent variable. The researcher used analytical Pearson Chi-Square test method helped to investigate and evaluate independent variables against dependent variables of that poses a dissonance behavioral change among students, due to high frequency use of Tik Tok that becomes aspiring that the perceived personalities are attempted to be embed in day-to-day activity of students.

Qualitative data: To analyze the interview transcripts of the qualitative data, thematic analysis method was applied. In this method the researcher examined the collected in-depth interview to find common perception, behaviors and patterns to the meaning that come up repeatedly on the data.

Firstly the collected data are read through and through to take initial notes and observe familiarity among conducted interviews. Then patterns and behaviorism explained toward the use of Tik Tok was highlighted and coded to describe the contents, followed by creating themes of combining such formed codes. To assure the established themes are correct and significant

data are not missing, the researcher did review them against the original interview data set to see if some contents were miss-represented or not included. If content and patterns are missed then the theme was revised to assure all key contents addressing each variable of the study are met adequately. Once themes are finalized the researcher did name each theme according to the three main variables of the study addiction, cognitive dissonance and dissonance behavioral change as seen the table below. For this study the researcher did use a deductive approach to see if the preconceived patterns and themes expected on the quantitative result is supported and explained by the qualitative part.

Table 3: Variables with each item to be measured for qualitative data

Codes	Theme	Naming as per the key variables
<ul style="list-style-type: none"> • Access to smart phone • Access to Wifi • Privacy • Browse daily • Long hours 	<p>Frequency of usage of Tik Tok</p>	Addiction
<ul style="list-style-type: none"> • Trendy and popular app by students • Contents are funny & entertaining 	Aspiration to practice	Dissonance
<ul style="list-style-type: none"> • Rehearsing contents • Academic performance is less • Change in attitude 	Dedication & seen behavior	Cognitive dissonance behavioral change

3.10. Ethical Considerations

In this study, all ethical considerations were given greatest attention. The study was approved by the Department of Psychology, Addis Ababa University prior to the collection of data. Moreover, the researcher had an approval from Bole sub-city and sampled school

administrators. During the data collection phase, the following ethical considerations were upheld as clearly specified at the beginning of the survey questionnaire.

1. Voluntary participation: the questionnaire clearly informed at the beginning to the respondents that the survey is fully voluntary and the respondents can terminate the interview at any time.
2. Informed consent: all respondents were asked that the information they provide is used for the research purpose of a thesis paper and interview does continue when consent is granted by the respondent.
3. Confidentiality and anonymity: the researcher have ensured of the confidentiality of paper and that his or her name is not be disclosed and kept confidential on the paper and that all data obtained is used for research paper only. For the in-depth interview the name of students was replace by code.
4. COVID-19 Protocols: All the necessary COVID-19 pre-caution measures were made during the data collection work.

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

In this chapter the researcher has presented the findings of the study. The section begins with the overall demographic findings of students in a frequency description of central tendency findings. Then the three main variables of the study which are addiction, cognitive dissonance and cognitive behavioral change of students' assessment analysis is presented collectively and cross-tabulation of the Pearson Chi-Square to see if the expected consideration of students' do encounter addiction, a discrepancy and a cognitive behavioral change due to Tik Tok platform. In the support to the quantitative data as the depth-interview findings of the qualitative study theme are presented along to explain the result.

4.1. Demographic and the Overall Tik Tok Use of Students

Among 135 students, who completed the questionnaire, the proportion of males and females was more or less equal with age groups ranging from 13 to 22 years schooling in grade 9 to 12. The researcher made sure to represent all three types of schools (public, private and community schools) of covering four secondary high schools. The socio-economic statuses of students' partners were also asked to assess if measured variables do vary among different socio-economic status. The following tables show the overall findings through frequency descriptive statistics;

Table 4 Demographic findings

Description	Frequency	Percent
Gender		
Male	67	49.6%
Female	68	50.4%
Age		
13-14yrs	3	2.2%

15-16yrs	26	19.3%
17-18yrs	58	43%
19-20yrs	39	28.9%
21-22yrs	9	6.7%
School Type		
Public	98	72.6%
Private	16	11.9%
Community	21	15.6%
Grade		
Grade 9	20	14.8%
Grade 10	38	28.1%
Grade 11	24	17.8%
Grade 12	51	37.8%

Table 5: Socio-Economic Status of Students Parents

Description	Frequency		Percent	
	Father	Mather	Father	Mather
Education Status				
Primary School	20	33	14.8	23
Secondary School	24	40	17.8	21.5
Diploma	17	20	12.6	11.1
Degree	36	11	26.7	23
Masters	16	16	11.9	8.1
Not applicable	22	15	16.3	13.3
Occupation				
Private business	20	21	14.8	15.6
Public Servant	56	28	41.5	20.7
Works at private firm	50	45	37	33.3
Works at NGO	3	5	2.2	3.7
Unemployed	3	32	2.2	23.7
Not applicable	3	4	2.2	3.0
Parents Monthly income	Frequency		Percent	

Below 5000	33	24.4
5,001-10,000	40	29.6
10,001-15,000	20	14.8
15,001-20,000	11	8.1
above 10,000	16	12.9
Not applicable	15	11.1

On the demographic section the result shows, there isn't that much a significant difference among students on base of the parents social economic status (SEC) of students' parents didn't have a significant difference measured in Education, Income and Occupation. The range was between 15 -25 percent variance among the 135 total samples.

After the demographic section was addressed students were asked of their reason to joined Tik Tok with a possible responds as to why a student would joined Tik Tok social media. As per students' response, students' uses as a means of entertainment (M=4.7) and as an activity students' engage with during their free time (M=4.31)

Table 6: Reason to Join Tik Tok

	N	Minimum	Maximum	Mean	Std. Deviation
I use Tik Tok to entertain myself	135	1	5	4.71	.645
I use Tik Tok to learn new things	135	1	5	4.23	.897
I use Tik Tok as source of information	135	1	5	3.01	1.281
I use Tik Tok new & exciting trendy things	135	1	5	3.84	1.141
I use Tik Tok to spend free time	135	1	5	4.29	1.190

4.2. Tik Tok Social Media Addiction Variable Measurement Central

Tendency Findings

The study shows that 72 percent of students joined Tik Tok less than two years ago, entertainment being the reason for 78 percent of them. To measure if Tik Tok is an addictive platform, the frequency usage of students was asked. 70 percent of the students do visit the platform at least once a day (M=3.7) and spend more than an hour during one visit / browsing time of the platform as shown below in table 7.

Table 7: Students' since they joined Tik Tok

	Frequency	Percent	Valid Percent	Cumulative Percent
within the last 3 months	28	20.7	20.7	20.7
3 -6 months ago	36	26.7	26.7	47.4
less than a year	36	26.7	26.7	74.1
One to two years	32	23.7	23.7	97.8
2 years and more	3	2.2	2.2	100.0

Table 8: Addictive variable measurement of Tik Tok

	N	Minimum	Maximum	Mean	Std. Deviation
Often do you browse Tik Tok	135	1	5	3.70	1.356

Another question response on the data shows the itemized contents of videos posted on Tik Tok are perceived as addictive by students. 20 percent of them said all contents are addicted, while five contents out of nine types show below in the table are to be addictive (M=3.5). Particularly three types of contents (comedy oriented silly and funny videos, technology based educational videos and art base videos) are mostly agreeable contents that are addictive.

Table 9: Addictive Contents of Tik Tok Videos

	N	Minimum	Maximum	Mean	Std. Deviation
Speech Contents	135	1	5	3.31	1.494
Spiritual Advise	135	1	5	3.98	1.225
Hair and makeup style	135	1	5	3.50	1.597
Clothing style	135	1	5	3.70	1.451
Cooking tips	135	1	5	2.75	1.554
Comedy and Jokes	135	1	5	4.07	1.339
Education on Tech	135	1	5	4.06	1.151
Making art	135	1	5	4.08	1.140
Hacks	135	1	5	3.56	1.444

In addition to the above two central tendency of addiction, (frequency and contents admitted to be addictive), the researcher also assesses students' feeling towards any missed Tik Tok day. Accordingly the finding shows, students did;

- Get upset, agreed by 28 percent
- Make sure to visit the platform on the next day at 50.9 percent agreed rate or/and talk about video posted with friends at 65.3 percent to catch up on missed contents and,
- Visit Tik Tok once or twice a week at 62 percent and/or rate not being bothered by it at 42 percent.

4.3. Addiction Pearson Chi-Square test of Independent Variables against dependent variables Measurement Findings

The 1st cross tabulation of person chi-square measurement used to measure the significance of addiction against dependent variables is using demographic as independent variable.

Demographic was used by incorporating gender, age, school type and school grade as independent variable against dependent variables of time spent on Tik Tok frequency and duration spent on platform, perceived addictive contents and emotion felt when Tik Tok is missed. The null hypothesis (H_0) statement is that the independent variable doesn't have a relationship on dependent variables to show addiction on students while the alternative (H_a) shows a non-probability of stud nets doesn't reflects addiction variance among demographic components. The following table shows the result of P-value of independent variable analyzed against dependent variable that reflects the alternative hypostasis are currant H_a that gender , school type and school grade of students' does show significance on dependent variables.

Table 10: Demographic components with P-value that meets H_a alternative hypostasis

School type (IV) against Time spent on Tik Tok – Duration (DV)						
Public School	22.4%	35.7%	30.6%	6.1%	5.1%	.089
Private School	12.5%	18.8%	25.0%	18.8%	25.0%	
Community School	23.8%	23.8%	28.6%	4.8%	19.0%	
School grade (IV) against Time spent on Tik Tok – frequency (DV)						
Grade 9		10.0%	20.0%	20.0%	50.0%	.070
Grade 10	21.1%	2.6%	26.3%	18.4%	31.6%	
Grade 11	4.2%	16.7%	16.7%	20.8%	41.7%	
Grade 12	13.7%		25.5%	17.6%	43.1%	
School grade (IV) against Time spent on Tik Tok – duration (DV)						
Grade 9	15.0%	20.0%	55.0%	5.0%	5.0%	.030
Grade 10	21.1%	44.7%	15.8%	10.5%	7.9%	
Grade 11	12.5%	41.7%	37.5%	8.3%		
Grade 12	25.5%	23.5%	27.5%	5.9%	17.6%	

Students' time spent on Tik Tok the frequency and duration P-value against the school type and grade are at 0.089, 0.070 and 0.030 respectively.

