

# Beneficial and Harmful Effects of Work-Related Social Media Utilization and Its Relationship with Work Productivity among Nurses

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## Abstract

**Background:** The internet and social media have become available in all aspects of daily life and there are rapid technological advances in the healthcare sector. It is a double-edged sword with its drawbacks. Also, the use of work-related social media may affect work productivity among nursing staff in their workplaces. The current study aimed to identify the beneficial and harmful effects of work-related social media utilization and its relationship with work productivity among nurses. **Settings:** The study was conducted at all critical care units (N=6) at Kafr El-Sheikh University Hospital. **Subjects:** All staff nurses (N=137) who provided direct and indirect care to patients, with experience of at least 6 months. **Tools:** Two tools were applied to collect the required data. The 1<sup>st</sup> tool was The Work-Related Social Media Questionnaire. The 2<sup>nd</sup> tool was The Endicott Work Productivity Scale. **Results:** Around one-fifth (18.2%) of studied nurses had a high level of beneficial media use and more than three-quarters (76.6%) of them had a moderate level. Three-quarters (75.2%) of the studied nurses had a low level of total harmful media use, and around one-fifth (20.4%) of them had a moderate level. Also, more than one-third (34.3%) of them had a moderate level of work productivity, while less than two-thirds (63.5%) of them had a high level of work productivity. **Conclusion:** The findings showed there was a low positive statistically significant relationship between beneficial media use and nurses' productivity while a negative moderate statistically significant relationship was noticed between nurses' productivity and harmful media use. **Recommendations:** It is important to establish clear guidelines, ethical standards, and policies to prevent social media abuse in the workplace. In addition, conducting regular awareness workshops on the appropriate use of work-related social media is crucial. It is also important to educate the new generation of nursing students about the proper use of social media in the workplace to increase productivity. These concepts should be integrated into nursing curricula.

**Keywords:** Beneficial and Harmful Effects, Work-Related Social Media, Nurses, Work Productivity.

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## Introduction

In order to be able to deploy the other resources, human resources become one of the most crucial components of healthcare organization (Worringer et al., 2020). To increase patient satisfaction and hospital performance, it is crucial and necessary for healthcare organizations to have great nursing staff on duty (Blake et al., 2020). The

adoption of utilization of professional social media apps and the internet has grown significantly inside the healthcare sector (Ahmead et al., 2022). The expression "social

media" is utilized to describe a wide range of platforms, technologies, and channels, including Facebook, Twitter, Telegram, WhatsApp, and YouTube (Glasdam et al., 2022).

Ressler & Glazer (2010) defined social media as "an online platform that enables users to interact, work together, and communicate with others in real-time". The most common tool for information sharing and keeping in touch with healthcare team members is social media specifically for work (Ahmead et al., 2022). In order to record patient data and care procedures, access

patient information, and access and use scientific literature, nursing is a profession that frequently utilizes the internet as well as instruments like telephones and computers (Johansson et al., 2014).

There are several advantages to having a personal communication device that can link nurses to the internet, such as access to patient records and medical sources of information. It may also be used for documentation, patient education, and consultation (Divall et al., 2013). At the time of COVID-19, social media has the enormous benefit of quickly disseminating instructional information. For instance, Chan et al., (2020) prepared an infographic describing the care of the airways in patients suspected or proven infected with corona virus.

However, social media does have many benefits, such as the ability to quickly access relevant information, but it also has drawbacks. Another big drawback of using social media in the healthcare sector is the breach of patient confidentiality and privacy. The violation may occur in a variety of manners and may be either intentional or unintentional (Ventola, 2014). Distractions and interruptions while working are another harmful impact of social media platforms utilization on healthcare practice (Piscotty et al., 2015).

Productivity is a performance measurement that takes into account both effectiveness and efficiency. Therefore, it's critical to understand which nurses are more productive (Bhatti & Qureshi, 2007). The impact on work productivity is one of the most significant consequences of the usage of job-related social media apps in the workplace (Louati & Hadoussa, 2021). Hathi (2008) showed that nurses who utilize social media extensively for professional purposes may become internet addicts, which might lower workplace productivity. However, König & Caner de la Guardia (2014) asserted that permitting some utilization of the internet and social media sites boosts nurses' productivity.

