

Evaluation of Emotional Intelligence and Social Media Usage in Nurses and Nursing Students

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Original Research Article

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Article History

Received: 09.05.2018

Accepted: 24.05.2018

Published: 30.05.2018

DOI:

10.36347/sjams.2018.v06i05.056



Abstract: Emotional intelligence can help us to assess information about emotions in everyday life as well as to reflect the energy created by them to our work and school life. Healthcare professionals with good emotional intelligence can also establish good relations with patients from various ethnic backgrounds. In parallel with the worldwide growing use of social media its use by healthcare professionals to reach knowledge, to maintain personal development, to improve health and to share experience about risks is also increasing. The main purpose of this study is to evaluate the level of emotional intelligence and social media use in practicing nurses and nursing students in order to examine whether they contribute to personal and professional development of nurses. The universe of this study included nurses and nursing students in Trakya University Nursing School and nurses who were working in Trakya University Health Center for Medical Research and Practice. Our study included 133 volunteers and conducted between February and October 2017. Seventy-eight of them was nursing students and 55 were nurses. Social Media Attitude Scale (SMAS) was used to evaluate social media use. To evaluate emotional intelligence Bar-On Emotional Quotient Inventory (EQ-i) was used. Evaluation of the two groups (students and nurses) showed statistically significant differences in both SMAS and Bar-On scales. The mean SMAS score was 62.7 in nursing students and 53.9 in nurses. EQ-i score in nursing students was 291.9 and in nurses was 274.3. The mean scores of the nursing students who were continuing their education in the university were higher than practicing nurses. The nursing students used social media significantly more frequently than the nurses. Social media use more than once a day was more common in the students than the nurses. Duration of time spent in each entry to social media was more in the nursing students than the nurses. The nurses spent more time for social media at home while the nursing students spent more time outdoors. Relationship between SMAS and Bar-On Scale scores and between these two scale scores and age were evaluated with Pearson correlation coefficient. Scores from the scales tended to decrease with increasing age and the results were statistically significant (SMAS; $r = -0.324$, $p < 0.001$), (Bar-On; $r = -0.307$, $p < 0.001$). There was a moderate negative correlation between increasing age and scores from both SMAS and Bar-On scales. There was a significant positive correlation between SMAS and Bar-On scales which means that emotional IQ increased with increasing social media use ($p < 0.001$). A positive relationship was found between SMAS and Bar-On scale in our study. As the use of social media increased, the emotional intelligence score also increased. Emphasis should be placed on the use of social media to develop emotional intelligence. The socialization of nurses allows communication with colleagues and to communicate with people of all ages and socio-cultural backgrounds. It can provide health information to the society. Social media can contribute to the field of academics by providing means of research, discussion and learning. It provides a range of accessible and reliable solutions to problems encountered during professional work. It allows them to support social sensitivity projects. It allows sharing good health practice examples and creating new ideas. Emotional intelligence supports understanding patients and communicating with patients. Individualized efforts for emotional intelligence development and promotion of emotional intelligence development through training will support the nurses to have stronger personality and increase the quality of the service offered.

Keywords: Emotional intelligence, social media, nurse, students.

INTRODUCTION

Emotional intelligence is defined as the ability to evaluate and control personal emotions and other people's emotions. It involves 3 abilities. The first one is the awareness of the feelings of himself and others. The second one involves controlling emotions during problem solving and decision making in daily life. The third one involves being influential on emotions of both himself and others [1]. Emotional intelligence can help us to assess information about emotions in everyday life as well as to reflect the energy created by them to our work and school life [2].

The effects of emotional intelligence skills can be observed in academic achievement, in the establishment of quality social relations, in reducing behavioral problems, in life satisfaction and in good health [3]. Undoubtedly, the nature of the relationship with the environment is very important in the development of these skills. It is important to be able to understand the patients, to establish qualified communication, and to make the right and timely decisions when faced with problems in order to provide quality services [4, 5]. Healthcare professionals with good emotional intelligence can also establish good relations with patients from various ethnic backgrounds. Intensive working conditions due to continuity in healthcare and the necessity to meet specific demands of each patient requires strong self-control and coping with stress. Qualified employees are required to provide optimal quality of care.

According to the 2016 report of Pew Research Center for the People and the Press 72% of the individuals in Turkey use the Internet and this rate increases to 93% in 18-34-year-old individuals [6]. Similar high percentages are also true for social media use. Six years ago 6.77% of the World population was active internet users and this rate increased to 44% nowadays [7]. Social media use is increasing especially among young population. In the United States 62% of the young population were found to be actively using social media to follow the agenda [8]. In Turkey 73% of people who follow the agenda were using social media as a tool. Research shows that in nearly every country internet and social media use of people between 18-34 years of age is more active than people above 35 years of age [2, 6, 9].

