

Redefining the Practice of the Old Profession with Technology: Sex Work and the Use of Whatsapp for Clientele Management

Naa Adjeley Suta Alakija Sekyi (PhD)

Sociology and Anthropology Department, University of Cape Coast, Cape Coast.

Brandford Bervell (PhD)

College of Distance Education, Maths, Science & ICT Department
University of Cape Coast, Cape Coast

Valentina Arkorful (PhD)

College of Distance Education, Maths, Science & ICT Department,
University of Cape Coast, Cape Coast

ABSTRACT

Technology has revolutionized the culture within contemporary society. Especially for communication and sharing of information, social media has taken the epicenter. The proliferation of social media technologies in our daily communication has infiltrated into all facets of life from education, commerce, family and friends, relations etc. However, an aspect of socio-cultural life which is sex trade has also been influenced by social media technological diffusion. A notable and popular social media platform today purported to be complementing the activities of sex workers is the WhatsApp technology. In view of this, the study focuses on unraveling the actual use of WhatsApp by sex workers in managing their clients. Accordingly, the study employed the qualitative approach with the phenomenological transcendental design to find out actual usage experiences of commercial sex workers in the Cape Coast metropolis of Ghana. A purposive sample based on snowballing technique was used to collect data from fifteen (15) sex workers based on a semi-structured interview guide. A thematic analysis centred on a deductive approach was used to analyze the qualitative data. The findings revealed that sex workers had favourable and positive impressions or attitude towards WhatsApp usage. They also found WhatsApp to be very useful and benefitted immensely from it in various ways. Irrespective of this, sex workers were beset with challenges such as stigma from future leakage of their nude information as well as internet network constraints in using WhatsApp. The study derived a

model based on the findings for future validation through quantitative modelling analysis.

Keywords: Sex Work; WhatsApp; Technology; Usage; Clientele; Management

INTRODUCTION

Our contemporary society has been revolutionized by technological innovations (Combi, 2016; Niculescu, 2016). This revolution has influenced the culture of our modern society from a modest traditional society to a technologically sophisticated cyber culture (Combi, 2016; Niculescu, 2016). Communication which is a crucial element in human culture (Combi, 2016) has shifted from oral to written communication, from script to print, from print to electronic media and especially the web 2.0 and other internet technologies (Lister, 2009 cited in Niculescu, 2016). Technology has brought about a lot of transformations in various fields such as the political, economic as well as social (Puriceli, 2011). This has helped in improving various businesses and commercial activities in the world over. The age long profession of sex work has equally been technologically revamped (Siegal, 2016) to the extent that prostitutes have stepped up their game technologically. Sex trade is an ancient global practice (Valerie, 1990; Bullough and Bullough, 1978) and the phenomenon has advanced in several ways including the adoption of modern technology in its dealings. Anecdotal evidence shows that sex workers now use modern technologies such as Facebook, Instagram, twitter and WhatsApp in their profession. The rise of social media locations originated after the creation of Facebook in 2004 (Utuophu-Birl and Iwu, 2014). The main purposes of the social media sites were to informally link or bring together friends and families, and obviously such groups of people carried the 'we' spirit even though they may be miles apart (Utuophu-Birl and Iwu, 2014). Social networks have now transformed into social media, which execute diverse responsibilities such as playing vital role in communal interconnectivity. In other words, social media carry its patrons together for common supply and consumption of information and thus making room for social communication between the viewers and handlers (Picard, 2009; MacMillan, 2009; Hagerty, 2009).

This has equally made sex trade to be transformed from streets to the internet. Commercial sex workers now use internet applications (apps) or social media apps such as Snapchat and Instagram in recruiting new members as well as soliciting for sex (The Strait Times, 201; Utuophu-Birl and Iwu, 2014). According to a study titled "Sexual exploitation: New challenges, new answers" which looked at sex trade trends in 35 countries, one of the apps called Tinder is used in Israel as the most current tool to discover prostitutes (Foundation Scelles, 2019). Similarly, young girls living in welfare homes and those in high schools are contacted via Facebook and Snapchat by gangs in France to engage in sex trade (Foundation Scelles, 2019). These girls are assured of juicy ways of making quick money as a way of luring them into the business (The Straits Times, 2019). There are numerous online adverts on dating and forums about sexuality trending globally from restraining nations such as China, through to the more tolerant ones such as Germany, Nigeria, Kenya, South Africa, UK, US etc. This implies that both developed and developing nations are experiencing this transformation in technology. Stokes (2012) mentioned that there are a rising number of students in the United Kingdom (UK) who engage in sex trade via social media in order to make money to pay their university fees. Similarly in Nigeria, female university students were reported to have used the social media to encourage sex trade (Abati, 2009).

Notwithstanding the negative aspects of internet sex work, the fast growth of internet technologies may have opened up new opportunities for sex workers in Africa (Ufuophu-Biri and Iwu, 2014; Abati, 2009) and specifically Ghana. In the western countries, Facebook and Whatsapp usage have made it easier and convenient for sex workers to reach out to their clients (Cunningham and Kendall, 2011). Anecdotal evidence shows that sex workers in Ghana have gone technological by acquiring android phones which enables them go on whatsapp to communicate and transact business with clients. This may be the case because the internet has a lot of benefits for most sex workers who have gone high-tech by selling sex online without having to move from their places of abode. Apart from the fact that they earn extra compared to going on the streets, their safety and efficiency are both assured (Cunningham and Kendall, 2011; Moore, 2011). These groups of sex workers are actually classified as advanced sex workers compared to their counterparts on the streets (Marcum, Sparks, Clevenger and Sedlacek, 2019). In actual fact, this classification gives them the greatest opportunity to place higher charges on the services they offer (Sparks, Marcum, Clevenger and Sedlacek, 2019).

In view of the benefits, the development and emergence of internet technology in sex trade is common in many parts of the world including the U.S.A., Europe, Asia and some African countries such as South Africa, Kenya, Zambia and Nigeria (The Straits times, 2019). However, the discourse in Ghana seem to be limited due to few or no research being done in the area, thus the need for this particular study to examine the extent to which sex workers in Ghana are commercializing their activities via whatsapp and its implications. In view of this, the study seeks to achieve the following objectives:

1. Scrutinize the impressions (attitude) of sex workers about whatsapp technology regarding its usefulness and benefits to their profession.
2. Investigate how easy it is for sex workers to use whatsapp for their professional activities.
3. Explore the various ways in which prostitutes in Ghana are engaged in actual whatsapp usage.
4. Interrogate the challenges associated with using whatsapp technology in their profession.

