UNDERSTANDING THE USAGE OF WHATSAPP AMONG ACADEMICIANS OF HIGHER LEARNING INSTITUTIONS IN MALAYSIA

NUR SYAHIDA BINTI ZAINAL ABIDIN

A project report submitted in partial fulfilment of the requirements for the award of the degree of

Master of Project Management

School of Civil Engineering
Faculty of Engineering
Universiti Teknologi Malaysia

ACKNOWLEDGEMENT

My all gratitude, praises and thanks to Almighty ALLAH who bestowed me this opportunity and infinite support for successful accomplishment of this study. May peace and blessing be upon Holy Prophet Muhammad SAW, his parents, family, companions, and Ummah.

I would like to take this opportunity to express and record my greatest gratitude towards my supervisor Dr Haliyana Binti Khalid, for all the time she allocated and all her guidance, encouragement, critics, and generosity to provide her experience and knowledge. Without her guidance and support, this dissertation report would not have seen the light. Also I would like to take this opportunity to express and record my gratitude towards my beloved husband, Ahmad Amin Aleman for all the time he allocated and all his encouragement, throughout my journey finishing my Master. A big thankful also for everyone that I encountered and meet along the journey until it was completed.

I would like to express my apperception to the faculty of Civil Engineering's staff of Universiti Teknologi Malaysia, International Business School's staffs, and to all Universiti Teknologi Malaysia's staff. Also, I would like to express my appreciation to the respondents who spent their time to participate in the questionnaires and interviews of this research and to all who contributed to make the process of getting information or collecting the data. Lastly, my sincere wishes to all friends in UTM.

ABSTRACT

Instant messaging, specifically WhatsApp has been used entirely in daily communication across the world. Undoubtedly, education sector has become among the most that use instant message widely, be it among the academicians, the administrative staff or even between students and academicians. The usage of WhatsApp is becoming more prevalent among academicians of higher learning institutions. It is not only used for personal communication, but also used to manage their job responsibilities such as supervision, administrative task and also organizing events. The research objective of this study is to understand the usage of WhatsApp among academicians of higher learning institutions in Malaysia and to understand its challenges and implications on their work-life balance. Comprehensive literature review from previous researches have been done to gather information on the usage and implication of WhatsApp in academic field followed with quantitative method of online and in-person questionnaires distribution as one of the tools to gain data from respondents, which comprises of academicians of various positions. Another approach of data collection was a qualitative method, which is done by having an interview session of selected participants in academic field. The result of this study shows that academicians are happy when they are using WhatsApp as a medium of communication among their colleagues and agreed that WhatsApp has helped them a lot in their work as an academician. They have become more productive as workrelated discussions are made easy using the WhatsApp group chat feature. Yet, this has developed a conflict in their work-life balance as they need to be alert with workrelated matters even during their off-days. The analysis of this study may be useful for academicians and researcher s for understanding the productivity of WhatsApp users and the relationship among their professional community.

ABSTRAK

Aplikasi pesanan segera, khususnya WhatsApp telah digunakan sepenuhnya dalam komunikasi harian di seluruh dunia. Tidak dinafikan, sektor pendidikan telah menjadi antara yang paling banyak menggunakan pesanan segera secara meluas, sama ada di kalangan ahli akademik, kakitangan pentadbiran atau bahkan antara pelajar dan ahli akademik. Ia bukan sahaja digunakan untuk komunikasi peribadi, tetapi juga digunakan untuk menguruskan tanggungjawab dalam bekerja seperti pengawasan, tugas pentadbiran dan juga acara penganjuran. Objektif kajian ini adalah untuk memahami penggunaan WhatsApp di kalangan ahli akademik institusi pengajian tinggi di Malaysia dan untuk memahami cabaran dan implikasi mereka dalam keseimbangan kerja-kehidupan mereka. Kajian sastera yang komprehensif dari penyelidikan sebelum ini telah dilakukan untuk mengumpulkan maklumat tentang penggunaan dan implikasi WhatsApp di bidang akademik diikuti dengan metode kuantitatif pengedaran soal selidik dalam talian dan dalam diri sebagai salah satu alat untuk mendapatkan data dari responden, yang terdiri dari ahli akademik pelbagai jawatan. Satu lagi pendekatan pengumpulan data adalah kaedah kualitatif, yang dilakukan dengan mengadakan sesi wawancara peserta terpilih dalam bidang akademik. Hasil kajian ini menunjukkan bahawa ahli akademik gembira apabila menggunakan WhatsApp sebagai medium komunikasi di kalangan rakan sekerja dan bersetuju bahawa WhatsApp telah membantu mereka dalam kerja mereka sebagai ahli akademik. Mereka telah menjadi lebih produktif kerana perbincangan berkaitan kerja dibuat dengan mudah menggunakan ciri perbualan kumpulan di WhatsApp. Namun, ini telah menimbulkan konflik dalam keseimbangan kerja-kerja mereka kerana mereka perlu berjaga-jaga dengan perkara yang berkaitan dengan pekerjaan walaupun pada hari cuti. Analisis kajian ini berguna bagi para ahli akademik dan penyelidik untuk memahami produktiviti pengguna WhatsApp dan hubungan di kalangan komuniti profesional mereka.

