



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



www.hrmars.com

ISSN: 2222-6990

A Systematic Review on Psychological Factors Influencing Mobile Phone Addiction among Youth in The United States of America

Mohd. Fauzi Fadzil & Akmar Hayati Ahmad Ghazali

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i14/15819> DOI:10.6007/IJARBSS/v12-i14/15819

Received: 13 October 2022, Revised: 17 November 2022, Accepted: 24 November 2022

Published Online: 07 December 2022

In-Text Citation: (Fadzil & Ghazali, 2022)

To Cite this Article: Fadzil, M. F., & Ghazali, A. H. A. (2022). A Systematic Review on Psychological Factors Influencing Mobile Phone Addiction among Youth in The United States of America. *International Journal of Academic Research in Business and Social Sciences*, 12(14), 120–145.

Copyright: © 2022 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Special Issue: Community Development, 2022, Pg. 120 - 145

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at
<http://hrmars.com/index.php/pages/detail/publication-ethics>



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



www.hrmars.com

ISSN: 2222-6990

A Systematic Review on Psychological Factors Influencing Mobile Phone Addiction among Youth in The United States of America

¹Mohd. Fauzi Fadzil & ^{1,2}Akmar Hayati Ahmad Ghazali

¹Institute for Social Science Studies, Universiti Putra Malaysia, ²Faculty of Modern Language and Modern Communication, Universiti Putra Malaysia

Abstract

Mobile phone addiction has become one of the main issues affecting the youth of today especially in the United States of America. There are limited systematic review articles on social perspectives of mobile phone addiction among youth and this gears the present article to analyse the existing literature in a systematic way, focusing on youth in the United States of America. This study is guided by PRISMA Statement (Preferred Reporting Items for Systematic reviews and Meta-Analyses) as it offers several advantages. Based on the systematic review on Scopus and Web of Science, a total of 20 out of 83 related articles were selected. Review of these articles resulted in six main themes, namely entertainment, attachment feeling, media platform, safety, friendly technology and internet. These six themes further produced a total of 13 sub-themes. Future studies are recommended to place their focus on a mixed method approach and try to involve expert on validating themes (analysis) of the study. As a conclusion, it's important for developing country such as Malaysia to study social trends of developing country such as the United States of America because the impact soon or later will be faced by a developing country.

Keywords: Systematic Review, Mobile Phone, Addiction, Youth, United States of America.

Introduction

If we take a walk on any university campus, mall or park today, we can see scenery where some youth using a mobile phone. This a global phenomenon, youth today depend on their mobile phone in every aspect of their life weather it is related to networking, education or sports. It has been reported that three-quarters of the world's inhabitants now have access to a mobile phone (World Bank, 2012). This information shows how important mobile phones have become today. Dependency of youth towards mobile phone can be explained by the benefit of this gadget even though it also provides negative impact.

There have been numerous reports on how mobile phone addiction has badly affected its users. Previous studies have confirmed that such technology gives a negative effect on user behaviour and functioning, also on the mental and physical health of both the individual and the entire society (Lanaj et al., 2014). There is also a study that show associations between intense mobile phone use and mental distress such as depression, anxiety, stress and sleep

disturbances (Lopez-Fernandez et al., 2018). The worst finding found that alcohol consumption may predict problematic mobile phone use which might suggest a possible association between excessive mobile phone use and other addictive disorders (De-Sola et al., 2017). Talking about phone addiction will bring us to negative perception towards this phenomenon, the previous study had proven that phone addiction will bring the individual towards bad condition either physically or mentally. This situation is interesting to focus on, the fact that most of today's studies have highlighted the bad impact of mobile phone can bring to youth but they still unable to avoid the attraction. It has then sparked an interest within the research field in mobile phone addiction in several ways, which systematically reviewing is one of it. Systematic review can be interpreted as an examination of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research and to collect and analyse data from studies that are included in the review (Shaffril, 2018).

This article is guided by the main research questions – what are the factors that influence United States of America youth into addiction towards mobile phones? The main focus of this study was placed on youth addiction rather than hard science related perspective on mobile phones. A special focus was given to United States of America youth because 85% of the youth (aged between 18 to 29) owned a mobile phone (Trub & Barbot, 2016). It has been reported that in 2010, 302.9 million (85%) people living in the United States of America own a mobile phone (Duggan & Rainie, 2012). This number is the reason why only youth from the United States are included in this study, youth who come from other countries are not included.

'Rigorous Search' is method that allows this study to identify gaps and determine new directions for future research of study regarding systematic review. Systematic reviews are rarely found in psychological studies especially studies on mobile phone addiction. The lack of systematic review articles particularly on mobile phone addiction, resulted in the absence of details in the review of databases searched, articles excluded and search terms used on mobile phone addiction. It is important to develop a more systematic review of social perspectives especially on mobile phone addiction as the phenomenon of mobile phone addiction is growing rapidly in the United States of America (Chen, 2004). Researchers have to understand the current pattern of existing studies regarding mobile phone addiction because this pattern allows researchers to develop effective counters that are measured against this problem. Systematic review on mobile phone addiction is important especially in United States of America because this developed country can show the psychological factors that have the potential to influence mobile phone addiction among youth for developed countries.

The main objective of this research is to systematically analyse existing literature focusing on psychological factors influencing United States youth addiction to mobile phones to fill this study gap. The study was divided into four sections. The first section specifies the purposes of developing this systematic review while the second section provides details for the methodology section where PRISMA Statement (Preferred Reporting Items Systematic Reviews and Meta-Analysis) is referenced. The third section systematically reviews and synthesizes scientific literature to identify, select and appraise relevant research on psychological factors influencing United States of America youth addiction to mobile phones.

The final section focuses on discussing potential recommendations for future policy and identifying future research potential.

Methodology

The main focus for this section is a rigorous method of obtaining articles related to psychological factors influencing mobile phone addiction in United States of America youth. PRISMA is a tool that has been utilized to run the systematic review process (identification, screening and eligibility), data abstraction and analysis.

Prisma

PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) is a tool that guides the review of articles for this study. The reason why PRISMA was chosen to guide this study is because PRISMA identifies clear research questions that permits systematic research, it identifies inclusion and exclusion criteria and it attempts to examine a large database of scientific literature in a given time. PRISMA helps this study to make a meticulous search on matters related to psychological factors that influence United States youth addiction to mobile phones. Data from articles taken from a thorough search will then be coded for management review.

Resources

This review relies on one main journal database which is Scopus and the Web of Science. Environmental science, social science, psychology, and biological studies are some of the subject areas included in the Scopus database. There are more than 22,800 journals from 5000 publishers worldwide making Scopus the largest abstract and citation database of peer-reviewed literature. Web of Science is a database with 100 years of academic history, Clarivate Analytics who established it have ranked Web of Science in three separate measures which is citations, papers, and citations per-paper. Web of Science also covers over 256 academic disciplines and consists of more than 33,000 journals.

Eligibility and Exclusion Criteria

The eligibility and exclusion criterion related to the type of literature, language, timeline, countries and regions for this study were determined (Table 1).

Table 1

The Inclusion and Exclusion Criteria

Criterion	Eligibility	Exclusion
Literature type	Journal (research articles)	Journals (systematic review), book series, books, chapters in books, conference proceeding
Language	English	Non-English
Timeline	Between 2007-2018	<2007 and >2018
Countries and regions	United States of America	States other than the United States of America

Systematic Review Process

This study has followed four stages of the process as suggested by Tranel et al (2003) in order to conduct systematic review article writing. The review process of article for Scopus database was conducted on September 3, 2018 (13.20 o'clock), while the Web of Science database review process was performed on July 19, 2018 (13.30 o'clock). Identifying keywords used for the search process is the first phase for the study of systematic review process. Phrases related to mobile phone addiction (as shown in Table 2) have been developed using previous studies and thesaurus.

