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The Impact of Interactive Social Media on Students' Communication and Social Motivation Skills at University Level

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Abstract

The study examines the relation between interactive social media usage and social competencies i.e. verbal and non-verbal communication and social motivation skills of the university students of Pakistan. It also aims at finding whether gender variable in interactive social media usage reflect the verbal and non-verbal communication and social motivation skills of the university students or not. This was the cross-sectional research study. The sample consisted of 202 undergraduate students who were selected from the universities of Islamabad and Rawalpindi. A demographic form was used for taking background information from the participants. Multidimensional Social Competence Scale (MSCS) for young adults was administered. The study revealed that there is significant relationship of interactive social media usage with nonverbal communication and social motivation skills, but no significant relationship exists for the verbal communication skills. Furthermore, study investigated the effect of gender difference which was not significant. Interactive social media is one of the most used technological platforms in current times. This study will help policy makers, psychologists and health practitioners to facilitate individuals of all ages particularly adolescents and young adults in predicting psychological well-being.

Keyword: *Interactive Social Media, Verbal Communication, Non-Verbal Communication, Social Motivation*

Introduction

Internet is a global network, an increasing phenomenon of the 21st century. It provides a variety of information and

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communication facilities all around the world, playing a vital role in human life. People use internet connection mainly for communication, which generally has positive impact though can be labelled as paradox as well. The profuse use of computers, laptops, and mobile phones and the availability of internet connectivity has put many undergraduates at the touch of a finger to actively participate in social networking. With a focus on networking, social media has become a term commonly used to describe various electronic communication platforms that enable the creation, sharing and exchange of information and ideas.

Social media has become pervasive in modern digital society. It is mainly categorized into three domains: (1). Streaming Social Media (YouTube, Skype, and TikTok etc.), (2). Browsing Social Media (Email, Pinterest, LinkedIn etc.), and (3). Interactive Social Media (WhatsApp, Facebook, Instagram etc.). Among these three domains, Interactive Social Media is mostly being used which is also the focus of my research. The Interactive Social Media can be acknowledged as the relationship that exist between networks of people, which mostly contains social interacting apps in its domain. The current research focuses on the most used top five applications i.e. WhatsApp, Facebook, Instagram, Twitter and Snapchat, selected for research purpose. This issue is being selected for research purposes to determine the impact of social media usage in building competencies of the university students. It is expected that this research will contribute to the emerging studies on the social media usage for further research and academic purposes.

Social networks allow individuals and communities to create and maintain social capital. This allows an individual to access resources such as information and social support from other network members (Viswanath, 2008). Social media, on the other hand, not only break down distance and time barriers to connect with others, but also provide individuals with a platform to expand and enhance their offline networks and interactions (Antoci et al., 2015). As defined by Bryer and Zavatarro (2011), social media is 'technology that facilitates social interaction, transforms collaboration and enables consultation among stakeholders'. Social media activities typically involve social skills such as interpersonal relationships, social interaction, and various types of information-sharing activities (Boyd & Ellison, 2007). Social interaction also includes the use and interpretation of social cues such as showing and recognizing facial expressions (Ekman, 1993; Izzard, 1992). It can be observed that when measuring use of social media, most studies rely on individuals' frequency of use and the number of social media platforms. It should be noted here that current literature characterizes the link between social media use and human competencies in two ways; one, body of literature views social media use as a conventional social behavior with positive or negative effects on health-related outcomes, while the other focuses on problematic use and related effects. It is also instructive to note that studies that focus on problematic use of social media addiction scales go beyond measuring frequency and duration of use (Andreassen, 2015).