TABLE OF CONTENTS

		TITLE	PAGE
	DEC	LARATION	iii
	DED	ICATION	iv
	ACK	NOWLEDGEMENT	\mathbf{v}
	ABS	ГКАСТ	vi
	ABS	ГКАК	vii
	TAB	LE OF CONTENTS	viii
LIST OF TABLES		xi	
	LIST	OF FIGURES	xii
	LIST	OF ABBREVIATIONS	xiii
	LIST	OF APPENDICES	xiv
CHAPTE	R 1	INTRODUCTION	1
	1.1	Introduction	1
	1.2	Background	3
	1.3	Problem Statement	4
	1.4	Research Aim	5
	1.5	Research Objectives	5
	1.6	Scope of The Study	5
	1.7	Significant of The Study	6
	1.8	Research Methods	6
	1.9	Limitation of The Research	7
	1.10	Conclusion	8
CHAPTER 2		LITERATURE REVIEW	9
	2.1	Introduction	9
	2.2	Group Chat in Organization	11
	2.3	Participation in Group Chat	12
	2.4	Well Being of WhatsApp Users	13

2.5	Work	-Life Balance for Employees	14
2.6	Resea	rch Framework	16
CHAPTER 3	MET	HODOLOGY	19
3.1	Introd	luction	19
3.2	Resea	rch Design	20
3.3	Popul	ation and Sampling Technique	22
3.4	Instru	mentation and Measurement	24
	3.4.1	Quantitative instrumentation	25
	3.4.2	Qualitative instrumentation	26
3.5	Data (Collection	27
	3.5.1	Quantitative Data Collection	28
	3.5.2	Qualitative Data Collection	28
3.6	Data A	Analysis	29
3.7	Concl	usion	31
CHAPTER 4	DATA	A ANALYSIS	33
CHAPTER 4 4.1		A ANALYSIS Juction	
	Introd		33
4.1	Introd Quant	luction	33 33 33 34
4.1	Introd Quant	duction citative Analysis (Questionnaire Survey)	33 33 34
4.1	Introd Quant 4.1.1	duction citative Analysis (Questionnaire Survey) Demographic Analysis	33 33 34
4.1	Introd Quant 4.1.1 4.1.2	duction ditative Analysis (Questionnaire Survey) Demographic Analysis The Intensity of WhatsApp Usage	33 33 34 36
4.1	Quant 4.1.1 4.1.2 4.1.3	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups	33 33 34 36 38 41
4.1	Quant 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups Interaction in the WhatsApp Groups	33 33 34 36 38 41 45
4.1 4.1	Quant 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups Interaction in the WhatsApp Groups Well-Being of the Users	33 33 34 36 38
4.1 4.1	Quant 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 Qualit	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups Interaction in the WhatsApp Groups Well-Being of the Users tative Analysis (Interview Sessions)	33 34 36 38 41 45
4.1 4.1	Quant 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 Qualit 4.2.1	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups Interaction in the WhatsApp Groups Well-Being of the Users tative Analysis (Interview Sessions) Effective Communication Tool	33 34 36 38 41 45 47
4.1 4.1	Quant 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 Qualit 4.2.1 4.2.2	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups Interaction in the WhatsApp Groups Well-Being of the Users tative Analysis (Interview Sessions) Effective Communication Tool Participation in Group WhatsApp	33 34 36 38 41 45 47 48
4.1 4.1	Quant 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 Qualit 4.2.1 4.2.2 4.2.3	Demographic Analysis The Intensity of WhatsApp Usage Usage of WhatsApp Groups Interaction in the WhatsApp Groups Well-Being of the Users tative Analysis (Interview Sessions) Effective Communication Tool Participation in Group WhatsApp Well-Being when Using WhatsApp	33 34 36 38 41 45 47 48 49 50