Table 2

The search string used for the systematic review process

Databases	Keywords used
Scopus	(psycholog* OR emotion* OR intellect* OR mental* OR subjective*) AND ("mobile phone*" OR mobile telephone* OR cellular telephone* OR cellular phone* OR car phone* OR car telephone* OR cell phone* OR cell telephone* OR digital phone* OR digital telephone* OR radiotelephone* OR radiophone*) AND (addict* OR crave* OR dependent* OR enslave* OR fixation* OR hang-up* OR hook* OR inclination* OR jones* OR obsess*) AND (youth* OR teen* OR adolescent* OR bloom* OR boyhood* OR minor* OR childhood* OR girlhood* OR Immature* OR juvenescence* OR puberty* OR young*) AND NOT (medicine OR "medicine subject area")
Web of Science	(TS=((psychology OR emotion* OR intellect* OR mental* OR subjective*) AND (mobile phone* OR mobile telephone* OR cellular telephone* OR cellular phone* OR car phone* OR car telephone* OR cell phone* OR cell telephone* OR digital phone* OR digital telephone* OR radiotelephone* OR radiophone*) AND (addict* OR crave* OR dependent* OR enslave* OR fixation* OR hang-up* OR hook* OR inclination* OR jones* OR obsess*) AND (youth* OR teen* OR adolescent* OR bloom* OR boyhood* OR minority* OR childhood* OR girlhood* OR immature* OR puberty* OR young*)) NOT (medicine OR medicine subject area))) AND DOCUMENT TYPES: (Article)

Article Available After Systematic Review Process

There are 108 articles that have been suggested by Scopus and Web of Science to be included in this study after searching using the search string above. Only 20 articles were selected after passing the systematic review process. The reason why 88 articles were rejected from this study is because 25 of them do not have the criteria needed by this study which is the type of literature, language, timeline and country/ region. This study only focuses on research articles (systematic review journals, book series, books, chapters in books and conference proceeding will be excluded) that use English language. Published articles must be between 2007 and 2018, the article must focus on the phenomenon of mobile phone addiction that occurs in the United States of America. Another 39 other articles were rejected because they could not be retrieved from Scopus and Web of Science databases. Researchers tried to get the article by e-mailing the writer of the article and searching for it using Open Access and Universiti Putra Malaysia subscription database, but the article has not yet been retrieved. Another 24 other articles were excluded because after the researcher read the details of the article, researchers found that the article did not focus on the discourse regarding mobile phone addiction.

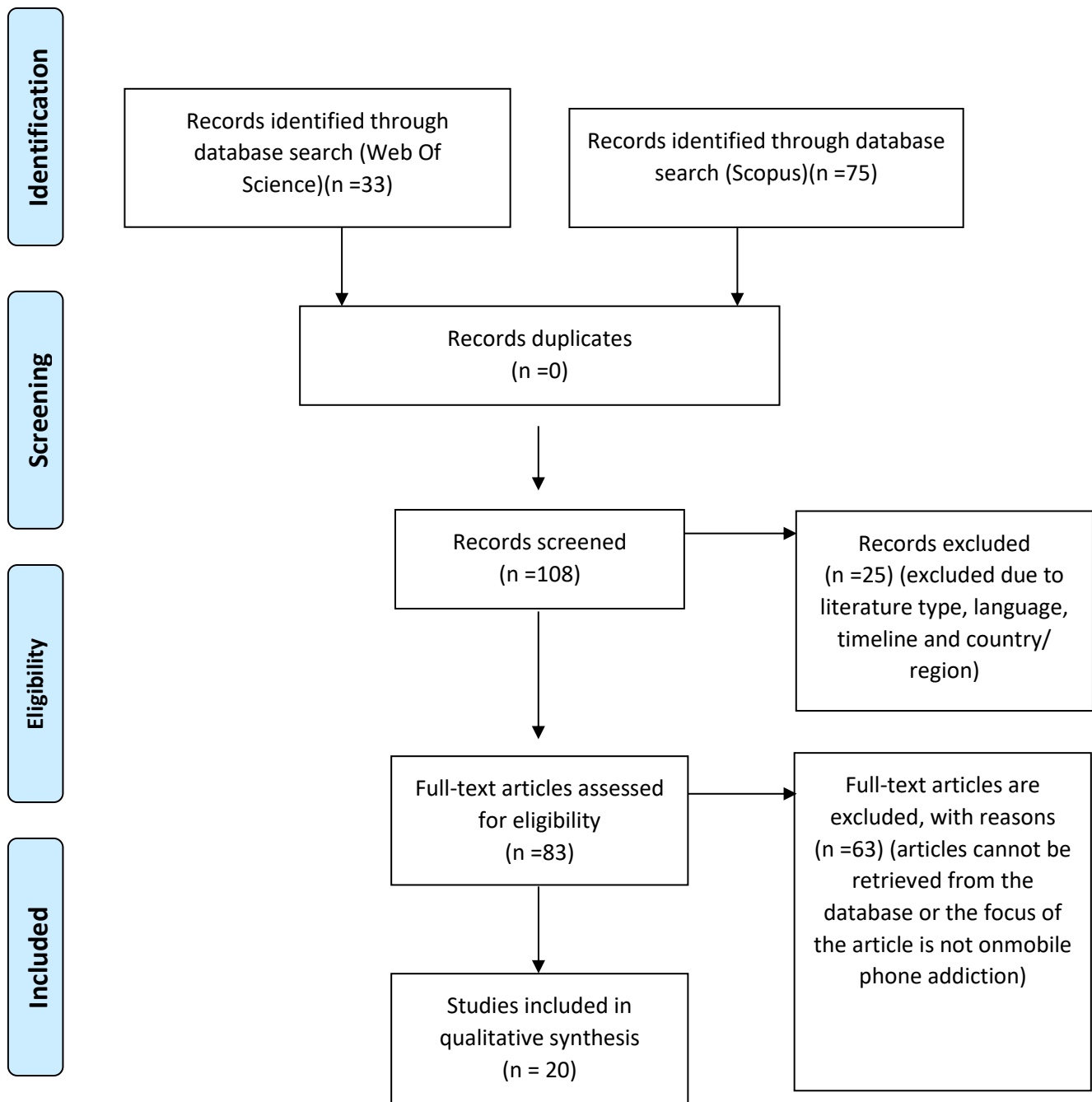


Figure 1: The flow diagram of the study (adapted from Moher et al. 2009).

Data Abstraction and Analysis

After the systematic review process, only 20 articles were selected, the articles were then assessed and analysed using formulated questions for this study. In the screening phased, 25 articles were excluded because they did not have the features required by this study such as literature type, language, timeline and country/ tregion. In the eligibility phased, 39 articles were excluded because the full text of this article could not be found by the researcher either in Scopus, Web of Science, Open Access or subscribed database of Universiti Putra Malaysia. Another 24 article were excluded because the discourse did not focused on mobile phone addiction. Data from the selected articles is extracted, key themes based on the selected article is developed using content analysis. To make the analysing process smoother, the

abstract is first examined before the full (in-depth) article is analysed so that appropriate themes and categories can be considered. Coding categories based on themes from selected article were developed for this study, the theme were established based on typology.

Result

This study manage to find six main themes and 13 sub-themes related to the factors influencing mobile phone addiction from 20 articles that have been selected. Entertainment (three sub-themes), attachment feeling (two sub-themes), media platform (two sub-themes), safety (two sub-themes), friendly technology (two sub-themes) and internet (two sub-themes) are the six main themes for this study. The results can be referred in Table 3 and 4. The results provide a comprehensive analysis of the current factors influencing mobile phone addiction among youth in United States of America.

All articles selected in this study focus on discussion among youth in the United States of America, but there are different methods used by each article to determine the factors that influence mobile phone addiction among youth in the United States of America. This study found that out of 20 articles that were selected, a total of 16 articles applied a quantitative approach while the remaining four articles focused on a qualitative approach. There are no identifiable articles that use a mix method approach. There is one article published every year in 2007, 2011, 2013, 2017 and 2018. In 2009, 2015 and 2016, there are two articles published in each year. Three articles were published in 2010, 2012 and 2014 each year.