This study is significant because there is a risk posed on patient safety if work-related social media utilization affects negatively work productivity. Yet, there is not a lot of studies were conducted concerning the investigation of the relationship between using of internet, social media and work productivity which may be adversely affected, directly or indirectly on patient's quality of care and patient safety. This study would give recommendations regarding techniques to control internet surfing time, procrastination and enhance worker productivity in the working environment.

### *Aim of the Study*

This study aims to identify the beneficial and harmful effects of work-related social media utilization and its relationship with work productivity among nurses.

### *Research questions*

- What are the beneficial and harmful effects of work-related social media utilization among nurses?
- Is there a relationship between work-related social media utilization and work productivity?

### *Materials and Method*

#### *Materials*

**Design:** A descriptive correlational research design was used in this study.

**Settings:** This study was conducted at Kafr El-Sheikh University Hospital. This hospital is affiliated with the Ministry of Higher Education and provides public non-paid health services with a bed capacity of 340 beds and have free internet access in all departments. The study was conducted at all critical care units (N=6) namely, CCU, Medical ICU, Surgical ICU, Pediatric ICU, Neonate ICU, and Chest ICU.

**Subjects:** The study subjects included all staff nurses (N=137) who were working in the previously mentioned units and did not provide any administrative activities. They were divided into (N=124) professional nurses

and (N=13) technical nurses who provided direct and indirect care to patients, with experience of at least 6 months (to ensure that participants had at least some familiarity with the job, colleagues, and organization system.

**Tools:** In order to collect the necessary data for the study two tools were used:

**Tool I: The Work-Related Social Media Questionnaire (WSMQ):** The Work-Related Social Media Questionnaire (WSMQ) was developed by Landers & Callan (2014) to assess the degree to which nurses are using social media in the workplace. In the current study, the long form of the scale (36 items) was adopted by the researcher. **It consisted of two subscales.**

**The first subscale:** was beneficial WSMQ. It consisted of 18 items classified into eight dimensions as follows; information gathering, communicate with existing client, new customer/client outreach, crowd sourcing, intra-office communication, participation in online work community, organizational reputation management, social media as a technical solution. Participants were asked to indicate their level of agreement with each statement using a 5-point Likert scale ranging from strongly disagree =1 to strongly agree = 5. As regards beneficial WSMQ, (q1-q18), the overall score ranged from (18-90). The low beneficial score ranged from (18<42), The moderate beneficial score ranged from (42<66) and the highly beneficial score ranged from (66-90).

**The second subscale:** was harmful WSMQ. It consisted of 18 items classified into Nine dimensions as follows: creating offensive content, time theft, disparaging others, multitasking, representing organizational poorly, diminishing personal reputation, establishing an inappropriate relationship, plagiarism and relationship refusal. Participants were asked to indicate their level of agreement with each statement using a 5-point Likert scale ranging from strongly disagree =1 to strongly agree = 5. Regarding the harmful WSMQ (q19-q36) the overall

score will be ranged from (18-90). The low harmful score ranged from (18<42), The moderate harmful score ranged from (42<66) and the highly harmful score ranged from (66-90).

**Tool II: The Endicott Work Productivity Scale (EWPS):** This EWPS was developed by Endicott & Nee (1997) and modified and tested for its validity, and reliability by Uguz et al., (2004) to use in the Turkish Society on nurses, this scale was used to assess work activities during the previous week measuring the participants' behaviors affecting work performance, efficiency, and attitudes towards work and general feelings that had an impact on their productivity and effectiveness. It consisted of 25 items. Responses were measured on a 5-point Likert scale ranging from 0 "never", to 4 "almost always", and the total score ranged from (0 to 100). The score ranged from (0<34) indicates high productivity, score ranged from (34<67) indicates moderate productivity, and a score ranging from (67-100) indicates low productivity.

**In addition, a personal and work-related data sheet was developed by the researcher and consists of Three parts:**

**Part I:** Socio-demographic questions included age, gender, marital status, educational level, and monthly income.

**Part II:** Work-related questions which included job title, workplace, years of experience, number of working hours, and employment status.

**Part III:** Internet-related questions which included the most used Internet and social media applications, frequency of Internet and social media use, hours spent on the Internet and social media applications per day, devices used to access the Internet and social media, the network used to access the internet and social media applications, and awareness about presence of internet and social media applications policies in hospitals.

