Social Implications of the Social Media Use by Students with Disabilities at the University of Jordan: Facebook as a Model

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ABSTRACT
This study aimed to measure the benefits of using the social media website as perceived by students with disabilities at the University of Jordan. The sample consisted of 150 students with disabilities and used a 5-point Likert scale to rank the perceived benefits on a 12-item survey. On average, the students indicated that using social media websites provided a moderate level of social benefits. In contrast, the students indicated that social media websites provided a high level of social benefit for increasing the number of new friends, deepening their relationship with others who have a disability or who are concerned with disabilities, and identifying societal attitudes toward disability and disability support services.

Keywords
Students with Disabilities, Social Media, Social Implications, Higher Education.

Introduction
During the past few years, social media websites have significantly impacted daily communication patterns and knowledge exchanges worldwide. The spread of social media has allowed subscribers to create private social networks where they can link electronically to one another across the world and share similar interests and hobbies. Such electronic networks play a vital role in influencing members’ beliefs, daily habits, and cultural traditions (Al-Alami, 2011). They have become a significant determinant for shaping members’ thoughts and behaviors and have disrupted traditional communication patterns and social reality, particularly for youth (Al-Jallad, 2014). Social media is pushing people toward a new age of global interaction and communication, freedom of expression, and information access that transcends their traditional borders and barriers. Social media sites such as Facebook, Twitter, and Instagram are not merely information sites that people view occasionally. Instead, they are an integrated part of many individuals’ daily lives and provide different user gratification (Al-Hayes, 2015).

Facebook was launched by Mark Zuckerberg in 2004 and is one of the largest social media websites in terms of membership (Ahmad, 2011). Facebook has over 750 million subscribers, most of whom are youth. Data published on the Statistics Facebook website indicate that 66% of the Jordanians have Facebook accounts. Jordanian youth have 41% of these accounts; most of these youth are between 18 and 23 years old (Facebook website, 2017) when they enroll in universities. Consistent with the data posted on the Facebook website, A’abed (2012) also found that Facebook accounts for 79.9% of the students’ social networking activities, and Al-Saquer and Hendawi (2016) found high usage of social media sites by adolescents. Similarly, Al-Oteibi’s study (2018) indicated that Facebook usage has spread to 77% of the students. In addition to the number of users, time spent on social media platforms is an essential factor influencing communication patterns. Al-Masri’s study (2010) indicated that 30% of the social media users spent less than one hour, 22% spent one to two hours, and 26% spent more than three hours a day on social media sites. Al-Ahmär’s study (2011) showed that social media usage ranged between three and four hours daily. A’abed (2012) found that 40.45% of university students in the study spent one to three hours a day on social media. Al-Fadhil’s study (2013) showed that King Saud University’s students used social media two and four hours daily. An important motive for students to use
social media might be explained by the uses and gratifications theory, based on the selective exposure principle, a sociology concept. According to the uses and gratifications theory, people select information resources that gratify their needs, particularly social and psychological needs (Kardash, 2005). According to the selective exposure principle, individuals voluntarily expose themselves to information resources that match their interests, desires, and thinking patterns. In their study, Urista and Day (2014) asserted that students use social media to gratify their personal needs and desires to communicate with others. These sites allow for rapid communication of content to others, whether they be few or many. Social media platforms facilitate exchanging information, views, and ideas and promoting self-efficacy, improved communication skills, and increased motivation to communicate (Boyd & Ellison, 2008).

**Literature Review**

Findings from several studies about social media use in general and Facebook, in particular, revealed that these sites increased social relationships by expanding opportunities to share news and ideas, remain informed about one another's personal lives, respond to postings, send compliments, and explore interests. Such actions helpedstrengthen existing friendships, increase the number of friends who share similar interests, remove psychological and social barriers between the genders, and meet people across gender lines. Social media also provided long hours of entertainment in online games (Abu Sa’ileek, 2012; Al-Zboun & Abu S’aileek, 2014; Young, 2011). Young (2011) conducted an Internet opinion poll of students from Sydney University. These students indicated that Facebook networks enhanced their existing friendships by expanding their traditional communication modes, such as telephones and face-to-face contact. Besides, Facebook allowed for effective communication with larger groups of acquaintances, which, in turn, contributed to their social capital. Brown and Yang (2013) found similar correlations between the reasons for and the level of Facebook use by secondary and university students. Also, they found that the Facebook network enhanced social adaptation within the university environment. These results were supported by Junco (2013), who found that certain Facebook activities contributed to positive social relationships among the students. Ellison (2014) found that Facebook contributed to positive social interaction by providing essential background information to introduce people to one another and form relations with the friends’ group.