Young people use social media for a variety of reasons, including entertainment, identity building, social reinforcement

(via online interactions), and maintaining interpersonal relationships (Ifinedo, 2016). According to one study, an overwhelming number of today's university students (referred to as 'Net Generation' students) spend nearly nine hours a day on social media, most using social networking sites and browsing tools. (Rosen, 2011; Cabral, 2011). The pace at which Interactive Social Media has introduced major changes worldwide with rapid acceptance and adoption among masses, it has a commendable sharing of unique and vital relationship with the competencies of the individuals. According to Ross et al. (2009), 'Online communication and social behaviors seem to be integrated across cultures'. In close relationship with the interactive social media, the social skills involve verbal and non-verbal communications which is employed to have interaction with each other (Dereli, 2009; Samanci, 2010). Along with these, social motivation is also an important factor which is related to the study. Humans communicate through different channels such as physical appearance, tone of voice, body language, and word choice. In social media, 'Communication occurs when someone responds, comments on another person's status, or initiates a conversation with another person. Since the rise of social media, online communication has become a major part of communication' (Othman, Fariha, 2016).

Over the past decade, the way people communicate has changed dramatically. About 03 billion people use social media today, which means 40% of the world uses social media to communicate. Not surprisingly, this widespread use has had far-reaching implications for communication, which is influenced by

an individual's channel of communication, expectations of others, and personal style of speaking. People communicating on social media and texts aren't saying that they're mispronouncing. They use a whole new language' (Subramanian, 2017). Internet communication through social media has changed the way people communicate. Therefore, with this understanding, it is important to understand how social media affects the way people communicate. Personal responses, emotional, or social changes are changed because people do not have to respond online to these forms of communication. Social networks and online interactions provide coverage between the sender and recipient of a message. This can lead to some unanswered conversations, as this interaction is no longer face-to-face and people feel like they can say anything without consequences. This leads to less experience and awareness of the needs of others based on these types of indicators that can only be found in face-to-face communication. 'Misra et al. (2014) found that people who communicate without a mobile device showed higher levels of empathy than those who use a mobile device as a source.' (Jha & Srirang, 2020). This understanding explains very well how social media has affected communication. On social networks, most communication takes place through text and common images. This type of communication is not comparable to the rich symbols and complex messages that result from face-to-face conversations. As an important communication mediator, social media has the potential to enhance social support, enhance relationships, and create a sense of purpose and connection in life (Seepersad, 2004). A study by Kim and Kim (2017) also showed that social media use

was positively correlated with heterogeneity of communication networks and social capital among college students. Onyeka, Sajoh & Bulus (2013) argued that frequent use of social media sites does not affect student learning and academic performance. Similarly, Valenzuela et al. (2009) found that intensive Facebook use was positively associated with student life satisfaction and social participation. On the other hand, rapid changes in web technology can lead to psychological stress and social problems (Valkenburg & Peter, 2009; Turkle, 2011). Social media can interfere with face-to-face interactions (Hampton, Goulet & Rainie, 2009). Another study claimed that students' obsession with social media distracted their attention and significantly reduced their retention of knowledge (Junco & Cotten, 2012).

Methodology

A cross sectional research design was used, in which data was collected from 202 participants from the public and private universities including NUST, FAST, RMU, HBS Medical College, Gordon College and Arid Agriculture University. Data collection was approved from departmental research board. After obtaining authorization from the official authorities of each university, data was collected from students with their complete consent. 122 females and 80 males participated in the survey with 60.40% and 39.60% participation share respectively. Students enrolled in Undergraduate/BS Level (Bachelor in Science) were selected as target population. Age range of 18 to 24 years (Mean age = 21 years) was selected for the sample. The individuals who use less than three interactive social media platforms were not selected.

Those participants who had affiliation with university but were in Postgraduate/ Masters Level were excluded from the research.

Instruments

Demographic Questionnaire

A questionnaire was used consisting of five items pertaining to address basic demographic information about Gender, Age, Institutions' name of the individuals along with social media usage time and number of social software used by the students.