### **Method**

Approval of the ethics committee of the faculty of nursing was obtained. An official approval to conduct this study was obtained after providing explanation of the aim of the study. An informed consent was obtained from the participants. The study tools were translated into Arabic, and back-to-back translations (Arabic to English) were done. The study tools were tested for content validity by 5 experts in the field of the study. The necessary modifications were done based on their opinions such as rewording of some questions. A pilot study was carried out on 10% of the study sample in order to test the clarity and applicability of the research tools. Reliability of the tools was tested using Cronbach's Alpha test. The reliability coefficient was 0.919 for tool one and 0.902 for tool two which is acceptable. Data was collected by the researchers during the period from mid-February to mid-April 2022.

### **Ethical considerations:**

Written informed consent from the study subjects was obtained after explaining the aim of the study and confidentiality of data was maintained. The anonymity of the study participants was kept, and the subjects were participating in the study on a voluntary base and had the right to withdraw at any time from the study.

### **Statistical Analysis**

Data collected was fed to the computer using SPSS (Statistical Package for Social Science) program for statistical analysis version 20. Data were described using numbers, minimum, maximum, arithmetic mean, and standard deviation such as age, years of experience, and number of working hours. Categorical variables were described using frequency and percentage such as: levels of beneficial utilization of social media among nurses, levels of harmful utilization of social media among nurses, and levels of work productivity among nurses at the study hospital. Finally, analysis and interpretation of

data were conducted. P-values of 0.05 or less were considered statistically significant.

### **Results**

**Table 1** presents distribution of the studied nurses according to their socio-demographic and work-related characteristics. Regarding the nurses' age, it ranged from 20.0 to 46.0 years with a mean of  $26.11 \pm 2.520$  years. Moreover, the majority (81.0%) of the studied nurses aged from 25 years to less than 30 years. Regarding the sex, more than half percent (56.9%) of the studied nurses were females and more than two-fifths (43.1%) of them were males. About the level of education, the majority (88.3%) of the studied nurses had bachelor's degrees in nursing. Concerning the studied nurses' marital status, more than half (53.3%) of the studied nurses were single, and more than two-fifths (45.3%) of them were married, while 1.4% of them were either divorced or widowed. The same table reveals that the majority of the studied nurses (89.8%) worked as professional nurses while around one tenth (10.2%) of them worked as staff/ technical nurses. Concerning the working unit of the studied nurses, less than one quarter (23.4%) of the studied nurses worked in the cardiac and medical intensive care unit with the same percentage, while less than one-fifth of them worked in the surgical, pediatric and neonatal intensive care units (14.6%, 15.3%, and 16.1% respectively). On the other hand, 7.3% of them worked in the chest intensive care unit.

**Table 2** demonstrates distribution of the studied nurses according to their internet use-related characteristics. It was noticed that less than three quarters (70.8%) of studied nurses reported that WhatsApp is the most used application at work, followed by Facebook (47.4%), google (24.1%), YouTube (23.4%), Instagram (14.6%) and finally twitter as mentioned by 2.9% of them. For the frequency of internet use per day, less than three-quarters (70.1%) of the studied nurses mentioned that they use the internet three times or more, while more than one-tenth (13.1%) of them reported

using of internet once daily. In addition, more than one-third (37.2%) of studied nurses use the internet for 3 hours or more, while around one-third (33.6%) of them stated that they use the Internet for an hour daily, and around (29.2%) of them use internet for 2 hours. Moreover, the majority (97.8%) of the studied nurses reported use of personal phones, and a minority of them used laptops and work computers to access the internet (1.5% and 0.7% respectively). The same table reveals that less than three-quarters (73.7%) of the studied nurses reported the use of personal networks and around one-quarter (26.3%) of them used work networks. Finally, less than two-thirds (65.0%) of the studied nurses reported being knowledgeable about the internet use policy in the hospital while more than one-third (35%) of them reported not being knowledgeable about the internet use policy in the hospital.