Table 3
The Findings

ENTERTAINMENT	ATTACHMENT FEELING	MEDIA PLATFORM	SAFETY	FRIENDLY TECHNOLOGY	INTERNET
VM = Video And Music PC = Picture OG = On-line Game	BR = Burden CC = Connectedness	SM = Social Media ME = Media Electronic	SC = Security PH = Phonebook	VB = Voice Based SS = Screen Size	IP = Information Platform IE = Information Exchange

Table 4
The Findings

AUTHORS	STUDY DESIGN	ENTERTAINMENT			ATTACHMENT FEELING		MEDIA PLATFORM		SAFETY		FRIENDLY TECHNOLOGY		INTERNET	
		VM	PC	OG	BR	CC	SM	ME	SC	PH	VB	SS	IP	IE
Hussain et al (2015)	QN			√										
Elhai et al (2016)	QN				√									
Trub & Barbot (2016)	QN				√				√					
Kruger & Djerf (2017)	QN					√								
Harbluk et al (2007)	QL										√			

Waite et al (2018)	QN							√						
Chen & Katz (2009)	QL					√		√		√				
Ledbetter et al (2011)	QN					√	√							
Clayson & Haley (2012)	QN							√						
Chen (2013)	QN						√	√						√
Lam (2012)	QN					√		√						
Chan-Olmsted et al (2012)	QN										√		√	
Cotten et al (2009)	QN	√	√	√				√		√				
Baron & Segerstad (2010)	QN	√						√	√					
Yang et al (2014)	QL		√			√	√							
Hall et al (2014)	QN						√	√						
Lepp et al (2015)	QN			√		√	√						√	
Chayko (2014)	QL					√	√							
Jin & Park (2010)	QN					√		√						
Campbell & Kwak (2010)	QN							√						√

Potential Psychological Factors Influencing Mobile Phone Addiction in The United States of America

This section concentrates on the main potential psychological factors influencing mobile phone addiction among youth in United States of America such as entertainment, attachment feeling, media platform, safety, friendly technology and the internet.

Entertainment

A total of five out of 20 articles focused on entertainment regarding the factors that influence mobile phone addiction among youth in United States of America. The most common entertainment factors that lead to mobile phone addiction are video and music which found in two articles, the second entertainment factor picture found in two articles and the last entertainment factors is on-line game is found in three articles (Table 4).

Video and Music

Cotten et al (2009) articles indicated several interesting point about mobile phone addiction among youth in the United States of America regarding video and music, data from his articles show that male youth have a higher tendency to use mobile phones to listen to music or share videos. Data from the article also claims that video sharing and listening to music moved from

a non-significant female advantages to a statistically significant male advantages. It is also interesting to note that among ethnicity of youth in the United States of America, video sharing is higher among Asians.

Baron & Segerstad (2010) mentioned that multipurpose functions gadgets such as mobile phone still predominated among youth in United States Of America. This situation is supported by the proliferation of internet-friendly smart phones, multipurpose devices such as mobile phone providing everything that youths need for entertainment such as music. This attributes makes youth addicted to mobile phones which gives them a lot of pleasure that they are need.

Picture

Pictures are one of the four factors of entertainment that lead to mobile phone addiction among youth in United States of America. One of the two articles that discussed about picture in this study suggesting that mobile phone photo feature allows users to carefully craft the image they would like to present to their partners, which can be especially crucial in determining whether the relationship could be maintained and advanced. Evaluation and judgment of partners through mobile phone pictures are really important for youth, this is why youth always used mobile phones to take valuable moment or nice pictures so that they can attract the attention of their partner (Yang et al., 2013). Youth need to always be ready to take picture in any moment, this situation make youth inseparable from their mobile phone. An article from Cotten et al (2009) provide another interesting data where picture sharing shifts from a non-significant female advantages to a statistically significant male advantages. The article also claims that picture taking and sharing are higher among Asian youth in the United States of America.

On-line Game

Lepp et al (2015) in his article suggests that youth in the United States of America consider mobile phones primarily as a leisure device and most often use mobile phones to play games. If mobile phone utilized for leisure rather than education then it may disrupt learning within academic settings, it has been reported that online gaming is associated with lower levels of academic performance.

Another article by Cotton et al (2009) suggest that youth male in the United States of America are more likely to use functions such as games from mobile phones. This situation can be seen from early age where boys tend to interact with technology as toys mainly because many phones include digital games. Game playing among youth in United States of America are higher among African Americans.

Hussain et al (2015) in his article suggest that Massively Multiplayer Online Role-Playing Games (MMORPGs) is a mobile game used by millions of youth worldwide, this games provides an intense experience of immersion and can be extremely time consuming. This article claims that a strong motivator for on-line gaming among youth in the United States of America are the psychological need for relatedness and autonomy and competency features. High urgency is a problematic use of on-line games, urgency has been linked to drug abuse, pathological gambling, problematic mobile phone use and alcohol abuse problem. Youth who are highly social and competitive with on-line gaming have a high risk of addiction, social

interaction and competition are among the triggers of addiction. Using on-line games enjoyment motivations will be created which allows youth to explore the virtual world, get to know other players and chat with other players. Addiction to online games can also lead to an aggressive, anti-social and non-curious elements.

Attachment Feeling

A total of 10 out of 20 articles focused on feeling of attachment to the factors that influence mobile phone addiction among youth in the United States of America. There are only two sub-themes related to attachment feeling factor that lead to mobile phone addiction which is burden that found in two articles and connectedness that found in eight articles (Table 4).

Burden

One of attachment feeling sub-theme which leads youth in United States of America towards mobile phone addiction is burden. Sub-themes in this study were discussed by Elhai et al (2016), it has been suggested that nearly half of Americans reported that they “couldn’t live without” their smartphones especially among youth. Vibrations of mobile phones despite an absence of incoming phone notifications are reported to give a psychological burden to the youth, the vibration make youth lost focus towards other thing. This article also highlights the problematic relationships between mobile phone and the severity of general stress, self-esteem, depression and anxiety symptoms. In worst case scenario, reactions from mobile phone such as texts, calls or vibrations can result in psychopathology. The burden of mobile phones among youth also comes from the pleasure derived from tactile sensations in holding the phone and the autotelic touch required in completing tasks with fingers. Activities that first started as a pleasure will end as a burden when youth start to get addicted to that pleasure, the mind of the youth after that will be haunted with feeling of “Need for touch”.

Another article in this study which discusses about feelings of attachment is Trub & Barbot (2016), this article claims that the increasing continuous connection of people to devices comes feelings of stress and social overload. This situation often seen among youth in United States as they engage in romantic relationships where more intimate forms of interaction are needed to maintain it. This type of youth relationships are more likely to experience poorer relationship satisfaction and depression. The sophistication of mobile phones is also reported in this article triggering paradoxical experiences in individuals including enslavement, dependence and the creation of needs. This experience can also be defined as a burden in this study. This feeling of burden arises upon separation from the mobile phone and feeling that the presence of mobile phones reduce the ability to be present or enjoy a given moment.

Connectedness

Connectedness is one of two sub-themes for attachment feelings which influence mobile phone addiction among youth in the United States of America. One of the eight articles in this study which discusses about connectedness is Yang et al (2014), this article claims that as the relationship progress Individuals desired more personal interaction with each other. So that they would actually ‘know’ the person instead of just ‘knowing of’ him or her, this is where mobile phone came as a medium with instantaneousness stood out. Mobile phones support instant response so that individuals can have real-time conversations, but users can also delay their replies without social sanction. The instantaneousness and real-time conversations give

the feeling of connectedness to youth in their relationship, this experience makes them addicted to mobile phones in their relationship with others.

Another article in this study that discusses about connectedness is Lepp et al (2015), this article suggests that mobile phones allow youth to access a variety of electronic media at almost any time and any place to call or send messages. Mobile phone creates a temptation to contact friends or engage with any number of mobile phone based leisure activities, which some youth fail to resist when they should focus on academics. The negative relationship between mobile phone use and academic performance identified in this articles could be attributed to youth lack of attention while studying or a diminished amount of time dedicated to uninterrupted studying. Mobile phone are sometimes found occasionally distracts youth either in libraries, dormitories or in any other setting utilized by youths for academic purposes. This situation shows that mobile phone usage among youth in academic field encourages multitasking. The temptation to contact friends engage with any number of mobile phone based leisure activities which some youth fail to resist make them addicted to mobile phone. Multitasking using the phone in academic activities make connectedness of youth with their friends become closer.

