

## PSYCHOLOGICAL AND EDUCATIONAL IMPACTS OF USING SOCIAL MEDIA BY STUDENTS WITH DISABILITIES IN HIGHER EDUCATION

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### *Abstract*

*This study aimed to explore the psychological and educational impacts of using social media by students with disabilities in Jordanian universities. The participants were 176 students with hearing, visual, and physical disabilities, who are studying at the Hashemite University and the University of Jordan. The study instrument consisted of 24 items that are distributed on psychological and educational dimensions. The results showed a moderate impact level of using social media sites. Essential psychological impacts identified by the study were entertainment, leisure time, and venting out psychological pressures. The most critical educational impacts were obtaining information, exchanging and discussing ideas, and conducting educational dialogues. The results also showed statistically significant differences in the psychological and educational impacts according to disability type and communication duration in favor of the hearing-impaired students and for using social media more than three hours.*

Keywords: psychological impact; educational impact; students with disabilities;  
social media

### **Introduction**

Social media has become an essential method to communicate and learn among community members, particularly the youth (Armitage, 2015; Perrin,

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2015). In many cases, it replaced the direct, face-to-face communication, in addition to access to news and information (Davis III, Deil-Amen, Rios-Aguilar, & González Canché, 2015). In addition to communication, social media are a vital tool in learning (Alwagait, Shahzad, & Alim, 2015; Dron & Anderson, 2014; Paulin & Gilbert, 2016), especially remote and unofficial learning (Greenhow & Lewin, 2016). In higher education, social media has become a crucial tool in learning and teaching (Manca & Ranieri, 2016; Neier & Zayer, 2015), which requires exploring students with disabilities' use of social media and the sources of this use.

As other students in higher education, students with disabilities are also found social media an excellent method to positively communicate with their community (McMillen & Alter, 2017). The development in services and applications provided by smartphones and computers encourage young college students to expand their use of new technologies to share and express themselves (Kim, Wang, & Oh, 2016). This technological development was associated with an increase in the number of students with disabilities in higher education, which enhances the use of these resources in the learning process (Asuncion, Budd, Fichten, Nguyen, Barile, & Amsel, 2012). Accordingly, social media application become more accessible for students with disabilities, especially students with auditory and visual impairments (Abu Ghoaleh, 2017).

However, many studies show that there are high turnout degrees of the students with disabilities' use of the social media (Abu Alrob, 2015; Caton & Chapman, 2016; Furr, Carreiro, & McArthur, 2016). Social media features and advantages, such as accessible communication, propel students with disabilities to use these sources (Snethen & Zook, 2016). On the other hand, the disability situations impose challenges and pressures that may prevent students with disabilities from achieving real social interaction chances; therefore, they prefer to use social media applications that may not require them to disclose their physical or sensory nature (Rajabi & Rimawi, 2016).

Studies have linked social media and students with disabilities' users, some argue that the most social media used by children with hearing loss are the Facebook, YouTube, and Tweeter, respectively (Abdel Hamid, Imam, & Aziz, 2015) while others claimed that the most used and benefited site by the students was YouTube, while the Live Messenger Windows was the most accessible (Asuncion et al., 2012). Abu Alrob (2015) indicated that social media did not

satisfy the professional, social, and psychological needs of users with visual impairments. Additionally, Lewthwaite (2011) reported discrimination activities against students with disabilities users of social media networks inside campuses, but these also contributed to supporting the educational experiences of these students with disabilities. On the other side, Holmes and O'Loughlin (2014) claimed that students with disabilities' use, participation and social interaction in social media helped them make and retain friendships with others, at the same time, they argued the students with disabilities' fears in terms of their safety and breaching their privacy. Jaeger and Xie (2009) indicated that the social media networking is an essential element and tool of the social interaction and communal participation, but social media are designed in a manner that more matches the ordinary people.