**Table 3** shows distribution of the studied nurses according to the mean score of their beneficial media use. It reveals that the total beneficial media use was moderate by the study subjects with a range from 24 to 79 with a mean of  $57.91 \pm 9.082$  and a mean percent of 64.34%. According to the mean percent score, the first domain of beneficial media use was intra office communication (78.40%) with a mean of  $(7.84 \pm 1.545)$ , followed by social media as technical solution (76.60%), information gathering (72.90%), crowd sourcing (68.0%), organization reputation management (60.60%), communicate with existing clients (53.40%), and lastly, new client's outreach (52.90%).

**Table 4** reveals distribution of the studied nurses according to the mean score of their harmful media use. It reveals that the total harmful media use was low by the study subjects with a range from 18 to 71 with a mean of a mean score of  $36.85 \pm 13.31$  with a mean percent score of 40.94%. According to mean percent score, the first domain was multitasking (48.80%) with a mean of  $4.88 \pm 1.855$ , followed by creating offensive content (46.40%), time theft (45.80%),

relationship refusal (41.30%), disparaging others (40.10%), representing organization poorly (38.50%), establish inappropriate relations (36.70%), diminishing personal reputation (35.60%), and the last domain was plagiarism (35.30%) with a mean of  $3.53 \pm 1.823$ .

**Table 5** presents distribution of the studied nurses according to the level and mean score of productivity. It was found that less than two-thirds (63.5%) of the studied nurses had a high level of productivity with a mean score of  $30.54 \pm 16.39$  and mean percentage of 30.54% while more than one-third (34.3%) of them had a moderate level and only 2.2% of them had a low level of productivity.

**Table 6** presents the relationship between the studied nurses' levels of beneficial and harmful media use at work and mean scores of productivity. It was found that the highest productivity mean score present among the nurses with high level of beneficial media use, while the lowest productivity mean score noticed among the nurses with low level of beneficial media use ( $36.12 \pm 18.22$  and  $19.00 \pm 14.27$  respectively) with a statistically significance relationship between them ( $F=3.359$   $P=0.038$ ). Moreover, a highest productivity mean score was found among the nurses with low harmful media use ( $50.83 \pm 21.87$ ) and the lowest productivity mean score was present among nurses with high level of harmful media use ( $25.25 \pm 11.59$ ), with a statistically significant relationship between them ( $F=31.73$   $P=0.000$ ).

**Table 7** presents correlation matrix between the nurses' levels of beneficial and harmful media use and the mean score of productivity. The table reveals a low positive statistically significant relationship between beneficial media use and nurses' work productivity while, a negative moderate statistically significant relationship was noticed between nurses' work productivity and harmful media use. ( $r=0.228$ ,  $p=0.007$  and  $r=0.631$ ,  $p=0.000$  respectively).

**Table 8** shows regression analysis of the factors affecting the nurses' productivity in the workplace. The table portrays that seven variables were found to be predictors of productivity including years of experience ( $p=0.053^*$ ), work hours per day ( $p=0.005^*$ ), knowledge about internet use policy in the hospital ( $p=0.031^*$ ) and total beneficial media use ( $p=0.000^*$ ) which had a positive correlation with productivity, while frequency of using internet per day ( $p=0.008^*$ ), duration of internet use per day ( $p=0.040^*$ ) and total harmful media use ( $p=0.000^*$ ) had a negative correlation with productivity.

### *Discussion*

An online platform known as social media allows users to interact, collaborate, and communicate with each other instantly (Zhao et al., 2020). The most popular way to stay in touch with people and share information is through social media. The use of social media and the internet in the healthcare system has grown significantly (van Laar et al., 2019).

The results of the current study clearly show that, for over three quarters of the nurses surveyed, have a moderate level of beneficial media use. Furthermore, it was observed that social media is essential for social networking, collaborative decision-making, health promotion, communication, and information retrieval. Also, it offers apps for healthcare practitioners to discuss health practice challenges, provide health information, interact with the public, and encourage primary health care practices.

In accordance, Ahmad et al., (2018) and Gamor et al., (2023) noted that social media platforms offer numerous benefits to the nursing profession because nurses frequently update their followers on new research or article abstracts. In this manner, nurses receive information in real time rather than having to search for it. Accordingly, Casella et al., (2014) and Adjei et al., (2023) discovered that social media may be effectively integrated into the nursing process at every level, which

includes the phases of diagnosing, planning, implementation, and assessment.

