The Effectiveness of *WhatsApp* as an Interpersonal Communication Medium among Abu Dhabi University Students

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Abstract: *The way in which we interact with one another is constantly evolving. In this day and age, WhatsApp has become a communication medium commonly used among individuals, especially College Students. The objective of this research is to identify the perceptions and trends of Abu Dhabi university students when considering WhatsApp as an effective interpersonal communication medium. This study will also investigate whether 'emoji's, voice-notes, text messaging etc.'' could be a replacement of this key face-to-face element during the interpersonal communication process. Lastly, the study also includes a look into whether or not these college students receive miscommunications during WhatsApp communications, and what the biggest miscommunications are. A survey was conducted on 100 Abu Dhabi University students of both genders, using a questionnaire to evaluate their perceptions and activity on the application in order to effectively answer the Research questions. Ultimately this study found a positive reaction from the students and has generated the needed results. WhatsApp can therefore be considered an effective interpersonal communication medium. There are a range of various perceptions with regards to the replacement of face-to-face communication, but it is ultimately used as an addition to, not replacement of face-to-face communication. There are miscommunications found when using the application; however the results varymainly between genders.*

Keywords: *WhatsApp, Social Media, Interpersonal Communication*

1. INTRODUCTION

Examining the way in which we communicate has always been important. Whether it's verbal or non-verbal communication, conveying a message to other individuals is necessary for human understanding and interaction. It not only helps us understand what they are saying, but it also helps us to express our feelings, emotions, and needs(CareSearch, 2016). Humans have found ways to revolutionize communication so that it can become more equipped to our ever-changing needs. Dating back to the times people used Neanderthal cave painting or only spoken word stories to the development of postal services, smoke signals, and handwritten manuscripts delivered by carrier pigeons, humans have gone through an evolution of communication patterns(Atlassian, 2011).

Communication is still constantly changing today even though we have already seen incredibly large trend changes within the last few decades including quick, easy, and instant communication. The change of communication influences many factors including message length, delivery time, and rate of response (UK Government, 2007) . The latest edition to the communication evolution in the 21st century: new media. New Media is described by the New Media Institute as "… all things related to the internet and interplay between technology, images and sound" (Socha & Eber-Schmid, 2014). New media includes Social Media which are virtual networks allowing community based interactions and communication (WhatIs.com, 2016).

The increased rate of Mobile Messaging (MM) (or IM- Instant Messaging) through social media messaging sites has increased significantly over the past few years. This has led to many studies of these trends and the effects it has on all of its users. According to Digital marketing site eMarketer.com, a forecast report shows that by 2018 there will be two billion MM users which represent 80% of smartphone users (eMarketer, 2011).This dramatic change in communication has a significant impact on all individuals because it alters the message standards that we all now consider acceptable. Whether it is face-to-face communication, telephone calls, emails, text messages, or a tweet to another person, these interactions affect the way in which we communicate. In this day and age, WhatsApp is currently the leading instant messaging application globally after they hit the target of 1 billion people in their user base especially among young adults (Sutikno, Handayani, Stiawan,

Riyadi, Riyadi, & Subroto, 2016). Thus, the effect this medium has on the public's interpersonal communication is important and will be further explored in this research. Previous Research studying technological advancement's effect on face to face communication resulted in negative effects in terms of both the quality and quantity of face to face communication (Drago, 2015).

This study will address the significance or effectiveness of WhatsApp on interpersonal communication amongst college students in the UAE. The focus is on whether or not WhatsApp leaves room for misconceptions and miscommunication during the communication process. Although there have been various studies conducted regarding the effects of social media on the users, studies have yet to focus on the college students in the UAE and their avid use of WhatsApp. The basis of the study involves the WhatsApp medium's effectiveness as an interpersonal communication medium. Results yielded in this study could serve as the basis for further extensive Research in interpersonal communication skills or patterns. These communication patterns would be of great significance considering the vast diversity of the UAE society (Rizvi & Bell, 2015).

The research questions in this study are as follows:

1. Is WhatsApp an effective interpersonal communication medium?

2. Can WhatsApp replace face-to-face communication?

3. Does WhatsApp lead to miscommunications, and what are they?

2. LITERATURE REVIEW

Social media users between the ages of 18 to 35 years spend a minimum of two hours online daily, whether it is to communicate with others or even to just mindlessly scroll through their newsfeeds, it takes up approximately a quarter of their day (Khaleej Times, 2016).In 2015, the total population of the UAE numbered to 9.58 million people, with more than half of the population (52%) active on social media applications (Global Media Insight). According to Global Media Insight, Skype is the number one social chat application in the UAE with 4.88 million users, followed by WhatsApp with 4.69 million users (2015). Instagram and Snapchat are some of the latest applications that have witnessed a rise in fame over the past two years. A study by Kantar TNS, a global research firm, discovered that usage of both Instagram and Snapch at in the UAE has grown from 15% in 2014 to 53% in 2016; thus indicating an increase in social media trends within the last few years (Nelson, 2016).