LITERATURE REVIEW

Whatsapp is an American freeware, cross-platform messaging and voice over Internet Protocol (VoIP) service which allows users to send text messages and voice messages, make voice and video calls, and share images, documents, user locations, and other media (whatsapp.com., 2009 in Wikipedia.org). The application runs on mobile devices through the use of an internet. The use of whatsapp technology as a social networking technological platform has gained popularity in contemporary society (Jamil, Talib, Azam, Nazeri, Yusof and Abidin, 2018; Shambare, 2014; Church and Oliveira 2013). The technology has provided affordances that have been leveraged upon in education for teaching and learning; commerce for marketing and family life for communication and other social groups and association (Hashim, Mat and Abdullah, 2015; Jisha and Jebakumar, 2014).

Whatsapp in Education

Within education, authors such as Annamalai (2019), Arani (2017), Nair and Simi (2018) etc. have investigated how the technology is being used to deliver instruction outside the traditional classroom. For instance in education, Amry (2014) indicated that whatsapp enabled students and teachers to effectively engage in flip classroom activities without boundaries (Hanafi, 2019;

Martins, Gerald, Afonseca and Gouveia, 2018). Similarly, in higher education, the technology has been well utilized for both synchronous and asynchronous learning (Ujakpa, Heukelman, Lazarus, Neiss and Rukand, 2018; Cetinkaya, 2017). Posting of materials as advance organizers and discussions for elaborations on content learnt as well as the ability of students to collaborate amongst peers and teachers outside the classroom experience have been some of the educational uses (Awada & Wang, 2016).

Whatsapp in Social Life and Business

In the social milieu, other social use of whatsapp is to link up with family members and other social organizations (Ali and Kootbodien, 2017). Studies by Nouwens, Griggio and Mackay (2017), Aharony and Gazit (2016) as well as O'Hara, Massimi, Harper, Rubens and Jessica Morris (2014) indicate how whatsapp has been useful in managing social and family ties. Whatsapp technology has also been identified to promote marketing and sales especially for small scale enterprises whose clientele base is relatively small and can be managed by the electronic platform (Baird and Parasnis, 2011; Fouad, 2017). A typical example is a study by Tsimonis and Dimitriadis (2014), as well as Atanassova and Clark (2015) who investigated into how whatsapp and other social media are improving the marketing of products by small scale business enterprises. The platform has been used to promote arrival of new goods, reduction sales promotion and available stock to customers (Ibrahim, Ros, Sulaiman, Nordin, Ze, and Yuan, 2014). Even in real estates, Matidza, Ping and Nyasulu (2020) reported the use of such platforms to market housing facilities in countries such as Malawi to attract customers and improve sales.

Whatsapp in Sex Trade

In terms of business or e-commerce with social media, the use of whatsapp has seen another form of use dimension and this has been for trading sex (Ufuophu-Biri and Iwu, 2014). Kuncoro (2004) defines sex trade as "a form of sexual perversion, with patterns of organization impulses or sex drive that is not fair and not integrated, in the form of release of desired sex without control with many people (promiscuity), accompanied by exploitation and the commercialization of sex, without affection, impersonal nature " (cited in Irawan, Gultom and Amsani, 2017:271). The former definition is however considered a bit harsh on sex workers and the job they engage in. However, according to the Federal Bureau of Investigation (FBI), "sex trade and commercialized vice is the "unlawful promotion of or participation in sexual activities for profit, including attempts to solicit customers or transport persons for commercial sex purposes; to own, manage, or operate a dwelling or other establishment for the purpose of providing a place where sex work is performed; or to otherwise assist or promote sale of a sex act" (FBI, 2010, Offense Definitions cited in Sparks, Marcum, Clevenger and Sedlacek, 2020:333). Commercial sex has been altered by social media platforms and made the old profession a techno-centric one (McCaskey, 2012; Pope, 2012). Cunningham and Kendall (2011) referred to this as prostitution 2.0 where the internet has become a hub for sex traders to ply their trade indoors. The internet and social media have facilitated off street sex work and rendered on-street sex labour barely 20% in the American sex market (Cunningham and Kendall, 2011) with enormously 80% of sex trade occurring online (Sparks, Marcum, Clevenger and Sedlacek, 2020). Veena (2007) investigated into the intersection between sex trade and new technologies and found the profound alteration or revolution of sex labour by technology. Sex workers in her study agreed to utilizing the internet technologies for their trade more than face-to-face. Similarly, Ufuophu-Biri and Iwu (2014) in their study revealed the use of whatsapp and other social media as correlates to prostitution by higher education

students. In furtherance to the above, Irawan, Gultom and Amsani (2017) also discovered that social media was a potent tool in promoting commercial sex among college students. The quandary is what has rendered social media, and especially whatsapp as an effective collaborative online tool for commercializing sex.