Multidimensional Social Competence Scale (MSCS)

It was used for young adults to measure the competence across various domains (Jodi Y., Grace I., 2018). MSCS has 07 domains with each of the domain containing 11 items that makes a total of 77 items. Only 03 domains consisting of 33 items were selected to measure Verbal and Non-Verbal Communication and Social Motivation Skills. Participants were asked to rate each item on a 5-point Likert scale. For each item, they must circle the number that best describes their behavior over the past six months. Each of the subscale has excellent reliability i.e. Verbal Communication Skills (0.794), Non-Verbal Communication (0.806) and Social Motivation (0.862). Similarly, each domain has good discriminant validity i.e. Verbal Communication (0.697), Non-Verbal Communication Skills (0.773) and Social Motivation (0.704) (Jodi Y., Grace I., 2018).

The data collected from the participants was checked for completeness, coded and then was analyzed on SPSS for windows version 22 statistical software for analysis. Independent Sample T-test was applied for assessing differences. This test was used as

it has the capability to compare means of two independent groups. Precision was one of the main reasons to select this test.

Results

The stages of data analysis that were used in this study includes descriptive statistics and the testing of variables. It was done by statistical analysis using SPSS software by applying and testing the Independent Sample T-Test.

Table 1 shows the socio-demographic characteristics of the study participants. Analysis of frequencies and percentages of demographic variables showed that there were 202 participants in total (N=202). Majority of the participants were between the age range of 20 to 21 years (n=89) with the overall mean age and standard deviation was 21.7 years and 0.729 respectively. 39.6% of the sample consisted of males (n=80) and 60.4% of the sample consisted of females (n=122). In terms of time spent on social media, the majority of respondents spent less than 05 hours/day which makes 54.5% (n=110) and others with 45.5% (n=92) respondents spent more than 05 hours/day on social media.

Table 1: *Socio-Demographic Characteristics of the Study Participants (N=202)*

Variables	***F***	**%**	**M**	**SD**
Age			21.70	0.729
18-19	39	19.3		
20-21	89	44.1		
22-24	74	36.6		
Gender			01.60	0.490
Male	80	39.6		
Female	122	60.4		
Time Spent on Social Media			01.46	0.499
Less than 05 Hours/Day	110	54.5		
More than 05 Hours/Day	92	45.5		

Note: n=Number of Participants, %=Percentage, M=Mean, SD=Standard Deviation

Table 2 shows Group Statistics for sum of verbal communication skills, nonverbal communication skills and social motivation skills independently. The majority of respondents (n=110) which makes total of 54.5% spent less than 05 hours/day while respondents with 45.5% (n=92) spent more than 05 hours/day on social media. Each scale has total score of 55 points from which mean score is calculated for each group. For verbal communication skills, there is a very slight difference between means of two groups. Mean score for participants with less than 05 hours/day is 38.77 as compared to 38.78 to the other group. But for the nonverbal communication skills, there is the clear

difference between the mean score of two groups with 42.18 for group less than 05 hours/day which is higher as compared to other group that is 41.37. Similarly, for social motivation skills, for group less than 05 hours/day the mean score is higher that is 36.95 than more than 05 hours/day group that is 36.58.

Table 2: *Group Statistics for Interactive Social Media Usage (N=202)*

Hours/Day	n	M	SD	SE
Sum of VCS				
Less than 05 Hours/Day	110	38.77	5.732	0.547
More than 05 Hours/Day	92	38.78	5.517	0.575
Sum of NVCS				
Less than 05 Hours/Day	110	42.17	5.720	0.545
More than 05 Hours/Day	92	41.37	7.060	0.736
Sum of SMS				
Less than 05 Hours/Day	110	36.95	7.303	0.696
More than 05 Hours/Day	92	36.58	9.561	0.997

Note: n=Number of Participants, M=Mean, SD=Standard Deviation, SE=Standard Error Mean, VCS=Verbal Communication Skills, NVCS=Nonverbal Communication Skills, SMS=Social Motivation Skills

Table 3 shows results of data analysis for independent sample t-test. It shows that mean difference for verbal communication skills is -0.010 which is not significant (p=0.881). But for the nonverbal communication skills, it significantly showed that the mean difference of one group (less than 05

hours/day) is 0.803 higher than the other group (more than 05 hours/day) with significance level ($p<0.05$). Also, for the social motivation skills, it significantly showed that the mean difference of less than 05 hours/day group is 0.369 higher than the other group with significance level ($p<0.05$).