2.1. Uae University Students and Social Media Usage

With the new communication abilities, young adults especially are spending an increased amount of time on social media sites. Therefore, there is an increase in the global concern for the long hours that students spend on social media sites. 75% of young adults claim that they would not be able to last one day without using social media and that a similar percentage of teenagers admitted that they would text a family member who is in the same house as them(Jones, 2015). Young adults make up a significant number of the UAE population, and because of the easy going life that UAE residents have, teenagers especially benefit from the new technological advancements that come into the country. A study conducted in 2012 with a sample of 179 students from four universities in the UAE concluded that 99.4% of the respondents connect to the internet via their desktop computers and 92.6% of them also use their smartphones for the same purpose (Wiest & Eltantawy).

People have different reasons for using social media depending on their age, gender, social status, and other factors. The Uses & Gratification Theory identifies five categories that can be used to assess the purpose of one's social media use: 1) cognitive needs, 2) affective needs, 3) personal integrative needs, 4) social integrative needs, and 5) tension-release needs (Acar, 2014). The process of actively seeking any form of media presence is driven by personal motivations. In the UAE context, majority of the teenagers who access the internet and social media want to be connected, informed, and entertained (Ayyad, 2011).

2.2. Whatsapp as the Latest Trend in the Uae

WhatsApp is a social media application which involves direct messaging as well as sharing media including voice messages, videos, and photos among others (Steele, 2014). It uses both data and WIFI, so it is not included in your monthly text-message subscription. WhatsApp is available on

relatively any device (initially free on smartphones) and is considered relatively safe and secure. A reason behind the continuously increasing popularity among teenagers and young adults is WhatsApp features which includes group chats and location sharing (Webwise, 2016).

A study done earlier this year by a Northwestern University in Qatar on the Middle East's social media patterns, which includes the UAE, found interesting trends in media usage. While Instagram is growing in popularity, Facebook and Twitter have been declining and being replaced by a more direct form of communication such as WhatsApp and Snapchat(TCA Regional News, 2016). The study continued to show that "The UAE has the highest rate of internet penetration with 100 percent of nationals saying they are connected to the internet in 2016" as well as having the highest penetration in the Middle East (99%) with regards to smartphones(TCA Regional News, 2016). This clearly shows the importance that the UAE society places on social media in particular to WhatsApp. This importance can be translated into acceptable norms or required standards that the individual feels needs to be associated with the WhatsApp interaction. Furthermore, the communication outside of WhatsApp could be affected by the aftermath of the great importance placed on this source of communication.

However, recently the UAE has made some official rulings with regard to the messages being sent or received on WhatsApp. It has become imperative that users are careful with what they say as swearing or insulting the UAE on WhatsApp has been banned by Authorities. Penalties of violating this WhatsApp ruling include facing fines of up to 250,000dhs, imprisonment, or deportation if you are a tourist(Gouveia, 2016). Another WhatsApp ruling is the sending of the 'middle finger emoji' which is an illegal gesture in the country and perpetrators could spend up to 3 years in prison or a 500, 000dhs fine(Gouveia, 2016). The above mentioned crimes would first need to be reported to the police in order to be trialed upon. The UAE has also banned the free calling and video calling offered by WhatsApp which is available in many other countries (Kuttab, 2016). There have been restrictions on other social media sites too such as iPhones' facetime application. With these restrictions placed upon WhatsApp, there may be a desire for UAE Residents to look for alternative social media sites where there is more freedom. However, the other features that WhatsApp presents to its users has kept it in the market with continued usage throughout the UAE.

2.3. Whatsapps' Impact on Interpersonal Relationships

Based mainly on features, usability, functions, and convenience, instant messaging (IM) sites have become increasingly popular, but they could also encompass issues regarding social intimacy and negative feelings (Si, 2012). Instant messaging services such as WhatsApp allow for easy communication with people over long distances. The method has become quick, easy, and inexpensive. It was found in a Study by Lin Si that instant messaging actually increased the amount of social intimacy as well as the desire to want to communicate face to face. It is further indicated that the more you IM someone, the closer the person is to you (Si, 2012).