Chayko (2014) also discusses about connectedness in this study, the article claims that mobile phones provide the means for contact to be available for youth nearly all of the time. Although youth may not be able to contact a certain person in a particular community at will, but usually someone in at least one of their social circles can be contacted almost at any time of the day or night. Always “open” and always “on,” mobile phone and the community can provide youth with a deep-seated sense of connectedness. Feeling “plugged in” to a unit larger than oneself and of being super-connected. This feeling can become such a relied-upon aspect of techno-social life that major stress and anxiety can occur when youth become disconnected, even temporarily. It will bring a sense of being overwhelmed and “fear of missing out”. The feeling then leads youth to become addicted to mobile phone.

Another article written by Jin & Park (2010) also discusses connectedness, this articles suggests mobile phones provide youths with various needs such as companionship, closeness and care. Given youth an innate desire to relate to other people. Loneliness and belonging will also influence youth tendency to use mobile phones, every youth needs to have social relations. This desire leads youth to initiate and maintain relationships. Youth communicate through mobile phones to exchange feelings of caring and connection. This article proves that youth enjoy calling and texting as a way to escape from something distressful and seek some kind of enjoyment. Through this enjoyment, youth become addicted to mobile phones.

Chen & Katz (2009) suggest in their article that youth who are highly dependent on mobile phones will express extreme reluctance to give it up. Mobile phones are often used by youth to connect with their family members and friends, even though mobile phones was originally designed for professional and business purposes. It was also reported that an engagement with a mobile phone disconnected youth from physical connections and activities occurring around them. The concept of “absent presence” is introduced in this article, a situation in which people are psychologically present in a place but also absent at the same time. By using mobile phones, youth will create their own private space in public by avoiding the gaze of others and avoiding interaction. The reason why youth do this is because they want to deter

people from approaching them physically. Youth in the United States of America sometimes do not like to connect with their surrounding so they use mobile phones to create barriers between them and their surroundings, eventually this situation exist frequently which make them frequently doing the same thing which in the end making them addicted to mobile phone. In this situation, it is reported that male youth will called their mothers and female youth will called their parents. Data show that youth relationships with their parents is better because of this situation.

Another article by Kruger & Djerf (2017) claims that “phantom ringing,” “phantom vibrations,” “ringxiety,” “vibranxiety” and “FauxCellArm,” are factors that leads to mobile phone addiction among youth in the United States of America. This phenomenon is considered hallucination as the mind perceives a sensation that has no physical basis. This also creates dependence/addiction on mobile phone communication. Youth who check for text messages more often and are more anxious when they do not receive an immediate reply are more bothered by phantom vibrations. Female youth with lower conscientiousness and emotional stability have higher symptoms of phantom vibrations according to this article, which makes them more addicted to mobile phones.

Ledbetter et al (2011) in this study suggested that mobile phones raise concerns about deleterious effects on the quality of interpersonal relationships. This article claims that social anxiety in offline settings, fostering patterns of online interpersonal communication that produce deleterious psychosocial and relational outcomes have become a motivation among youth in the United States of America to use mobile phones. Communication using mobile phones creates significant indirect effects on relational closeness, it also positively predicted relational closeness even while controlling the contribution of offline communication. The closeness created by mobile phones is a factor that makes youth become addicted to it.

The last article that discusses about connectedness as a factors influencing mobile phone addiction among youth in the United States of America is Lam (2012), this article suggests that mobile phones manage to build and maintain a relationship. Youth are reported to have higher level of connectedness when using mobile phones as medium of communication compared to others due to the immediacy, perpetual contact, and near conversational nature. Mobile phones may allow youth to be more honest and truthful compared to other communication platforms, youths who frequently use mobile phones are reported to be experiencing increased feelings of social connectedness especially between couples involved in romantic relationships. Mobile phones are often used as a tool to express affection and stay in touch. Youth who are socially single and anxious usually take advantage of the social functionality of mobile phone to enrich their personal relationships. The connectedness can also be enhanced when mobile phones are used for other team-building activities, it is useful in speeding up the process of building social networks because it inherently forms intimacy warmth between the youth. This feeling will then leads youth to become addicted towards mobile phones.

Media Platform

A total of 15 out of 20 articles stated that media platforms are a contributing factor influencing mobile phone addiction among youth in the United States of America. There are two sub-themes found under the media platform factor, which is social media and electronic

media. A total of six articles were found discussing social media as a sub-theme of the media platform and 11 articles discussing media electronic (Table 4).

Social Media

Social media is one of the two factors of the media platform that leads to mobile phone addiction among youth in the United States of America. One of the six articles that discussing social media in this study shows that social media builds connections in social networks, those who use online communication are more likely to communicate with their friends using social media (Ledbetter et al., 2011). Social media also claimed to be the best dyadic relationships platforms because it allows users especially youths to connect with their friends with limitation to the number of participants. This situation keep youth addicted to mobile phones as they can control the confidentiality of their conversations.

Other articles discussing social media in this study claim that online communication using social media do not harm sociability and often increase network size and diversity (Chen, 2013). This article shows that frequent use of the internet and online communication using mobile phones is associated with a larger core discussion network and a more extensive position-generated network. Therefore, this is why youths are more likely to be addicted to mobile phones. By using this gadget they are able to maintain a strong network core and a more extensive position generated network.

An article by Yang et al (2014) found that social media among youth in the United States of America usually starts via Facebook, then switches to IM and as the relationship gets closer it will proceed to cell phones. Youths' major concern was to minimize awkwardness by avoiding direct interaction, this is why social media is the best platform because youth can communicate indirectly via cyberspace and at the same time allow them to maintain a distance. Social media has the ability to enable youth gain knowledge about new people, youth could bypass the problems associated with direct interrogation and still obtain abundant information about the profile owner. 'Lurking' using social media allows youth in the United States of America to get information gleaned so that they can facilitate subsequent conversations with an acquaintance. This is the fastest yet easiest way for youth to make new friends or to get popular around their circles, this is why youths cannot stop themselves from get addicted to mobile phones.

Hall et al (2014) also discuss social media in this study, in the article the concept of cross-talk has been highlighted. This concept helps youth to get social comfort when they face society. This article claims that youth in the United States of America usually abandons the others to engage with third parties through mobile communications. Youth feel more comfortable communicating with their cyber space friends rather than real person, they feel entitled to more attention than anyone who calls or sends a text. This makes youth in the United States of America addicted to mobile phones.

Lepp et al (2015) in claimed that social media give a negative relationship to academic performance among youth in the United States of America. Youth who are addicted to social media have lower self-reported GPAs and spend fewer hours per week studying. The articles claims that similar negative relationships have been found in populations around the world including North America, Europe and Asia. The article found that social media activities are

practised among youth in the United States of America via mobile phones viand not through computers, youth also founded multitasking (surfing social media) in everything that they are involved (including studying). This situation makes youth always on social media and makes them addicted to mobile phones.

Chayko (2014) suggests that online grouping, which can also be referred to as an online community, is the reason why youth in the United States of America are addicted to mobile phones. Experienced as a community can be easily adopted using social media. This platform can give social support, social capital and resources which permitting the emergence of relationships, community and group culture. There are 89% of youth (18–29 years old) in the United States of America who are regularly engage in social media, this shows that online communities can be formed nearly anytime and anywhere which makes them addicted mobile phones.

Media Electronic

One of two sub-theme for the electronic media platform, this sub-theme has been discussed by 10 articles in this study. One of the articles is Hall et al (2014), this article claims that youths tend to take a call on a mobile phones while in conversation with another person. The ringing of mobile phone is a disturbance for youth, possessing a mobile phone is a constant reminder of impending distraction for them in reality. While using a mobile phone, youth can be physically present but yet psychologically distant. Phones create a barrier for youth with reality, youth cannot refrain themselves from using mobile phones to communicate with others when it rings, this makes them addicted to mobile phones.