Usefulness of Whatsapp Use

The quest to use a technology for endeavours or job related performance has been its usefulness and easiness to use (Davis, 1989, Venkatesh and Bala, 2008; Adetimirin, 2015). Usefulness of technology has been a crucial element in technology acceptance research (Davis, 1989; Venkatesh, Thong and Xu, 2012; Venkatesh, Thong and Xu, 2016). Venkatesh et al., (2012) and Bervell and Umar (2017) indicate that before individuals crave the intent to use a particular technology, there is an initial projection into how the technology can be of benefit towards the achievement of job performance gains. Originally, Davis (1989) explained usefulness of a technology to be “the degree to which a person believes that using a particular technology system would enhance his or her job performance”. Contextually, we can define this variable as the degree to which commercial sex workers believe that whatsapp would enhance their job performance. This relevance of technology (Venkatesh and Bala, 2008) has the propensity to induce individuals to form favourable intentions towards its usage and actual usage. Accordingly, instant messaging services such as whatsapp allow for easy communication with people over long distances. The technology offers quick, easy and inexpensive communication with loved ones abroad and long distances (Ali and Kootbodien, 2017). Steele (2014) also indicated that whatsapp promotes direct messaging, sharing media, voice messages, videos and photos etc. When a technology is perceived to be of value to the execution of one’s job, then there is the inclination towards usage. Studies from the use of whatsapp in education, commerce and social life from authors such as Annamalai (2019); Arani (2017); Hashim, Mat and Abdullah (2015); Jisha and Jebakumar (2014) respectively, have confirmed that whatsapp has been used by people for varied purposes because they found it useful or relevant to the promotion of their desired outcomes. For instance, Annamalai (2019) reported in their study that whatsapp was primarily used by teachers and pupils because they found it useful for teaching and learning and promoted social presence. In tandem to this, Atanassova and Clark (2015) also indicated that owners of small scale enterprises used whatsapp because it promoted their business. The usefulness of a technological system is tagged along by perceived benefits (Ray, Bala and Dasgupta, 2019; Gewald and Jacob, 2013). This is the perception of the positive consequences of using a particular technology (El-Masri and Tarhini, 2017). Thus the benefits obtained from the usefulness of whatsapp technology correlates to its usage which ultimately forms positive attitudes and impressions in sex workers towards the social media technology. Relative to benefits of online sex trade, Sparks, Marcum, Clevenger and Sedlacek (2020) and Bellhouse, Crebbin, Fairley and Bilardi (2015) cited lucrateness in terms of monetary acquisition, low exposure to crime and arrest, safety etc. for sex workers who ply their trade off-streets. In extreme cases, on-street commercial sex workers are exposed to incidents of murders (Cunningham, Sanders, Platt, Grenfell and Macioti, 2018; Quinet, 2007; Sanders, 2005) than their online counterparts. Within this study, it is expected that if sex workers view the use of whatsapp as useful and beneficial for clientele management, they will use it for such purposes.

Ease of use of Whatsapp

In addition to the usefulness of a technology as an acceptance factor, the easiness to use that particular technology is also a key antecedent towards usage (Venkatesh et al., 2012). Venkatesh

and Bala (2008) as well as Venkatesh et al., (2016) suggest that despite the usefulness or otherwise of a new technology, its usage simplicity accounts for individuals' decision on attitude towards technology. Invariably, the more easily the use of a technology is, the more positive attitude will be formed towards it. The product of these two rational assessments (perceived ease of use and perceived usefulness) adversely or favourably affects attitude, which is a strong determinant of use intention which intends informs actual usage. Ease of use has been defined as "the degree to which a person believes that using an information technology will be free of effort (Davis et al., 1989 cited in Venkatesh and Bala, 2008). Within this study, this variable is defined as the degree to which sex workers believe that using whatsapp technology will be free of effort. The usefulness of a system is tied to its actual usage. This is accentuated by the amount of effort required to utilize that particular technology. If a technology is easy to use, then potential users are able to identify with it and use it to achieve their job or personal gains. Thus, for a technology to be deemed useful, it should be tenable to easy usage. This means there is the tendency of avoidance towards usage if individuals perceive the use of a particular technology to be shrouded with difficulty. Hence the easiness aspect of using whatsapp as a social networking technology is a prelude to its usage by sex workers in this study for managing their clients. In other studies Shambare (2014) reiterated that whatsapp features were easy to use for purposes such as communication, video calls and picture sending which resulted in positive impressions or attitude towards the technology. This was earlier indicated by Church and Oliveira (2013) that easiness of whatsapp usage has promoted the widespread use of the technology among the social class, especially the youth. Similarly, a recent study by Anderson (2016) reported that easiness to use whatsapp was a motivation for its usage for various forms of communication across the social milieu. Anderson (2016) restated that the whatsapp app was user-friendly, generally intuitive and simplicity in nature and renders its copious usage.

Actual Use Behaviour of Whatsapp

Actual use or use behaviour of a technology is what unravels the benefits gained through that technology. Thus attributes of a technology for usage are what makes the technology worthwhile. The rationale for an introduction of every technology or system may largely be to facilitate the execution of job related tasks. At the heart of technology integration is how it can be employed for use purposes to achieve job oriented goals. The actual usage of an information technology system is termed as the use behaviour (Davis, 1989; Venkatesh et al., 2016). This reflects how and the frequency at which individuals utilize any form of technological system towards the achievement of intended outcomes. Venkatesh et al., (2008) and Davis (1989) defined use behaviour "as the rate of frequency, duration and intensity of person and system interaction" (Rad, Nilashi, Dahlan and Ibrahim, 2017). Within this study, we define actual use or use behaviour of whatsapp as the various uses and intensity that whatsapp technology is being utilized by commercial sex workers for job performance. In education, commerce and social relationships, whatsapp has been reported to be used for chatting, video recording, video calls, ordinary voice calls, recording, sending of pictures and other contents etc (Ali & Kootbodien, 2017; Shambare, 2014; Church and Oliveira, 2013; Steele, 2014). According to Anderson (2016) " whatsapp users can send text, video, photos, audio and even make phone calls, all using the phone's internet rather than requiring a cellular connection for calls and SMS" : 12. As indicated earlier by Maheswari (2014), majority of respondents using whatsapp messenger usually send images, videos and do group chatting with minimum number of friends and long-time users usually send images, videos and do group chatting with maximum number of friends (cited in Veena and Loksha, 2016). However in this

study the interest is on how commercial sex workers specifically use whatsapp to manage their clients.