However, IM'ing sites such as WhatsApp causes seven negative emotions in users; including anxiety, guilt, pressure, distraction, embarrassment, suspicion, and confusion (Si, 2012). Symptoms of these emotions include worrying and a decreased self-esteem when faced with long replies, pressure to respond to messages immediately, relationship mistrust with who another person is contacting, confusion with regards to what the intended meaning of the message is, and more. Thus, although there are positive aspects of WhatsApp during interpersonal communication including quick communication with loved ones far away; it could also create communication barriers with different interpretations of a message that may result in a wide array of negative emotions (Si, 2012).

3. METHODOLOGY

In order to fully accomplish the proposed Research objectives, of answering the Research Questions, Primary Research needs to be conducted. The Research Questions have to a reasonable extent determined the method that will be employed in this research. After careful consideration of all Research limitations, the Survey method was chosen to be the method needed to answer the questions found in this project. The instrument which will be used for data collection is a survey in the form of questionnaires. The purpose of the questionnaire is to discover the perception and attitudes of the respondents regarding interpersonal communication as affected by their use of WhatsApp. The

questionnaire contains 14 questions including both closed ended and open ended questions. This method has been chosen because of its convenience, reliability, and validity in providing answers.

The Questionnaire prepared for this study has been carefully structured and designed in order to analyze and interpret all necessary elements. All respondents are assured that there will be full confidentiality with their responses and are eased into the questionnaire with a flow in the level of question difficulty and relevance. The questions used are a combination of both close and open-ended. Close- ended Questions include: Multiple Choice Questions (forced answers which are mutually exclusive as well as checklist answers), Rating Scales (Likert and Semantic Differentials), and Matrix Questions. This provides a necessary balance that is not monotonous for respondents but still achieves clear and accurate responses with a restriction on the range of available answers. Open- ended questions allow the respondents to answer the question the way he or she likes with fewer restrictions except for the length which is indicated with lines.

The Questions are made clear in order to avoid confusion that is often found in loaded or double-barreled questions.

In order to generate the most accurate results and accurate representation of the chosen population, the Random Sampling Method was implanted during this Research. By using this technique, there is a basis for future extensive continuation on the study and the research is able to generalize results on the entire population of study. The population for this Research Report is students in Abu Dhabi University, United Arab Emirates. 100 students were selected as the respondents of this study.

4. RESULTS AND FINDINGS

In this study, the researchers made use of the age comparison in order to see any significant patterns when younger or older. With regards to the students who are 23 years old or younger, they use the application more hourly (59%) than the 41% who only use it daily. This could indicate that 59% of this aged group sample, (more than half) checks the application every hour of the day. The opposite is apparent for those students who are older than 23 years old, who use the application more daily than they do hourly. 83% of College students who are 24 years or older, use WhatsApp daily, but do not check the application every hour.

The results also show whether or not the respondent would WhatsApp message someone who is in the same house as them and has been classified by age. 30 year olds are least likely to message someone when they are in the same house as them, with 83% of them claiming they would not. Results for 17 year old students and those younger indicate the opposite, with 83% claiming that they would message someone that is in the same house as them. Age grouped respondents 24-29 year olds have no difference between those who would or wouldn't message someone in the same house with 50% of respondents choosing either option. Majority (70%) of the 18-23 year old age group state that they would message someone in the same house as them.

According to the result of this study, 100% of female College Students use WhatsApp, with 80% of them 'always' using it. This is in contrast to Males where 5% of them hardly ever use WhatsApp and only 75% of male students 'always' use WhatsApp when they message. After Respondents were asked whether or not WhatsApp has changed the way in which they now communicate, 65% of respondents said that it did, with more females (72% of female respondents) than males (55% of male respondents). Only 28% of female students claimed that WhatsApp has not changed their communication patterns whereas almost half (45%) of males responded that WhatsApp made no difference to their communication.

When it comes to the biggest miscommunication problem found when communicating on WhatsApp, almost half of the females (40%) state that Lack of facial expressions on WhatsApp is the biggest cause of miscommunications, and undetectable sarcasm is the least favored rating option with only 15%.However, according to the result, the biggest miscommunication on WhatsApp involves the interpretation of the user's tone when typing a message (44%). This is followed by the lack of facial expressions that was rated highest by the girls. The lowest ranking miscommunication cause included a draw between insufficient information and undetectable sarcasm, both at 17%.