Al-Hayes (2015) expanded on these studies and examined the effects of social media interactions on specific aspects of students’ personalities at Sultan Qaboos University, such as social awareness, self-development, and social capital development. The findings revealed that social media usage (a) fostered understanding and civilized communication with others, (b) promoted values of volunteerism and social participation, (c) reduced forms of social discrimination, and (d) supported humanitarian interactions across different nationalities. The study by Bader (2015) indicated that the most important social effects of social media usage for students at Gulf States University in the United Arab Emirates were: increased exposure to other cultures, increased vocabulary, and increased satisfaction with communicating with old friends. Social media’s impact on the social, psychological, educational, and cultural aspects of people’s lives is not always positive (Al-Jallad, 2014; Al-Zboun & Abu S’aileek, 2014). There also are negative aspects to social media, especially in light of the absence of control systems to monitor what may be aired. These negative aspects are a concern. Uncensored falsifications, propaganda, violent content, and vilifications at the personal and societal levels influence negative thoughts and behaviors and create risks for community members, in general, and youth, in particular. Studies are needed to understand these positive and negative effects and determine if and how social media sites should be controlled.

Many youths who have disabilities use social media (Abu El-Robb, 2015) even though these websites often are designed for people without disabilities (Jaeger, 2009). It may be that these youth are attracted to social media sites because they provide relatively easy access to social networks. By comparison, face-to-face social interactions may be more difficult for the youth to
initiate because of the physical limitations associated with their disabilities (Al-Rajabi & Al-Rimawi, 2016). In addition, because the youth do not need to disclose their disability, they may find that social media help mitigate societal biases that limit their interactions with others (Abu El-Robb, 2015). Heasley’s study (2010) showed that social media networks opened the gates for individuals with disabilities. The networks afforded greater social access for these individuals, allowed them to form fruitful friendships, minimized negative perceptions directed against them, and reduced isolation by creating communication channels to large numbers of people. Katrina and Nessa (2012) focused their study on students’ social media experiences with learning disabilities. Their results indicated that social media assisted these students with initiating and maintaining friendships. Asuncion, Budd, Fichten, Nguyen, Barile, and Amsel (2012) compared the accessibility of various social media platforms for post-secondary age students with disabilities. The results indicated that these students accessed YouTube more frequently than other websites and that Windows Live Messenger was the most accessible website.

Several researchers examined the use of social media by people with specific disabilities. Soderstrom and Ytterhus (2010) found that people with visual impairments accessed social media sites less frequently than those with other disabilities. These sites' technical operations were based on visual displays and thus did not accommodate the needs of people with visual impairments. Those people who were blind required assistive technology to access social media sites. Abu Al-Robb (2015) conducted a study of individuals with disabilities in the Kingdom of Saudi Arabia (KSA) and found that they benefited socially, cognitively, and psychologically, but not professionally when using social media. Those individuals with visual impairments who were 35 years of age or older, and who had only a secondary education level benefitted the least from social media.

Abdul Hamid, Imam, and Aziz (2015) studied the social media usage of 200 youth with total hearing loss. The youth were 12 to 18 years old and attended preparatory and secondary schools in Cairo and Monoufia. The researchers found that these youth used Facebook most frequently, followed by YouTube and Twitter; 51% of the youth used social media sites more than once a day, and 46% spent 1 to 2 hours a day on these sites. The researchers also found a positive correlation between social media use by these youth and their degree of gratification. The use of social media did not appear to affect their other social relationships.

Other researchers focused specifically on the use of social media by university students with disabilities. For example, Lewthwaite (2011) examined the social media networks of students with disabilities on university campuses in the United Kingdom and obtained results consistent with Heasley’s (2010) findings. The networks provided significant support for their new educational experiences, promoted interactions between students with and without disabilities, and facilitated change in disability perceptions. These interactions minimized prejudices directed toward students with disabilities, created opportunities for them to express positive feelings about their capacities and reduced the adverse effects of disability status. The current study expands upon the work of Lewthwaite (2011) and others (Bader, 2015; Al-Hayes, 2015; Al-Ahmar, 2011; Al-Masri, 2010; Yang & Brown, 2013) by exploring the benefits of social media usage from the perspective of students with disabilities specifically at the University of Jordan. No studies could be found that gathered the perspective of university students with disabilities at Jordanian or Arab universities regarding social media usage benefits. Furthermore, this current study is distinguished by its sample, which included students with auditory, visual, physical, and health disabilities. Such research is essential for framing policies at the University of Jordan that address students’ learning and social support needs with various disabilities.