CHAPTER 5	CON	CLUSION AND RECOMMENDATIONS	55
5.1	Introd	uction	55
5.2	Discus	ssion of Main Finding	55
	5.2.1	Usage of WhatsApp among academicians (Objective 1)	56
	5.2.2	The Implication of WhatsApp to work-life balance (Objective 2)	57
5.3	Recon	nmendation	58
	5.3.1	Recommendation For The Organization	59
	5.3.2	Recommendation For future study	59
5.4	Concl	usion	60
REFERENCES			61

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 3.1	Population of the related respondent to the study	24
Table 4.1	Academicians' Happiness When Using WhatsApp	46
Table 4.2	Academicians' Productivity When Using WhatsApp	47

LIST OF FIGURES

FIGURE NO	TITLE	PAGE
Figure 1.1	Project Communication Management from PMBOK	1
Figure 1.2	Statistic of WhatsApp users	2
Figure 2.1	Literature Review Themes	11
Figure 2.2	Research framework for the whole study	17
Figure 3.1	Research Methodology Flowchart	21
Figure 4.1	Respondents' gender	34
Figure 4.2	Respondent Position	35
Figure 4.3	Respondent's Age Group (years)	36
Figure 4.4	Hours Spent on WhatsApp	37
Figure 4.5	Frequency of Checking WhatsApp	38
Figure 4.6	Number of WhatsApp Groups	39
Figure 4.7	Work-Related WhatsApp Groups	40
Figure 4.8	WhatsApp Groups Policy at Work	40
Figure 4.9	What Interest the Respondents to Reply in the WhatsApp Group	41
Figure 4.10	When the Respondents Reply to WhatsApp Group	42
Figure 4.11	When Colleague Share Good News	43
Figure 4.12	When Colleague Post an Announcement	44
Figure 4.13	Interesting Topics	44

LIST OF ABBREVIATIONS

SPSS - Statistical Package for Social Science

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	Data collection for qualitative approach	65
Appendix B	Questionaire	94

CHAPTER 1

INTRODUCTION

1.1 Introduction

In every project management, communication technology is the crucial aspect of Project Management Body of Knowledge (PMBOK, 2013). Communication in the context of academics does not stress on the high technology used of software, rather it is a day to day basis communication within their circle of community, which includes colleagues, administrators, and students. Therefore, an effective and convenient application used such as WhatsApp is already considered as communication technology. As shown in Figure 1.1, communication technology plays an important role in planning and also in managing communication in the project.

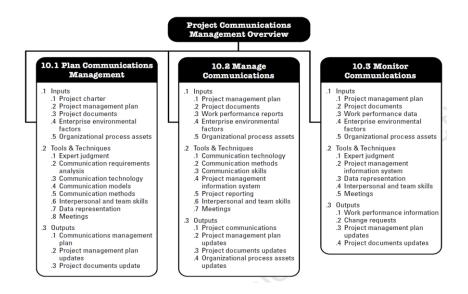


Figure 1.1 Project Communication Management from PMBOK

WhatsApp is truly a success mobile communication application that was developed by Brian Acton and Jan Koum, where both are ex-employees of a well-known IT-based company, Yahoo Inc. The idea behind the initial evolution was to create an application that would have a person's status beside his name. The application provides a simple interface with no advertisement that appeals to users, allowing them to communicate with other WhatsApp users either in groups or individually. It did not take long for them to develop the application in 2009, and since that, WhatsApp has been booming and surpassed Facebook and WeChat as the most popular social media platform with half a billion active users per month as of 2019 (Statista, 2019). In other research, Searchenginejournal.com found out that on average the open rate of WhatsApp messages per day is 70% which indicates that WhatsApp has been used as prominent communication means in daily life.