Another article in this study that discusses electronic media is Cotten et al (2009), this article claims that female youth use mobile phones for two reasons which are fashion and communication. Among female youth, the use of mobile phone is for visiting and frivolous uses which makes female youth tend to use mobile phones for social calls. This is why mobile phones are considered a feminine technology, used more for casual communication. Male youth tend to use mobile phones for formal communication (education and business), this trend is higher among Hispanics youth in the United States of America. Youth in the United States of America according to this articles use mobile phones for communication (either formally or informally), this function than leads to mobile phone addiction among youth in the United States of America.

Baron & Segerstad (2010) also discuss electronic media as a factor that influencing mobile phone addiction among youth in the United States of America. This article reports that youth in the United States of America make seven voice calls for every three text messages. The average number of text messages they send daily by youth is between three and six, a phenomenon that has been rocketing since 2005. It is also reported that American youth send or receive more text messages than voice calls on mobile phones. This situation happens because of affordability, actually youth in the United States of America can call or text for free at nights and on weekends (depending on their TELCO). This affordability than causing the youth in the United States of America to become addicted to mobile phones.

An article by Chen (2013) also discusses electronic media as factor influencing mobile phone addiction among youth in the United States of America. This articles recommends that the

use of mobile phones decreased visible sociability, but at the same time increase the size and diversity of the network. Mobile phones have the ability to develop connections among heterogeneous youth. This connection is called name generator or the position-generated. Exposure to various contacts from mobile phones brings fresh information and perspectives to youths, which helps them to develop cognitive flexibility and cultural capital. This article concludes that mobile phones may harm weak ties when people are too encapsulated by the intensified social interactions with their existing strong ties. This means that when youths are so focused on the friends they have on their mobile phones (which are really closed to them), they tend to create barriers with the new people that they meet on reality. The strong ties that youth have with their friends on mobile phones make them addicted towards that device.

There is also an article by Campbell & Kwak (2010) which discusses electronic media, this article shows that mobile phones fosters engagement in civic life. Mobile phones creates new affordances for people to connect and be informed. It also creates embodiment of personalization because it tends to involve contact with others who are known by fixed and identifiable account numbers especially in recreational context. This situation fosters more accountability and pro-social behaviour than anonymous online interactions, leading to increased trust in others and civic-mindedness. This form of use may be a distinctively private activity with limited implications for civic life. The platform to get to know other people (even strangers) provided through mobile phones makes youth addicted to this device, the opportunity to create new relationship is wide open and across ethnic, geography and status.

Jin & Park (2010) also discuss the same sub-theme of electronic media, this article claims that mobile phones are one of the most pervasive modes of interpersonal communication particularly for youth in the United States of America. Youth can bring a mobile phone as they get ready to communicate with others, perpetual contact is the motive for youth to use a mobile phone. This article also claims that youth personal relationships will play a role in the use of their mobile phones. Apart from that, mobile phones play a role in making appointments among youth. Immediate access regardless of time and location as well as eliminating the need to find a landline phone is another reason for youth to use a mobile phone. It is clear that the mobility and immediate accessibility that been highlighted by this article makes youth in the United States of America addicted to mobile phones, they can make phone calls in any situation or time.

Chen & Katz (2009) suggest that networking is the major reason on why youth depend on mobile phones. This articles claims that the mobile phones provide a direct and private channel of communication between parents and youth and between youth and close friends. Youth are cared for by their parents with “mobile parenting” using mobile phones, parents often communicate directly with their children through mobile phones to give advice or opinions. Voice contacts which have the capacity to articulate personal emotions are the reason youth tend to used mobile phones to communicate with thier parents. Easily with direct contact youth can speaks with thier parent when they have problems, this frequently happens among female youth compared to male youth. Emotions through mobile phone communication are a factor that makes youth addicted to mobile phones, they can be closed to their loved ones (parents) even when they are far away.

Lam (2012) suggested that mobile phones can construct a message or response without the multiple distractions of real-time social interaction. Youth use the medium conversationally

to make it more functional in real time, it will be used for informal messages such as scheduling leisure activities with friends. Mobile phones are also important for health messages to depressed youth. This will allow for constant connection and conversational, quasi-synchronous communication. This is the reason why youth become addicted to mobile phones according to this article, mobile phones allow youth to communicate as in real life situations.

Waite et al. (2018) claim that youth use mobile phones because they provide opportunities for both in-task elaboration and off-task multitasking. Mobile phones give youth the ability to seek additional information on topics during class, but on the other hand it is reported that amount of texting via mobile phone during class is negatively related to self-report of sustained attention and cognitive learning (students with greater self-regulation were less likely to text during class). Youth who text on a mobile phone during a class presentations have significantly lower scores on multiple choice tests that assess facts and knowledge. This shows that youth can control themselves from texting when they using mobile phones, it is the addiction that makes them unable to stop sending messages even in the classroom.

Clayson & Haley (2012) suggest that mobile phone texting has become so intimately associated with youth that they simply text irrespective of circumstances and rules. Youth like mobile phone texting because it offer unparalleled freedom to communicate on their own terms, regardless of place and time. The concept of Janus-faced technology” is discussed in this article which means that youths have perceived social necessity of always being available to communicate. This type of youth is also known as “hyptertexter”, they are reported to have an average of 120 texts or more, per day, during school day. This article also found that almost all youth (94%) in this article reported receiving text messages while in class during the term, and 86% said they had send texts from class. The reason why this happens is because the desire to communicate followed by concern about someone and boredom with the class. Youth surrounding also become a factor that makes them addicted to mobile phones, boredom with surrounding make youth try to find enjoyment with other friends with mobile phone communication.

Safety

A total of four out of 20 articles state that safety is a contributing factor influencing mobile phone addiction among youth in the United States of America. There are two sub-themes been found under safety factors which is security and phonebook. A total of two articles were found discussing security as a sub-theme of safety and two articles discussing about phone books (Table 4).

Security

Security is one of two sub-themes for safety as factor influencing mobile phone addiction among youth in the United States of America. One of the article discussing about security is (Baron & Segerstad, 2010). This article claims that youth in the United States of America feel safer when having mobile phone with them in certain situations such as long distance driving long. Mobile phones can provide a sense of security for them in that situation. Mobile phone have been choose by youth as comforting gadget because of mobility and dependency of mobile phones. Youth are inexperienced person, they feel uncomfortable when in unfamiliar environment, but certain mobile phone functions make youth feel connected to their normal

world. Using phone youth can contact people and can be reached anywhere. This function although are not used in unfamiliar environment, gives a sense of security feeling to the youth in the United States of America.

Another article discussing security is Trub & Barbot (2016), this article claims that mobile phones give bond of connection between youth and caregivers. This bond is a factor that provides sense of security among the youth. Caregiver is a secure base which provide safety to youth, mobile phone which connects them makes youth always have a sense of security. Sometimes mobile phones can give the security feeling without caregiver towards youth, this article said that inanimate objects can similarly be used as a secure base. Youth with depression are found to use certain objects to obtain a sense of security when they fail to develop secure attachment to the parent. Mobile phones are one of the inanimate objects that can provide a sense of security among youth in the United States of America. Mobile phones that provide a sense of security have made youth become refuge, youth will heightened their feelings of safety when they use their phone and feel anxious or discomfort upon separation from mobile phones. This refuge condition make youth become addicted to mobile phones.

Phonebook

There are two articles in this study that discuss the phonebook as a sub-theme of security in influencing mobile phone addiction among youth in the United States of America. Cotton et al (2009) is one which suggested that youth females are reported to have more use of the mobile phone as a phone books. The reason this situation happens because youth females have more tendency to feel insecure in certain situations. Mobile phones that contain information about the social circle of female youth can help them reached to others when they feel insecure. Safety and accessibility are found as to why mobile phones are adopted as communication technology by youth (Chen & Katz, 2009). Mobile phones which have the telephone number of important people for youth can easily be used when youth feel unsafe, it has been reported that female youth call their parents while they were walking alone on streets late at night or while they take a taxi alone. In situation where female youth panic, it is not easy for them to remember the phone numbers of important people at that time. Mobile phones can easily help them in such situations and this is the reason why youth carry mobile phones consistently especially when they go to certain places. This situation makes them addicted to mobile phones in the eyes of others.