All these benefits were evident in the current study, which discovered that intraoffice communication—which includes actions where nurses utilize social media to stay in touch with coworkers, supervisors, and subordinates was the first positive media use indicated by the nurses under review. This finding could be explained as social media may serve as a final choice when more traditional means of communication, such as phone and email, are ineffective and a prompt response is required.

The results of the current study also show, around three quarters of the nurses used social media at a low harmful level, and one fifth of them used it at a moderately harmful level. In a similar vein, Erer & Çobaner (2016) discovered that over three quarters of the participants believed that accessing social media came with several risks, mainly the possibility of receiving false information and ethical violations.

Furthermore, Smahodzic et al., (2016) and Panahi et al., (2016) observed that the primary hindrance to the use of social media in the workplace was the unreliability and poor quality of health information, as it may be incomplete, informal, or unreferenced.

Additionally, Barnable et al., (2018) and Ventola, (2014) discovered that the primary drawbacks of utilizing social media at work were violating confidentiality, loosening accountability, blurring professional boundaries, portraying unprofessional behavior, and legal concerns.

The largest human resource component in healthcare organizations is the nurse, and nurses' contributions are vital to the effective delivery of healthcare, which directly affects the productivity of the healthcare industry. The effectiveness of nurses is essential to increasing the efficiency of healthcare organizations. Poor performance by nurses is a contributing factor to lower hospital

productivity and worse health outcomes for hospitalized patients (Tesfaye et al., 2015).

Less than two thirds of the nurses in the current study demonstrated high productivity, with the remaining nurses demonstrating moderate level. In a similar vein, Hermansyah, et al., (2022) discovered that hospital nurse productivity was deemed good.

Akman & Mishra, (2009) showed that simply decreased in productivity because of the length of time involved by employees engaged in particular forms of cyberloafing. Additionally, it was shown by Ivarsson, & Larsson, (2011) employees that were engaged in non-work use of the internet for long periods of time had an impact on productivity.

The results of the current study demonstrated a negative association between harmful media use and productivity as well as a positive relationship between nurses' productivity and their beneficial use of media. These results aligned with the research conducted by Long X et al., (2017), which discovered that over three quarters of participants indicated that social media and the internet had a positive impact on their performance. This was because social media enhanced the efficacy of medical education, raised awareness of the practices, and provided positive patient feedback.

Also, these findings were corroborated by Maturi, (2018) who discovered that over three quarters of workers who use social media during work hours saw a little drop in productivity as a result of excessive surfing and the uploading of personal images unrelated to job-related content. Additionally, it was found that frequent usage of social media at work significantly affects workers' productivity by raising job satisfaction, which fosters organizational commitment.

Furthermore, a study done by Cook, (2017) suggested that work productivity had a statistically significant negative relationship with cyberloafing behavior. However, Charoensukmongkol, (2014) study discovered

a direct correlation between job satisfaction and job performance and the level of social media use at work. Ultimately, König, & de la Guardia, (2014) concluded that social media use helps workers improve their performance by enabling them to create and deepen relationships with others.

### **Conclusion**

The current study highlighted several important conclusions that there was a low positive statistically significant relationship between beneficial media use and nurses' work productivity while, a negative moderate statistically significant relationship was noticed between nurses' work productivity and harmful media use.

### **Recommendations**

In line with the findings of the study, the following recommendations are made:

- **Recommendations for hospital administration:**

**A) Improve the beneficial work-related social media utilization and limit harmful utilization through the following:**

- 1) Develop obvious guidelines, work ethics and policies to limit harmful utilization of work-related social media .
- 2) Internet and work- related social media utilization by nurses should be limited, restricted, and monitored closely.
- 3) New hires should receive training on how to deal with the consequences of work-related social media on their ability to be productive at work.

**B) Enhance nurses work productivity through the following:**

- 1) Foster teamwork by creating collaborative tasks and practicing honest, clear, and direct communication.
- 2) Building successful leadership styles in response to the scenario and being cautious in how to deal with staff difficulties.
- 3) Create and put into action programs for change that will enhance the working conditions for nursing staff such as flexible

schedules, clear feedback and interaction, and dealing with all nurses on the unit equally.