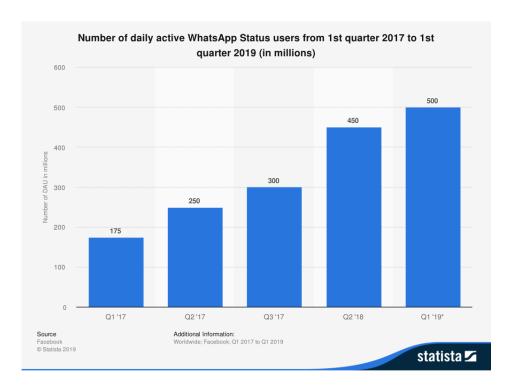


Figure 1.2 Statistic of WhatsApp users

Other key features that WhatsApp provides that attract more people to switch to using it are:

- O <u>Group Chat:</u> This feature has made a discussion in a group effortless. One group can be up to 256 individuals.
- WhatsApp Web: With this feature, users can directly send and receive messages via computer. Everything will sync and show up on the phone application, however, the web version does not offer a calling feature.
- No Usernames or Pins: WhatsApp works with just the phone number and integrates consistently with user phone's existing contacts, whereby WhatsApp can identify people in the contact list who currently use the application, thus users don't have to add them manually and they don't have to bother remembering other users' username or PIN.
- O <u>Always Logged In:</u> One awesome trait about WhatsApp is the ability to always be logged in. Hence, users will never miss a message from anyone.

1.2 Background

The growth of technology has empowered everyone with different ways of communicating and reaching out to others. Instant messaging platforms explicitly WhatsApp has become a dominant communication channel and means in daily communication. WhatsApp is among the famous communication platform used nowadays, and with the help of it, people can connect themselves to the society without boundaries. It is an effective medium to rapidly exchange vital information across the globe. 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 by Si (2012) "the more you instant message someone, the closer the person is to you". Undoubtedly, education is one of the most key service areas, which gain instantaneous benefits from new developments in the information and technology sector (Malhotra and Bansal, 2017).

This application is an advantage for everyone in many aspects, which occupies a major part of their day-to-day life. The simplicity of its features has differentiated WhatsApp from other mobile communication applications. The speed, privacy, group chat, and widespread use are features that have made WhatsApp an essential tool for every organization there is. According to Acton, B., & Koum, J. (2014) in their official WhatsApp blog, their daily active users' number has reached 1 billion users. The potentiality is endless. One of the main uses of WhatsApp would be the method of exchanging knowledge and consultation, which complies with research done by Sulliman (2014) who has studied WhatsApp as a method for consultation in health and medical industry.

It is essential for every community to work in groups, have it a discussion or just even a chitchat. In general, people want to join a group that is based on their social, cultural and lifestyle according to their personal preferences and needs. This is a common occurrence that applies to everyone. They prefer to make a group or become a member of a group on WhatsApp, which belongs to their peers. Preferably, they want to join a WhatsApp group of their colleagues, family members, relatives, and friends. A research was done by Seufert et al. (2015), in which the finding exposed that participation in the WhatsApp group was high with specifically selected members who know each other. Besides that, the group chat feature is becoming the key function in WhatsApp as almost every user uses it frequently. WhatsApp can be an effective tool to improve productivity and relationship.

1.3 Problem Statement

Various studies have explored the usage of WhatsApp in the medical field (Drake, et al. 2016) and academic (Davitivitch & Yavich, 2016) industry, yet only a limited number of studies have focused on its implication to work-life balance. There were several literature reviews found on students' perspective and WhatsApp's implication to the students, but it was very limited on the academician side. Although the adaptation rate of WhatsApp in daily life is high, empirical studies of WhatsApp practices that explicitly associate social interaction in the application with job

productivity and personal well-being among academicians are largely absent from the literature. In this study, researcher will explore how the academicians use WhatsApp on their daily basis for work purposes. Researcher will also identify the challenges that the academicians encountered when using WhatsApp as one of the main communication tools in the academic field and how is the usage of WhatsApp affect their work-life balance

1.4 Research Aim

The research aim is to provide a deeper understanding of the usage of crossplatform messaging service, specifically WhatsApp, among the academicians of higher learning institutions in Malaysia. This research is an exploratory study, in which this study was conducted to have a better understanding of the research gap, but will not provide conclusive results.

1.5 Research Objectives

- i To understand how WhatsApp is being used by academicians in their day-today basis
- ii To understand its challenges and implication to their work-life balance

1.6 Scope of The Study

The scope of this study is confined to the usage of the mobile communication application, WhatsApp, among academicians in higher learning institutions. The location of this study includes various universities and colleges in Malaysia and the participants of this study consist of academicians of different positions.