As is evident from the study, female college students are 85% inclined to make use of the WhatsApp emoji feature. There is however 10% of the sample who never use emoji's and 5% who only use it 'sometimes'. The male sample use the emoji's at 70% saying they do, and 5% claiming that they only

use it sometimes. The remaining 25% state that they do not use emoji's when using WhatsApp. When comparing the male and female WhatsApp emoji usage, one can clearly see from the line graph above that Females use emoji's 'a lot' at a 10% higher rate than males. When one communicates on WhatsApp, often there are misinterpretations phrases or the meaning of words, etc. As previously investigated on pages 28 and 29, there are many causes of the miscommunication. According to the result of this study, there will be a study of who receives the most WhatsApp miscommunications as well as the frequency. It is clearly shown that the both the 'divorced' and 'married with kids' percentage of participants never experienced any miscommunications during WhatsApp interactions, at a 100% rate. However the 'married' and 'single' participants do experience miscommunications which could alter the message as well as the responses given. This causes barriers that negatively affect the communication process. The graph shows that 60% of married respondents do not experience WhatsApp miscommunications while 40% do. The single respondents show a 31% chance of never receiving a miscommunication problem when using WhatsApp compared to the 69% who say that they do miscommunicate on the Application. Of the 69% single-status respondents, 56% claim that they do sometimes experience miscommunications, and 13% say that they always experience problems.

Occasionally when waiting for a reply on WhatsApp and seeing that the person you are chatting to has either read your message or is online, this could make one feel anxious. It's even possible to feel anxious when the person has simply not been online or read your message because now you are feeling anxious about where they are or what they're doing. Usually this involves the specific person you are chatting to. For example, if you are a mother with children, your anxiety levels might increase when your child does not respond immediately and you are expecting them too. Although this is different according to each case, there will be an evaluation of the averaged results displayed in the bar graph above. According to the graph, married college students with kids receive the most anxiety when awaiting replies (almost 50%), followed by single college students (40%) who also experience high stress/anxiety levels when awaiting a reply. Whereas according to the study, divorced individuals receive the least amount of anxiety in this situation.

Studies have been done on the type of phones respondents have, and it has been compared to the number of hours spent daily using not only their phone but WhatsApp as well. The result indicates that of those individuals that use WhatsApp daily, android phone users make up 55% of the study. IPhone users follow Android with 40% and then Nokia which consists of only a 5% share. When comparing WhatsApp to face-to-face (real life) communication, the respondents were asked which of the two they preferred. The reason for the preference was not noted at this point. From the result, 63% of respondents indicated that even though they use WhatsApp, they still prefer face-to-face communication. 37% of the respondents disagreed and claimed that they choose WhatsApp as a better way to communicate. According to the results in this study, more than half (55%) of the population sample do not correlate the frequency of WhatsApp message sending to the importance or closeness of relations with that person. However, 45%, almost half of the study does relate the two variables.

The final result involves the College students' perceptions of WhatsApp regarding three factors; namely the ease of WhatsApp usage, the helpfulness of WhatsApp with improving grammar as well as the overall effectiveness of WhatsApp as a communication medium. This was asked as a matrix question which involves the five emotional options ranging from the agreeability and disagreeability of the individual.

1. In the first question involving the ease of WhatsApp, 36% strongly agreed that the application was straight forward and messaging is easy. The next 10% of the sample agreed that yes WhatsApp is easy; however, (38%, the biggest portion) were simply neutral to the idea of ease. That leaves 6% of respondents to disagree and state that they do not find the WhatsApp application easy to use.

2. With WhatsApp and grammar, the majority of the population strongly agrees that it does in fact enhance one's grammatical ability (60%). 22% also agree to this statement as well as 12% are neutral to it. Only 6% of the sample disagree and do not think WhatsApp has any or little effect on their grammar.

3. The third question related to the overall effectiveness of WhatsApp as an interpersonal communication medium. Of the respondents, 48% (the majority) strongly agreed that it is in fact effective.

32% also agree, though not strongly about its effectiveness to communication. 10% remain neutral to the idea. The last 10% disagree and claim that college students do not find WhatsApp to be an effective form of interpersonal communication.

5. DISCUSSION

In the survey conducted, university students in Abu Dhabi are very aware of WhatsApp and it is a part of everybody's daily lives. It is however apparent that the younger students, being younger than 24 years old, spend more time on WhatsApp that those 24 years and older. This is indicated through 59% of the younger respondents claiming that they check their WhatsApp every hour every day. WhatsApp is used primarily as a messenger, to communicate with one another through text messages. Only 5% of the total population (all males) claimed that they hardly ever use the Application to message. Competitive Applications include iPhone's Imessaging application which may even be a key source as to why Android phones showed a stronger indication of WhatsApp daily use (55%), with IPhones coming in second with 40% of the population share using WhatsApp daily.