The nature or severity of the disability imposes psychological and educational constraints on students with disabilities, which makes social media one of the essential methods of communication and learning for these individuals. Hence, studying the psychological and educational impact of the use of social media by students with disabilities in higher education is a significant factor to explore the reality of this use and its role in the psychological adjustment and educational development of these students. Therefore, this study problem stems from the necessity of identifying psychological and educational impacts of using social media by students with disabilities in Jordanian universities, particularly, for students with auditory, visually, and physical disabilities. It is especially important given that students with disabilities' use of social media are widely increased among higher education students, and there are few studies in the Arab area that investigated the psychological and educational impacts of using these by students with disabilities.

### **Objectives**

Previous studies have focused on the extent to which students with disabilities use social networking sites; however, studies on the reality of using social media by students with disabilities in the Arab countries are generally few. Hence, the current study is one of the first studies in Jordan and surrounding countries that aimed at exploring the psychological and educational impacts of using social media by students with disabilities in higher education settings. Specifically, this study aimed to explain the relationship between using social

media by students with disabilities and the implications of that use, especially in the psychological and educational aspects. On the other hand, this study aimed to identify the effect of the type of disability (physical, auditory, and visual) and the duration of use on the psychological and educational aspects of students with disabilities.

## **Method**

### *Participants*

The study sample consists of 176 students with disabilities from the University of Jordan (150 students) and the Hashemite University (26 students) during the first semester of the academic year 2017/2018. The study sample consists, 111 males and 65 females, aged 18 to 21, from various disciplines. Specifically, 45 participants of the study sample have visual impairments with an average age of 19.30 years ( $\pm 0.87$  SD), 75 participants have auditory impairments with an average age of 19.40 years ( $\pm 1.17$  SD), and finally, 56 participants have physical and health impairments with an average age of 19.20 years ( $\pm 1.02$  SD).

### *Study Instrument*

To achieve the objectives of the study, the researchers reviewed the literature related to the social media and students with disabilities at the higher education level, especially those related to the impacts the use of these leave on their users. Furthermore, the researchers sought out the experience of several social media users by asking specific questions, which may identify the impacts resulting from their use of the social media, especially, in the psychological and educational aspects, to construct the study instruments. The instrument, in its final form, consisted of (24) items (*see* Appendix A) distributed over two dimensions: the psychological and educational impacts of using social media sites, which were measured based on gradient scale from 1 to 5 grades, according to Likert five-point scale.

The researchers relied on the content and internal construction validity to verify the validity of the instrument. The content validity was verified by reference to the experts, as it was sent to twelve experts in the field, who were faculty members in the Hashemite University, specialized in special education,

psychology, counseling, and Arabic language, to examine the instrument items in its initial form, which included (24) items. The purpose was to ensure that the items match the study objects, and identify the clarity degree of the items, to achieve the content validity. The results of the experts showed a (100%) agreement on the items belonging to the study objectives. Other comments included certain language paraphrasing to fit the required meanings and were considered and carried out. The researchers obtained the correlation coefficients between items and dimensions, as well as the overall correlation with the study instrument items to conclude the construction validity. In this concern, the correlation coefficients of the psychological impact dimension items were ( $r=.15-.83$ ;  $p<.005$ ). As for the educational impact, the items correlation coefficients with this dimension were ( $r=.20-.80$ ;  $p<.005$ ).

The researchers applied Chronbach Alpha to calculate the reliability of the study instrument, which analysis results showed suitable reliability degrees, as the psychological and educational impacts' dimensions were ( $\alpha=.62$ ;  $.70$ ), respectively, based on the performance of (40) male and female students from outside the sample. Such values are deemed suitable for carrying out this study.

#### *Study design and statistical analysis*

The current study is a descriptive study aimed to identify the psychological and learning effects on the use of disabled students in the Jordanian universities of electronic social media networking. To answer the study questions, the researchers used the means (M) and standard deviations (SD) to answer the first and second questions; while for answering the third question, they employed the One-Way ANOVA analysis for the disability type variable. The researchers calculated the impact degree of the social media in the psychological and educational aspects by subtracting the minimum limit of the response alternative (1) from the maximum limit (5) and then dividing the difference between the two limits by three levels, as follows:  $4 \div 3$  (levels)=1.33. Accordingly, the low level is 1-2.33, the medium is 2.34-3.66, and the high is 3.67-5.

