

Perceived Social Media Addiction Differences by Student University

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Abstract: The present study determined if there is a difference in perceived social media addiction between students at different university levels. The university levels examined were the following: Freshman, Sophomore, Junior, and Senior. Two-hundred and one students participated in the present study. The students attended a university in Kuwait, representative of the Gulf region of the Middle East. Freshman students had the highest mean for perceived social media addiction, with 75% thinking they are addicted to social media. A statistically significant effect was found utilizing an independent between-groups ANOVA, with 3.1% of the variance in perceived social media addiction accounted for by university level. A Scheffe post-hoc test resulted in a non-significant finding between university levels, however, with each increase of university levels, the mean addiction declined. One possible explanation could be that the educational levels were very close in range.

Keywords: Perceived social media addiction, University Level, ANOVA

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Üniversitenin Farklı Sınıflarına Göre Öğrenciler Arasında Algılanan Sosyal Medya Bağımlılığı Farklılıkları

Öz: Bu çalışma, farklı üniversite kademelerdeki öğrenciler arasında algılanan sosyal medya bağımlılığında bir fark olup olmadığını tespit etmiştir. Bu çalışmada birinci, ikinci, üçüncü ve dördüncü kademeler ayrı ayrı incelenmiştir. Bu çalışmaya iki yüz bir öğrenci katılmıştır. Katılımcılar Orta Doğu'nun Körfez bölgesini temsil eden Kuveyt'teki bir üniversitenin öğrencileri. Birinci sınıf öğrencileri, algılanan sosyal medya bağımlılığı için en yüksek ortalamaya sahipti ve 75%'i sosyal medyaya bağımlı olduklarını algılıyorlardı. Bağımsız gruplar arası ANOVA kullanılarak istatistiksel olarak anlamlı bir etki bulundu. Üniversite kademeleri algılanan sosyal medya bağımlılığındaki veryansın 3.1%'ini açıklıyor. Scheffe post-hoc testi, üniversite kademeleri arasında anlamlı olmayan bir bulgu ile sonuçlandı, ancak üniversite kademelerindeki her artışla ortalama bağımlılık azaldı. Muhtemel bir açıklama, eğitim seviyelerinin birbirlerine çok yakın olmasından dolayı anlamlı sonuç bulunmamış olabilir.

Keywords: Sosyal medya bağımlılığı algısı, üniversite kademelerine göre karşılaştırma, ANOVA

Introduction

Seventy-three percent of Internet users are also active on social media (Kemp, 2017). However, there are differences in usage depending on the different social categories: education, region, income, age, gender, and race/ethnicity. These differences can be found due to unequal access to technology and the Internet (Banerjee & Hodge, 2007).

Although individuals of all ages have begun to use social media platforms (Cotten, 2008; Greenwood et al., 2016; Kircaburun & Griffiths, 2018; Klobas et al., 2018; Rideout, 2012), older generations do not prefer to use social media to the same extent as the younger generation. Some of the reasons for this difference listed by the older generation are: not being used to social media, finding it unnecessary due to its lack of contribution to one's life, and having low-level technical knowledge and skills (Durak & Tekin, 2020). Other researchers note how the Baby Boomer generation do not have the confidence to utilize the platforms for its intended purposes and refer to themselves as "too old" (Gardner & McKee, 2019).

The younger generation on the other hand prefers social media to communicate and interact with family, friends, and acquaintances (Kircaburun et al., 2020; Kuss & Griffiths, 2017) and manages "their social capital through the Internet" (Young, 2006, p. 107). This is most notable for ages between 18 and 34 (Rideout, 2012). The social media platforms allow individuals to communicate with people who have similar interests, allowing for a wider circle of friends. However, the downside to such interactions as noted by Kircaburun (2016), is that these interactions can be superficial and artificial.

Similar to non-behavioral addictions such as drug ingestion, behaviors can also be addictive, such as sex, Internet use, gambling, etc. (Griffiths, 2005). Fatayer (2008) divides addiction into four types: alpha addiction, beta addiction, gamma addiction, and delta addiction. Alpha addictions refer to food addictions, beta addictions refer to addictions that lead to body functions such as alcohol and narcotics, gamma addiction refers to addictions that are related to the mind such as gambling, sex, computer/net, etc., and lastly delta refers to the different combinations of addictions. If a person has delta addiction for instance, they can be addicted to nicotine and alcohol or food, alcohol, and work. Technology addiction "distorts the expectancy-value formulation" and thus impact decision making processes (Turel et al., 2011). Addiction is an interplay between a person's emotion (desires), their cognition, and culture (Fatayer, 2008). If addiction is viewed through the lens of consumption, with the increased use of social media, and the consumption of social media, it can be said that social media addiction is on the rise. Addiction can also be said to be a form of dependence, making it difficult for the consumer to stop the behavior (Wang et al., 2015). Within the current context, the dependence would be the difficulty to stop using social media. It is possible to have more than one type of addiction, dividing it into primary and secondary addictions (Fatayer, 2008). While some researchers emphasize the interplay of social cognition, vulnerable emotional makeup, and the possibility of chemical imbalance when examining addiction (Fatayer, 2008), others view addiction through the lens of consumptions.