In parallel with the worldwide growing use of social media its use by healthcare professionals to reach knowledge, to maintain personal development, to improve health and to share experience about risks is also increasing [10]. In addition, use of internet and social media by nurses and healthcare personnel is also increasing. Social media which has the features of mutual communication, personal content design, and versatility seems to have an important place in health communication. It has a wide range of possibilities in the field of health communication by its characteristics that differ from other communication tools [11, 12].

The main purpose of this study is to evaluate the level of emotional intelligence and social media use in practicing nurses and nursing students in order to examine whether they contribute to personal and professional development of nurses.

MATERIALS AND METHODS

The universe of this study included nurses and nursing students in Edirne and the sample included 2nd and 3rd grade students in Trakya University Nursing school and nurses who were working in Trakya University Health Center for Medical Research and Practice. Our study included 134 volunteers and conducted between February and October 2017. Sociodemographic features of the participants were evaluated using "Personal Information Form". In this form questions were asked about age, gender, employment status, education level and profession of their family, socioeconomic status and attitudes of the families towards them.

Social Media Attitude Scale (SMAS) was used to evaluate social media use. Validity and reliability of this scale were established. This is a Likert type 5-item scale. It includes 23 items (17 positive and 6 negative) and 4 subscales. These subscales are need to share (8 items), social competence (6 items), social isolation (6 items) and relations with teachers and authorities (3 items). The score that can be taken from the scale ranges between 23 and 115 points. There are 6 items which are scored reverse. These factors explain 52.6% of the total variance [13, 14].

To evaluate emotional intelligence Bar-On Emotional Quotient Inventory (EQ-i) which was developed by Bar-On was used. This scale has commonly been used in previous research and its validity and reliability were established. The original form of this scale includes 5 subscales as self-awareness, interpersonal relationship, adaptation to the environment and conditions, stress management, and general mood. Bar-On scale was adapted to Turkish and its equivalence, and criterion and construct validity were proven [15].

The scores from the two scales and personal information form were evaluated together; relationship between the two scales and relationship between sleep quality and social media use were assessed. Factors that may affect sleep quality were evaluated.

Approval was obtained from Trakya University Ethics Committee on Social and Human Scientific Research and consents were obtained from all volunteers by informed consent form.

All statistical analyses were performed using IBM SPSS 21.0 software. Hypothesis of normal distribution was controlled with Shapiro-Wilk test.

Student-t test was used for group comparisons. Pearson Chi-square test was used to evaluate the relations between categorical variables. Correlations between numerical variables were evaluated using Pearson correlation coefficient. Mean and standard deviation were used for quantitative variables; percentage and frequency were used for qualitative variables. Significance level for all statistical analyses was defined as 0.05.

RESULTS

Our study was conducted between February and October 2017. This study included 133 volunteers. Seventy-eight of them were nursing students and 55 were nurses. The students were 2nd and 3rd grade nursing students in Trakya University Health

Vocational High School. The mean age was 19.7. The nurses were between 27-55 years of age and their mean age was 36.12. Evaluation of the two groups (students and nurses) showed statistically significant differences in both SMAS and Bar-On scales. The mean SMAS score was 62.7 (±12.6) in nursing students and 53.9 (±13.0) in nurses. EQ-i score in nursing students was 291.9 (±22.1) and in nurses was 274.3 (±33.9). The mean scores of the nursing students who were continuing their education in the university were higher than practicing nurses.

Among nursing students 31 were in the 2nd grade and 48 were in the 3rd grade (Table 2). The first and the 4th grade students were not included.

Table-1: The SMAS and Bar-On EQ-i Scores of Nurses and Nursing Students in the Study

	Gender N		Bar-On EQ-i ± SD	SMAS ± SD	P
	Female	Male			
Nursing Student	56	23	291.9 ± 22.1	62.7 ± 12.6	<0.001*
Nurse	52	3	274.3 ± 33.9	53.9 ± 13.0	

Those marked with * indicate statistically significant difference.

Table-2: Distribution of nursing students in this study according to their grades

	Class	
	2nd grade	3rd grade
Student N (%)	31 (39.2)	48 (60.8)

Education level of parents of the participants are shown in Table 3. No significant difference was found between nurses and nursing students according to education level of parents. Education level of the

fathers were higher than mothers in both groups. Education level at or above secondary education was higher in fathers than mothers (Table 3).