#### **Results**

To identify the level of the psychological impact (PI) and educational impact (EI) of using social media by students with disabilities in Jordanian

universities, the researchers calculated the means (M) and standard deviations (SD) of the participants' responses on the scale, as illustrated in Table 1.

Table 1. Means (M) and Standard Deviations (SD) of PI and EI Dimensions

PI Dimension			EI Dimension		
No.	M	SD	No.	M	SD
1	4.26	0.829	13	2.87	0.601
2	4.44	0.665	14	4.15	0.982
3	4.77	0.42	15	2.15	0.781
4	2.98	0.709	16	2.5	0.85
5	2.76	0.673	17	3.8	0.997
6	4	0.705	18	1.76	0.673
7	2.74	0.665	19	2.01	0.704
8	4.25	0.654	20	2.89	0.92
9	2.77	1.2	21	2.36	0.844
10	2.74	0.665	22	2.64	0.863
11	3.76	0.834	23	2.65	0.854
12	2.48	0.501	24	2.52	0.874
Total	3.5	0.257	Total	2.69	0.401

Note: PI= Psychological Impact, EI= Educational Impact

Table 1 shows that the level of the psychological impact (Items=1-12) on social media use by students with disabilities in Jordanian universities. The overall PI level was medium (M=3.50, SD=0.26). Six items were with high level (M=3.76-4.77, SD=0.83-0.42), and the remaining six items were with medium level (M=2.48-2.98, SD=0.71-0.50).

Regarding the educational impact level (Items=13-24), EI level of using social media by students with disabilities in Jordanian universities was generally medium (M=2.69, SD=0.40). Two items were of high level (M=4.15-3.80, SD=0.98-0.1) respectively, while seven items were of medium levels (M=2.36-2.89, SD=0.92-0.84). Still, three items ranked low (M=1.76- 2.15, SD=0.78-0.67).

To identify the effect of the disability type and communication duration on the psychological and impacts of using the social media used by students with disabilities in Jordanian universities, the researchers used One-Way ANOVA analysis as shown in Table 2.

Table 2 shows statistically significant differences in both the psychological and educational impacts' dimensions in the type of disability variable; F Values were: [F(2, 173)=4.85, p<.009]; [F(2, 173)=3.47, p<.033].

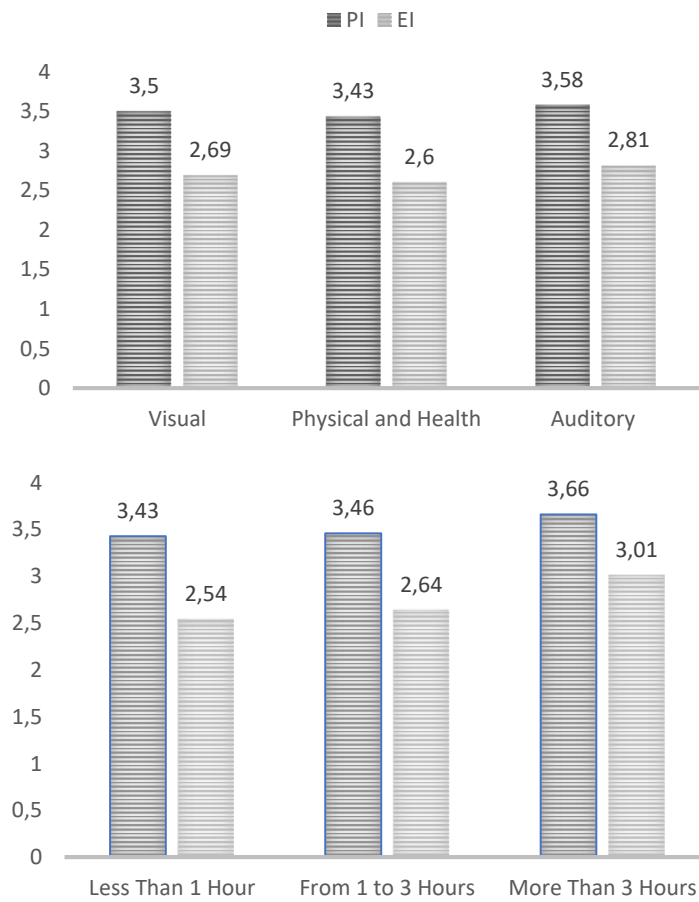
Moreover, there were statistically significant differences in the level of both the psychological and educational impacts of using social media used by students with disabilities in Jordanian universities based on communication duration; F values were:  $[F(2, 173)=11.460, p<.000]$ ;  $[F(2, 173)=21.95, p<.000]$ .