Addiction can be viewed as non-use, non-addictive use, near-addiction, and addiction. Each of the stages is compared with the other stages by examining the frequency of engagement, level of negative consequences, and self-control (Grau et al., 2019; Martin et al., 2013). The negative consequences can vary between physical, economic, social, or psychological (Sampasa-Kanyinga & Lewis, 2015; Settanni et al., 2018). One negative consequence may also lead to another negative consequence. For instance, distancing the self from loved ones can lead to social consequences, which in turn can also lead to depression which is a psychological consequence that may also lead to an economic consequence (Zivnuska et al., 2019) because of its impact on job performance and a physical consequence by making it hard to get up from bed due to depression (Davey et al., 2018), leading to lower exercise (Shimoga, et al., 2019).

While some researchers investigate and explore social media addiction, others examine perceived or self-belief about social media addiction. However, there is less research on self-belief of social media addiction (Allahverdi, 2021a, 2021b, 2021c, 2022a, 2022b; Mahamid & Berte, 2019). Klobas et al. (2018) are one of the few researchers that asked participants to determine their YouTube use. Results indicated that around 20% of YouTube users believed they were compulsive users. The current study examined perceived social media addiction in the Gulf region of the Middle East, without specifying the specific social media apps, and

looking at social media as a general construct. It is important to study the Gulf region of the Middle East since Fatayer (2008) emphasizes the effect of different social forces in divergent cultures.

Moreover, although there is research on social media addiction based on age, with research indicating age to be more influential compared to income and schooling in determining Internet use (Young, 2006), there is less research on differences based on education. One of the few studies that has examined educational levels and its relationship with addiction is by Mahamid and Berte (2019). These researchers assessed bachelor and master's students. Results indicated significantly higher addictive behavior in bachelor students compared to master's students. Durak and Tekin (2020) found similar results with university graduates using social media more frequently compared to students who received education post-bachelors.

Both Mahamid and Berte (2019) and Durak and Tekin (2020) examined large educational differences. The present study made several contributions because it examined each level (Freshman, Sophomore, Junior, and Senior) within the bachelor's degree, comparing closer range educational levels. Thus, the current study determined if small variations in education supports the existing literature related to social media addiction. In addition, the current study examined students in the Gulf region of the Middle East, where there is a lack of research on social media and perceived social media addiction.

Research Question

Is there a difference in perceived social media addiction between students in different university levels?

Methodology

Analysis

The current study employed the Analysis of Variance (ANOVA) statistical technique. Mean differences were compared to test for significance on the dependent variable (Mertler & Vannatta, 2010). It was selected because it allows the researcher to determine if the differences that exist among the groups are statistically significant. A post-hoc Scheffe was utilized afterward to determine where the significant differences lie. Scheffe was selected due to the uneven sample size.

Participants

Two-hundred and one students participated in the present study. Around 31% of the participants were male and 66% were female. There were more females compared to males. This was due to the general school population; more females attended the university compared to males. In total there were 38 Freshman students, 58 Sophomore students, 52 Junior students, and 53 Senior students. The students for the current study were gathered from a university in a Gulf country.

Procedures

The university in Kuwait was specifically selected for the current study due to it being representative of the population of the Gulf region within the Middle East. Random sampling was utilized to preserve the homogeneity of the population (Emerson, 2015). For systematic random sampling random, classes from each area (Sciences, Social Sciences, etc.) were selected and students were also approached at the cafeteria, around the campus, etc. University approval was provided for the collection and the analysis of the data after being deemed ethical. The data was double-checked for validity after it was entered into a database.

Measures

Demographic Information

Students provided information on their level (Freshman, Sophomore, Junior, or Senior).

Perceived Social Media Addiction (Eijnden et al., 2016)

The following question was asked to assess perceived social media addiction, "To what extent do you feel addicted to social media?" The scale utilized for the study was from zero to 100, which was different from the five-point Likert scale that Eijnden et al. (2016) utilized. Instead of a five-point Likert scale, the zero to 100 scale was utilized to increase the validity and increase the variability found between students. This question was specifically selected due to its high correlation with the Social Media Disorder (SMD) scale.

Findings

The average addiction perception of social media was ($\bar{x} = 65.05$) with a standard deviation of (sdv=24.22). From the 201 participants, 99 students (around 50% of the participants) believed they were addicted to social media between 75%-100%. Since each student rated their perceived addiction from a scale of zero to 100, the fact that 99 students out of 201 rated themselves as addicted to social media between 75%-100% is quite high. Moreover, 40 students (around 20% of the participants) perceived themselves as addicted to social media 100%, thus believing they were extremely addicted to social media.