Table-3: Distribution of participants according to mother and father education level

	Mother Education Level				Father Education Level				
		Primary school or below	Secondary school or above	Total	P	Primary school or below	Secondary school or above	Total	P
Student	N	54	25	79	.895	31	48	79	.765
	(%)	68.4%	31.6%	100%		39.2%	60.8%	100%	
Nurse	N	37	18	55		23	32	55	
	(%)	67.3%	32.7%	100%		41.8%	58.2%	100%	
Total	N	91	43	134		54	80	134	
	(%)	67.9%	32.1%	100%		40.3%	59.7%	100%	

Distribution of participants according to occupations of their fathers and mothers is shown in Table 4. There were housewives among mothers, but all of the fathers had jobs. Percentage of workers was

higher in nursing students than nurses. But there was no statistically significant difference in occupation of fathers and mothers between the groups.

Table-4: Distribution of the participants according to occupation of fathers and mothers

	Occupation of Mother				Occupation of Father				
		Housewife	Working	Total	P	Worker / Public Servant	Self-employed	Total	P
Student	N	66	13	79	.765	30	49	79	.287
	(%)	83.5%	16.5%	100%		38%	62%	100%	
Nurse	N	47	8	55		16	39	55	
	(%)	86.5%	13.5%	100%		29.1%	70.9%	100%	
Total	N	113	21	134		46	88	134	
	(%)	84.3%	15.7%	100%		34.3%	65.7%	100%	

Family attitudes of the volunteers and socioeconomic status of their families were also evaluated, and no difference was detected between the groups. Protective family attitude was higher in the

nurses and authoritarian family attitude was higher in the nursing students. The most common family attitude in both groups was protective attitude (Table 5,6).

Table-5: Distribution of the participants according to socioeconomic status

	Socioeconomic status				P
		Moderate	Good	Total	
Student	N	62	17	79	.772
	(%)	78.5%	21.5%	100%	
Nurse	N	42	13	55	
	(%)	76.4%	23.6%	100%	
Total	N	104	30	134	
	(%)	77.6%	22.4%	100%	

Table-6: Distribution of the participants according to family attitudes

	Family Attitude					P
		Protective	Authoritarian	Democratic	Total	
Student	N	51	8	20	79	.403
	(%)	64.6	10.1	25.3	100	
Nurse	N	32	10	13	55	
	(%)	58.2	18.2	23.6	100	
Total	N	83	18	33	134	
	(%)	61.9	13.4	24.6	100	

Evaluation of social media use in the nurses and the nursing students revealed no significant difference between those who have been using for 4 years or more and less than 4 years, but the nursing

students used social media significantly more frequently than the nurses (Table 7). Social media use more than once a day was more common in the students than the nurses.

Table-7: Social media use characteristics of the participants

	Duration of social media use				Frequency of social media use				
		Less than 4 years	4 years and more	Total	P	Once a day or less	More than once a day	Total	P
Student	N	22	57	79	.585	14	65	79	.026*
	(%)	% 27.8	% 72.2	% 100		% 17.7	% 82.3	% 100	
Nurse	N	13	42	55		19	36	55	
	(%)	% 23.6	% 76.4	% 100		% 34.5	% 65.5	% 100	
Total	N	35	99	134		33	101	134	
	(%)	% 84.3	% 15.7	% 100		% 24.6	% 75.4	% 100	

Those marked with * indicate statistically significant differences.

The nurses spent more time for social media at home while the nursing students spent more time outdoors (Table 8).

Duration of time spent in each entry to social media was more in the nursing students than the nurses.

Table-8: Time spent for social media at each entry and place of connection to social media

	Time spent for social media at each entry				Place of connection to social media				
		Less than 30 minutes	30 minutes and more	Total	P	Place of residence	Outdoors	Total	P
Student	N	37	42	79	<0.001 *	28	51	79	.026*
	(%)	46.8%	53.2%	100%		35.4%	64.6%	100%	
Nurse	N	50	5	55		41	14	55	
	(%)	90.9%	9.1%	100%		74.5%	25.5%	100%	
Total	N	87	47	134		69	65	134	
	(%)	64.9%	35.1%	100%		51.5%	48.5%	100%	

Those marked with * indicate statistically significant differences.

Relationship between SMAS and Bar-On Scale scores and between these two scale scores and age were evaluated with Pearson correlation coefficient.

Scores from the scales tended to decrease with increasing age and the results were statistically significant (SMAS; $r = -0.324$, $p < 0.001$), (Bar-On; $r = 0.307$, $p < 0.001$). There was a moderate negative correlation between increasing age and scores from both SMAS and Bar-On scales.