**Study Problem and Research Questions**

The University of Jordan has more students with disabilities than any other university in Jordan. According to data collected from the Deanship of Student Affairs at the University of Jordan (2017), 500 students had a visual, auditory, physical, or
health disability. Nevertheless, no research existed to help inform administrators and faculty at this university or any other university in Jordan about how social media, specifically Facebook, could be used to support student success. Thus, this study sought to answer the following questions:

- What are the perceptions of students with disabilities in the University of Jordan about the perceived benefits of social media usage?
- Do students with different disabilities at the University of Jordan have statistically significant differences in perceptions about the perceived benefits of social media usage?

Study Rationale and Significance

This study is the first in Jordan and perhaps only one of the few within the Arab world, as far as the researchers could find, that examines social media usage by university students with varying disabilities. Thus, the results contribute to the Arab and international literature about university students’ electronic communications practices with disabilities. This current study may catalyze additional studies that evaluate the implications of social media usage on the learning and social development of Jordanian and Arab university students with disabilities. It is hoped that this study's results provide foundational knowledge about disability supports that should be incorporated into university training and counseling programs.

Methods

Study Sample

The study population consisted of all male and female students with disabilities who were enrolled at the University of Jordan during the first semester of the academic year in 2017/2018 (N = 500). According to admission and registration data provided by the Student Affairs Deanship, these students had auditory, visual, physical, or health disabilities. A random stratified method was used to select 150 of these students to participate in the study. The sample consisted of 86 males and 64 females, as shown in Table 1.

<table>
<thead>
<tr>
<th>Disability</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>40</td>
<td>27%</td>
</tr>
<tr>
<td>Visual</td>
<td>68</td>
<td>45%</td>
</tr>
<tr>
<td>Physical and Health</td>
<td>42</td>
<td>28%</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100%</td>
</tr>
</tbody>
</table>

Study Instrument

Since a standardized survey tool could not be found, the researchers constructed a survey instrument specifically for this study. First, they reviewed the literature about electronic social media and the effects of social media usage, particularly those by Abu Al-Robb (2015), Al-Zboun, and Abu Su'aileek (2014), and Awawdeh (2013). The researchers then interviewed some social media users about their social experiences. Based on the literature and social media users' information, the lead researcher constructed a 12-item survey tool and a five-point Likert scale using the following gradients: 5= always; 4 = often; 3= sometimes; 2= rarely; 1 =never = 1 grade.

Validity. The researchers established apparent validity for the instrument. Apparent validity is a type of content validity and involves arbitrators (Melhem, 2017). Nine faculty members from Hashemite University and Al-Balqa' University special education, psychology and counseling, sociology, and measurement, served as the arbitrators. They reviewed the 18 items in the draft version of the instrument to determine alignment with the study objectives and clarity for content validity. The faculty members recommended paraphrasing some items, deleting other items, and combining some items to achieve a 100% agreement between the items and the study objectives. The final version of the instrument contained 12 items.

Reliability. To assess instrument reliability, the researchers conducted Cronbach Alpha analysis using scores of 20 male and female students from
outside the study sample. The researchers obtained a Chronbach alpha of $\alpha = 0.78$.

**Procedures**

The researchers met with Students at the University of Jordan to establish collaboration for the research. The researchers then visited the offices and clubs for students with disabilities at the University of Jordan to explain the study's objective and distribute the instrument to the study participants. A sign language specialist translated the instrument items for students with hearing loss. The items were read to students who were blind. The responses of these students were recorded on the corresponding boxes of the instrument items. The remainder of the participants completed the survey independently. The researchers collected and analyzed the responses using descriptive statistics to identify the perceived benefits of social media usage by students with disabilities at the University of Jordan. The researchers calculated the means (M) and standard deviations (SD) to answer the first question. Then they calculated the degree of effect of social media site usage on social aspects by subtracting the minimum score (1) from the maximum (5) score, then divided the results by three to obtain the range of scores for three levels: low, moderate, and high. Accordingly, scores between 1.00 and 2.3 were labeled as providing a low level of benefit, those between 2.34 and 3.66 were labeled as providing a moderate level of benefit, and those between 3.67 and 5.00 were labeled as providing a high level of benefit. To substantiate the reliability of the instrument, the researchers conducted a one-way ANOVA and Scheffe’s test.