The hypothesis statement for to measure the addiction present among students' is that; the null hypothesis indicated by H_0 is demographic components (gender, age school type or

school grade) are all independent to all or any of the perceived addictive contents. And alternative hypothesis donated by H_a is all or some of the demographic comments (gender, age school type and school grade) are not independent. The analysis shows that all of the dependent variable perceived addictive contents are not independent to some of demographic components. The table below shows contents that are not independent with a significant less than 90%, 95% and two few at 99% at difference rate of 2.

Table 11: Demographic components of the P-value that meets H_a alternative hypostasis against the perceived addictive contents

Gender (IV) against Perceived addictive contents _ Cooking Tips (DV)						
	Highly addictive	Addictive	undecided	Less addictive	Least addictive	Pearson Chi-Square
Male	34.3%	19.4%	17.9%	14.9%	13.4%	.015
Female	35.3%	7.4%	5.9%	29.4%	22.1%	
Gender(IV) against Perceived addictive contents _ Hack videos (DV)						
Male	16.4%	1.5%	9.0%	26.9%	46.3%	
Female	19.1%	5.9%	26.5%	26.5%	22.1%	.009
Age(IV) against Perceived addictive contents _ Free Speech Videos (DV)						
13-14yrs.	33.3%	33.3%			33.3%	
15-16yrs.	7.7%	23.1%	26.9%	26.9%	15.4%	
17-18yrs.	24.1%	1.7%	29.3%	17.2%	27.6%	.016
19-20yrs.	23.1%	10.3%	7.7%	17.9%	41.0%	
21-22yrs.	11.1%		33.3%		55.6%	
Age(IV) against Perceived addictive contents _ Spiritual Advice Videos (DV)						
13-14yrs.		66.7%			33.3%	
15-16yrs.	7.7%	15.4%	23.1%	19.2%	34.6%	
17-18yrs.	6.9%	8.6%	22.4%	12.1%	50.0%	.018
19-20yrs.	2.6%		15.4%	28.2%	53.8%	
21-22yrs.			22.2%		77.8%	
Age(IV) against Perceived addictive contents _ Cooking Tips Videos (DV)						

13-14yrs.			33.3%		66.7%	
15-16yrs.	34.6%	26.9%		34.6%	3.8%	
17-18yrs.	37.9%	8.6%	15.5%	19.0%	19.0%	.035
19-20yrs.	35.9%	15.4%	10.3%	23.1%	15.4%	
21-22yrs.	22.2%		22.2%	11.1%	44.4%	
School type (IV) against Perceived addictive contents _ Cooking Tips (DV)						
Public School	30.6%	13.3%	10.2%	26.5%	19.4%	
Private School	50.0%	18.8%		18.8%	12.5%	.084
Community School	42.9%	9.5%	28.6%	4.8%	14.3%	
School type (IV) against Perceived addictive contents _ Comedy and jokes (DV)						
Public School	30.6%	13.3%	10.2%	26.5%	19.4%	
Private School	50.0%	18.8%		18.8%	12.5%	.056
Community School	42.9%	9.5%	28.6%	4.8%	14.3%	
School grade (IV) against Perceived addictive contents _ Speech videos (DV)						
Grade 9	5.0%	10.0%	35.0%	20.0%	30.0%	
Grade 10	15.8%	13.2%	26.3%	23.7%	21.1%	.051
Grade 11	25.0%		4.2%	16.7%	54.2%	
Grade 12	23.5%	9.8%	23.5%	13.7%	29.4%	
School grade (IV) against Perceived addictive contents _ Spiritual (DV)						
Grade 9		15.0%	30.0%	15.0%	40.0%	
Grade 10	7.9%	15.8%	18.4%	10.5%	47.4%	
Grade 11	4.2%		12.5%	8.3%	75.0%	.036
Grade 12	5.9%	3.9%	17.6%	27.5%	45.1%	
School grade (IV) against Perceived addictive contents _ hair & makeup (DV)						
Grade 9	5.0%	15.0%	15.0%	20.0%	45.0%	
Grade 10	31.6%	5.3%	10.5%	18.4%	34.2%	.000
Grade 11	12.5%			12.5%	75.0%	
Grade 12	25.5%	7.8%	15.7%	19.6%	31.4%	
School grade (IV) against Perceived addictive contents _ clothing style (DV)						
Grade 9		15.0%	10.0%	15.0%	60.0%	
Grade 10	15.8%	21.1%	21.1%	5.3%	36.8%	

Grade 11		16.7%	4.2%	4.2%	75.0%	.031
Grade 12	13.7%	13.7%	19.6%	9.8%	43.1%	
School grade (IV) against Perceived addictive contents _ making art (DV)						
Grade 9	5.0%	10.0%	15.0%	25.0%	45.0%	.000
Grade 10	7.9%	2.6%	7.9%	44.7%	36.8%	
Grade 11			4.2%	25.0%	70.8%	
Grade 12	3.9%	5.9%	29.4%	7.8%	52.9%	
School grade (IV) against Perceived addictive contents _ making art (DV)						
Grade 9			5.0%	60.0%	35.0%	.000
Grade 10	31.6%		10.5%	15.8%	42.1%	
Grade 11	20.8%		8.3%	20.8%	50.0%	
Grade 12	13.7%	9.8%	33.3%	21.6%	21.6%	

Table 12: Demographic components of the P-value that meets Ha alternative hypostasis against emotion felt when Tik Tok is missed

Age (IV) against Emotion felt when Tik Tok is missed _ browse next day ASAP (DV)						
13-14yrs.	33.3%			66.7%		
15-16yrs.	7.7%	19.2%	42.3%	11.5%	19.2%	
17-18yrs.	10.3%	24.1%	6.9%	27.6%	31.0%	.005
19-20yrs.	25.6%	15.4%	10.3%	28.2%	20.5%	
21-22yrs.	33.3%	11.1%		33.3%	22.2%	
School Type (IV) against Emotion felt when Tik Tok is missed _ get upset (DV)						
Public School	25.5%	42.9%	5.1%	1.0%	25.5%	
Private School	31.3%	18.8%	31.3%		18.8%	.020
Community School	14.3%	23.8%	19.0%		42.9%	
School Type (IV) against Emotion felt when Tik Tok is missed _ browse next day ASAP (DV)						
Public School	17.3%	17.3%	16.3%	27.6%	21.4%	
Private School	31.3%	6.3%	6.3%	12.5%	43.8%	.035
Community School		38.1%	9.5%	28.6%	23.8%	

The 2nd P-value measurement of addiction is the independent variable reason of joining Tik Tok being entertainment against the perceived addictive contents. The null hypothesis H₀ is

the entertainment reason of joining Tik Tok is independent and doesn't have a relationship with to all or one of contents being addictive. Whereas the alternative hypothesis H_a is the entertainment reason is not independent and students' browse Tik Tok for reason of entertainment still perceive all or one genera on Tik Tok platform to be addictive. Accordingly, the following table shows entertainment reason is not independent with perceived addictive contents.

Table 13: Reason of Entertainment of P-value that meets H_a alternative hypostasis against the perceived addictive contents

Reason (IV) against perceived addictive content _ Free speech videos (DV)						
Browse Tik Tok for entertainment	Highly addictive	Addictive	Undecided	less addictive	least addictive	Pearson Chi-Square
Strongly dislike		100.0%				
Dislike				50.0%	50.0%	.000
Undecided			50.0%		50.0%	
Agreed	4.0%	8.0%	52.0%	32.0%	4.0%	
Strongly Agreed	24.8%	8.6%	15.2%	14.3%	37.1%	
Reason (IV) against perceived addictive content _ Comedy and Jokes (DV)						
Strongly dislike				100.0%		
Dislike					100.0%	.000
Undecided		50.0%	50.0%			
Agreed	4.0%	24.0%	28.0%	4.0%	40.0%	
Reason (IV) against perceived addictive content _hair & makeup videos (DV)						
Strongly dislike	100.0%					
Dislike					100.0%	.001
Undecided	50.0%		50.0%			
Agreed	44.0%	12.0%	28.0%	12.0%	4.0%	
Reason (IV) against perceived addictive content _clothing (DV)						
Strongly dislike	100.0%					
Dislike		50.0%			50.0%	.000
Undecided		50.0%	50.0%			
Agreed	8.0%	36.0%	40.0%	8.0%	8.0%	
Reason (IV) against perceived addictive content _cooking tips (DV)						
Strongly dislike	100.0%					
Dislike	50.0%		50.0%			.008
Undecided			100.0%			
Agreed	32.0%	20.0%	24.0%	24.0%	22.9%	
Reason (IV) against perceived addictive content _Making art (DV)						

Strongly dislike				100.0%	
Dislike			50.0%	50.0%	
Undecided	50.0%	50.0%			.003
Agreed		44.0%	28.0%	28.0%	

Another measurement of addiction on this study is to assess if the period time frame of students' joined Tik Tok platform does has a significant relation on their time spent on Tik Tok in terms of frequency and duration that increases the addiction level of students. And the result shows a high significance rate at 95% and 99% on students' time spent computed with time they joined the social media.

Table 14: Joining time frame of Tik Tok P-value test that meets Ha alternative hypostasis against the time spent on Tik Tok

Time since joined Tik Tok (IV) against Time Spent on Tik Tok _frequency (DV)						
Time since joined Tik Tok	on every possible free time	twice a day	at least once a day	4-5 times a week	2-3 times a week	Pearson Chi-Square
within the last 3 months	17.9%	3.6%	32.1%	3.6%	42.9%	
3 -6 months ago	11.1%	8.3%	19.4%	25.0%	36.1%	.007
less than a year	5.6%	8.3%	27.8%	38.9%	19.4%	
One to two years	15.6%		18.8%	3.1%	62.5%	
2 years and more			33.3%		66.7%	
Time since joined Tik Tok (IV) against Time Spent on Tik Tok _duration (DV)						
within the last 3 months	46.4%	39.3%	10.7%	3.6%		
3 -6 months ago	8.3%	44.4%	30.6%	5.6%	11.1%	.000
less than a year	19.4%	22.2%	47.2%	5.6%	5.6%	
One to two years	18.8%	25.0%	28.1%	15.6%	12.5%	
2 years and more					100.0%	

H_0 is the time students' joined Tik Tok is independent and has no relationship with perceived addictive contents and the alternative H_a it has relationship. The result shows the independent variable of students' time since they joined Tik Tok computed against the perceived addictive contents did show a relationship on three contents and the rest doesn't.