Table 3: Independent Samples T-Test for Interactive Social Media Usage (N=202)

Independent Samples T-Test for Interactive Social Media Usage (N=202)

	Levene's Test for Equality of Variances		T-Test for Equality of Means		
	F	Sig.	t	df	MD
Sum of VCS					
Equal variances assumed	0.022	0.881	-0.012	200	-0.010
Equal variances not assumed			-0.012	196.068	-0.010
Sum of NVCS					
Equal variances assumed	4.440	0.036	0.893	200	0.803
Equal variances not assumed			0.877	174.445	0.803
Sum of SMS					
Equal variances assumed	5.829	0.017	0.311	200	0.369
Equal variances not assumed			0.304	168.071	0.369

Note: MD=Mean Difference, t=t-statistic/t-value, VCS=Verbal Communication Skills, NVCS=Nonverbal Communication Skills, SMS=Social Motivation Skills

Table 4 shows Group Statistics for male and female with respect to sum of verbal communication skills, nonverbal communication skills and social motivation skills independently. The majority of respondents (n=122) which makes total of 60.4% are females and respondents with 39.6% (n=80) are males. For verbal communication skills, there is a very slight difference between means of two groups. Mean score for male participants is 38.29 as compared to 39.10 to the other group. But for the nonverbal communication skills, there is comparatively more difference between the mean score of two groups with 40.71 for males which is lower as compared to other group that is 42.52. Also, for social motivation skills for male group the mean score is higher that is 38.06 than female group that is 35.93.

Table 4: *Group Statistics for Male and Female Groups (N=202)*

Male/Female	n	M	SD	SE
Sum of VCS				
Male	80	38.29	5.803	0.649
Female	122	39.10	5.499	0.498
Sum of NVCS				
Male	80	40.71	5.733	0.641
Female	122	42.52	6.667	0.604
Sum of SMS				
Male	80	38.06	7.732	0.864
Female	122	35.93	8.718	0.789

Note: n=Number of Participants, M=Mean, SD=Standard Deviation, SE=Standard Error Mean, VCS=Verbal Communication Skills, NVCS=Nonverbal Communication Skills, SMS=Social Motivation Skills

Table 5 shows results of data analysis for independent sample t-test. The testing shows that mean difference for verbal communication skills is -0.811 which is not significant (p=0.349). For nonverbal communication skills, it shows that there is less mean difference of -1.812 between the two groups that is not significant (p=0.078). Similarly, for the social motivation skills, there is no significant mean difference between the two groups as it is 2.128 with no significance (p=0.129).

Table 5: Independent Samples T-Test for Male and Female Groups (N=202)

Independent Samples T-Test for Male and Female Groups (N=202)

	Levene's Test for Equality of Variances		T-Test for Equality of Means		
	F	Sig.	t	df	MD
Sum of VCS					
Equal variances assumed	0.882	0.349	-1.003	200	-0.811
Equal variances not assumed			-0.992	162.612	-0.811
Sum of NVCS					
Equal variances assumed	3.146	0.078	-1.995	200	-1.812
Equal variances not assumed			-2.058	185.832	-1.812
Sum of SMS					
Equal variances assumed	2.322	0.129	1.773	200	2.128
Equal variances not assumed			1.818	182.722	2.128

Note: MD=Mean Difference, t=t-statistic/t-value, VCS=Verbal Communication Skills, NVCS=Nonverbal Communication Skills, SMS=Social Motivation Skills

Discussion

The study was carried out to investigate the impact of interactive social media on university students' verbal and nonverbal communication skills and social motivation skills at undergraduate level. There was the question that if interactive social media has impact on quality of these social competencies and interpersonal relationships between individuals. Beside this, individual variations in numerous areas including cognition, behavior, emotional reactions and personality might be attributed to this impact but these are not the part of the current study.