Challenges of Whatsapp Use

Amidst the various uses of a technology are inherent challenges. These challenges could be technological, social, environmental or psychological (Hui and Kambhampati, 2019). Whatsapp technology even though has been widely used for various purposes across sectors, there has also been reported challenges associated with its usage. Primarily, the most widely challenge is the leakage of information which invades privacy (Rashidi, Vaniea and Camp 2016; Kobsa, Patil and Meyer, 2012) and it's seen as a technological challenge. Privacy concerns on social media usage have been across cultures and individuals' decisions to continuous use of social media technologies have been partly influenced by privacy related issues (Dev, Das and Camp, 2018). The leakage of this confidential information can create social or psychological stigma for the people involved especially if nudity is embedded in the content (Ashforth and Kreiner, 2014). In the case of sex workers, this aspect of privacy creates both social and psychological stigma if there is present or future reference to their activities based on such evidence (Hui and Kambhampati, 2019). This is further exacerbated by the stigma associated with the sex trade (Benoit, McCarthy and Jansson, 2015; Biradavolu, Blankenship, Jena and Dhungana, 2012) and makes it difficult to counter the social, psychological and moral stigma (Ashforth and Kreiner, 2014). Whatsapp technology uses internet to operate (Anderson, 2016) and hence thrives on the regular and speed internet connectivity. However, internet speed and regularity is a concern in most sub-Saharan African countries (McKinsey and Company, 2014; Stork, Calandro and Gillwald, 2013; Calandro, Chair and Deen-Swarrray, 2015). Studies such as that of Stork, Calandro and Gillwald (2013) as well as Calandro, Chair and Deen-Swarrray (2015), report that the users of online services have been beset with sporadic and low speed internet connectivity. This has an adverse effect on the effective use of social media and other technologies for online activities (Fernandez-Robin, Yanez and McCoy, 2019; Karapanos, Teixeira and Gouveia, 2016). However, within this study, it is not certain if the problems of privacy and stigma as well as internet connectivity are apparent in the quest to using whatsapp technology by sex workers for managing their clients who require varied services from them.

METHOD

The qualitative approach was adopted for this study with the phenomenological transcendental design employed. This was because participants were required to provide a verbal account of their usage of whatsapp social media technology in their ply of sex trade. Qualitative approach and specifically the phenomenological transcendental design, aim to uncover contextual complexities and key dynamics of a particular phenomenon for a sub-population (Mason, 2010; Nichols, 2012 cited in Gerassi, Edmond and Nichols, 2017). Additionally, the phenomenological transcendental design stresses on the fact that to understand the reality of a phenomenon, is to understand the phenomenon as it is lived by a person (Neubauer, Witkop and Varpio, 2019). In view of this, the bare explanations of the experiences of a person in relation to the phenomenon under study are warranted (Neubauer et al., 2019).

Selection of Participants

The study adopted the non-probability sampling method to select participants because of the hidden nature and hard-to-reach participants such as sex workers (Gerassi, Edmond and Nicols,

2017) as is the case of this research. Specifically purposive and snowball sampling techniques were used. These techniques were used because of the special characteristics of participants and the fact that the categories of participants were not randomly distributed in the population (Alvi, 2016). Purposive sampling and snowballing technique especially, are most suitable and have been widely used for researches that bother on sexual exploitation and sex work (Reichert & Sylwestrak, 2013; Dodsworth, 2014; Nichols, 2012). The snowball technique helped in building trust between the researchers and participants, mainly because the researchers did not just show up unexpected but were introduced by friends and colleagues of participants in the business. Again, the method was very useful because of the sensitive nature of the issues to be discussed (Condomines and Hennequin, 2014). A total of fifteen participants were involved in the final sample. These participants were residing and working in various hotels and guesthouses in the Cape Coast metropolis.

Materials and Data Collection Procedure

A semi- structured interview guide was used to elicit detailed information from participants (DeJonckheere and Vaughn, 2019; Adams, 2015). This was because aside the specific questions in the guide, semi-structured interview guides aid follow up questions and responses (DeJonckheere and Vaughn, 2019; Adams, 2015) that may not have been captured in the original guide. The interviews were conducted at places of convenience to participants, and these included, their homes, bars, hotels, guesthouses and some other places suggested by participants. This was to ensure the safety, comfort and anonymity of the participants. The technique yielded fifteen participants who were sex workers and used whatsapp for their sex trading activities. This was because after the fifteenth participants, the interview became monotonous as the same responses were being recorded and signified a saturation point (Plano Clark and Creswell, 2015; Mason, 2010). Some of the interviews were recorded while others were not. This is because not all the participants agreed to the recording of interviews. Only eight out of the fifteen agreed to be recorded during the interview. Participants who opted not to voice recording were entreated to speak slowly so that all their responses could be written down verbatim. Again, in view of the fact that three participants could not flow in the English language, they agreed to be interviewed in Fante (local language) which was translated into English because the researchers could fluently read and write both languages. However, all other twelve were interviewed in English. Data collection was done individually in a secluded room with veil covered faces of participants to ensure a non disclosure of their identities. Participants' consents were sought before they were interviewed. Hence voluntary participation was encouraged to satisfy for research ethics.

The data were collected within a month and participants were asked questions pertaining to their socioeconomic background, their impressions about the whatsapp technology, its usefulness to their profession, how easy it was for them to use whatsapp for their professional activities and the challenges associated with using the technology in their profession. Most of the interviews lasted for one hour and twenty-five minutes; however, a couple of them lasted for fifty minutes. After each interview session, a token of Ghs 50 was given to each participant for their time spent.

Analytical Strategy

While the three written interviews were coded and put into themes for manual analysis, the recorded ones were transcribed before being analyzed based on the themes. The deductive

thematic analysis approach which provides analysis from general to specific (DeJonckheere, Robinson, Evans et al., 2018; Braun and Clarke, 2012) was used for the data analysis.

RESULTS

Demographic Information

The gender distribution within the sample of this study is presented in Table 1.

Table 1. Gender Distribution		
Gender	Frequency	Percentage
Male	0	0
Female	15	100
Total	15	100%

With reference to Table 1, the total sample obtained for the study was fifteen (15) female sex workers. No male was encountered in this study even though suggestions imply that there are male sex workers too.

In terms of the educational background of the respondents, the majority of them had higher national diploma (n=5; 33.3%) and senior high school certificates (n=5; 33.3%). The least category was those with first degree certificates due to their representation of only 13.3%. None of the participants had a master's degree. This demographic was contrary to the view that commercial sex workers were uneducated and school drop-outs. This is depicted by Figure 1.