Friendly Technology

A total of two out of 20 articles focus on friendly technology regarding the factors influencing mobile phone addiction among youth in the United States of America. There are two sub-themes found in this study regarding friendly technology factors which are voice based and screen size (Table 4).

Voice Based

Voice based is one of the friendly technology factors that leads to mobile phone addiction among youth in the United States of America. An article found in this study that discusses voice based is highlighting the user friendly characteristic of a mobile phone such as voice-based technologies, technology multiplicity and specific devices that contribute in mobile phone addiction among youth in the United States of America. A study by Harbluk et al (2007)

show that hands-free and voice-based technology is often used as a solution to the problem of distraction in vehicle devices. This technology provided by mobile phones helps youth to use their devices even while they are driving, this situation contributes to the higher dependence of mobile phone among youth in the United States of America.

Screen Size

Another article by Chan-Olmsted et al (2012) show that technology attributes involving the device itself such as screen size and viewing quality also contribute to mobile phone addiction among youth in the United States of America. Technology attributes become a catalyst to customization, immediacy and multiplicity. Customization has been discussed from the perspective of interactivity and personalization. Immediacy is discussed from the perspective of news consumption while multiplicity is discussed from multimedia, links and search ability formats perspective. Screen size and viewing quality caused more convenience experience of mobile phone usage among youth, this experience then contributes to mobile phone addiction among youth in the United States of America.

Internet

Four out of 20 articles state that the internet is a contributing factor influencing mobile phone addiction among youth in the United States of America. There are two sub-themes found under safety factors which is information platform and information exchange. A total of two articles were found discussing information platforms as internet sub-themes and two articles discussing information exchange (Table 4).

Information Platform

An article by Lepp et al (2015) suggested that mobile phones provide youth in the United States of America with immediate and portable access to many of the same education-enhancing capabilities such as online information retrieval, file sharing and interacting with professors and fellow students. The article claims that among heavy youth internet users, information seeking is associated with better academic performance. Youth also assessing time with information search and use of educational software via mobile phones. This situation makes youth always on the internet via their mobile phones to get access to information, sometime they get carried away and become addicted towards their mobile phones.

Another article discussing mobile phone addiction among youth in the United States of America under the information platform sub-theme is Chan-Olmsted et al (2012), this article suggests that youth are more likely to follow the news frequently, use multiple news platforms/sources, seek practical utilities from news information, value portal news sites, share content with others and be receptive to advertising campaigns via mobile phone. This articles claims that mobile news is preferred by youth because it provides news content, such as current events, weather, sports and business/finance. "On-the-go" youth are more likely to access more news platforms and use multiple online news sites via mobile phones. Mobile news give youth freedom to access news without the limitation of space or time. This characteristic makes youth addicted to their mobile phones when they can access to the latest news in every situation.

Information Exchange

Another sub-theme for the internet is information exchange, in this study there are two articles discussing about this sub-theme. One of the article is Chen (2013), this article suggests that frequent used of the internet are associated with having a larger number of friends, colleagues and kin. This means that the internet has been used among these people for the exchanged of information (weather in the form of photos or instant messages) which associated to the size and the diversity of Americans internet platform. Strong ties generated by internet platforms can influence the opinions of youth. The internet can help facilitate the transfer of fine-grained information, tacit knowledge and valuable resources that encourage collaboration and enhance social control. Other than that, the internet via mobile phones reviled the depth and breadth of information about one's network contacts shared on social networking sites. All information exchange activities between youths via internet platform according to Chen (2013) will develop a strong ties between them which in the end makes them know each other more deeply. This strong ties are the factor that makes youth addicted to the internet via their mobile phones.

Another article that discusses the exchange of information as a sub-theme of the internet as a contributing factor that influences mobile phone addiction among youth in the United States of America is Campbell & Kwak (2010). This article claims that mobile phones to discuss and exchange opinions on issues was significantly and positively related to participation measures. This situation than leads to a positive relationship between information exchange with civic and political involvement. This articles than highlighted the number of social affordances of the mobile phones/ internet that support attachment to others and their communities. These affordances include multiple channels for interaction, data exchange, global connectivity, personalization and wireless portability. This article also claims that increased skills in exchanging information through the mobile phones contributes to increased opportunity and engagement in society. Youth usually use mobile phones to obtain and share content pertaining to hobbies, personal interests and pleasures. This type of activity involves exchanges with others who share similar interests and resonates with social capital benefits of informational and communicative media use. These activities than make youth addicted to mobile phones because the same interest that they share with their friends over the internet.

Discussion

This study attempts to analyse the existing literature in a systematic way, focusing on the psychological factors which influence mobile phone addiction among youth in the United States of America. This study is important because it can help academics to understand mobile phone addiction among the youth which today have become a mental disease, by using the result of this study then the possibility of improving mobile phone addiction among youth can be seized. A rigorous review on the SCOPUS database and the Web of Science has resulted in 20 articles related to mobile phone addiction among youth in the United States of America. A total of six themes and 13 sub-themes have emerged in this study, this situation shows that diverse factors influence mobile phone addiction among youth in the United States of America. Entertainment, attachment feeling, media platforms, safety, friendly technology and the internet are the six main factors influencing youth against mobile phone addiction in the United States of America.

Mobile phone addiction is getting worse today, several studies prove that this situation has been growing since 2000. Starting in year 2004 the mobile phone usage trend among youth in the United States of America has been detected, however it is still sparse (Davie et al., 2004). Data show around year 2005 there were 33% of the United States of America youth aged 12–17 years had used the mobile phone for text messaging (Lenhart et al., 2005). Data in the year of 2006 claimed that 26% of American mobile phone users could not live without a mobile phone (Rainie, 2006). Around 2007 there were 93% of United States of American youth aged 12–17 who used mobile phones for internet surfing (Lenhart, 2007). Data in year 2008 showed that texting increased in America by 450% especially among women who wrote longer and more complex messages (Drouin, 2011). It was also reported in year 2010 where 90% of 18-19 year olds even sleep with their mobile phone (Rosman, 2010). This situation can also be seen to grow rapidly when in year 2011 there were 64% of the United States of America citizens owned smartphone (Pew Research Center, 2015), and from this data 85% of youth aged 18-19 share the same portion (Nielsen, 2014). As for the data in year 2015 suggests that 72% youth in the United States of America describe mobile phones as connecting, where the loss of mobile phones associated with feelings of anxiety about disconnection and to be out of touch with people (Pew Research Center, 2015). Recent study in year 2016, showed that in the United States of America there were over 395 million active wireless devices including mobile phones that send over 1.66 trillion texts and over 277 billion multimedia messages annually (CTIA, 2017).

Before talking about mobile phone addiction among youth in the United States of America, first the meaning of addiction must be understood. According to Hussain et al (2015), addiction is a repetitive habit pattern that increases the risk of disease and/or associated personal and social problems. Addictive behaviours are often experienced subjectively as ‘loss of control’. In this study, mobile addiction can be understood as a behaviour in which youths in the United States of America lose control over usage of mobile phones. They cannot control themselves without a mobile phone by their side, they become emotionally and physically unstable when they don’t have their mobile phone.

Youth in the United States of America use mobile phone for entertainment purposes, specifically to share video, music and photos in addition to online games. It has become a trend where youth consistently sharing their everyday routine in the form of videos, music and picture via mobile phone. Using youth mobile phone, any picture or video can be made instantly. Youth also share music that related to their live to express their feelings. The mood of the music shared can determines the youth feeling whether they are happy, sad or angry. By sharing videos, music and pictures then youth can get attention from their social circle. The response from their social circle to videos, music and pictures will determine the popularity of that youth. It has been reported by Pew Research Center (2018) that youth in the United States of America within the age of 13-17 say they use Facebook notably lower than the shares who use YouTube, Instagram or Snapchat. This application provides function for youth to share their video, music and picture via mobile phone. This is why today terms like insta-famous exist, youth not only gain fame but also money just by sharing their videos, music and pictures via mobile phones. On-line games also offer the same price for mobile phone users among the youth. Winning or scoring top ranked placed in certain on-line game such as Player Unknown’s Battle Grounds, Vainglory and Pokemon Go can make player become famous among on-line gamers community. Sometimes youth can sell their on-line

gaming accounts to buyers who offer good money. It can be understood that fame and money driving youth to become addicted to entertainment (videos, music and pictures) via mobile phones.