1.7 Significant of The Study

Every organization is reliant on communication, which defined as the exchange and dissemination of ideas, message or information by speech, writing, and signal. As technology being more and more sophisticated, everyone is looking for a fast and easy yet accurate way to communicate. It's all very well saying that WhatsApp now has more than half a billion daily active users (Statista, 2019) and academicians now tend to use WhatsApp as the main communication tool to have discussions, spreading news and even making decisions. It is much more likely to get a response if communication is made via their preferred medium. It is anticipated that the results will increase the understanding of significance usage of WhatsApp among the academicians in which may lead to high productivity and maintaining relationship while preserving the insanity and reducing workload and burnout. An exploration of the different prospects of social media is ultimately beneficial to increase knowledge sharing in university research cultures. Such research would also be beneficial for other organizations outside academia to raise knowledge sharing practices. The study also forms the basis for further future research related to crossplatform messaging application.

1.8 Research Methods

In this study, the research design used is the mix methods of quantitative and qualitative, in which the findings from both methods will fill the gap of the research objectives. The quantitative approach is used to describe and access the perception of selected groups on how WhatsApp is being used on their daily basis by distributing the survey. 239 participants have participated in the survey questionnaires and the structure questionnaires are related to the interaction and practice of WhatsApp. The participants were from the group of academicians that varies in positions and different universities in Malaysia. This method is much more structured as respondents are guided to answer the questionnaires. The collected data were analyzed using the non-parametric descriptive statistics. The model structure of nonparametric models is not specified a prior but is instead driven from data. The

term *nonparametric* is not meant to imply that such models completely lack parameters, but rather that the number and nature of the parameters are flexible and not define in advance. The software used for this analysis is SPSS (Statistical Package for the Social Sciences).

The second research method is the qualitative approach in which interview sessions were conducted. For this method, a total of 3 participants have been interviewed in-person in which all the participants are from different institutions in Malaysia. A qualitative approach is used to dive deeper into the participants' thoughts and perspectives on the usage of WhatsApp among their organization. As academicians, they were in an ideal position to give the valuable first-hand information from their very own perspective. Data collected from both approaches were analyzed using Thematic Analysis whereby we closely examine the data to pinpoint the common themes such as daily usage of WhatsApp, participation in group WhatsApp as well as challenges of using WhatsApp.

1.9 Limitation of The Research

Although careful and specific steps have been taken in completing this study, there are some limitations encountered in evaluating every aspect to obtain a comprehensive study result. Withal, the outcome of this study will contribute to new useful information to the institutions especially as it is evidenced by feedback from the academicians itself. Among the limitations faced throughout this study is the very short time constraint. Furthermore, in completing the study the time has to be divided into the essential tasks in the office and completing this Master project. If full coverage can be given to this study, it can be implemented in more detailed and overall. Furthermore, the difficulties in obtaining the participants involved in interview sessions are also limiting the study due to large and distant population studies.

1.10 Conclusion

This chapter explained the fundamental of the study conducted. This study is important to understand the academician's work-life balance as the adaptation of WhatsApp has increasingly influenced their life. Therefore, unraveling of the enigma of the usage among the academicians is what motivates the researcher to continue with this study. Proceeding with the introduction is the problem statement where the researcher defined the gap of our study, followed by the research objectives, methodology and significance of the study. The next chapter will be the literature review where the experts' studies and researches were captured and cited, followed by the research methodology in which research flow is explained in detail. Going on to the next chapter is the data collection and findings where the researcher defined how data was collected, and then analyze and interpret them to get what should be the findings for this study. This paper concludes with the highlighted results and also recommendations.