Table 15: Joining time frame of Tik Tok P-value test that meets H_a alternative hypostasis against the perceived contents

Time since joined Tik Tok (IV) against Perceived content _spiritual advice (DV)						
Time since joined Tik Tok	on every possible free time	twice a day	at least once a day	4-5 times a week	2-3 times a week	Pearson Chi-Square
within the last 3 months	3.6%	7.1%	35.7%	14.3%	39.3%	
3 -6 months ago	2.8%	8.3%	16.7%	16.7%	55.6%	.070
less than a year		11.1%	19.4%	8.3%	61.1%	
One to two years	15.6%	6.3%	12.5%	25.0%	40.6%	
2 years and more				66.7%	33.3%	
Time since joined Tik Tok (IV) against Perceived content _clothing style (DV)						
within the last 3 months	7.1%	35.7%	21.4%	7.1%	28.6%	
3 -6 months ago	5.6%	13.9%	25.0%	2.8%	52.8%	.069
less than a year	8.3%	11.1%	16.7%	8.3%	55.6%	
One to two years	18.8%	9.4%	6.3%	15.6%	50.0%	
2 years and more					100.0%	
Time since joined Tik Tok (IV) against Perceived content _clothing style (DV)						
within the last 3 months	21.4%	14.3%	14.3%	35.7%	14.3%	
3 -6 months ago	36.1%	2.8%	19.4%	25.0%	16.7%	.076
less than a year	27.8%	19.4%	11.1%	13.9%	27.8%	
One to two years	53.1%	15.6%		18.8%	12.5%	
2 years and more	33.3%	33.3%	33.3%			

On the qualitative findings relating with theme frequency strength the above quantitative finding about time spent on Tik Tok. Out 12 Interviewed students, 6 of them do have access to Wifi at their home and 4 out of 6 do have privacy in their home to be in their own room for long hours without interruption from any of elder family members. One student interview X who does has access to Wifi at home but not that much of privacy sits with his school book open in living room and disguise his family in thinking that he is studying but actually browse Tik Tok. Four of students' who doesn't have access to Wifi save up the transportation money given to them to buy air time and browse Tik Tok.

Five of the interviewed students' browse Tik Tok daily up to 3 hours between school breaks and after school. While seven students see Tik Tok for an average of 30min in school break time and about an hour to an hour and half at night within their rooms. All of the 12 interviewed students talk about contents of Tik Tok whenever possible during going or return back to school, in class and in school breaks.

4.3. Cognitive Dissonance Measurement

On the data, the researcher did measure the cognitive dissonance of students on two responses. Firstly, students' reasons to use Tik Tok social media platform entertainment and as a browsing activity to spend free time as seen in Table 9 (M=4.7)

Table 16: Two Reasons to Join and Use Tik Tok

	N	Minimum	Maximum	Mean	Std. Deviation
Tik Tok for Entertainment	135	1	5	4.71	.645
Tik Tok to spend free time	135	1	5	4.29	1.190

Inspiring videos are those videos students most agreeable with are filled with silly, funny, artistic and tempting contents. Knowing that these contents are not behaviorally acceptable by

society and psychology theories, however they still were found to be motivated and inspired by high school students that limit the positivity and uplifting growth of good behavior.

Table 17: Aspired Contents and Pretending Characteristics

	N	Minimum	Maximum	Mean	Std. Deviation
Aspire to Silly and funny	135	1	5	4.07	1.235
Aspire to Artistic and tempting	135	1	5	4.01	1.116
Aspire to challenge videos	135	1	5	3.69	1.249
Aspire to dance moves	135	1	5	4.07	1.101
Aspire to share honest opinion	135	1	5	4.21	1.037
Aspire to share advise on life and relationship	135	1	5	3.96	1.190
Aspire to hacks videos	135	1	5	3.63	1.375

The aspiration varies between male and female students; most of the contents are more inspired by male students than females.

- About 80 percent of male students inspired by silly and funny videos while 60 percent of female students were inspired by the same content. The artistic and tempting video contents are inspired by male students at 78 percent and 70 percent for female students.
- And 65 percent male students were inspired by challenging videos and less female at 49 percent are inspired. Male also is inspired by free troubling speeches at 83 percent whereas females are only inspired by the same video at 68 percent. Hanks are also considered as aspiring by male students by 62 percent while female students are at percent.
- Dance moves are preferred by both genders with slight difference of female at 75 percent than male students at 73 percent

The researcher then put a null H_0 hypothesis that these aspiring contents are not independent against the demographic component and the alternative H_a being some or all do have a significant relationship with some or all demographic component. The table shows H_a does seem to have a significant P-value at 90% for nine of the contents and 95% to the one content.

Table 18: Demographic components of P-value that meets the H_a alternative hypothesis of Tik Tok contents to be aspiring

Gender(IV) against Aspired contents _ Dance move videos (DV)						
	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Male	6.0%	10.4%	9.0%	23.9%	50.7%	
Female	1.5%	4.4%	16.2%	38.2%	39.7%	.090
Gender(IV) against Aspired contents _ Hacks videos (DV)						
Male	10.4%	6.0%	20.9%	11.9%	50.7%	
Female	11.8%	14.7%	22.1%	25.0%	26.5%	.029
Age(IV) against Aspired contents _ artistic and tempting videos (DV)						
13-14yrs.	33.3%			33.3%	33.3%	
15-16yrs.	3.8%	23.1%	19.2%	26.9%	26.9%	
17-18yrs.	3.4%	5.2%	17.2%	39.7%	34.5%	.025
19-20yrs.	2.6%	7.7%	2.6%	28.2%	59.0%	
21-22yrs.			11.1%	22.2%	66.7%	
Age(IV) against Aspired contents _ free Speech (DV)						
13-14yrs.					100.0%	
15-16yrs.		26.9%	38.5%	15.4%	19.2%	
17-18yrs.	6.9%	5.2%	19.0%	19.0%	50.0%	.044
19-20yrs.	2.6%	5.1%	17.9%	20.5%	53.8%	
21-22yrs.		11.1%	11.1%	11.1%	66.7%	
School type (IV) against Aspired contents _ artistic and tempting videos (DV)						
Public School	2.0%	8.2%	9.2%	32.7%	48.0%	

Private School		12.5%	12.5%	37.5%	37.5%	.031
Community School	14.3%	9.5%	28.6%	28.6%	19.0%	
School type (IV) against Aspired contents _ free speech videos (DV)						
Public School	1.0%	5.1%	11.2%	26.5%	56.1%	
Private School			31.3%	18.8%	50.0%	.065
Community School	9.5%	14.3%	14.3%	19.0%	42.9%	
School grade (IV) against Aspired contents _ silly and funny (DV)						
Grade 9	15.0%			25.0%	60.0%	
Grade 10	2.6%	26.3%	10.5%	18.4%	42.1%	.000
Grade 11			12.5%	8.3%	79.2%	
Grade 12	5.9%	7.8%	9.8%	27.5%	49.0%	
School grade (IV) against Aspired contents _ artistic and tempting videos (DV)						
Grade 9	5.0%	10.0%	5.0%	40.0%	40.0%	
Grade 10	5.3%	7.9%	18.4%	34.2%	34.2%	.007
Grade 11			8.3%	20.8%	70.8%	
Grade 12	3.9%	9.8%	13.7%	35.3%	37.3%	
School grade (IV) against Aspired contents _ challenging videos (DV)						
Grade 9		15.0%	10.0%	35.0%	40.0%	
Grade 10	7.9%	21.1%	26.3%	18.4%	26.3%	.029
Grade 11		20.8%	12.5%	20.8%	45.8%	
Grade 12	7.8%	3.9%	29.4%	19.6%	39.2%	
School grade (IV) against Aspired contents _ free speech (DV)						
Grade 9		5.0%	30.0%	25.0%	40.0%	
Grade 10	2.6%	18.4%	13.2%	21.1%	44.7%	
Grade 11	4.2%	4.2%	4.2%	8.3%	79.2%	.031
Grade 12	5.9%	7.8%	29.4%	17.6%	39.2%	
School grade (IV) against Aspired contents _ Hack videos (DV)						
Grade 9	5.0%	15.0%	5.0%	20.0%	55.0%	
Grade 10	21.1%	13.2%	21.1%	10.5%	34.2%	.084
Grade 11	12.5%	4.2%	20.8%	12.5%	50.0%	
Grade 12	5.9%	9.8%	25.5%	27.5%	31.4%	

The theme of aspiration from the interviewed gained on qualitative interview summarizes that students do aspire by Tik Tok where responses of the scheduling time of browsing Tik Tok, prioritizing the app than other relevant activities including school work; follow Tik Toker as influencer to study the patters to use as input for content development.

Ten students prioritizing Tik Tok engagement than other preset activity. For instance Interviewer X from 11th grade at Glory high school said on his interview “I stopped going to church for bible study, instead I am going to meet my friends to talk about contents for Tik Tok and how to make our video better.” While seven students’ don’t dedicate to study and do school assignment daily as they used too that was scheduled at least 2-3 hrs. per day while Tik Tok takes up to 2 hrs. of their time.

All 12 students have favorite Tik Tok influencers that inspire them to be creative, motivated, bold and confident in the video content they are making to Tik Tok. Another interviewee Y said “I really love the Tik Tok influencer Mahider, you know she has more than 115 thousand followers in short period of time on Tik Tok. She amazes me on how she talks about things that actually happens in our day to day life. By the way she is very short (laughter) but still her confidence is amazing. I really want to be confident and make videos like her” another student interviewee P has said similar thing like Student Y; he said he has a dose of people he called influential that are inspiring with content video of making imitation, funny drama acts, dance, and challenge videos that he draw different acting to help him build his own creative video. While the remaining five students all stated on their interview, that even if they don’t upload videos of their own but follow many Ethiopian Tik Tokers they consider very talented and aspiring.

4.3.1. Tik Tok pretending personalities perceived as real: a showcase for cognitive dissonance

On the Tik Tok platform there are various types of behaviors seen on videos of people posting. The most vivid and viral video content encloses a fake personality or behaviors. These contents are displayed in silly, dramatic and funny characteristics, and those most viral contents that imitate others. Another type of Tik Tok's behavior is those who consider themselves as opinionative and give free and often troubling speech on any subject.