**C) Head Nurses should:**

- 1) Set a time limit for implementing the assigned tasks for the staff nurses.
- 2) Establish short-term goals and reward staff nurses when properly achieving them.
- 3) Emphasize on job objectives and assign tasks as a priority.

**D) The educational administrators should:**

- Teach the new generation of nursing students the concepts of work-related social media and how to utilize it to increase work productivity and incorporate this in the nursing curriculum.



**Table (1): Distribution of the studied nurses according to their socio-demographic and work-related characteristics.**

Nurses' characteristics	Total N=137	
	No.	%
<b>Age (years)</b>		
▪ 20-	22	16.1
▪ 25-	111	81.0
▪ ≥30	4	2.9
Min- Max	20.0-46.0	Mean ± SD
		26.11 ± 2.520
<b>Sex</b>		
▪ Male	59	43.1
▪ Female	78	56.9
<b>Level of education</b>		
▪ Technical institute diploma	14	10.2
▪ Bachelor's degree	121	88.3
▪ Post graduate studies	2	1.5
<b>Marital status</b>		
▪ Single	73	53.3
▪ Married	62	45.3
▪ Widowed/Divorced	2	1.4
<b>Occupation</b>		
▪ Staff/technical nurse	14	10.2
▪ Professional nurse	123	89.8
<b>Monthly income</b>		
▪ <3500 LE	129	94.2
▪ ≥3500 LE	8	5.8
<b>Working unit</b>		
▪ CCU	32	23.4
▪ Medical ICU	32	23.4
▪ Surgical ICU	20	14.6
▪ Pediatric ICU	21	15.3
▪ Neonatal ICU	22	16.1
▪ Chest ICU	10	7.3
<b>Years of experience since graduation</b>		
▪ 1-	101	73.7
▪ 3-	30	21.9
▪ 5-7	6	4.4
Min- Max	1.0-7.0	Mean ± SD
		1.990 ± 1.210
<b>Working hours per day</b>		
▪ 6 hours	12	8.8
▪ 12 hours	125	91.2
<b>Working status</b>		
▪ Part time	114	83.2
▪ Full time	23	16.8

**Table (2): Distribution of the studied nurses according to their internet use-related characteristics.**

Items	Total N=137	
	No.	%
<b>Most used application in work #</b>		
▪ Facebook	65	47.4
▪ What's app	97	70.8
▪ Instagram	20	14.6
▪ Google	33	24.1
▪ Twitter	4	2.9
▪ You tube	32	23.4
<b>Frequency of internet use per day</b>		
▪ Once	18	13.1
▪ Twice	23	16.8
▪ Three times and more	96	70.1
<b>Duration of internet use per day</b>		
▪ One hour	46	33.6
▪ Two hours	40	29.2
▪ Three hours	51	37.2
<b>Used apparatus used to access internet</b>		
▪ Personal phone	134	97.8
▪ Laptop	2	1.5
▪ Work computer	1	0.7
<b>Used network</b>		
▪ Personal	101	73.7
▪ Work	36	26.3
<b>Knowledge about internet use policy in the hospital</b>		
▪ Yes	89	65.0
▪ No	48	35.0

# multiple responses were allowed

**Table (3): Distribution of the studied nurses according to the mean score of their beneficial media use.**

Items	Min -Max	Mean ± SD	Mean Percent Score	Rank
▪ Information gathering	2.0-10.0	7.29±1.852	72.90%	3
▪ Communicate with existing clients	2.0-10.0	5.34±2.034	53.40%	7
▪ New client outreach	2.0-10.0	5.29±2.001	52.90%	8
▪ Crowd-sourcing	2.0-10.0	6.80±1.981	68.00%	4
▪ Intra-office communication	2.0-10.0	7.84±1.545	78.40%	1
▪ Participation in online community work	2.0-10.0	5.58±1.798	55.80%	6
▪ Organization reputation management	4.0-19.0	12.12±3.544	60.60%	5
▪ Social media as a technical solution	3.0-10.0	7.66±1.550	76.60%	2
<b>Total beneficial media use</b>	<b>24.0-79.0</b>	<b>57.91±9.082</b>	<b>64.34%</b>	