Addiction to mobile phones among youths in the United States of America is also related to attachment feeling, this factor can be understood as the emotional attachment that youth felt upon their mobile phones. Attachment feeling towards mobile phone are driven from burden and connectedness feeling, this is a problematic relationship between youth and their mobile phones. When talking about relationship, it will be about emotions and feelings. There is a big hole among youth relationship in the United States of America with their social circle in reality, they can't connect smoothly with people in reality. This is why mobile phones become a replacement for relationship among youth. The connectedness feeling that supposed exist between youth and their social circle in reality is shifted to mobile phones, this gadget isn't a device anymore but it has become object of emotions and feelings. Through the time that been invested upon this relationship (youth and mobile phones), the connectedness feeling become stronger as time goes on. It will come to some point where this relationship becomes a burden for youth. The strong feeling towards mobile phone make youth unable to separate from mobile phones. Not just that, it will not be enough if the mobile phones isn't responding (vibrates with new messages) when youths have mobile phones with them. The silence of mobile phones become a burden in terms of feelings for youth, it will effected youth physically and emotionally. This is where youth lose control, they will consistently check their mobile phone and for some period of time if the phone aren't responding (vibrate with new message) then their emotions will be unstable and their body will show some symptoms such as pain in the neck, shoulders or wrist hands (Choi, 2018).

Media platforms are also a factor that make youth in the United States of America become addicted to mobile phones. There are two functions provided by media platform in this study which are social media (refer to application like Facebook, Twitter and Instagram which can be accessed via mobile phones) and media electronic (refer to phone calls and SMS). The functions provided by mobile phones (social media and media electronic) have make communication between youth and their social circle more flexible. It also helps create new communication between youth in United States and others from all around the globe. Just imagine talking to a friend even while youth is doing business in the toilet, mobile phone manage to break the barriers of time and place for communication. Youth can maintain or create relationship in almost in any situation, this will be really helpful for youth who stay far away from their family or have a romantic relationship. Youth today not only travel to other places for education but also for work and relationships, home sickness syndrome is no longer a problem when youth can always communicate with their social circle in their hometown using social media and electronic media. Youth who are beginning to get involve in romantic relationship are always able to communicate via mobile phones, a new technology provided by mobile phone not only allowed voice communication but also video communication. The flexibility provided by mobile phones allows youth to communicate anytime and anywhere, thus it makes youth addicted to communicate to their social circle because of easy way provided by mobile phone usage.

There are two sub-themes that can be developed in this study under safety factor which is security and phonebook, it has been proven from this study that female youth are more

related to this factor compared to male youth. This is a logical situation to happen for female youth because there are many negative possibilities that can happen to them when they are alone in public places. It has been reported by Federal Bureau of Investigation (2018) that in 2017 there 99 856 rape cases in the United States of America, this number are increasing every year since 1998. Mobile phones can be a tool for female youth safety, it can be used to contact family or friends when female youth feel unsafe. Although for some reasons mobile phone cannot be used to contact family and friends when female youth feel unsafe (weather it caused by unstable Telco lines or Telco coverage which is limited), mobile phones still can be used as phonebook to get family or friends telephone number so it can be used by other telecommunication gadget. Today women travel for leisure as much as men do and they have similar amount of business trips (Junek et al., 2006). This fact shows that how much possibility for negative situation can happen to female youth (rape or sexual abused), this is why they consistently hold to their mobile phones every time they leave their house. This situation can be interpreted as addiction, but it is a necessary addiction for female youth part.

Friendly technology has been identified in this study as a factor that promote mobile phones addiction among youth in the United States of America. There are 2 sub-themes under friendly technology developed in this study which is voice based and screen size. Gadget that are too complicated and hard to handle will not attract youth to use them. That is why new technologies will always do research before launch, this situation can be seen when Apple spend \$223 507 million dollar in 2016 just for research and development purposes (Wuerthele & Owen, 2017). All of this investments are made to ensure that customer especially youths, can get satisfactory experience while using mobile phones. By using this huge research and development fund, the results that been receive for sure are highly positive. Several new technologies such as voice based and screen size can be developed using these funds. This technology purposed is to make effortless experience of mobile phone usage, everything become easier using this new technology especially voice based. Using voice every activities for mobile phone can be control without using any finger movements, youth can spend as much time as they want without feeling tired of handling this technology. Also the proper screen size for mobile phone is continuously introduced in every new production of mobile phones. Research that been done by mobile phone companies precisely measured youth physical so that the size of their mobile phone especially screen size are matching. This effort to give comfortable experience of mobile phone usage make youth in the United States of America become addicted towards this gadget.

The last factor that lead mobile phone addiction among youth in the United States of America is the internet, under this factor there are 2 sub-theme which is information platform and information exchange. The internet has become known today as the easiest platform to again access towards information, as evolving technology has combine the internet and mobile phones. This situation gives an advantage for youth as most of them are in the learning phase, they not only need vast access towards information but they also need it quickly. This need can be provided by mobile phones, as youth in education institution are competing with each other so they need to be fast and knowledgeable. Mobile phones also help youths to exchange information with others, this way they can verify all the information that they gain with people in real world. Youth can exchange information with people from Arab countries for example, this way they can verify the information from media with people all around the world. Having a mobile phone by their side at all times can help youth to be ready to get

information in the fastest time, which is why youth are seen holding their mobile phones whether at school, library or bustop. This situation makes people see youths to be addicted to their mobile phones.

Future Study

There is still much that is not known about mobile phone factors that influencing mobile phone addiction among youth in the United States of America, attention need to be given to certain areas of research. This study found that research about youth mobile phone addiction in the United States of America are quantitative (16) and qualitative (4) in nature, this study failed to find research related to this topic that used a mix method approach. Future studies should consider using a mix method approach. A mixed method approach can offset weaknesses of quantitative and qualitative in certain research context by allowing for both exploration and analysis in the same study. Using this approach then result that produce by future study will have a broader perspective on the overall issue or research problem mobile phone addiction among youth in the United States of America.

This study develops themes and sub-themes solely depending on the researcher, the conformation of the themes and sub-themes from experts in the field is not obtained. There is discourse about expert involvement in validating systematic review study, there are scholars that said it's not necessary for expert involvement and there are scholar that emphasize expert involvement. A study by Tong et al. (2014) said that the absence of expert in research may cause lower confidence in the conclusions of the systematic review even though the study are still valid. It's recommended for future study that related to this topic to involved expert to validate the themes and sub-themes (analysis part).

Conclusion

Most of the result of article selected in this study show the negative effects of mobile phone addiction among youth in the United States of America (although the positive effect can't totally be denied). The effect of social relation is a mind boggling issue that has been raised in this study, if these negative effects are not handled properly today, then the future society of the United States of America is in trouble. As a developed country such as the United States of America, the social development of this country is observed by the world especially developing countries, including Malaysia. The effect of technology such as mobile phones on society in the United States of America is 10 years ahead compared to developing countries, it is important to understand the mobile phone addiction problem among youth in the United States of America and try to suggest a solutions so that in future when this problem start to hit developing countries including Malaysia than we can refer back to studies that have been done in the United States of America. Malaysia which in future will face this problem in a tense state can minimize the impact of mobile phone addiction among youth thanks to such studies.

References

- Baron, N. S., & Segerstad, Y. H. (2010). Cross-cultural Patterns in Mobile-phone Use: Public Space and Reachability in Sweden, the USA and Japan. *New Media & society*, 12(1), 13–34.
- Campbell, S. W., & Kwak, N. (2010). Mobile Communication and Civic Life: Linking Patterns of Use to Civic and Political Engagement. *Journal of Communication*, 60, 536–555.