REFERENCES

- Acton, B., & Koum, J. (2014). WhatsApp blog. Retrieved from http://blog.WhatsApp.com/
- Adams, William. (2015). Conducting Semi-Structured Interviews. 10.1002/9781119171386.ch19.
- Adisa, T., Gbadamosi, G. and Osabutey, E. (2017), What happened to the border? The role of mobile information technology devices on employees' work-life balance, Personnel Review, Vol. 46 No. 8, pp. 1651-1671
- Aharony, N. (2015). What'sApp: A social capital perspective. Online Information Review. 39. 26-42. 10.1108/OIR-08-2014-0177.
- Ahmed A and Rana A., (2018), Usage and Perceptions of Mobile Devices and Applications among HE Instructors, International Journal of Information and Education Technology, Vol. 8, No. 11, November 2018
- Amichai-Hamburger, Yair & Aharony Noa. Bronstein, Jenny & Gazit, Tali & Perez, Oren & Bar-Ilan, Judit &, (2016). *An examination of the factors contributing to participation in online social platforms*. Aslib Journal of Information Management. 68. 793-818
- Avi K. (2018). The Story and History of WhatsApp, (June) Retrieved from https://candybitsocial.com/news/history-of-WhatsApp
- Bere, A. (2012). A comparative study of student experiences of ubiquitous learning via mobile devices and learner management systems at a South African university. Proceedings of the 14th Annual Conference on World Wide Web Applications: (4-17). Durban, South Africa: Cape Peninsula University of Technology
- Bronstein, J., Gazit, T., Perez, O., Bar-Ilan, J., Aharony, N. and Amichai-Hamburger, Y. (2016), An examination of the factors contributing to participation in online social platforms, Aslib Journal of Information Management, Vol. 68 No. 6, pp. 793-818
- Charl Vollgraaff, (2018), *Employer's Guide to WhatsApp groups in the workplace*, Retrieved from http://www.seesa.co.za/employers-guide-to-WhatsApp-groups-in-the-workplace
- Church, K., & Oliveira, R. (2013). What's up with WhatsApp? Comparing mobile instant messaging behaviors with traditional SMS. MOBILEHCI Collaboration and Communication, (pp. 352-361). Munich, Germany.

- Cristobal F., Diego Y, and Scott M., (2019), *Intention to Use WhatsApp*, IntechOpen, Book Citation Index in Web of Science™ Core Collection (BKCI)
- Davidivitch N & Yavich R. (2016). WhatsApp Messaging: Achievement and Success in Academia. International Journal of Higher Education, Vol. 5, No. 4; 2016
- Drake, T.M., Claireaux, H.A., Khatri, C. and Chapman, S.J. (2016), *WhatsApp with patient data transmitted via instant messaging?*, The American Journal of Surgery, Vol. 211 No. 1, pp. 300-301.
- Feride A., (2015), Academicians' Use Of Social Media Tools For Education: An Assessment
 On Communication Faculties In Turkey And In Baltic Countries, E-Journal of
 Intermedia, 2015/2(2) 330 339
- Gabarro, j. (1990), The development of working relationship. In J. Galegher, R. E. Kraut, &
 c. Egido (Eds.), Intellectual Teamwork: Social and Technological Foundations of
 Cooperative Work (pp. 79-110). Hillsdale, NJ: Lawrence Erlbaum Associates
- Gazit T. and Aharony N. (2018). Factors explaining participation in WhatsApp groups: an exploratory study, Aslib Journal of Information Management Vol. 70, No. 4, 2018, pp. 390-413
- Glucksmann, M. and Nolan, J. (2007), New technologies and the transformations of women's labor at home and work, Equal Opportunities International, Vol. 26 No. 2, pp. 96-112.
- Johnston, M.J., King, D., Arora, S., Behar, N., Athanasiou, T., Sevdalis, N. and Darzi, A. (2015), Smartphones let surgeons know WhatsApp: an analysis of communication in emergency surgical teams, The American Journal of Surgery, Vol. 209 No. 1, pp. 45-51.
- Katies E. (2016), Getting acquainted with social networks and apps: WhatsApp-ening with mobile instant messaging?, Number 6 2016, pp. 11-15
- Kaye, L. K., Kowert, R., & Quinn, S. (2017). The role of social identity and online social capital on psychosocial outcomes in MMO players. *Computers in Human Behavior*, 74, 215-223. doi: 10.1016/j.chb.2017.04.030
- Kehinde H., (2016), WhatsApp and Information Sharing: Prospect and Challenges, International Journal of Social Science and Humanities Research, Vol. 4, Issue 1, pp: (615-625), Month: January - March 2016
- Kofodimos, J. R. (1993). The Jossey-Bass management series. Balancing act: How managers can integrate successful careers and fulfilling personal lives. Jossey-Bass.