Table 19: Perceived Personality to be real on Tik Tok

	N	Minimum	Maximum	Mean	Std. Deviation
Silly and funny contents	135	0	1	.64	.480
Artistic and showoff contents	135	0	1	.57	.497
Dramatic and imitate contents	135	0	1	.67	.473
Dance move contents	135	0	1	.51	.502
speech contents	135	0	1	.71	.455

The independent variable used to measure cognitive dissonance is perceived personality of Tik Tokers against aspired contents and attempt behaviors as dependent variables. On this measurement, the researcher want to test the null H_0 of the fake personalities on Tik Tok platform does not actually perceived to be real and are not inspiring to students'. Whereas the alternative H_a statement is that students' do actually consider the fake personalities on Tik Tok to be real and continues to be inspired. The table below shows the alternative H_a is met at one dance content at 0.090 P-value and inspiring to three contents particularly to artistic and tempting behaviors at 0.000 P-value.

Table 20: Perceived personality of P-value that meets the H_a alternative hypostasis of Tik Tok contents to be aspiring and attempting behaviors

Perceived personality (IV) against Aspiring contents _Dance moves (DV)						
	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Fake Personality	4.5%	12.1%	15.2%	33.3%	34.8%	.090
Real Personality	2.9%	2.9%	10.1%	29.0%	55.1%	
Perceived personality (IV) against Attempting behaviors _Silly and funny (DV)						
	Students' doesn't attempt to replicate behavior		Students' doesn't attempt to replicate behavior		Pearson Chi-Square	
Fake Personality	52.1%		47.9%		.033	
Real Personality	33.3%		66.7%			
Perceived personality (IV) against Attempting behaviors _artistic and tempting (DV)						
Fake Personality	60.3%		39.7%		.000	
Real Personality	26.0%		74.0%			
Perceived personality (IV) against Attempting behaviors _dance moves (DV)						
Fake Personality	31.8%		68.2%		.082	
Real Personality	18.8%		81.2%			

Furthermore, these students were asked if they would want to attempt or try these behaviors in their day-to-day activity and the average response was “Yes I would like to be / show certain behaviors in my day-to-day activity” across all characteristics (M=0.5)

Table 21: Attempt behaviors students want to replicate that was gained from Tik Tok

	N	Mean	Std. Deviation
Attempt to show a silly and funny behaviors	135	.60	.492
Attempt to have an artistic and tempting behavior	135	.59	.493
Attempt behaviors that imitate others	135	.63	.485
Attempt to be a dancer	135	.75	.436
Students' acts seen in challenge videos	135	.73	.444

Attempt a behavior to be like free speakers	135	.55	.500
Students' try to be hackers	135	.44	.499

Both male and female students' response wishing to attempt the listed behaviors on to their day to day activity are more or less within the same range but highly rated toward dance move behaviors by both genders. As 77 percent of male students and 73 percent female students said they try dance moves and incorporate it into their daily activity. And male students' responses were higher in trying free speech talks by 62 percent than female students at 51 percent.

The researcher was able to gain from collected data that the perceived thought of students on characteristics or personalities of Tik Tokers are to be true when in fact they are not. To see if null hypothesis H_0 , where students do try to replicate behaviors seen on Tik Tok regardless of demographic component, the alternative was find to be true for some of the attempted behaviors against the independent variable of demographic section (gender, age, school type and school grade). The following two tables' shows behaviors or acts are being attempted and tried out in students' day to day activity. Dance moves and imitation videos are most significant at P-value 0.003 and 0.031.

Table 22: Demographic components of P-value that meets the H_a alternative hypostasis of students attempting or replicating behaviors from Tik Tok

Gender(IV) against Attempt behaviors from Tik Tok _ trying to be DIY hacks (DV)			
	Not attempting	Attempting	Pearson Chi-Square
Male	43.3%	56.7%	
Female	67.6%	32.4%	.004
Age(IV) against Attempt behaviors from Tik Tok _ trying silly and funny behaviors (DV)			
13-14yrs.	33.3%	66.7%	
15-16yrs.	65.4%	34.6%	

17-18yrs.	44.8%	55.2%	.003
19-20yrs.	17.9%	82.1%	
21-22yrs.	33.3%	66.7%	
Age(IV) against Attempt behaviors from Tik Tok _ trying to be opinionative (DV)			
13-14yrs.	66.7%	33.3%	
15-16yrs.	65.4%	34.6%	
17-18yrs.	51.7%	48.3%	.008
19-20yrs.	25.6%	74.4%	
21-22yrs.	22.2%	77.8%	
School Type (IV) against Attempt behaviors from Tik Tok _ artistic and tempting (DV)			
Public School	34.7%	65.3%	
Private School	62.5%	37.5%	.055
Community School	52.4%	47.6%	
School Type (IV) against Attempt behaviors from Tik Tok _ imitate (DV)			
Public School	30.6%	69.4%	
Private School	62.5%	37.5%	.027
Community School	47.6%	52.4%	
School Type (IV) against Attempt behaviors from Tik Tok _ dance (DV)			
Public School	23.5%	76.5%	
Private School	50.0%	50.0%	.080
Community School	23.8%	76.2%	
School Grade (IV) against Attempt behaviors from Tik Tok _ silly and funny behaviors (DV)			
Grade 9	40.0%	60.0%	
Grade 10	55.3%	44.7%	
Grade 11	20.8%	79.2%	.029
Grade 12	35.3%	64.7%	
School Grade (IV) against Attempt behaviors from Tik Tok _ imitators (DV)			
Grade 9	30.0%	70.0%	
Grade 10	31.6%	68.4%	
Grade 11	16.7%	83.3%	.012
Grade 12	51.0%	49.0%	

School Grade (IV) against Attempt behaviors from Tik Tok _ challenge videos (DV)			
Grade 9	40.0%	60.0%	
Grade 10	36.8%	63.2%	
Grade 11	4.2%	95.8%	.003
Grade 12	21.6%	78.4%	
School Grade (IV) against Attempt behaviors from Tik Tok _ hack DIY videos (DV)			
Grade 9	70.0%	30.0%	
Grade 10	65.8%	34.2%	
Grade 11	33.3%	66.7%	.031
Grade 12	54.9%	45.1%	

Table 23: Reason of Entertainment P-value that meets the Ha alternative hypostasis of students attempting or replicating behaviors from Tik Tok

Reason(IV) against Attempting behaviors _ imitation (DV)			
Browse Tik Tok for entertainment	Students' doesn't attempt to replicate behavior	Students' doesn't attempt to replicate behavior	Pearson Chi-Square
Strongly dislike	100.0%		
Dislike		100.0%	
Undecided	50.0%	50.0%	.003
Agreed	68.0%	32.0%	
Strongly Agreed	29.5%	70.5%	
Reason(IV) against Attempting behaviors _ dance (DV)			
Strongly dislike		100.0%	
Dislike	50.0%	50.0%	
Undecided	50.0%	50.0%	.031
Agreed	48.0%	52.0%	
Strongly Agreed	19.0%	81.0%	

In addition to the above result the research test the hypothesis that the independent variable reason of joining Tik Tok being entertainment, contents on Tik Tok cannot be aspiring students are aspiring. And the alternative Ha being, regardless of entertainment reason students

are still aspired by Tik Tok contents. Accordingly as per the table seen below for all genera contents, students are aspired with a significant level either less than 90%, 95% or 99%.

The partiality theme of the in-depth interview is about students summarize perception on perceived Tik Toker behavior seen on the platform are be real or not, writing content and rehearsing for video uploads and attempting to act Tik Tok behaviors in real life.

Among interviewed students eleven of them do perceive that Tik Tokers behaviors on app are real as their personality. Students explained the fun about Tik Tok has as Tik Tokers shows their true deep nature. The personalities are not real but Tik Tokers act genuine and authentic and capture a lot of followers in short period of time

Ten of them do have active account and post videos on their account. Eight of these students' write scripts and rehears contents 3 – 4 days a week and every other day they practice to be good at video editing. Because like one interviewee said it, “unless you are good at video and sound editing you can’t make best video”

Table 24: Demographic components of P-value that meets the Ha alternative hypostasis of students being aspired by Tik Tok videos

Reason(IV) against Aspiring Content _silly and funny videos (DV)						
Browse Tik Tok for entertainment	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Strongly dislike			100.0%			
Dislike				50.0%	50.0%	
Undecided		50.0%		50.0%		.009
Agreed	4.0%	24.0%	4.0%	40.0%	28.0%	
Strongly Agreed	5.7%	6.7%	11.4%	15.2%	61.0%	
Reason(IV) against Aspiring Content _artistic and tempting (DV)						
Strongly dislike				100.0%		
Dislike				100.0%		

Undecided			50.0%	50.0%		.018
Agreed		12.0%	32.0%	44.0%	12.0%	
Strongly Agreed	4.8%	8.6%	7.6%	27.6%	51.4%	
Reason(IV) against Aspiring Content _challenging videos (DV)						
Strongly dislike					100.0%	
Dislike			50.0%	50.0%		
Undecided		50.0%		50.0%		.005
Agreed	4.0%	4.0%	44.0%	44.0%	4.0%	
Strongly Agreed	5.7%	17.1%	17.1%	15.2%	44.8%	
Reason(IV) against Aspiring Content _ dance moves (DV)						
Strongly dislike					100.0%	
Dislike		50.0%		50.0%		
Undecided			50.0%	50.0%		.005
Agreed	8.0%	12.0%	32.0%	40.0%	8.0%	
Strongly Agreed	2.9%	5.7%	7.6%	28.6%	55.2%	
Reason(IV) against Aspiring Content _ free speeches (DV)						
Strongly dislike					100.0%	
Dislike		50.0%		50.0%		
Undecided		50.0%		50.0%		.001
Agreed		8.0%	24.0%	52.0%	16.0%	
Strongly Agreed	2.9%	3.8%	12.4%	17.1%	63.8%	
Reason(IV) against Aspiring Content _ hacks DIY videos (DV)						
Strongly dislike			100.0%			
Dislike				50.0%	50.0%	
Undecided		50.0%		50.0%		.079
Agreed	8.0%	12.0%	24.0%	40.0%	16.0%	
Strongly Agreed	12.4%	9.5%	21.0%	12.4%	44.8%	

4.3.2. Cognitive dissonance presence vs. current practice

A result on question of how often students practice during a week to recorded and upload best video contents on their Tik Tok page against students' observation of a cognitive dissonance

presence on other students due to Tik Tok. The table below shows how much students agree that Tik Tok is influential and did create cognitive dissonance in high school students.