Table 2. ANOVA analysis of the study variables effects

V	D	SV	TS	FD	SA	F	Sig
TD	PI	Intergroup	0.617	2	0.308	4.853	.009
		Intra-Group	10.993	173	0.064		
		Total	11.61	175			
	EI	Intergroup	1.088	2	0.544	3.472	* .033
		Intra-Group	27.108	173	0.157		
		Total	28.196	175			
CD	PI	Intergroup	1.358	2	0.679	11.46	*.000
		Intra-Group	10.251	173	0.059		
		Total	11.61	175			
	EI	Intergroup	5.707	2	2.853	21.949	*.000
		Intra-Group	22.489	173	0.13		
		Total	28.196	175			

Note: V=Variables, TD=Type of Disability, CD=Communication Durations, D= Dimensions, PI=Psychological Impact, EI=Educational Impact, SV=Source of Variance, TS=Total Squares, FD=Freedom Degree, SA=Squares Average, F=F Value, Sig=Significance

The results (*see* Figure 1) showed that there was an effect of the disability type on the psychological and educational impacts of using the social media used by students with disabilities in Jordanian universities. Specifically, for the psychological impact, the results of calculating the means (M) and standard deviations (SD) of the effect of disability types were: visual (M=3.50; SD=0.26), physical (M=3.43; SD=0.26), and auditory (M=3.58; SD=0.25). As for the educational impact, values were: visual (M=2.69; SD=0.42), physical (M=2.60; SD=0.42), and auditory (M=2.81; SD=0.39). Regarding the communication duration variable, means (M) and standard deviations (SD) in the psychological impact were: less than 1 hour (M=3.43; SD=0.26), from 1 to 3 hours (M=3.46; SD=0.26), and more than 3 hours (M=3.66; SD= 0.18). As for the educational impact, values were: less than 1 hour (M=2.54; SD=0.38), from 1 to 3 hours (M=2.64; SD=0.38), and more than 3 hours (M=3.01; SD=0.29).



Note: PI= Psychological Impact, EI= Educational Impact

Figure 1. Psychological and educational impacts according to the type of disability and communication durations

### Discussion

Based on the results of the study, the researchers may claim that using social media has psychological and educational impacts on students with disabilities in Jordanian universities. Psychologically, students with disabilities indicated that the most effective social media usage was that social media allows them to spend extra time in recreation and entertainment. On the other hand, they



claimed that social media allows them to display themselves in a manner that is different from their actual image.

The results showed that there were statistically significant differences in the levels of both the psychological and educational impacts based on the type of disability; for the auditory disability as compared to the students with other disabilities. In other words, individuals with auditory disabilities are more affected in terms of both the psychological and educational dimensions as a result of their use of social media sites. Regarding the education impact, students with disabilities in Jordanian universities claimed that social media enable them to obtain the needed information, carry out learning dialogues, and submit and discuss their ideas. In contrast, they stated that social media did not help them in assignments and carry out the required duties and activities.

As for the study variables, the results also showed that the type of disability and communication duration affect the psychological and educational level of students with disabilities in Jordanian universities. For the type of disability, the results showed that students with auditory disability were more affected psychologically and educationally of using social media compared to the students with other disabilities. On the other hand, the social media duration of use affected the Jordanian universities disabled students, which is quite evident in the responses of students with disabilities, who use social media for more than three hours a day.

This study has potential limitations. First, the study results are limited to the sample of the study, which was from two Jordanian universities, and to the study participants' response to the study instrument. On the other hand, this study was implemented during the first semester of the academic year 2017/2018. Besides, this study focused only on the psychological and educational impacts of using social media by students with disabilities in higher education. Future research needs to investigate other factors, including social implications of using social media in higher education.