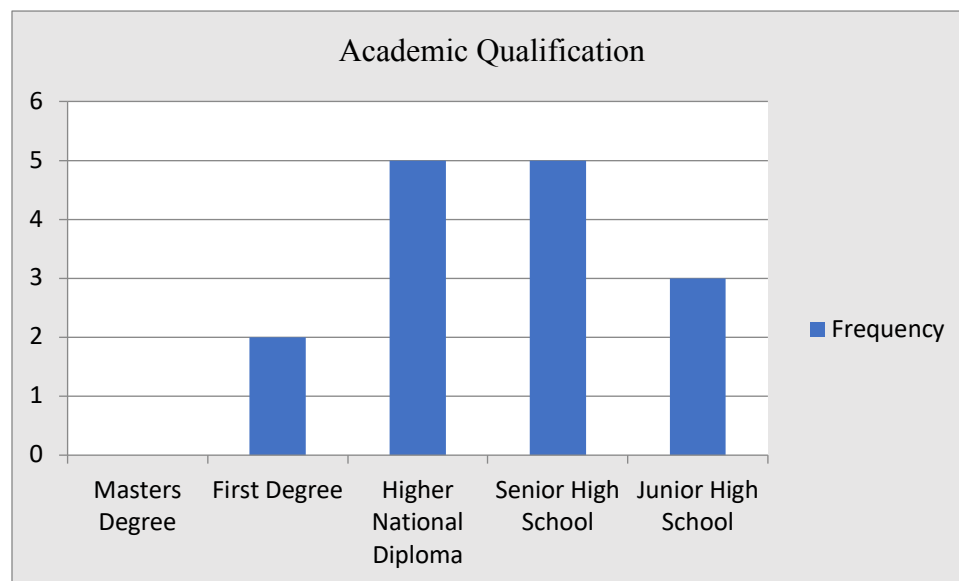


Figure 1. Academic qualification of respondents

With respect to the age range of respondents, majority of them had ages ranging between 18-22 (n=5; 33.3%) and 23-27 (n=5; 33.3%). The least age group was those between the ranges of 33-37 with only 6.7% of the total percentage. None of the sex workers was aged 38 and above. This implies that they were relatively within their youthful stages.

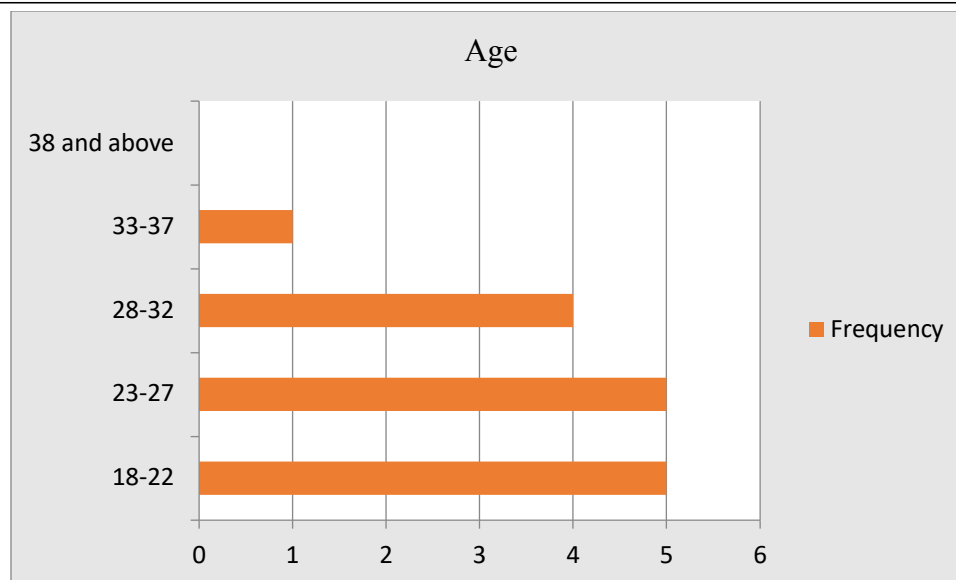


Figure 2. Age range of respondents

Impressions (Attitudes), Benefits and Usefulness of Whatsapp Platform

Impressions (attitudes), benefits and usefulness of whatsapp from the perspectives of sex workers yielded positive responses. For instance one of them (AB) indicated that:

"I think it is very good since I started using whatsapp because it makes the job easier for me. Sometimes we do sex on video without meeting personally and I still get my money."

Another reiterated that:

"...I love it. I have gained a lot from whatsapp and I have a lot of clients through whatsapp. Some of them (clients) they call you and you don't even know who gave them your number but it gets nice after we start exchanging sexy pictures and videos."

Other views from AC were that:

"Immediately a client asks me if I have whatsapp? It means he likes video sex, nude pictures and video calls. I have come to like it because most of my clients like it. If I don't like it I don't know how best I can make money for myself and my son."

As for AD, she indicated the usefulness of whatsapp by stating that:

"I really enjoy business because of whatsapp. Sometimes I do oral sex on video than normal sex and it is so fun. The white clients only do the video sex and will still send your money through mobile money"

With respect to the usefulness of whatsapp, AE also had this to say:

"Whatsapp is very good for me because I really like to take pictures and send to my clients....Some of my men are more interested in my pictures I send to them and the

postures I do. In fact some tell me which posture to use in taking the pictures for them and this increases my cash flow."

Another important point put forward on usefulness of whatsapp was from AF. She stated that:

"I will say that whatsapp is very useful for my business....Some of my clients send me mobile money and we do sex on whatsapp video. I really enjoy that one because most times when I am tired, I prefer to stay away from live (actual bodily) sex."

On the part of AH, she indicated that:

"I only like whatsapp because it helps me get more money nowadays than at first when I started the job."

Similar to the view by AH, respondent AJ also stated that:

"I think we should be ready to adapt to new things in our job if it will help us. We do this work for money so if whatsapp will help us get more money, why not? It is helping me so well."

Respondent AL elaborated further by saying that:

"Technology is a good thing that has helped we the 'sisters' because it makes everything easy for us. Whatsapp is a good platform to trade for sex and it is even more fun when you get a client who understands the business well. I can do video call the whole day with some of my clients when they travel out of town and it is so nice. I still get my cash with no body touch."

Other respondents such as AM, AN and AO all indicated that whatsapp is useful when it comes to searching and linking up with clients, reading important messages from clients and inviting even new clients over.