Table 25: Agreeing to the Possibility of Cognitive Dissonance

	N	Mean	Std. Deviation
Discrepancy because of Silly and Funny contents	135	3.84	1.141
Discrepancy because of Artistic and tempting contents	135	4.06	1.042
Challenge videos and contents imitates others	135	4.06	.998
Discrepancy because of Dance Contents	135	3.58	1.249
Discrepancy because of Speech Contents	135	3.99	1.051
Hacks videos	135	3.27	1.260

However, the same students did say they wish to attempt these behaviors on their day to day activity, (M= 0.5) even knowingly or not knowingly of these cognitive behavioral changes.

The last hypothesis to see whether there is a cognitive dissonance is presented within sample students or not was to prove that regardless of the demographic component, and the reason to join Tik Tok was entertainment students' was still agree for the possibility of cognitive dissonance presence due to Tik Tok platform. And the alternative Ha hypothesis being there is no significant relationship to either of demographic component or reason to join Tik Tok against the agreeing to the presence of cognitive dissonance. Accordingly, three of the demographic component (age, school type and school grade) did meet the alternative Ha particularly between school grade and two contents (silly & funny and hacks DIY videos) at 99%. And out of seven contents relationship with entertainment reason three contents that are perceived to create a cognitive dissonance are significant at 90% with P-value of 0.087 for artistic and tempting contents, 0.054 dance moves and 0.054 for hack videos.

Table 26: Demographic components of P-value that meets the Ha alternative hypostasis of students agreeing to cognitive dissonance presence

Age(IV) against Agreeing to CD _silly and funny videos (DV)						
	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
13-14yrs.				33.3%	66.7%	
15-16yrs.	19.2%	7.7%	19.2%	23.1%	30.8%	
17-18yrs.		10.3%	29.3%	31.0%	29.3%	.081
19-20yrs.	2.6%		25.6%	25.6%	46.2%	
21-22yrs.	11.1%		22.2%	22.2%	44.4%	
School type (IV) against Agreeing to CD _hack DIY videos (DV)						
Public School	7.1%	22.4%	23.5%	25.5%	21.4%	
Private School	31.3%	12.5%	31.3%	6.3%	18.8%	.019
Community School	4.8%	4.8%	47.6%	19.0%	23.8%	
School grade (IV) against Agreeing to CD _silly and funny (DV)						
Grade 9	10.0%	15.0%	25.0%	15.0%	35.0%	
Grade 10	5.3%	2.6%	21.1%	28.9%	42.1%	.000
Grade 11		8.3%	25.0%	20.8%	45.8%	
Grade 12	2.0%	3.9%	29.4%	35.3%	29.4%	
School grade (IV) against Aspired contents _ Free speech (DV)						
Grade 9	5.0%		15.0%	45.0%	35.0%	
Grade 10	7.9%	2.6%	28.9%	21.1%	39.5%	.000
Grade 11			16.7%	45.8%	37.5%	
Grade 12	2.0%	3.9%	23.5%	27.5%	43.1%	

Table 27: Entertainment Reason of P-value that meets the Ha alternative hypostasis of students agreeing to cognitive dissonance presence

Reason(IV) against Agreeing to CD presence _artistic and tempting (DV)						
	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Browse Tik Tok for entertainment					100.0%	
Strongly dislike						

Dislike			50.0%		50.0%	
Undecided				50.0%	50.0%	.087
Agreed	4.0%	12.0%	32.0%	48.0%	4.0%	
Strongly Agreed	1.9%	6.7%	11.4%	28.6%	51.4%	
Reason(IV) against Agreeing to CD presence _dance (DV)						
Strongly dislike				100.0%		
Dislike				50.0%	50.0%	
Undecided		50.0%	50.0%			.054
Agreed		16.0%	48.0%	32.0%	4.0%	
Strongly Agreed	9.5%	11.4%	20.0%	21.9%	37.1%	
Reason(IV) against Agreeing to CD presence _hacks DIY videos (DV)						
Strongly dislike	100.0%					
Dislike			50.0%		50.0%	
Undecided		100.0%				.067
Agreed	4.0%	20.0%	44.0%	16.0%	16.0%	
Strongly Agreed	10.5%	17.1%	24.8%	24.8%	22.9%	

4.4. Measuring Cognitive Behavioral Change

To check if cognitive dissonance is actually created among high school students by Tik Tok; students were asked to rate a noticeable behavior that was altered after students start using the Tik Tok platform. The researcher listed out major five undesirable behavioral changes that were rated by students. These behaviors were: change of wardrobe style, speaking tone and pervious perceived thoughts were changed, and decrease in academic performance. On the finding three behaviors (attitude change towards friends and teachers and academic performance decrease) were considered as change whereas the clothing style and tone of speaking has been changed significantly (M= 4).

There isn't much of a significant difference between male and female respondents about changes in noticeable behaviors of students after Tik Tok. However, as per the age group of 19-20 years old students did notice a significant change in students' clothing style at 61 percent, and change on previous thoughts at 58 percent higher than other age groups.

Table 28: Noticeable Behaviors Changes

	N	Minimum	Maximum	Mean	Std. Deviation
Clothing style change	135	1	5	4.04	1.184
Speaking tone is changed	135	1	5	4.07	1.101
Attitude toward friends is changes	135	1	5	3.49	1.354
Attitude toward teacher is changes	135	1	5	3.21	1.437
Academic Performance decrease	135	1	5	3.20	1.280

To measure if noticeable behavioral change on students after Tik Tok has a significant relationship with the demographic components (gender, age, school type and grade) the researcher put forth the following hypothesis; H_0 is regardless of the demographic components or reason to join Tik Tok, any student do perceive a noticeable behavioral change do occurs after Tik Tok. And the H_a is the demographic component or the reason entertainment did actually matter and any of the students does not consider a noticeable behavioral change after Tik Tok. And the result shows in the below table that the H_a hypothesis are met on certain behavioral changes to each respective demographic component with significant level of 90%, 95% and 99% to one case (school grade and academic performance decreases). Particularity clothing style p-value at 0.001, academic performance at 0.000 and speaking tone change at 0.005 do have a relationship with school grades students are.

Table 29: Demographic component of P-value that meets the H_a alternative hypostasis of students claimed noticeable behavioral change due to Tik Tok.

Gender (IV) against Noticeable Behavioral change _Speaking tone (DV)						
	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Male.	4.5%	11.9%	22.4%	19.4%	41.8%	.048
Female	1.5%	2.9%	11.8%	30.9%	52.9%	

Gender (IV) against Noticeable Behavioral change _Attitude towards friends (DV)						
Male.	11.9%	19.4%	19.4%	19.4%	29.9%	
Female	13.2%	4.4%	17.6%	36.8%	27.9%	.038
Age(IV) against Noticeable Behavioral change _clothing style (DV)						
13-14				33.3%	66.7%	
15-16	15.4%	19.2%	3.8%	34.6%	26.9%	.077
17-18	1.7%	12.1%	17.2%	20.7%	48.3%	
19-20	2.6%		10.3%	25.6%	61.5%	
21-22		11.1%	11.1%	22.2%	55.6%	
School grade (IV) against Noticeable Behavioral change _clothing style (DV)						
Grade 9	25.0%	5.0%	5.0%	40.0%	25.0%	
Grade 10		13.2%	7.9%	23.7%	55.3%	.001
Grade 11	4.2%	8.3%	8.3%	20.8%	58.3%	
Grade 12		9.8%	19.6%	19.6%	51.0%	
School grade (IV) against Noticeable Behavioral change _speaking tone (DV)						
Grade 9		5.0%	10.0%	30.0%	55.0%	
Grade 10	2.6%	10.5%	18.4%	26.3%	42.1%	.005
Grade 11	4.2%	8.3%	8.3%	16.7%	62.5%	
Grade 12	3.9%	2.0%	23.5%	27.5%	43.1%	
School grade (IV) against Noticeable Behavioral change _attitude towards friends (DV)						
Grade 9	10.0%	5.0%	15.0%	30.0%	40.0%	
Grade 10	13.2%	18.4%	21.1%	34.2%	13.2%	.027
Grade 11	12.5%	16.7%	12.5%	16.7%	41.7%	
Grade 12	13.7%	3.9%	21.6%	29.4%	31.4%	
School grade (IV) against Noticeable Behavioral change _academic performance (DV)						
Grade 9	20.0%	20.0%	30.0%	15.0%	15.0%	
Grade 10	18.4%	26.3%	10.5%	28.9%	15.8%	.000
Grade 11	12.5%		33.3%	12.5%	41.7%	
Grade 12	7.8%	9.8%	35.3%	37.3%	9.8%	

The alternative Ha hypostasis shows a significant level on three noticeable behavioral changes (clothing style at 0.028 P-value, attitude towards friends are changed at 0.072 P-value and the academic performance decrease at 0.005)

Table 30: Entertainment reason of the P-value that meets the Ha alternative hypostasis of students claimed noticeable behavioral change due to Tik Tok.

Reason(IV) against Noticeable Behavior change _Clothing style (DV)						
Browse Tik Tok for entertainment	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Strongly dislike					100.0%	
Dislike				50.0%	50.0%	
Undecided					100.0%	.028
Agreed		16.0%	36.0%	32.0%	16.0%	
Strongly Agreed	5.7%	8.6%	6.7%	23.8%	55.2%	
Reason(IV) against Noticeable Behavior change _Attitude towards friends change (DV)						
Strongly dislike				100.0%		
Dislike				50.0%	50.0%	
Undecided	50.0%		50.0%			.072
Agreed	4.0%	4.0%	40.0%	40.0%	12.0%	
Strongly Agreed	14.3%	14.3%	13.3%	24.8%	33.3%	
Reason(IV) against Noticeable Behavior change _Academic performance decreases (DV)						
Strongly dislike				100.0%		
Dislike					100.0%	
Undecided	50.0%	50.0%				.005
Agreed		12.0%	28.0%	56.0%	4.0%	
Strongly Agreed	16.2%	16.2%	27.6%	20.0%	20.0%	

Another hypothesis tested to measure the noticed cognitive behavioral change is to see if each perceived personality that are considered to be fake doesn't show a noticeable behavioral change on students. This was considered as a null hypothesis and the alternative statement that

regardless of what students consider Tik Tokers to be real or fake still shows a noticeable cognitive behavioral change. As the table shows the noticeable behavioral change of academic performance decreasing, attitude towards friends and speaking tone change show an alternative significance to all personalities consider being real.