	%	<i>x</i> ⁻	sdv
Freshman	19%	75.27	28.70
Sophomore	29%	63.21	21.86
Junior	26%	62.54	21.14
Senior	26%	62.74	21.70

 Table 1. Descriptive Statistics

Descriptive statistics associated with student level are reported in Table 1. It can be seen that Freshman level students have the highest perceived social media addiction mean (\bar{x} = 75.27). To determine if these differences were significant, a between-groups ANOVA was conducted. Data were screened to ensure that the assumptions of ANOVA were met. The assumption of normality was determined to be satisfied by examining the Q-Q plots and because the four groups' distributions had a skew and kurtosis less than |2.0|. Moreover, the assumption of homogeneity of variances was satisfied on Levene's *F* test, *F* (3, 156) = 1.14, *p*= .33.

 Table 2. ANOVA Results

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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4596.295	3	1532.098	2.88	0.04*
Within Groups	104976.720	197	532.877		
Total	109573.015	200			

* p<0.05

The independent between-groups ANOVA yielded a statistically significant effect, *F* (3, 197) = 2.88, p < .05, $\eta^2 = .031$ as can be seen in Table 2. Therefore, the null hypothesis of no differences between the means was rejected, and 3.1% of the variance in perceived social media addiction was accounted for by student university level. Once the null hypothesis was rejected, a Scheffe post-hoc test was utilized to determine which specific levels were significantly different from each other. This post-hoc test was utilized due to the uneven sample size

Le	vel	Mean Difference	Std. Error	Sig.
Freshman	Sophomore	11.85	4.8	0.113
	Junior	12.24	4.9	0.107
	Senior	12.53	4.9	0.093
Sophomore	Junior	0.39	4.4	1.000
	Senior	0.68	4.4	0.999

Table 3. Scheffe' Post-hoc

Looking at Table 3, it can be seen that there was no significance in the different levels, however, among the four levels, the most difference was between the Freshman level and the Senior level. Interestingly, as the levels progress, the difference starts approaching significance.

Discussion

The current study examined how students perceive themselves as addicted to social media and whether the percentage of perceived social media addiction varied significantly by student level. Examining the descriptive results indicated that around 50% of them perceived themselves as addicted to social media between 75%-100%. It could be said that the high percentage could partially be related to the fact that perceived social media addiction was assessed rather than real addiction. However, it is important to note that previous studies have found similar results when examining real social media addiction rather than perceived social media addiction. For instance, Mahamid and Berte (2019) found around 47% of the students to be addicted to social media. Alnajat et al. (2019) similarly found that around 50% of males as addicted to social media.

This is the first study to compare the different levels of bachelor degrees. Freshmen students were more likely to report themselves as addicted to social media compared to the other levels, with the most difference existing between the Freshman and Senior levels. However, although the decline of the percentage of perceived social media addiction from Freshman to Senior level follows a similar trend to Mahamid and Berte (2019), with the increase in educational levels resulting in less addiction, the differences are not statistically significant. Looking at the present study, it can be said that there needs to be greater level differences to result in a statistical significance. Thus, using Mahamid and Berte (2019) as a guide, it can be said that if Senior year students were compared with high school students, statistical significance might be achieved.

However, it is important to note that researchers in Turkey have come to different conclusions. While Simsek et al. (2019) found no statistical significance between high school and university students in terms of social media addiction, Durak and Tekin (2020) found high school students to use social media less than bachelor degree students. It is important to note that Durak and Tekin (2020) examined social media usage and not addiction. Since the current study took place in the Gulf region of the Middle East, it can also be said that different social forces might have been at play compared to Turkey, supporting Fatayer (2008) who emphasizes the variability that can occur in divergent cultures.

What differentiates the current study is not only the population that it worked with but also the fact that it compared each of the bachelor's degree levels against each other, comparing minor differences in educational levels. This is the first study to the best knowledge of the researcher to conduct such a study.

Future Studies

This is the first study to compare the different levels of bachelor degrees. Future studies should determine if similar results are found with different populations. Moreover, since the trend of the data followed a pattern similar to Mahamid and Berte (2019), greater level differences should be examined with the Gulf population. Future studies can examine high school students and compare the different high school levels with bachelor degree levels, thus providing a wider range of educational levels.

Since the present study investigated perceived social media addiction, future studies can determine if Freshman students are actually addicted to social media more compared to other levels. Participants can also be asked why they perceive themselves as addicted to social media. This could allow for pattern formation using qualitative techniques.

Fatayer (2008) discusses how there might be a chemical imbalance or an addiction gene in some people which may impact whether a person becomes addicted. Future research can determine if people who are addicted to social media have chemical imbalances and if the chemical imbalances are the same severity as those who think they are addicted to social media.

Similar to Durak and Tekin (2020), future studies can also determine whether there is a relationship with the working statuses of individuals and perceived social media addiction. Since Durak and Tekin's study (2020) took place in Turkey, examining the differences in the Gulf region of the Middle East, while also looking into perceived addiction rather than actual addiction would add to the existing literature.

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