**Results**

The researchers used the means and standard deviations of the sample participants’ responses on the scale of the social implications to measure university students' perceptions with disabilities about the benefit of social media usage. As shown in Table 2, the social implications level of the social media website use of students with disabilities was generally moderate ($M = 3.64, SD = 0.19$). Mean scores at the high level were obtained for seven items ($M = 3.75$ to $4.76$); Mean scores at the moderate level were obtained for four items ($M = 2.75$ to $3.38$), and a mean score at the low level was obtained for one item ($M = 1.72$). The item that obtained the highest mean score was “Social media provides me chances to expand my social relations by increasing introduction to new friends” ($M = 4.76, SD = 0.43$). The item with the second highest mean score was “Social media helps me to deepen my relations with other people who have the same disability or share similar interests” ($M = 4.62, SD = 0.49$). The item with the lowest mean score was “Social media allows me to revive and strengthen my old social relations with colleagues, relatives or friends” ($M = 1.72, SD = 0.69$).

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Social media provides me chances to expand my social relations by increasing introductions to new friends.</td>
<td>4.76</td>
<td>0.427</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Social media helps me deepen my relations with other people who have the same disability or share similar interests.</td>
<td>4.62</td>
<td>0.485</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Social media allows me to know the attitudes of the community members toward my disability by reading their publications and comments related to the disability.</td>
<td>4.48</td>
<td>0.650</td>
<td>High</td>
</tr>
</tbody>
</table>

www.psychologyandeducation.net
Social media allows me to know the services provided by civil society institutions in disability and means to access them. 4 3.88 0.486 High

Social media provides me chances to connect with others and to interact with them virtually in their social activities. 5 4.38 0.690 High

Social media enhances opportunities to build social support groups, including family and special interest groups. 6 3.76 0.658 High

Social media facilitates my access to other people who are very difficult to approach because of geographic distances or because of the inability to meet physically. 7 3.75 0.824 High

Social media provides me chances to reduce the negative social constraints I face. 8 3.38 0.690 Moderate

Social media provides me the opportunity to display my social self through the number of friends I have and the strength of those relations. 9 2.89 0.793 Moderate

Social media would contribute to my participation in certain public social events, such as contests, exhibitions, or initiatives, if they were announced in these websites beforehand. 10 2.86 0.780 Moderate

Social media allows me chances to strengthen my existing networks by engaging in thoughtful discussions. 11 2.75 0.430 Moderate

Social media allows me to revive and strengthen my old social relations with colleagues, relatives, or friends. 12 1.72 0.690 Low

Overall 3.64 0.191 Moderate

Note: Items appear in descending order of mean values; No. = item number

To identify the social benefits of using social media based on disability, computational averages, and standard deviations were calculated, as illustrated in Table 3. This table shows apparent differences in the means of perceived benefits resulting from social media use according to the student's disability type.

Table 3. Descriptive statistics of perceived social benefits of social media use (by disability type)

<table>
<thead>
<tr>
<th>Disability</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>3.64</td>
<td>0.202</td>
</tr>
<tr>
<td>Visual</td>
<td>3.61</td>
<td>0.168</td>
</tr>
<tr>
<td>Physical and Health</td>
<td>3.69</td>
<td>0.195</td>
</tr>
</tbody>
</table>

The one-way ANOVA was conducted to identify the significance of this difference, as shown in
Table 4. Differences in the perceived benefits resulting from social media websites by students with different disabilities were not statistically different, \( F(2,173) = 2.23, p = .111 \).

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>0.162</td>
<td>0.081</td>
<td>2.226</td>
<td>0.111</td>
</tr>
<tr>
<td>Within Groups</td>
<td>173</td>
<td>6.279</td>
<td>0.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>6.441</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To determine the impact of electronic communication time on the level of perceived benefits of using social media, the statistical averages and standard deviations of the perceived benefits of social media use by students with disabilities were calculated according to the duration of the electronic communication spent daily, as shown in Table 5. This table shows statistically significant differences in the means of the perceived benefits from social media use by university students with disabilities per the electronic communication duration variable.

Table 5. Descriptive statistics on perceived social benefits resulting from social media use (by the duration of use)

<table>
<thead>
<tr>
<th>Duration</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 hour</td>
<td>3.64</td>
<td>0.202</td>
</tr>
<tr>
<td>1 to 3 hours</td>
<td>3.61</td>
<td>0.168</td>
</tr>
<tr>
<td>More than 1 hour</td>
<td>3.69</td>
<td>0.195</td>
</tr>
</tbody>
</table>

To identify the significance of these differences, one-way ANOVA was used, as shown in Table 6. This resulted in statistically significant differences in the perception of the benefits of social media use by university students with disabilities, \( F(2,173) = 26.14, p < .001 \).

Table 6. Results of ANOVA on the significance of perceived social benefits differences (by the duration of use)

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>1.495</td>
<td>0.747</td>
<td>26.139</td>
<td>0.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>173</td>
<td>4.946</td>
<td>0.029</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>6.441</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To identify the significance of the differences of these social implications, the Scheffe's Test for the post-comparisons was conducted, as shown in Table 7. Statistically significant differences were found in social media usage based on the daily electronic communication period. Higher perceived benefits were found for students who used social media more than 3 hours a day.