Excerpts from their responses included:

"If I use whatsapp, it enables me to search and link up with clients more quickly." [AM]

"Whatsapp platform helps me to read important messages from clients." [AN]

"When I use whatsapp, it is easier to invite even new clients and get a lot of them." [AO]

Responses from the usefulness and benefits of whatsapp on the part of commercial sex workers in this study could be classified into six thematic areas comprising making lots of money; having sex without actual bodily touch (virtual and video sex); recruiting lots of clients; reaching clients abroad; reading important messages from clients; and quick link up with clients. In terms of impressions or attitudes towards whatsapp, sex workers revealed that they had positive and favourable attitudes towards whatsapp social media technology, This was informed by their responses such as *"I love it"* ; *"I like it"*; *"It is good"* etc.

Easiness of Use of Whatsapp Platform

On how easy it was for commercial sex workers in using whatsapp for clientele management, respondents had the following to say. For instance AA stated that:

"I find it easy to use whatsapp platform to contact my clients who are mostly whites, even though I have some black clients too."

This was supported by all the other sex workers as could be inferred from their responses on the usefulness of whatsapp. In the words of AE on easiness of using whatsapp, she reiterated that:

"It is very easy to use whatsapp to chat with clients and also send them information they request."

The information they send were mostly pictures and videos as indicated in their responses to the usefulness on whatsapp. AM reiterated that;

"I don't have any difficulty in recording sex videos and taking nude pictures to send to clients."

Other areas of easiness in terms of whatsapp were video calling communication with clients. In the words of AO:

"It is easy for me to use video calls on whatsapp to have sex with my clients"

Generally, traders of sex in this study did not find it difficult to use whatsapp for their job related activities. As confirmed by AL:

"When I am using whatsapp platform, I don't need a lot of efforts to manage clients. Whatsapp platform is very easy to use."

Deducing from the respondents' responses on the easiness in using whatsapp platform, their views were unified in the areas of easiness in terms of contacting clients, chatting with clients, sending information to clients, recording videos and taking pictures for clients and video calling clients. These were so clear in their responses on the usefulness of whatsapp platform to them in terms of job related activities.

Social Influence and Recommendations by Peers on Whatsapp Usage

Analysis of the responses revealed that most of the sex traders used whatsapp platforms because it was either introduced to them by their colleagues or they found out themselves that their friends were making a lot of money from using the social media platform. Evidence of this was from respondents such as AB, AC, AF, AK and AL. For instance in the case of AB she indicated comprehensively that:

"At first I didn't like it because I thought the men will send my pictures to other people and so I refused it when they tell me to send them pictures and sexy videos, but when I saw that my friends were making a lot of money and even some of them started acquiring a lot of things for themselves through the money they got, I realized that I

was fooling myself. So I changed from that time and now I love it even more than my friends and even the men."

In the words of AC;

"It (whatsapp) is good and even some of my friends who don't have whatsapp, I tell them to buy whatsapp phones for more money."

AL also stated that:

"Whatsapp is good for me and I recommend it to all my sisters."

AF also stressed that:

"I recommend it to my mates because not all like it."

Finally AK was of the view that:

"I like whatsapp and I will say all sisters should use it. I have some friends who don't like it but for me I do. It is good."

The above responses are a proof that not all the respondents liked using whatsapp partly because they didn't know the benefits. Others had to recommend to them based on the benefits before they also started using them and began benefiting from the social media platform. These new users in turn recommended whatsapp technology to other sisters (as they call themselves) after benefitting from the technology.

Actual Uses of Whatsapp by Sex Workers

The main uses of whatsapp by sex workers in this study were to search and link up more quickly with clients; read important messages from clients; send nude pictures to clients; send nude videos to clients; have video sex with clients; and invite new clients over. These were deduced from the responses of sex workers on the usefulness and easiness of whatsapp to their clientele management. Their responses were unified in the above six dimensions of whatsapp usage. For instance there were responses such as:

"Sometimes we do sex on video without meeting personally..." [AB]

"I really like to take pictures and send to my clients...." [AE]

"I can do video call the whole day with some of my clients when they travel out of town and it is so nice." [AL]

"...it (whatsapp) enables me to search and link up with clients more quickly." [AM]

"Whatsapp platform helps me to read important messages from clients." [AN]

"When I use whatsapp, it is easier to invite even new clients and get a lot of them." [AO]

Challenges in Using Whatsapp

The use of whatsapp, even though was beneficial to sex workers; it was not without some challenges. The challenges were sub divided into future psychological stigma; leakage of nude pictures and videos; and network failure.

These sub themes were derived from the responses provided by the sex traders. In the case of AE, she was of the view that:

"I don't really have any challenge with the use of whatsapp except that sometimes the network is so poor.....some of my men were not happy with me because they were not receiving pictures from me."

AG also supported this view by saying that:

"....where I live there are network problems so it makes things difficult for me. Though I like whatsapp, it doesn't help me a lot because of my area's network challenge."

In the same vein, AF was of the view that:

"...but it is not always the same because sometimes the network is so bad that I don't even get access to do video calls with my clients who are normally used to sex on whatsapp video."

In terms of psychological stigma of the future, AH worriedly said that:

"I always try to hide my face but some of my clients they tell me they want to see my beautiful face. I like whatsapp but not very much because of the future consequences if it shall happen."

The psychological stigma was mainly due to the fear of leakage of nude pictures and videos. This was confirmed by statements such as:

"...I thought men will send my pictures to other people.." [AB]

"...sometimes I feel scared that my videos will go viral and my pictures too. I always try to hide my face..."[AH]

The results of this study indicate that the impressions or attitudes of whatsapp usage by sex workers were determined by its usefulness, benefits, ease of use and social influence. However, the challenges encountered was only associated with actual usage of whatsapp. Based on the findings of this study, a conceptual model was derived for whatsapp usage. This is illustrated by Figure 1.