It is further indicated in the Study that WhatsApp has in fact changed the way in which college students communicate with one another. This is more apparent in females, with 72% of them claiming the change is due to WhatsApp, whereas 45% of males do not agree with WhatsApp having any effect on their communication patterns. This may even be a result of the fact that females on average spend more time on WhatsApp than males do. Females who spend up to a maximum of 7 hours and a minimum of 4 hours per day on their phones and on WhatsApp compared to males who spend a maximum of 3 hours and a minimum of 1hour per day. Another huge comparison with regards to gender is the use of emoji's on WhatsApp. Because there is a lack of face-to-face communication online, WhatsApp has 'smiley faces' which can be used to depict a person's emotions when there is no tone or expression displayed during texting (with the exception of a voice note). The results of the study found that females are more inclined to using emoji's when chatting on WhatsApp (75% always use it and only 10% never use it). Most males do use emoji's too with 70% claiming 'always'. However, there is a much larger percentage of males (25%) who don't use WhatsApp emoji's ever, compared to females who are 15% less likely never use emoji's.

Miscommunications could occur during any type of communication or interaction. During WhatsApp interactions it was narrowed down to the top two causes for miscommunications; including misinterpreting the other person's tone when texting (32%) followed by lack of facial expressions causing miscommunications with a 31% rating. These miscommunications could affect the outcome of the conversation and may cause many negative factors to be associated with WhatsApp. It was also found that respondents who are single experience the most miscommunications when sending WhatsApp messages. 69% of the single sample population indicate that they sometimes (56%) or always (13%) experience these problems. Married respondents are the category who follows with 40% experiencing some form of communication problems when messaging on WhatsApp.

WhatsApp is primarily used to send text messages. However, the other aspects that WhatsApp is involved in were analyzed too as they correlate with the experience that one gets when using the application. Respondents state that they disagree with WhatsApp being used to each other files. Files include pictures, videos, music, voice notes, and more; however 48% of the students don't believe this is what WhatsApp should be used for, and only 16% of the sample thought otherwise. They are however inclined to using WhatsApp group chats which allows for one person to message several people at a time. The group chat holds a certain number of participants who can freely message each other, and everyone can see all of the messages sent. This is extremely popular among the college students with 84% claiming to be a part of at least one WhatsApp group. Another element featured in the application is the ability to update one's WhatsApp profile. 30% of respondents claimed to regularly update their profile, which includes statuses or profile picture changes. With 45% claiming to sometimes change it and 25% claiming that they don't update it at all.

Positive aspects of the application include the ability to use privacy settings that most respondents, 85%, regularly use. These privacy settings could also be an indication as to why the rate of usage is so high even though there are features that are blocked in the UAE including WhatsApp calling or video calling (0% usage). WhatsApp has also been seen as an easy medium to use for communication, rated by 84% of respondents as neutral or relatively easy to use. Although one would think that the abbreviations often found when texting would decrease the grammar of the students, the opposite is

the case (94% think it is easy to use). A low of 6% of respondents think that WhatsApp is not easy to use.

However, WhatsApp has been seen by majority, than 60% of respondents, as a medium that is not used to avoid real life situations or encounters. It is in turn seen as an additional tool that helps communicate with other people. Although we are the age of technology and innovation, WhatsApp cannot be a replacement for face-to-face communication (63% still prefer being face-to-face). This study has also found that there is no correlation between the amount of time you spend messaging a person and how close the relation is to the person (55% of respondents rated against the closeness and frequency of WhatsApp messaging). Occasionally one messages someone daily simply because there is a reason for not being able to see them face-to-face. This does not however decrease the value or closeness put on those who are not messaged as often.

Overall, 80% of college students agree or strongly agree with WhatsApp being an effective form of interpersonal communication, 10% are neutral to the statement, and only 10% disagree with it.

6. CONCLUSION

Communication among young adults has shifted from traditional interpersonal communication that includes face to face conversations to various websites and applications limited to online communication. Because of the efficiency and convenience that online social media platforms provide, it is a preferred means by which people can communicate with others whenever they please (Sponcil & Gitimu, 2013).WhatsApp, the 5th most downloadable application in the world is used for communication through instant messaging, is downloadable to mobile phones, and has 4.69 million users in the UAE alone (Global Media Insight, 2015). WhatsApp is now even more popular in the UAE after the subscription fee was abandoned and it became free to its users in the beginning of 2016(George, 2016). With more than 56% of the UAE population being active on social media and more than 3.5 hours spent online a day, the study of social media trends is highly significant to the social trends in the country.

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