Table 7. Results of Scheffe’s test for post-comparisons of perceived social benefits from social media use

<table>
<thead>
<tr>
<th>Duration</th>
<th>SD</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Less than 1 hour</td>
<td>3.55</td>
<td></td>
<td>0.24597*</td>
<td>0.17501*</td>
</tr>
<tr>
<td>(2) 1 to 3 hours</td>
<td>3.62</td>
<td></td>
<td>0.24597*</td>
<td></td>
</tr>
<tr>
<td>(3) More than 3 hours</td>
<td>3.80</td>
<td></td>
<td>0.7501*</td>
<td></td>
</tr>
</tbody>
</table>

Discussions

According to the findings, students with disabilities at the University of Jordan rate social media, on average, as providing a moderate level of social benefits for them. The highest level of benefits was increased opportunities to expand relationships, meet new friends, and strengthen connections between persons with disabilities and individuals with similar concerns. The results of this current study expand upon those of Ellison et al. (2014) and Al-Zboun and Abu Sablik (2014), who found that the most significant social impact of social media usage was attributable to the identification of new friends. Consistent with the uses and gratification theory, those students who spent more time on social media sites rated them as affording higher levels of a benefit than those who spent less time on these sites. The university students attributed a lower social media level to reviving old social relations with relatives or friends. The reason for this is unclear. These relationships were already strong and did not need...
to be revived or that the students were not interested in reviving them. This result contradicts the results of studies by Al-Zboun and Abu Sallik (2014) and Young (2011), which indicated that social networking sites revive old friendships and reinforce existing ones by supplementing traditional communication forms. Besides, the present study's findings did not align with those of Badr (2015), who reported the presence of positive or happy feelings of social media site users when connecting with old friends. Statistically insignificant differences were found in the perceived level of social media use benefits by students with disabilities at Jordan University based on disability type. These findings support Heasley (2010) results, who did not find any differences in social networking users' implications based on disability type. Other researchers have examined the number of times students with disabilities spend on social media sites and postulate that these sites afford opportunities to build social networks and vent social and physiological pressures (Abdul Hamid, Imam, & Aziz; 2015; Al-Ahmari 2011; Almasri 2010). This may be particularly so for those students whose physical, health, visual, or auditory disability results in significant social barriers that prevent them from communicating in person with others or choosing to communicate with them. The studies vary in the amount of time the participants report that they spent on social media each day. For example, Abdul Hamid et al. (2015) indicated that 46% of their participants spent one to two hours daily communicating electronically. Almasri (2010) stated that 30% of social media site users spent less than an hour each day communicating electronically. Al-Ahmari (2011) indicated that the study participants communicated electronically between three to four hours daily. Such time differences may result from the variance in the participants' demographics across the studies and from the self-report versus time sample data collection methods. Though not examined in these studies, what is essential is whether there is an inverse relationship between the time spent on electronic communication versus face-to-face communications.

Conclusion
In light of the present study results, the researchers recommend that faculty and staff encourage the formation of electronic learning groups where students with and without disabilities collaborate on course projects and assignments. By minimizing communication and access barriers, such collaborations can increase opportunities for students with disabilities to engage in the learning exchanges, master course content actively, and demonstrate their capabilities. In addition, faculty and staff are encouraged to develop programs that help students with and without disabilities examine their social media use patterns, including time spent, sites used, site content, and purpose of usage. Consideration needs to be given to the advantages and the disadvantages stemming from the use or over the use of electronic media. There is a vital need to conduct additional studies that examine the impact of social media platforms and content on students' lives with and without disabilities. Current popular sites include Facebook, Twitter, Instagram, and WhatsApp websites. Students in the Levant countries use Facebook more frequently, whereas people in the Arabian Gulf countries use Instagram more frequently. Beyond investigating the perceived benefits of social media, an in-depth analysis of the content of and targeted audiences for these sites is necessary to understand how access to knowledge is being affected, information is being manipulated, and cultures are being changed. In light of the current controversy regarding the misappropriation of personal data on social media platforms, studies also need to be conducted about the potential increase risk for victimization of people with disabilities. Finally, studies are needed to investigate the accessibility level of social media websites and develop technology solutions to those barriers that restrict usage by people with disabilities.

Acknowledgement
The authors of this study have received no funds to conduct this research; moreover, the authors
have no conflict of interest. Indeed, the authors are very grateful to reviewers for their time and constructive suggestions to improve this article.

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