### **Conclusion**

The use of social media by students with disabilities in Jordanian universities entails several psychological and educational impacts. These provide this category of students an area to engage their spare times and are considered a relief place for them to mitigate the psychological pressures they suffer; because

they are humans before and after anything, and because of their disability, which propels them find a relief to get rid of these pressures. This topic was further asserted by the study of Rajabi and Rimawi (2016). Therefore, social media are the most critical relief for them, mainly because they do not require spending effort in motion, moving from one place to another, or spending money for this purpose. As for the non-impact of the social media on the students with disabilities' real self, it is a proof that the students with disabilities enjoy real selves, particularly, they are sharing with others they know.

Furthermore, students with disabilities in Jordanian universities do not tend to play unreal roles. These became a means of research to access the information, especially within the scientific frameworks. Their users managed to exchange dialogues, thoughts and questions, and discussion thereof. Therefore, obtaining information and exchange of thoughts are among the essential educational impacts on social media use. On the other hand, most users tend to spend spare times in using these sites, which is consistent with the nature of using these sites.

As for the psychological and educational impacts according to the type of disability, these provide many visual stimuli as compared to the auditory stimuli that incite students with auditory disabilities to use the social media sites, which results in different influences, especially in the psychological and educational domains.

Meanwhile, these stimuli are not considered suitable for physically disabled people. The psychological and educational impacts of using social media by students with disabilities in Jordanian universities differ by the duration of the communication, due to the social motivations to use these to be introduced to the others and keep in touch with them. This result is not consistent with the study of Abdel Hamid et al. (2015), which indicated that 46% of the individuals with disabilities spend from one to two hours.

In the light of the study results, the researchers recommend that the social media should be utilized and invested within educational frameworks by exchanging related scientific links with the academic subjects and assigning and directing the students to share in electronic communication groups to solve the homework and implement the activities. There is a critical need to form the educational policies in the Jordanian universities depending on the importance of the social media; therefore, social media should be included within the

planning of the academic courses or implementing their requirements. Additionally, awareness program about the psychological and educational effects of using social media should be implemented to encourage students with disabilities to use social media positively and avoiding the negative side of it, especially those related to the communication addiction. Finally, more studies should be conducted to investigate the barriers and challenges that students with disabilities face while using social media.

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## Appendix A

### The Scale of Psychological and Educational Impacts of Using Social Media

No.	Item
1	Social media allow me to express myself freely, better than facing through words, images or videoclips.
2	In social media sites, I find relief from the pressures I feel.
3	Social media allow me to spend extra time in recreation and entertainment.
4	In social media communication, I gain the psychological support I need; thereby, I increase my self-confidence.
5	In social media communication, I fulfil my psychological desire to let others know my news and activities.
6	In social media communication, I fulfill my psychological desire to let others know my news and activities.
7	By engaging in social media sites, I get away from the others' talks that don't appeal to me, so I keep apart from them.
8	Social media allow me to discharge my negative psychological energies, such as repression, frustration, and despair, etc.
9	Social media allow me to know my image about myself through the comments of the others and responses to what I publish.
10	Social media allow me to know the other's psychological attitudes about disabled people.
11	Social media contribute to the removal of the psychological barriers between me and the others.
12	Social media allow me to display myself in a manner that is different from my actual image.
13	Social media give me chances of being introduced to others' cultures as a source of knowledge.
14	Social media enable me to obtain the information I need.
15	Social media provide me chances to exchange information and pertinent scientific links with different subjects.
16	Social media provide me solutions to specific learning problems I face.
17	Social media enable me to carry out learning dialogues and submit and discuss ideas.
18	Social media help me in solving the assignments and carry out the required duties and activities.
19	Social media provide me chances to know the related scientific and practical experiences, practices, and applications.
20	Social media provide me chances to increase my learning experiences
21	Social media develop my learning skills and increase my thinking abilities.
22	Social media develop my self-learning.

- 23 Social media enable me to increase my awareness of many different academic aspects and issues.
- 24 Social media contribute to my participation in specific learning activities, such as seminars and public lectures, that are already published in the sites.
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