There was a significant positive correlation between SMAS and Bar-On scales which means that emotional IQ increased with increasing social media use ($p < 0.001$).

DISCUSSION

Some aspects of the results of the studies on the use of internet and social media cause concern among researchers. This is due to the rising tendency of social life to be based on use of internet and social media rather than television, newspaper and face-to-face communication [16]. When we look at the increasing statistical indicators of social media usage within the internet usage, it is seen that the social sharing tools that are spreading around the World play an important role in daily life. In 2015, 76% of internet users in 40 countries surveyed stated that they were using social sharing tools. Studies in adults in US showed that rate of social media use which was 8% in 2008 increased to 76% in 2015 [6, 17]. Increased social media use is probably due to its role as a source for information, news and communication. The interest in the young generation to social agenda and innovations is increasing day by day. The use of social media seems to reflect desire of young people to be informed in the shortest from the developments in their surroundings and to be actively involved in these developments [18].

Today, the increasing use of mobile devices is helping social media to become more widespread. Social media use is also important for institutions because it provides continuous communication environment and wide application possibilities. The use of social media is increasing in every aspect of communication [19]. Social media may also be used in nursing profession, where effective communication and understanding are important, in order to contribute to their training process and to improve themselves.

Studies demonstrated that the use of social media, especially in young adults aged 14-32 years, is now becoming a more common communication and news source than television. The desire of young population to get informed about the developments may be used to get different approaches and to increase problem solving ability [20]. Previous studies demonstrated that 51% of the participants used social media as a news source every week. Also, 12% of the participants reported that social media was their primary source for finding, reading, watching and sharing news. In addition, social media is increasingly being used for instant information sharing and collection. In the case of the younger generation aged 18-24, social media is more likely to be used than other news sources to catch up the agenda and follow up what's happening [19, 21].

Surveys show that 70% of US adults follow national and local news, and close follow-up on the agenda is still an important part of public life. International news was being followed by 65% of the respondents and 81% were getting this information by websites, applications and social sharing sites. Mobile devices were the first option for them. Social media was the main source for getting news in 64% of young adults among 18-24 years of age and 57% of young adults among 25-34 years of age. Television was the second source in young population although it is the

main news source in most of the population in older ages. Studies also evaluated use of social media for health purposes. Social media was used not only by nurses working on the academic field but also by nurses working in public health, child health and emergency care areas. Social media was reported to be used by 77% of the nurses for professional and personal reasons. Although 88% of the nurses between 18-24 years of age used social media in that study, a 67% rate in nurses above 55 years of age means that social media use is not unique to younger population [22-24].

Research on the importance of emotional intelligence in business success emerged by Mayer and Salovey in the early 1990s and later popularized by Goleman in his book *Emotional Intelligence: Why It Can Matter More Than IQ*. After this book, research on emotional intelligence and work life continued, and in these studies various issues are discussed in terms of emotional intelligence, working conditions and employee relations. Its relationship with motivation, job performance, job satisfaction, leadership, problem solving, and decision making process in unexpected situations were examined [25-28].

There are studies supporting a strong correlation between emotional intelligence and job satisfaction [29, 30]. Also, there are studies which couldn't find such a relationship [31]. Studies have been performed in different occupation groups, in different age groups, and in different communities [32]. Nurses use social media for dialogue with other health professionals as well as for the opportunity to follow innovations in health care. Social networking sites among nurses are the places where the solutions stemming from work experiences and emotional intelligence are shared. These networks are environments where psychological relief can be obtained by expressing emotions. Research has demonstrated that nurses have been able to closely follow innovations with social media through their communication with health workers, academics and students in different countries of the world. Through the "Connecting Nursing" study of the International Council of Nurses (ICN), a social forum was established where health professionals from all over the world can communicate and share their experiences [12, 24, 33].

A positive relationship was found between SMAS and Bar-On scale in our study. As the use of social media increased, the emotional intelligence score also increased. Emphasis should be placed on the use of social media to develop emotional intelligence. The socialization of nurses allows communication with colleagues and to communicate with people of all ages and socio-cultural backgrounds. It can also help them to increase their confidence. It can provide health information to the society. Social media can contribute to the field of academics by providing means of

research, discussion and learning. It provides a range of accessible and reliable solutions to problems encountered during professional work. It allows them to support social sensitivity projects. It allows sharing good health practice examples and creating new ideas. It helps to stay in contact with technology and science that is developing rapidly every day. Emotional intelligence supports understanding patients and communicating with patients. Individualized efforts for emotional intelligence development and promotion of emotional intelligence development through training will support the nurses to have stronger personality and increase the quality of the service offered.

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