Table 31: Perceived personality of the P-value that meets the Ha alternative hypostasis of students claimed noticeable behavioral change due to Tik Tok.

Perceived personality _being silly and funny (IV) against Noticeable behavioral change _speaking tone (DV)						
	Strongly dislike	Dislike	Undecided	Agreed	Strongly Agreed	Pearson Chi-Square
Fake Personality	2.1%	8.3%	18.8%	37.5%	33.3%	
Real Personality	3.4%	6.9%	16.1%	18.4%	55.2%	.091
Perceived personality _being artistic and show-off (IV) against Noticeable behavioral change _Academic performances decreases (DV)						
Fake Personality	13.8%	24.1%	29.3%	22.4%	10.3%	
Real Personality	13.0%	9.1%	24.7%	29.9%	23.4%	.062
Perceived personality _being dramatic and show imitation (IV) against Noticeable behavioral change _ Academic performances decreases (DV)						
Fake Personality	4.4%	24.4%	33.3%	22.2%	15.6%	
Real Personality	17.8%	11.1%	23.3%	28.9%	18.9%	.055
Perceived personality _dance moves (IV) against Noticeable behavioral change _Attitude towards friends change (DV)						
Fake Personality	12.1%	22.7%	25.8%	21.2%	18.2%	.000
Real Personality	13.0%	1.4%	11.6%	34.8%	39.1%	
Perceived personality _dance moves (IV) against Noticeable behavioral change _ Academic performances decreases (DV)						
Fake Personality	15.2%	15.2%	36.4%	19.7%	13.6%	.075
Real Personality	11.6%	15.9%	17.4%	33.3%	21.7%	

The qualitative finding on the cognitive behavioral change shows; students' response toward change attitude perceived or noticed due to Tik Tok, change patten seen on students after joining Tik Tok platform, and regrettable and/or accepted new discrepancy seen behavior acts.

Nine students' do believe certain behaviors have certainly changed in last year. However consider such behavioral changes are normal and expected and has nothing harm to do on personality growth.

According to interviewee B that is in a grade 12 students from public schools states that her life has changed because of Tik Tok. Since she start seeing how young Ethiopian girls like her use the social media platform to create contents and upload on their page and eventually get money out it something fascinating. Dancing is something she was always passionate about but was not motivated enough to pursue the interest. However now that she joined Tik Tok platform, she is encouraged to dance because even those that are not good dancers are using the platform to express their interest. It has been six months and she is actively been engaging on the social platform by uploading and showing her dance moves. The type of dance moves is mostly twaerking (it is a dance move that involves hip and butt movement). She upload videos at least once a week and she said her body shape around her hips and legs did help her to get a lot of viewers as she claim it to be beautiful and attractive.

Another student interviewed from grade 10 shared her experience that she is more stylish than she was before. She likes to style her hair very often and Tik Tok giver her opportunity to do so as she wants too. She styles her hair every day in the morning for about 30 minutes before she goes to school. This interviewee said on her interview not only Tik Tok helps her to change her hair style to better in addition it giver dressing tips and make up beauty hacks to apply on herself. She said she gained popularity in her school and got special attention from boys. She

believes her the overall style is something good and not bad and does not lead to undesirable behavioral change because even the popular celebrities of Ethiopian do it every time and it makes them even popular. She firmly says on the interview that “people need to wear what they want and do makeup and hair styles as they like. I disagree with those people who say too much hair or beauty styles are bad for young girls like us. There is no such thing as too much, I fight this concept with my mother all the time. It is a wrong perception vividly seen on our culture.”

Whereas another two male students experience with Tik Tok says it impacted their studies on school. Both were in grade 9 when they joined Tik Tok as they got a new phone for the first time as a present because of their grade school passing with flying colors. However the academic performance did get low on the first semester after Tik Tok. Both says one of the reasons of such lower grade is giving less attention to school works and miss the scheduled study time. Both acknowledge Tik Tok takes their time significantly as it becomes an addiction. Once started browsing the app hours continues before they realize they missed their study time. Having free access to Wi-Fi at their make it even convenient to stay up on app for long time. The temptation part of Tik Tok as explained by another student is the fact videos are different contents from funny - dance - hacks – education and no one get bored. He enjoyed Tik Tok because it is an entertainment but can't stop it now.

Other students did express their study time is not the same as it was prior to joining Tik Tok. They see the biggest challenge with Tik Tok is not able to track time at night. According to interviewee Y a grade 11 student usually sit to do her homework at 7pm after dinner and in between she start to browse Tik Tok telling herself she will only browse for 20 minutes and spent an hour and sometimes two hours will passes by before release the time. While another three students even keep alarm to monitor their Tik Tok time and studying time but often

snoozes the alarm and continue to watch Tik Tok. It seems a problem but all three accepted it and said it is the time of globalization nothing can do about it because all my friends same the same issue and we have no control over it.

CHAPTER FIVE: DISCUSSION

As it has been said on chapter two of this paper, considering the newness of the Tik Tok platform to social media stream, it was challenging to find literature works on addictive, cognitive dissonance and cognitive behavioral change in relation with Tik Tok. For this study the researcher did review and incorporate literature works that was published on the presence of addiction, cognitive dissonance and cognitive behavioral change that are grasped from the frequent use of various social media platforms. Students' reason to join Tik Tok platform in first place helped the researcher to further assess their engagement with Tik Tok on the preceding of measuring all three variables (addiction, cognitive dissonance and cognitive behavior change).

5.1. Discussion on measured addiction variable

Discussing the Addition measurement on the result shows that, although some addictive measurement items do vary from male to female students, from the overall responses asked, the researcher's interpretations shows that there is presence of Tik Tok addiction within students. The frequency browsing time dedicated for Tik Tok is on daily bases is at least an hour and 20 percent respondents also admit the contents on Tik Tok are addictive. 50 percent and more of students that missed Tik Tok during the day either talk about the missed contents with their friends or visit the site longer on the next day. The P-value of independent variable of demographic component does show significance to three of the dependent variables and the significance is doesn't show independent relationship of students' against the type of demographic to all of the contents at 90%, 95% and two few at 99% at difference rate of 2.

The qualitative study supports the quantitative study and shows an addiction behavior among students. The researcher uses the frequency theme result to explain addiction behavior that was measured and seen on the quantitative data. The access to Wifi makes it convenient to browse Tik Tok as often as possible for three of the students, while for the other students walking to school and from school and use the transportation money to buy air time on their phone for internet access but even it gives them a great excuse to talk about trendy contents seen on Tik Tok among friends. .

5.2. Discussion on measured cognitive dissonance

Before discussing the finding of the Cognitive Dissonance presence on students, the researcher first explains the most viral and spinning contents often posted on Tik Tok so the reader can have a glimpse understanding of the contents posted on Tik Tok platform. These leading contents are:

- Silly and Funny videos: These types of videos are made either by Ethiopians and/or foreigners and post funny videos mainly acting as silly or comedian characteristics. These videos are mostly viral and are repeatedly posted on platforms either with the usual trend of an acting based on someone else or snip video clips of funny moments from movies and TV shows.
- Dramatic and Imitation videos: these types of videos are popular on Tik Tok because people do develop content while imitating other entertaining characteristics and make dramatic and funny videos. These kinds of videos are also viral and so popular here in Ethiopia that some youths in Ethiopia were able to gain more than 100k followers on their Tik Tok pages.

- Challenge videos: Another widespread contents on Tik Tok are challenge videos are very common and troubling type of videos where a challenge is created either by a celebrity or Tik Tok influential (that has many followers) and does develop a content and post for all Tik Tok viewers to re make or act the content and post it on Tik Tok. Although these challenge videos are perceived to be exciting, some are also dangerous. As a showcase in the last month of April 2021, one 12 years old Ethiopian who lived in the United State of American has passed away after he tried a Tik Tok challenge video that dared viewers to choke themselves until they lost consciousness.
- Free speech videos: Another vial and most trendy content is videos posted on various topic areas. These free speeches are mostly labeled as advice or self-help contents focused mainly on man and women romantic relationships issues and some other time current issues that went viral on other media platforms.
- Informative and skill oriented tips videos; This last content are those types of videos that posts technology, closing style, makeup, and cooking skills, tips and hacks.

With the consideration of these categories, the responses of students' cognitive dissonance measurement were counted on their exposure to these pleasurable contents.

To discuss the findings, the researcher uses three methods to measure and assess the possibility of cognitive dissonance existence within Bole sub city high school students to their use of Tik Tok social media platform. For any individual that engages with certain activity for sake of entertainment, doesn't necessarily need to impact his/her cognitive thought to peruse for something more on such activity. However, for 95 percent students' entertainment being the reason for starting Tik Tok does inflict their mindset and inspire them and impact their cognitive thoughts from posted contents. The P-value for six contents at significantly high at 99% for three

of them and 95% for the other three contents, that students' are perceiving contents to be addictive even Tik Tok is considered as entertainment.

5.2.1. Action Dissonance

As per Jhon and his colleague journal, the action-based model concurs in other areas of psychology that perceptions and cognitions can serve as action tendencies. (Jhons' and Levy, 2015). On the finding it has been realized that there is the existence of action based cognitive dissonance where students attempt to develop and post a Tik Tok video by practicing as often as possible (driven action) versus a perceived thought of Tik Tok that creates a noticeable undesirable behavior on students (new preference). This model was replicated in this study to prove how increasing in some measure the discrepancy of students' behavior between the actions they take and the preference parameter of perceived thoughts of noticed undesirable behaviors toward Tik Tok. This study shows students tries to attempt to imitate contents on Tik Tok ($M=0.5$) plus students' that practice daily for Tik Tok videos are $M=3.5$ while they state that there is a noticeable undesirable behavioral change because of Tik Tok ($M=3.5$)

In addition, as the finding shows on in-depth interview, students' perceive Tik Tok contents to be real personality and are aspiring to adapt it into their own video making and even to their day to day life engagement. Tik Tok app is not just a means of entertainment social media platform but also practical tool used to influence behavior. As show case the two students (Yonas and Misrat) not only browse the app in addition they are also finding ways to adopt behaviors that are undesirable but popular on Tik Tok.