Descriptive analysis showed socio-demographic characteristics of the study participants. Analysis of frequencies and percentages of demographic variables showed that 122 females and 80 males participated in the research study with 60.40% and 39.60% participation respectively. Age range of 18 to 24 years (mean age=21 years) representing both genders is selected as most of the bachelors students fall in this age range. The results revealed that majority of the population sample was between the age range of 20 to 21 years (n=89) than the other two age categories of 18 to 19 and 22 to 24 (years). The results also indicated that the majority of respondents spent less than 05 hours/day which makes 54.5% (n=110) of the total sample taken. 'Interactive Social Media Usage generates a relationship with Students' Communication Skills and Motivation Level', this hypothesis is partially supported in the present study. For the Verbal Communication Skills, there is no significant relationship

of it with the interactive social media usage (p=0.881). The reason could be small sample size as larger sample size may lead to more generalized results which may be in accordance of the hypothesis. But on the contrary, there exists a significant relationship between nonverbal communication skills and the interactive social media usage (p<0.05). The students tend to have better nonverbal communication skills when they use social media less than 05 hours per day. The findings are reinforcing the results of the existing body of the theoretical and empirical knowledge which states that people who communicate without any digital means showed a higher level of empathy and understanding than those who use mobile resources as communication means (Misra et al., 2014). Similarly, there exists a significant relationship between social motivation skills and the interactive social media usage (p<0.05). The students have less social motivation skills when they use social media more than 05 hours per day as compared to the other group.

The literature also shows that rapid changes in web technologies and more social media usage leads to mental distress and social problems (Valkenburg & Peter, 2009; Turkle, 2011). Also, social media may impair face to face interactions (Hampton & Rainie, 2009). For the mean difference of verbal communication skills, it is -0.010 which is not significant (p=0.881), showing no impact of interactive social media. But on the contrary, the hypothesis significantly showed that the mean difference is 0.803 higher than the other group with significance level (p<0.05). The students tend to have better nonverbal communication skills when they use social media less than 05 hours per day. Similarly,

for the social motivation skills, the hypothesis significantly showed that the mean difference of 0.369 higher than the other group with significance level ($p<0.05$). The results for nonverbal communication skills and social motivation skills indicate that there exists a considerable mean difference for both variables so the good quality relationship is present for both variables.

'There is no significant relationship of gender based social media usage with students' Communication Skills and Motivation Level', this hypothesis is supported in the current study. For all the three variables including verbal communication skills, nonverbal communication skills and social motivation skills, there is no significant relationship of them with the interactive social media usage. The hypothesis testing showed that mean difference for verbal communication skills is -0.811, for nonverbal communication skills it is -1.812 and for the social motivation skills it is 2.128. It can be observed that there is slight mean difference within the two groups for each variable, so this might he reason that the analysis is not significant for each one. Recent research from 18 countries shows that male and female attitudes do not differ significantly by the interactive social media usage (Hanitzsch & Hanusch, 2012).The findings of the current study are relatively reinforcing which are adding the information in the existing body of the theoretical and research knowledge.

This study was not without limitations as this study was conducted in few universities over a short period of time. A larger sample size should have been taken, data should have been collected nationally for generalized results. Due to limited resources, the study sample has some limitations. The study was

conducted in Rawalpindi/Islamabad where children were provided with the best facilities with more resources compared to children in other cities. Consequently, this study does not reflect the vast majority of students in other regions. While collecting data, the parents of students should be incorporated in study. They may help in gathering information about the social development of students.

Conclusion

In today's society, the number of technological usage is skyrocketing, and youngsters especially students are immune to the impacts of interactive social media usage. The findings of this study will be fruitful by the implementation of policies from the concerned authorities. It will also help in improving the communication and social media usage style of students by providing guidance and counseling services in appropriate settings. This will help people to provide formalized help and avoid pathological usage of interactive social media. Interactive social media is a tool that maybe used for entertainment or to interact with others. However, if we allow this to become a way of life, it can cause personal and social problems especially for students. Students need to be shown healthy coping techniques and avenues for their recreation. As a result, we must address this issue so that it does not take over people's lives and their future.

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