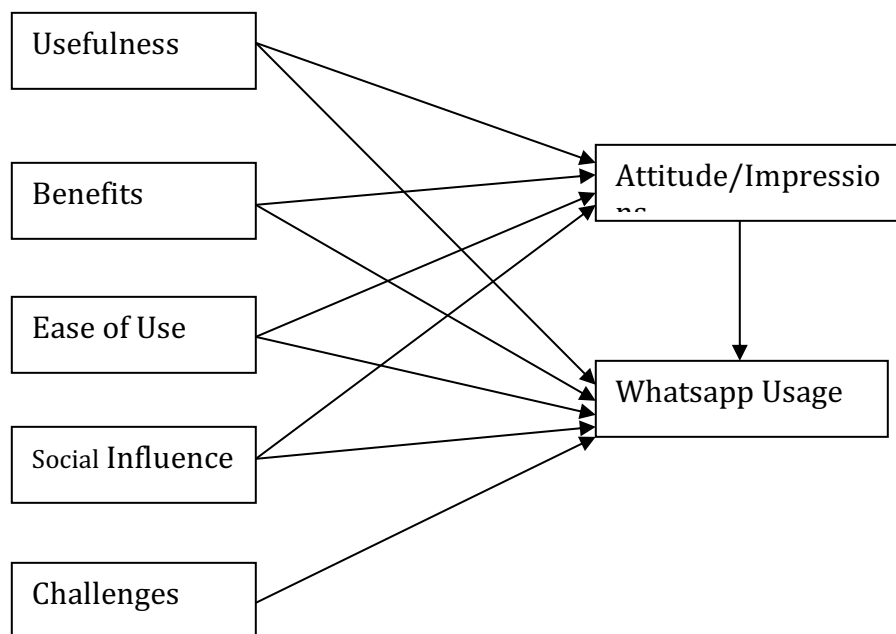


Figure 1. Conceptual Model for WhatsApp Usage

DISCUSSION

This study sought to unravel the use of WhatsApp by sex workers in managing their clients for their job performance. Four important objectives informed this research. However, from the responses provided, one more objective was realized which was on the social influence and peer recommendation towards the use of WhatsApp technology in sex trade.

Impressions or Attitudes about Whatsapp

Generally, the impressions or attitudes towards whatsapp technology by sex workers were positive. They showed favourable attitude towards the social media technology with emotional expressions such as 'I love it'; 'it is good' and even 'I love it'. These expressions indicated the extent to which sex workers adored the whatsapp social media platform in using it for their clientele management. These expressions were in tandem with responses from other users such as students (Annamalai, 2019; Arani, 2017), company staff (Fouad, 2017; Hashim, Mat and Abdullah, 2015; Jisha and Jebakumar, 2014) family members (Ali and Kootbodien, 2017; Nouwens, Griggio and Mackay, 2017; Aharony and Gazit, 2016) in their usage of whatsapp technology for social interactions. However, these favourable attitudes were underpinned by benefits and usefulness the whatsapp social media technology offered them in their line of job.

Benefits of Whatsapp

The benefits of whatsapp were mainly the provision of more money for clients; sex without bodily touch; easy access to customers abroad; quick search for clients and link ups as well as reading of important messages from clients. Commercial sex workers in this study overwhelmingly reported that the use of whatsapp has really brought a lot of money to their pockets as reported by studies such as that of Sparks et al., (2020) who indicated that online sex trade has led to more money making for sex workers. The technology has boosted their earnings from the prostitution business than ever before. They claimed that the versatility of the social media technology has provided varied ways of providing them with monetary gains and made them very happy with the use of the technology. They further revealed that whatsapp aided in virtual sex without them being present physically or being touched physically (Bellhouse, Crebbin, Fairley and Bilardi, 2015; Cunningham and Kendall, 2011; Veena, 2007). These benefits were so crucial because it eased them from the tiredness that was associated with the practice of routine physical sex endeavours. The lack of presence at a specific location (usually hotel, brothel or clients' homes) was a relief due to lack of exposure to physical crime or abuse that pervades their sex trade (Sparks et al., 2020; Marcum, Sparks, Clevenger and Sedlacek, 2019; Cunningham and Kendall, 2011). All over the world, violence and abuse against sex traders is on the ascendancy. In Africa, they are even susceptible to rituals by their clients who unsuspectingly lure them into such deadly dilemmas (Coetzee, Gray and Jewkes, 2017; Farley, 2004). For instance Sweat and Sisonke (2017) reported that in South Africa between 2013 and 2017, 65% of all sex workers' death cases were due to murder. Other authors such as Baral et al., (2014); Muldoon (2015); Lyons et al., (2017), and Roberts et al., (2018) reported varied abuses and crimes meted out to street sex workers in eSwatini, Uganda, Cote D'Ivoire and Kenya respectively. Thus, the use of whatsapp platform protects these pimps and renders them safe in their line of duty to their clients in the society (Sohn, 2016; O'Doherty, 2011). Furthermore, benefits such as easy access to customers abroad was important to sex workers in this study because it provided them with versatility in terms of reaching out to their clients by overcoming geographical barriers. Social media, especially whatsapp has the propensity to provide a caveat to members, relations or co-workers in terms of barriers with regards to space

(Ali and Kootbodien, 2017; Steele, 2014). This is because, the internet makes it possible for relations and other members to link up with each other even miles apart. For sex workers, this is welcoming as it aids them to continue trading sex online even when their clients were not in town (Marcum et al., 2019). They are also able to quickly link up with these clients, read important messages from them which are mainly sexual requests in varied ways. The quick search and link up is so beneficial and is further boosted by even contacting new clients by way of online invitations through this social media platform. This is mainly made possible through recommendations by other clients as revealed in this study. Benefits from the use of technology have been an important variable that drives potential users of technology to actually use it (Ray, Bala and Dasgupta, 2019; Gewald and Jacob, 2013) while propelling the continuous use of this technology by old users (El-Masri and Tarhini, 2017; Venkatesh et al., 2012).

Usefulness and Ease of Use of Whatsapp

When users of a technology accrue valuable benefits from its usage, they tend to use it for job related performance. They find it useful in achieving their job associated endeavours (Venkatesh et al., 2016), especially when usage is as easy as possible (Venkatesh and Bala, 2008; Venkatesh et al., 2016). This is evidenced by the usefulness of whatsapp to sex workers in the dimensions of recording sex videos, taking nude pictures and sending them to clients upon request as well as sex related video calls with clients (Veena and Loksha, 2016; Anderson, 2016; Maheswari, 2014). Even though traders of sex in this study did not detail how they learnt to use whatsapp, they were unanimously abreast of the use of whatsapp. Generally, they found whatsapp features to be easy to use for the various purposes. This resonates with the earlier views on the easiness of whatsapp because of how simple the interface appears which promotes its usability (Shambare, 2014; Church and Oliveira, 2013). Easiness of use of technology has been in the literature as one of the key antecedents of technology use (Venkatesh and Bala, 2008; Venkatesh et al., 2016). Once sex traders found whatsapp to be easy to use, they maximized the usefulness of the features of this technology. The ability of the features of whatsapp in providing such usefulness is making this innovation a blue print for clientele management by sex workers. These features have been also registered in studies such as Anderson (2016) to provide usefulness to the use of whatsapp technology.