5.2.2. Preference Change Dissonance

The perceived preference dissonance is when there is an increasing discrepancy between the new and old preference parameters (Jeff and Joel, 2000). In this study the old preference is using Tik Tok as means of entertainment and an activity that is spent on free time and compare it with the new preference of Tik Tok contents that are inspiring and the contents (pretending acts) posted are perceived as a real personality.

In addition to the above two methods, the other approach the researcher using cross-sectional method noticed the findings exposes how the addiction of students on Tik Tok causes cognitive dissonance and overtime leads up to cognitive behavioral change. The association is that when addiction on Tik Tok exists, it is an indication of a cognitive dissonance presence that leads to blindly increase of cognitive dissonance behavioral change overtime. Making a choice or undertaking an action of frequently using Tik Tok oftentimes blindly or forcibly can lead to an increased preference over time for the chosen alternative.

This understanding was seen because the frequency of using Tik Tok (M=3.5) against the acceptance of pretending acts of contents listed are considered to be real and aspiring (M=3.5). Students do practice such behaviors with the intention of developing content even if they did notice undesirable behaviors on high school students afterwards. Meaning, exposure to un-filtered contents on Tik Tok daily creates a cognitive dissonance that eventually leads to cognitive dissonance behavioral change.

The result also shows students do find a way to self-adjust these created dissonance. Their daily engagement on Tik Tok (M=3.5) does tends to inspire students on vivid contents particularly to those pretending characteristics (being silly, artistic and tempting) that are widely posted on the platform. These posted contents are perceived as a fake personality (silly, funny, a

showoff, a dramatic or an imitation) or behaviors that don't measure a real and desirable personality of an individual. Still the result of this thesis shows that fake behaviors of Tik Tokers are perceived as a real personality by students (M=0.5) homogeneously across all students.

On all interviews aspiration was seen to five of students towards Tik Tok videos. As seen on quantitative data strong significant relationship between Tik Tok contents and aspiration. Some or the entire contents do have a significant relationship with some or all demographic component. Four contents show a p-value between 0.001 -0.005 to four content and 0.079 & 0.081 for the other two contents, Tik Tok does have not only imposed an addiction threat but the contents within the app are also perceived to be very inspirational and motivational. This app does not only inspire students' the result also shows it limits them to act on prioritize activities they used to engage with before Tik Tok studying and spend time with family.

5.3. Discussion on cognitive dissonance behavioral change measurement

The interview from all five students on behavioral theme shows a distinct feature of behavioral change after continues browsing time spent on Tik Tok. All of them are aware and noticing change among them but still continues to use Tik Tok daily. Three of them are acknowledging the change and embracing it while two of them attempting to reverse the change but fails as they Tik Tok are so persuasive and addiction to stop.

By perceiving Tik Tokers' behaviors as real and wishes to adapt it into their daily activity, students knowingly or unknowingly do rewire the original perceived thought of these personalities of undesirable behavior into accepted behavior. Students' did conditions themselves to reduce the created dissonance via self-justification processes. The result shows that dance

content is at 0.090 P-value and artistic and tempting behaviors at 0.000 P-value showing students are attempt the behaviors that are fake (dancing, artistic and temptation).

In an ideal world an individual with such undesirable behavior doesn't want to expose him or herself in day to day engagement as it's considered imprudent to attain particularly in countries like Ethiopia. Even though these behaviors are perceived to be disagreeable within the society, students did self-justify these cognitive dissonances and still want to attempt these personalities in their day to day activities.

The findings of Tik Tokers pretending behaviors considered being real and those students would like to attempt or adopt these behaviors on their day to day activity may not seem to indicate a cognitive dissonance as both responses are predictable. However, knowing pretending behaviors that are silly, dramatic, showoff or troubling free speeches are not considered as per positive psychology the data indicates a clear dissonance presence within students but adjusted through (self-justify theory!). As per Bandura theory explanation, our behavioral standards determine our self-efficacy. Meaning self-efficacy or justifying refers to feelings of capability, efficiency, and competence in coping with life. People will meet and maintain their performance standards to enhance self-efficacy; failure to meet and maintain these standards will reduce performance (Bandura, 2013).

When assessing if the demographic components or reason to join Tik Tok, any student that perceive a noticeable behavioral change occurs after Tik Tok use. The demographic component and the reason entertainment did actually matter on a noticeable behavioral change. Particularly the personality perceived on Tik Tok that perceived reflects on the academic performance and speaking tone of students.

The result also indicates the existence of cognitive dissonance behavioral change within students by assessing the self-rated response of students on the possibility of cognitive

dissonance presence that was able to impact or inflict behavior against their current Tik Tok practice. This response can easily be compared with a cognitive dissonance that already existed to evaluate the tendency of behavioral change among students. Apparently, all adverse behavioral changes that would occur after the use of Tik Tok and realization of a cognitive behavioral change within students were agreed by all students.

This comparison shows clearly the contradiction and evidence to cognitive dissonance presence within the students. A student who thinks a specific behavioral act post on Tik Tok has a possibility of creating cognitive behavioral change but still concurrently wants to try such behavior into his/her life.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1. Conclusions

This study of assessing students' perception addiction, cognitive dissonance and dissonance behavioral change was conducted on secondary high school students at Bole Sub City show how the new viral social media platform Tik Tok is considered as addictive platform that develops a discrepancy of dissonance on mindset on students.

In conducting this study, the researcher believes studies on social media platforms Tik Tok and youths' engagement did help to understand how strategically positioned platforms like Tik Tok can negatively impact youth personality as it imposes on their cognitive process. This research was limited to only represent a define area within the Bole sub-city of Addis Ababa and the instrument tool development to measured variables covers certain perspectives of students' statement

The study aims to answer if there is actually an addiction presence within the students after continues engagement with Tik Tok social media and such engagement is creating a cognitive dissonance and dissonance behaviors change among students. A priority strategy of this study was a quantitative study with a sequence data collection of quantitative first followed by a qualitative study to explain the quantitative findings and at data was integrated during data interpretation. In such manner the theoretical perspective of addiction, cognitive dissonance and dissonance behavioral change was seen implicitly along testing the researcher hypothesis of Tik Tok.

For the quantitative study students filled a questionnaire and descriptive statistic was structured and data was presented by analyzing each measurable variable of addiction, cognitive dissonance and cognitive behavior change through cross-tabulation Pearson Chi-Square test.

The researcher used analytical Pearson Chi-Square test method helped to investigate and evaluate independent variables against dependent variables. In such a way four demographic independent variables and two additional independent variables was computed against three dependent variables to each three study areas separately to show whether there is a relationship or not. Accordingly a total of eighteen relationships were computed for each addiction, cognitive dissonance and dissonance behavioral change. In addition to the quantitate study five in-depth interviews has been conducted with students through convenient sampling method to ensure students' selected for interview were immensely engage with Tik Tok and are willing to share their experience with the researcher. After interview was completed patterns and behaviorism used to explain the use of Tik Tok was highlighted and coded to describe the contents.

The finding of the quantitate study was discusses against some literature theories to assess if there is a discrepancy among students. The finding shows 40 percent of students' browse Tik Tok at very least once on average staying an hour at each visit and for 10 percent of them even up to 3 hours. The p-value computed for each of the study area meet the presented hypothesis.

This frequent visit to Tik Tok did show the researcher there is a cognitive dissonance and cognitive behavioral change presence among students. The most often contents posted on the platform that are often filled with silliness, dramatic, and showing-off characteristics or behaviors often impact students to perceive such seen as a real personality and practice such act on daily bases. Students that are exposed to these types of personality on Tik Tok for a long time develop an addiction and indicate an existence of cognitive discrepancy. Overall, the data shows;

- Engaging too often with the unrealistic and dramatic characteristics on Tik Tok (M=0.6) that are to be fake personalities are considered as a real personality and are to be inspiring by the contents. And with a p-value of 0.000 duration and 0.007 frequency period against the time students join Tik Tok.

- 53 percent of students, who perceive there is a noticeable negative behavior changes among students because of Tik Tok, still want to attempt the moves and the acts on their day to day life activity. Three noticeable behavioral changes on clothing style at 0.028 P-value, attitude towards friends are changed at 0.072 P-value and the academic performance decrease at 0.005 was seen on the result.
- 62 percent students agree that these undesirable but most popular behaviors on Tik Tok are addictive and have a potential of developing a cognitive dissonance in students. Seven contents relationship were perceived to create a cognitive dissonance with 90% significance and with P-value of 0.087 for artistic and tempting contents, 0.054 dance moves and 0.054 for hack videos.

And the in-depth interviews explain the process undergo to reach an addiction level and eventually develop a cognitive dissonance and behavioral change due to it. Tik Tok has become inspiration tool to students' so they prioritize the activities for Tik Tok than studying and spend time with family. Two students are an example Tik Tok help them to adopt behaviors that are undesirable as person but can be used on Tik Tok and make them popular on the platform. Where three students do acknowledging the change Tik Tok brings to their lives and embracing it while two of them do attempt to reverse the change but fails as the platform is so persuasive and addiction.

These all findings indicate that a cognitive dissonance behavioral change is already present within the students. Not only perceived thoughts are conflicted but also action towards the behavior is being implemented with self-justification theory. An addiction to Tik Tok conditions students to be highly motivated and inspired by contents that help them to reduce created dissonance. The popularity of silly videos, however, still brings cash and a celebrity

reward to the Tik Toker condition students to have a better confidence and believe the rightness of the platform helps them to moderate the reduction of dissonance aroused. As a conclusion, The Self-standards Model (SSM) is already practicing by students as they condition themselves to reduce the created dissonance via self-justification processes.