- Kurubaran Ganasegaran, Pukunan Renganathan, Abdul Rashid & Sami Abdo Radman Al Dubai (2016). *The m-Health revolution: Exploring perceived benefits of WhatsApp use in clinical practice*. International Journal of Medical Informatics, 145-151. Retrieved from http://www.sciencedirect.com.ezproxy.utm.my/science/article/pii/S13865056163022
- Lie, M., & Sorensen, K. (1996). *Making technologies our own? Domesticating technology into everyday life*. Oslo: Scandinavian University Press (p.2)
- Malhotra, D. and Bansal, S. (2017), Magnetism of WhatsApp among veterinary students, The Electronic Library, Vol. 35 No. 6, pp. 1259-1267.
- Michelle R.Hebl^{al}Melissa J.Williams^{bl}Jane M.Sundermann^{a2}Harrison J.Kell^{a3}Paul G.Davies, (2010), *Selectively friending: Racial stereotypicality and social rejection*, Journal of Experimental Social Psychology Volume 48, Issue 6, November 2012, Pages 1329-1335
- Mirawati, Ira and Suryana, Asep and Hidayat, Mien and Agustin, Herlina, (2018), *Gender Differences in Workplace Humor Among Lecturers: Study on WhatsApp Group(s)*, International Journal of Engineering and Technology, Volume 7 Number 2.29.
- Muhammad N. (2019), Uncovering the role of social media and cross-platform applications as tools for knowledge sharing, VINE Journal of Information and Knowledge Management Systems, Vol. 49 No. 3, 2019, pp. 257-276
- Muller, M. J., Raven, M. E., Kogan, S., Millen, D. R., & Carey, K. (2003). *Introducing Chat into Business Organizations: Toward an Instant Messaging Maturity Model.*Paper presented at Conference on Supporting Group Work, Sanibel Island, FL.
- Naveen K. and Sudhansh S (2016). Survey Analysis on the Usage and Impact WhatsApp Messanger, Global Journal of Enterprise Information System
- Nicole B. and Sarah D., (2017) WhatsApp and wellbeing: a study on WhatsApp usage, communication quality and stress. Preceding HCI '17 Proceeding of 31st British Computer Society Human Computer Interaction Conference, Article No. 85
- O'Hara, K., Massimi, M., Harper, R., Rubens, S., & Morris, J. (2014). *Everyday dwelling with WhatsApp*. Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing (pp. 1131-1142). ACM, Baltimore, MD, USA.
- Pauleen, D., Campbell, J., Harmer, B., & Intezari, A. (2015). Making Sense of Mobile Technology: The Integration of Work and Private Life. SAGE Open. https://doi.org/10.1177/2158244015583859

- Seidman, G. (2013). Self-presentation and belonging on Facebook: how personality influences social media use and motivations. Personality and Individual Differences, 54, 402–407
- Seufert, M., Schwind, A., Hoßfeld, T. and Tran-Gia, P. (2015), *Analysis of group-based communication in WhatsApp*, Proceedings of the 8th International Conference, MONAMI 2016, Abu Dhabi, United Arab Emirates, Vol. 158, pp. 225-238
- Shiv R and Divyal M., (2018), Constructive usage of WhatsApp in education sector for strengthening relations, International Journal of Educational Management, Vol. 33 No. 5
- Si L., (2012), Instant Messaging on Interpersonal Relationship: How It Brings Intimacy and Negative Feelings? p.30
- Statista, (2019), *WhatsApp Statistics & Facts*, Retrieved from: https://www.statista.com/topics/2018/WhatsApp/
- Suliman, M.T. (2014), Sending photos through WhatsApp: a faster method for teleconsultation, Journal of Local and Global Health Science, Vol. 2014 No. 1, p. 2.
- Toyin A., Gbolahan G. and Ellis L., (2017), What happened to the border? The role of mobile information technology devices on employees' work-life balance, Personnel Review, Vol. 46 No. 8, 2017, pp. 1651-1671
- Uysal, N., (2016). Social collaboration in intranets: The impact of social exchange and group norms on internal communication. International Journal of Business Communication, 53, pp.181-199.
- Valcour M., (2007), Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. Journal of Applied Psychology, 92 (6): 1512-23
- Valkenburg, P. M., & Peter, J. (2009b). The effects of Instant Messaging on the quality of adolescents' existing friendships: A longitudinal study. *Journal of Communication*, 59 (1), 79-97. doi: 10.1111/j.1460-2466.2008.01405.