- Chan-Olmsted, S., Rim, H., & Zerba, A. (2012). Mobile News Adoption among Young Adults: Examining the Roles of Perceptions, News Consumption, and Media Usage. *Journalism & Mass Communication Quarterly*, 90(1), 126–147.
- Chayko, M. (2014). Techno-social Life: The Internet, Digital Technology, and Social Connectedness. *Sociology Compass*, 8(7), 976–991.
- Chen, Y. F. (2004). The Relationship of Mobile Phone Use to Addiction And Depression Amongst American College Students. *Mobile Communication and Social Change*, 10, 344-352.
- Chen, Y. F., & Katz, J. E. (2009). Extending Family to School Life: College Students' Use of the Mobile Phone. *International Journal of Human-Computer Studies*, 67, 179–191.
- Chen, W. (2013). Internet Use, Online Communication, and Ties in Americans' Networks. *Social Science Computer Review*, 31(4), 404-423.
- Choi, Y. S. (2018). A Study on the Smartphone Addiction and Physical Pain in the University Students. *Biomedical Research*, 29(16), 3162-3168.
- Clayson, D. E., & Haley, D. A. (2012). An Introduction to Multitasking and Texting: Prevalence and Impact on Grades and GPA in Marketing Classes. *Journal of Marketing Education*, 35(1), 26–40.
- Cotten, S. R., Anderson, W. A., & Tufekci, Z. (2009). Old Wine in a New Technology, or a Different Type of Digital Divide? *New Media & Society*, 11(7), 1163–1186.
- CTIA. (2017). CTIA Annual Wireless Industry Survey Annual Year-end 2016 Top-line Survey Results. Retrieved from <https://www.ctia.org/industry-data/ctia-annual-wirelessindustry-survey>.
- Davie, R., Panting, C., & Charlton, T. (2004) Mobile Phone Ownership and Usage among Pre-adolescents. *Telematics and Informatics*, 21(4), 359–73.
- De-Sola, J., Talledo, H., Rubio, G., & de Fonseca, F. R. (2017). Psychological Factors and Alcohol Use in Problematic Mobile Phone Use in the Spanish Population. *Front Psychiatry*, 8(11).
- Drouin, M. A. (2011). College Students' Text Messaging, Use of Textese and Literacy Skills. *Journal of Computer Assisted Learning*, 27(1), 67-75.
- Duggan, M., & Rainie, L. (2012). Cell Phone Activities 2012. Washington, DC: Pew Research Center. Available from: <http://pewinternet.org/Reports/2012/Cell-Activities.aspx>.
- Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2016). Fear of Missing Out, Need for Touch, Anxiety and Depression are Related to Problematic Smartphone use. *Computers in Human Behavior*, 63, 509-516.
- Federal Bureau of Investigation. (2018). Crime in the United States: by Volume and Rate per 100,000 Inhabitants, 1998–2017. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/tables/table-1>.
- Hall, J. A., Baym, N. K., & Miltner, K. M. (2014). Put Down that Phone and Talk to Me: Understanding the Roles of Mobile Phone Norm Adherence and Similarity in Relationships. *Mobile Media & Communication*, 2(2), 134–153.
- Harbluk, J. L., Noy, Y. I., Trbovich, P. L., & Eizenman, M. (2007). An On-Road Assessment of Cognitive Distraction: Impacts on Drivers' Visual Behavior and Braking Performance. *Accident Analysis and Prevention*, 39, 372–379.
- Hussain, Z., Williams, G. A., & Griffiths, M. D. (2015). An Exploratory Study of the Association between Online Gaming Addiction and Enjoyment Motivations for Playing Massively Multiplayer Online Role-playing Games. *Computers in Human Behavior*, 50, 221–230.

- Jin, B., & Park, N. (2010). In-Person Contact Begets Calling and Texting: Interpersonal Motives for Cell Phone Use, Face-to-Face Interaction, and Loneliness. *Cyberpsychology, Behavior And Social Networking*, 13(6), 611-618.
- Junek, O., Binney, W., & Winn, S. (2006). All-female travel: What do women really want? *Tourism: An International Interdisciplinary Journal*, 54(1).
- Kruger, D. J., & Djerf J. M. (2017). Bad vibrations? Cell phone Dependency Predicts Phantom Communication Experiences. *Computers in Human Behavior*, 70, 360-364.
- Lam, C. (2012). The Efficacy of Text Messaging to Improve Social Connectedness and Team Attitude in Student Technical Communication Projects: An Experimental Study. *Journal of Business and Technical Communication*, 27(2), 180-208.
- Lanaj, K., Johnson, R. E., & Barnes, C. M. (2014). Beginning the Workday Yet Already Depleted? Consequences of Late-night Smartphone Use and Sleep. *Organizational Behavior and Human Decision Processes*, 124(1), 11-23.
- Ledbetter, A. M., Mazer, J. P., DeGroot, J. M., Meyer, K. R., Mao, Y., & Swafford, B. (2011). Attitudes Toward Online Social Connection and Self-Disclosure as Predictors of Facebook Communication and Relational Closeness. *Communication Research*, 38(1), 27-53.
- Lenhart, A., Madden, M., & Hitlin P. (2005). *Teens and Technology*. Washington, DC: Pew Internet & American Life Project.
- Lenhart, A. (2007). 'A Timeline of Teens and Technology', Paper Presented at the American Psychological Association Annual Meeting, San Francisco, CA, 16 August.
- Lepp, A., Barkley, J. E., & Karpinski, A. C. (2015). The Relationship Between Cell Phone Use and Academic Performance in a Sample of U.S. College Students. *SAGE Open*, 1-9.
- Lopez-Fernandez, O., Mannikko, N., Kaariainen, M., Griffiths, M. D., & Kuss, D. J. (2018). Mobile gaming and Problematic Smartphone Use: A Comparative Study between Belgium and Finland. *Journal Behaviour Addiction*, 7, 88-99.
- Shaffril, M. H. A., Krauss, S. E., & Samsuddin, S. F. (2018). A Systematic Review on Asian's Farmers' Adaptation Practices towards Climate Change. *Science of the Total Environment*, 644, 683-695.
- Nielsen. (2014). *Mobile Millennials: Over 85% of generation Y owns smartphones*. Mobile. Pew Research Center. (2015). *U.S. Smartphone use in 2015*. Retrieved from <http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/>.
- Pew Research Center. (2018). *Teens, Social Media & Technology 2018*. Retrieved from <http://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/>.
- Rainie, L. (2006). PEW Internet Project Data Memo. PEW Internet and American Life Project. Retrieved June 24, 2008 from [/http://www.pewinternet.org/pdfs/PIP_Cell_phone_study.pdfS](http://www.pewinternet.org/pdfs/PIP_Cell_phone_study.pdfS).
- Rosman, K. (2010, October 14). Y U Luv Tests, H8 calls, The Wall Street Journal. Retrieved from <http://online.wsj.com/article/SB10001424052748703673604575550201949192336.html>.
- Tong, A., Palmer, S., Craig, J. C., & Strippoli, G. F. M. (2014). A Guide to Reading and Using Systematic Reviews of Qualitative Research. *Nephrology Dialysis Transplantation*, 31(6), 897-903.
- Tranel, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 14, 207-222.

- Trub, L., & Barbot, B. (2016). The Paradox of Phone Attachment: Development and Validation of the Young Adult Attachment to Phone Scale (YAPS). *Computers in Human Behavior*, 64, 663–672.
- Waite, B. M., Lindberg, R., Ernst, B., Bowman, L. L., & Levine, L. E. (2018). Off-task Multitasking, Note-taking and Lower- and Higher-order Classroom Learning. *Computers & Education*, 120, 98–111.
- World Bank. (2012). Mobile Phone Access Reaches Three Quarters of Planet's Population. Access on 3 May 2018 from <http://www.worldbank.org/en/news/press-release/2012/07/17/mobile-phone-access-reaches-three-quarters-planets-population>.
- Wuerthele, M., & Owen, M. (2017). Though Apple's R&D Spending is Massive, it's still more Efficient than all other Competitors. Retrieved from <https://appleinsider.com/articles/17/08/09/though-apples-rd-spending-is-massive-its-still-more-efficient-than-all-other-competitors>.
- Yang, C., Brown, B. B., & Braun, M. T. (2014). From Facebook to Cell Calls: Layers of Electronic Intimacy in College Students' Interpersonal Relationships. *New media & society*, 16(1), 5–23.