**Table (4): Distribution of the studied nurses according to the mean score of their harmful media use.**

Items	Min -Max	Mean $\pm$ SD	Mean Percent Score	Rank
▪ Creating offensive content	2.0-8.0	4.64 $\pm$ 1.790	46.40%	2
▪ Time theft	2.0-10.0	4.58 $\pm$ 2.158	45.80%	3
▪ Disparaging others	2.0-10.0	4.01 $\pm$ 2.179	40.10%	5
▪ Multitasking	2.0-10.0	4.88 $\pm$ 1.855	48.80%	1
▪ Representing organization poorly	2.0-10.0	3.85 $\pm$ 1.774	38.50%	6
▪ Diminishing personal reputation	2.0-10.0	3.56 $\pm$ 1.925	35.60%	8
▪ Establish inappropriate relations	2.0-9.0	3.67 $\pm$ 1.836	36.70%	7
▪ Plagiarism	2.0-9.0	3.53 $\pm$ 1.823	35.30%	9
▪ Relationship refusal	2.0-10.0	4.13 $\pm$ 1.790	41.30%	4
<b>Total harmful media use</b>	<b>18.0-71.0</b>	<b>36.85<math>\pm</math>13.31</b>	<b>40.94%</b>	

**Table (5): Distribution of the studied nurses according to the level and mean score of productivity.**

Items	Levels of Productivity					
	Low		Moderate		High	
	No.	%	No.	%	No.	%
▪ Level of Productivity	3	2.2	47	34.3	87	63.5
▪ Min -Max	0.0-73.0					
▪ Mean $\pm$ SD	30.54 $\pm$ 16.39					
▪ Mean Percent Score	30.54%					

**Table (6): Relationship between the studied nurses' levels of beneficial and harmful media use at work and mean scores of productivity.**

Nurses' characteristics	Mean Score of Productivity	Test of Significance
	Mean $\pm$ S. D	
<b>Total beneficial media use</b>		
▪ Low	19.00 $\pm$ 14.27	F=3.359 P=0.038*
▪ Moderate	29.98 $\pm$ 15.69	
▪ High	36.12 $\pm$ 18.22	
<b>Total harmful media use</b>		
▪ Low	50.83 $\pm$ 21.87	F= 31.73 P=0.000*
▪ Moderate	45.64 $\pm$ 17.92	
▪ High	25.25 $\pm$ 11.59	

F = ANOVA test \* statistically significant at  $p \leq 0.05$

**Table (7): Correlation matrix between the nurses' levels of beneficial and harmful media use and the mean score of productivity.**

		Total Nurses' Productivity
<b>Total beneficial media use</b>	r	0.228
	P	0.007*
<b>Total harmful media use</b>	r	-0.631
	P	0.000*

r = Pearson correlation \* Significant p at  $\leq 0.05$

$r \geq 0.9$  very high correlation     $r 0.7 < 0.9$  high correlation     $r 0.5 < 0.7$  moderate correlation     $r < 0.5$  low correlation

**Table (8): Regression analysis of the factors affecting the nurses' productivity in the workplace.**

Model	Unstandardized Coefficients		Standardized Coefficients	t	P
	B	Std. Error	Beta		
(Constant)	2.667	1.049		2.543	0.012*
Sex	0.053	0.087	0.049	0.604	0.547
Age	0.014	0.017	0.064	0.801	0.424
Marital status	0.006	0.028	-0.017	-0.212	0.833
Education	0.064	0.206	0.040	0.310	0.757
Income	0.122	0.183	-0.054	-0.665	0.507
Job title	0.155	0.227	0.088	0.680	0.498
Work unit	0.019	0.025	-0.058	-0.757	0.451
Years of experience	3.532	2.438	0.067	0.628	0.053*
Work hours per day	2.519	0.596	0.099	20.871	0.005*
Work status	0.108	0.139	0.076	0.777	0.439
Frequency of use internet per day	-1.853	0.696	0.364	2.662	0.008*
Duration of use internet per day	-5.124	2.477	0.212	2.069	0.040*
Knowledge internet use policy hospital	0.188	0.086	0.169	2.186	0.031*
Total benefits	7.602	1.303	0.610	13.512	0.000*
Total harms	-0.024	0.003	0.581	6.961	0.000*
R Square = 0.358		F= 4.496		P= 0.000*	

\* Statistically significant at  $p \leq 0.05$

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