6.2. Recommendations

This study is a snip view and a bird's eye view of how Tik Tok social media platform is making an adverse effect on students' cognitive process that are exposed to the platform on a frequent basis. In this study, the researcher can only grasp random students from four schools within one sub city of Addis Ababa. The platform is being used nationwide particularly in big urban cities. Nonetheless this study shows the thinking process of students and how dissonance is making a negative impact on these students. The following are the recommendation of the researcher at the conclusion of this paper;

- Awareness creation needs to be made on cognitive dissonance and its negative impact on behavior of students. Various stakeholders like media, government and NGO offices that work on youth empowerment along with civil societies need to promote the dissonances that are being created on youths through social media platforms particularly on Tik Tok that encourages them to develop undesirable behavior.
- Like said, this study is a bird's eye view that is leading to a negative and undesirable behavior immensely. Further studies and empirical research need to be conducted to assess in depth such cognitive issues that are causing significant impact on youth and students psychological well-being in the long run.

- Schools, teachers and families need to be aware of this dissonance so they can properly monitor and advise students on use of the Tik Tok platform. These stakeholders need to fully be aware of the addiction Tik Tok has over students and is becoming a tool for cognitive dissonance of undesirable behavior that leads to acceptance of such behavior. Awareness on addiction, cognitive dissonance and dissonance behavior change need to be awaken the families, the teachers and the schools to give proper attention to the disorder being created so an adversary action plan is in place.
- Popular Tik Toker similarly needs to relive the fakeness of their post videos. The most popular Tik Tokers that have many followers over 100k must prepare an honest video to tell their followers / viewers how the produced contents are fake and don't reflect their day to day behavior. For example, recently two most popular and influential Tik Tokers' did appear in one of the most viewed Television programs in Ethiopia named Seifu on EBS. Both were interviewed by the host on their engagement and popularity with Tik Tok platform. In the interview, both said the videos they are making are for fun and entertainment purposes and don't represent them. However, this acceptable entertainment reason is the reason for the students to get addicted to the platform and the preceding effect that is causing students to have a dissonance. These influential and popular Tik Tokers' has to make sure and provide a clear explanation on their post and their actual behavior. Viral videos must be developed on media and in their own page of how contents posted are not associated with one's self-personality and students or viewers shouldn't be aspired by these fake personalities so they don't attempt them in their day to day activity.

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ANNEX I: QUESTIONNAIRES

Study Instrument developed and used to collect data from high School Students for the Quantitative Study

Questionnaire to assess the Addictiveness of Tik Tok Social Media Platform and the Cognitive Dissonance Relationship on High School Students

Greetings My Name is _____, I am enumerator for. Today I am hear on behalf of Eyerusalem Berhanu, who is pursuing her master’s degree in social psychology at Addis Ababa University and currently working on her Thesis on the effects of cognitive dissonance on youth’s interaction with Tik Tok social media platform.

The purpose of this study is to understand the extent of Tik Tok engagement effects on the high school students that is creating a cognitive dissonance among youth uses. This survey interview is will be kept confidential, and you anonymity will be maintain. I would like to inform you that this interview is fully voluntary and that you will not receive any incentive for doing this and that at any time of the interview you can terminate and leave the interview

This interview will take 30min of your time. Are you willing to participate on this study?

Do you have a Tik Tok Account? Do you use it? (*Instruction: if answer is no for either or one of the question thanks the respondent and close the interview*)

Section I: Respondent Demographic

1. Gender (*circle the response*)

Male Female

2. Age (*circle the response*)

13-14 15 – 16 17-18 19-20 21-22

3. Where do you learn at? (*circle the response*)

Public School Private school Community school

4. What grade you are in? (*circle the response*)

Grade 9 Grade 10 Grade 11 Grade 12

5. What is your parent’s education level?

Father	Primary School	Secondary School	Diploma	Degree	Masters	PHD
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Mother	Primary School	Secondary School	Diploma	Degree	Masters	PHD
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6. What is your parent's occupation?

Father	Private Business	Public Servant	Employee at private firm	Works at NGO	Unemployed	Other
Mother	Private Business	Public Servant	Employee at private firm	Works at NGO	Unemployed	Other

7. What is your parent's monthly income range?

Below 5,000.00	From 5001, - 10,000.00	10,001 – 15,000.00	15,001 -20,000.00	Above 20,000 ETB
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Section II: Tik Tok use and Addiction Measurements

8. How long has it been since you joined Tik Tok?

Within the last 3 months	3 – 6 months ago	Less than a year	One to two years	2 years and more
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9. To which extent do you agree or disagree on the following reasons to join Tik Tok social media platform?

Reasons	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
To entertain myself					
To learn new things					
To use the app as source of information					
Because it's a new & exciting trendy thing to do now					
To spent my free time with					

10. How often do you browse Tik Tok? (*Instruction; circle the response*)

On every possible free time during a day	Twice a day	At least once a day	4-5 times a week	2-3 times a week
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11. For how long do you use Tik Tok on one time bases?

30min	Less than an hour	Between 1 – 2hrs	Between 2 - 3hrs	More than 3hrs
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12. To what extent would agree or disagree, for some case if you didn't browse Tik Tok during a day?

Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I will get upset that I missed my usual Tik Tok browsing time					
I will make sure to find time on the next day to browse as much as possible to compensate missed date					
I will talk about the topics, contents and videos to compensate what I missed during the day					
I will dedicate a longer time during a week to browse on videos to cover all as much as possible					

It doesn't bother me at all. I can continue couple of days without Tik Tok					
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13. To what extent do you agree or disagree to the following items you consider to follow Tik Tok page?

Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Pages with the dance moves, especially west African dance.					
Pages with the best funniest comedy that make fun of real life					
Pages that post real talks about life, romances and relationship					
Pages that provide me with new information about Ethiopian politics, economy and celebrities					
Pages that provide me with new information or education about art, technology, cooking or any other areas that built my skill set.					

14. List me your top 3 favorite Tik Tokers you follow? And what do you most like about them?

Tik Tokers Name/page	What is most liked about these Tik Tokers
1.	
2.	
3.	

15. Among the listed concepts which do you consider to be very addictive and least addictive contents?

Contents	Highly Addictive	Addictive	Undecided	Less Addictive	Least Addictive
Life advise					
Spiritual advise					
Challenge videos					
Hair and makeup styles					
Clothing style					
Cooking tips					
Comedy and jokes					
Education on Technology					
Making arts					
Hacks					

Section III: Cognitive Dissonance Measuring Questions

16. Which of the following Tik Tok contents do you like?

Characters/ concepts of videos	Strongly liked	Liked	Undecided	Dislike	Strongly dislike
Silly and Funny					
Artistic and tempting videos					
Contents that are trendy and everybody dos					
Dance moves					
Challenge videos					
Sharing honest opinions on any issue					

Share advises on life and relationship					
Hack videos					

17. To what extent do you agree or disagree to follow the listed contents that you consider to be aspiring?

Characters/ concepts of videos	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Silly and Funny					
Artistic and tempting					
Challenge videos and contents that imitates others					
Dance moves					
Challenge videos					
Share honest opinion on any issue					
Share advises on life and relationship					
Hacks videos					

18. Which of the following attitudes or thoughts posted on Tik Tok pages do you consider to be real and fake personality?

Attitudes	Real Personality	Fake Personality
Tik Tokers that tries to be silly and show funny behaviors		
Tik Tokers that are very artistic and showoff every time		
Tik Tokers that are dramatic and like to imitate		
Tik Tokers that dances afro bit melody with clothes on that are culturally sensitive		
Tik Tokers that talks on any subject matter		

19. Which of the following Tik Tok contents do you **try to be like** in your day to day activity?

Characters/ concepts of videos	I try to be like	I don't try to be like
Silly and Funny		
Artistic and tempting		
Challenge videos and contents that imitates others		
Dance moves		
Challenge videos		
Share my mind on any issue		
Do hacks videos		

20. To what extend do you agree or disagree on the following statements one should must do before posting best video on Tik Tok?

Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I have to practice daily and came up with ideas to acquire the necessary skills and post best video					
I need to practice 2 -3 times a week after school to better acquire the necessary skills to produce best content					
I somehow need to practice with friend or by self every weekend to produce best content					
I don't need to practice, I can just imitate and produce the					

video content					
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21. Which of the following undesirable behaviors do you notice on high school student following and browsing Tik Tok videos?

Behaviors observed on high school students	Strongly noticeable	Noticeable	undecided	Less noticeable	Least noticeable
Clothing/Wardrobe style is changed					
Speaking tone is changed					
Attitude towards friends is changed					
Attitude towards teachers is changed					
Academic performance decreased					
Previous believes and thoughts are changed					

22. Among the above listed concepts which do you consider will impact your thought and cause them create a cognitive dissonance? *Cognitive dissonance is he state of having inconsistent thoughts, beliefs, or attitudes, especially as relating to behavioral decisions and attitude change*

Contents	Impact students behavior to have inconsistent thoughts (Rate 5 for strongly agree and 1 to least agree with)				
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Silly and Funny					
Artistic and tempting					
Challenge videos and contents that imitates others					
Dance moves					
Honest real talks on current status an anything					
Hacks videos					

Thank The Respondent And Close The Interview.

ANNEX II: IN-DEPTH INTERVIEW

Study Instrument developed and used to collect data from high School Students for the Qualitative study

In-depth Interview Questions to assess the Addictiveness of Tik Tok Social Media Platform and the Cognitive Dissonance Relationship on High School Students

Greetings My Name is _____, I am enumerator for. Today I am hear on behalf of Eyerusalem Berhanu, who is pursuing her master's degree in social psychology at Addis Ababa University and currently working on her Thesis on the effects of cognitive dissonance on youth's interaction with Tik Tok social media platform.

The purpose of this study is to understand the extent of Tik Tok engagement effects on the high school students that is creating a cognitive dissonance among youth uses. I would like to inform you that this in-depth interview is fully voluntary and that you will not receive any incentive for doing this and that at any time of the interview you can terminate and leave the interview

This interview will take 1 hour of your time.

1. When did you join Tik Tok and tell me what was the journey you have with app so far?
2. What practices and hobbies engagements do you used to have prior to joining Tik Tok platform that now is not a seized?
3. What do you like about Tik Tok?
4. Do you find videos on Tik Tok to be inspiring? If so which type of contents are these and tell me what inspire you from mentioned videos?
5. Do you engage on Tik Tok yourself by posting videos? If not do you want to if so what kind of videos you upload or want?
6. What are new behaviors you notice on yourself or your fiends after Tik Tok use?
7. How do you descript your relationship with app and what are the things you either want to continue doing or let go off?