Social Influence on Whatsapp Usage

Another aspect of whatsapp usage which was revealed in this study was on the social influence and peer recommendation that accompanied the use of this social media technology. Most of the respondents were initially adamant to use whatsapp for various reasons which were not recorded by this study. However, upon recommendations by their peers on the benefits and usefulness of the social media technology, they became convinced and began using whatsapp. Others on the other hand provided recommendations to their 'sisters' (as they called themselves) within this study to utilize the technology in order to acquire the benefits associated with it. This finding was very interesting as it was serendipity to this study but has however been confirmed by earlier quantitative studies such as Taiwo, Downe and Mahmood (2013); Ambali and Bakar (2014) on the effects of peer or social influence on the use of information systems. In terms of whatsapp usage, De Benedictis, Lettieri, Masella, Gastaldi, Macchini, Santu and Tartaglioni (2019), Fernandez-Robin, Yanez and McCoy (2019) as well as Chen (2014) confirmed that usage of the social media technology was influenced by positive reference by colleagues. According to Venkatesh et al., (2012), before individuals have a positive inclination towards the use of a novel technology, they

based their willingness upon recommendations or influence by important referent others or relations as well as role models. Favourable recommendations have a positive cognitive influence and intention towards using a particular technology (Bervell and Umar, 2018; Taiwo and Downe, 2012). This was evident in this study as sex workers initial usage of whatsapp for managing their clients were underpinned by positive suggestions by their fellow 'sisters' who have used it and were benefitting immensely.

Challenges in Whatsapp Usage

Finally, the use of whatsapp was beset with some challenges as unraveled by this study. These challenges were categorised into psychological and technological. Major challenges as reported in this study bothered on future stigma resulting from leakage of nude pictures and videos; and poor network connectivity. The first challenge associated with the use of whatsapp was the uncertainty of the future with regards to nude photos and videos going viral. Irrespective of the incessant use of whatsapp by sex workers in this study, they were also mindful of the fact that there could be a leakage of their nude pictures and videos in the future which could lead to shame and respite (Benoit, McCarthy and Jansson, 2015; Biradavolu, Blankenship, Jena and Dhungana, 2012). This notion caused a psychological trauma and instability on the part of some of the sex workers as they plied their trade with whatsapp (Ashforth and Kreiner, 2014; Benoit, McCarthy and Jansson, 2015; Biradavolu, Blankenship, Jena and Dhungana, 2012). Fear of virility of nude content on the part of sex workers and even non sex workers through social media has been a great concern for users of whatsapp and other social media platforms (Rashidi, Vaniea and Camp 2016; Kobsa, Patil and Meyer, 2012). Privacy concerns in using whatsapp have been recorded in studies such as Dev, Das and Camp (2018); Kobsa, Patil and Meyer (2012) as well as Hui and Kambhampati (2019) and have been confirmed in this study. The second challenge was in relation to the sporadic and poor nature of internet connectivity in sub-Saharan societies. Even though internet is widely used in the sub-Saharan region, a major setback to its effectiveness is its poor connectivity in discharging online activities. Within this study, this was crucial to commercial sex workers in getting through with their online activities via whatsapp. This, according to some, led to dissatisfaction by clients and their inability to trade well and accrue more money. Authors such as Fernandez-Robin, Yanez and McCoy (2019), Karapanos, Teixeira and Gouveia (2016) attested this barrier in the effective use of whatsapp and other social media technologies. That notwithstanding, these challenges did not generate a negative attitude amongst the sex traders in this study towards the use of whatsapp. They were able to manage the challenges to foster continual usage of the whatsapp social media technology.

Implications

1. The results of this study provided insights to the fact that sex trade is viciously responding to technological innovation especially with social media technologies such as whatsapp which has altered the nature of practicing the old profession.
2. Findings of this study imply that whatsapp social media technology has the affinity to alleviate sex workers in Ghana from subjecting their bodies to excessive physical sexual activities.
3. Additionally, whatsapp social media technology has the propensity to protect commercial sex workers from physical violence and crime meted to them in their quest to ply their sex trade.

4. Furthermore, whatsapp social media technology can assist in minimizing the open obscene trade of sex by confining it to indoor technology-based in order to sanitize the society.
5. Finally, the findings of this study contribute to technology acceptance theory on the antecedents that determine attitude towards whatsapp social media technology and its actual use.

Limitations

1. The study was limited to a small sample in just one of the metropolis in Ghana. This provides just a narrowed view on the phenomenon under study and renders the generalization cautionable.
2. The study produced a framework which was not quantitatively verified, even though it was based on evidential responses.

Recommendations for Future Research

1. Future studies can provide an in depth investigation into the phenomenon based on a nationwide survey since most of the respondents were literates.
2. The conceptual model derived in this study can be quantitatively validated in future studies through a modelling approach.

CONCLUSION

This study pioneered an investigation into how sex workers in a metropolis utilized whatsapp social media platform for clientele management. It unraveled the various usefulness, benefits as well as impressions or attitudes towards the technology. Additionally, the study revealed that easiness of use of whatsapp was quintessential towards the usage of the technology by commercial sex workers. However, most users of the technology were influenced by their peers or colleagues based on the benefits the technology brings to the fore. Finally, in the wake of using whatsapp by these sex workers, there were some challenges such as the psychological uncertainties of future leakage of their nude pictures and videos coupled with poor internet connectivity. However, their drive to utilize whatsapp to manage their clients in order to make more money, were enough to render them unperturbed by these challenges.

Compliance with Ethical Standards

Conflict of Interest

All of the authors declare that we have no conflicts of interests.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional review board.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

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