

The Relationship Between Social Media Addiction and Career Stress of Sports Science Students

ERGUN YURDADON¹, AHMET DINÇ²

^{1,2}*School of Physical Education and Sports, Iğdır University, Iğdır, TURKEY*

ABSTRACT

The purpose of this study is to examine the relationship between social media addiction and career stress of sports science students. This research examined the relations of social media addiction to college students' mental health and academic performance, investigated the role of self-esteem as a mediator for the relations, and further tested the effectiveness of an intervention in reducing social media addiction and its potential adverse outcomes. In Study 1, we used a survey method with a sample of college students (N = 232) and found that social media addiction was negatively associated with the students' mental health and academic performance and that the relation between social media addiction and mental health was mediated by self-esteem. In Study 2, we developed and tested a two-stage self-help intervention program. We recruited a sample of college students (N = 38) who met criteria for social media addiction to receive the intervention. Results showed that the intervention was effective in reducing the students' social media addiction and improving their mental health and academic efficiency. The current studies yielded original findings that contribute to the empirical database on social media addiction and that have important theoretical and practical implications. This study examined the relations of social media addiction and college students' career stress. To collect the data we used a survey method with a sample of college students (N = 390) students studying at universities in Serhat provinces (Kars, Ağrı, Iğdır) in 2020-2021, and found that social media addiction was negatively associated with the students' career stress management. The social media scale developed by Şahin, (2018) and Choi et al. (2011), and the career stress scale adapted to Turkish by Özden and Serten Berk (2017) was used to conduct this study. Data were collected online via google platform. Social media scale and career stress scale is a 5-point Likert type scale. After the data were found to be distributed normally, a canonical correlation analysis was used to determine the relationship between dependent and independent variables. In the evaluation of the data, the significance level was accepted as $p < 0.05$. Considering the standardized coefficients and correlations in the I. canonical variable together with the explanation rates of the canonical variations in both clusters, the increase in employment pressure was associated with the virtual problem score.

Key Words: Physical Education and Sports, Nutrition, Mental well-being.

INTRODUCTION

Unlike all other beings, humanity has advanced in communication by using technology, regardless of intrinsic or biological phenomena. The communication technologies that humans have been using continuously evolving with new dimensions and features. Beginning with the use of one's own voice, which is within the physiological capabilities of the human, first the light, then the fire, then the physical and chemical components of this pair, initiated the evolution process in communication and advanced it to our day. However the most up-to-date tool of the evolution in communication is unquestionably Internet-enabled social media tools. Social media has become an indispensable part of our daily life and shapes our communication styles.

So what is social media, and how are they defined, and how can they manage, isolate or influence communication? Although it is essential to answer the above questions with precise answers in terms of scientific validity, unfortunately there are not very clear and accepted definitions adopted or accepted by the scientific community. In a brief literature review, we notice that although scientists have a natural perception and understanding of the name or what social media does, yet, there is no clear agreement about a common definition of what social media is due to the variety and usage areas of existing digital communication technologies. For instance, Kaplan et al.¹ consider social media as "online magazines created by internet users, websites, online games, audio

video sharing sites and electronic service platforms created by users." According to Muntinga et al.² social media is a "virtual communication" environment. Although scientists do not have a general consensus on the definition of social media, a large majority of them agree that social media will create dependency in case of excessive use. Kuang Tsan et al.³ define the negative and significant use of social media platforms as "unreasonable and excessive use."

The common view of the vast majority of academic research is that social media addiction negatively affects other aspects of individuals' lives. Griffiths^{4,5} in his studies indicated that "social media addiction causes a series of emotional, relational, health and performance problems on university students." Studies show that the symptoms of social media addiction are manifested in mood disorders, cognition, physical and emotional reactions, and interpersonal and psychological problems.⁶⁻¹⁰ In today's ever changing where rapidly developing technology affects the daily functionality of majority of world's population, accordingly both university students and young adults need to constantly renew themselves in order to keep up with this uproar. The major social networking sites such as Facebook and LinkedIn etc. are seen as important tools for networking among job seekers. The concern is that while virtual socialization behavior initiated by a young university student to locate a desired job is a good approach looking for a job by networking on social media can turn into addiction in the process of socializing.^{4,5,9,10} As a result of

this excessive use, students may be exposed to the negative effects of social media and experience career stress and social media addiction. Generally, students encounter many sources of stress related to academic issues such as financial concerns, social relations and career worries during their college study years, yet, among all stressors students ranked career-related worries at the top.⁸

Virtual communication or virtual information formats and forums play an active role in ensuring the career design of college students, positively or negatively. Considering that virtual communication is directed correctly it can give constructive results. However, polluted information disseminated by social media platforms can create a negative graphics that could confuse the judgement of a college student who is developing a career CV (Al-Menayes.¹¹ One another crucial point is students' maturity, ability, knowledge and expertise about how to use the social media technology or web based information source. It is this concern that this study was conducted to examine the relationship between social media addiction and career stress of college students.

MATERIAL AND METHOD

In this study, a quantitative research method was used. According to the positive sciences, scientific knowledge is gained through scientific research and experimental based observation.¹²

Research Design: SPSS (23.0) program was used to evaluate the research data. Kurtosis and Skewness values were examined to determine whether the data were normally distributed. It was determined that the Skewness value varied between -.379 and .195, and the Kurtosis value varied between -.551 and -.1.001. According to Tabachnick and Fidell (2013), Kurtosis and Skewness values should be between -1.5 and +1.5 in order for the data to be accepted as normal distribution. The independent variables of the research constitute the social

media set, virtual tolerance, virtual communication, virtual problem and virtual information variables. In the set of dependent variables; career uncertainty and lack of information, external conflict and job-seeking pressure are included. Since both dependent and independent variables of the study consist of more than one continuous data and it was aimed to examine the relationships between the variables in both sets, the canonical correlation technique was used in the analysis of the data.¹¹ (Tabachnick & Fidell, 2013). In the evaluation of the data, the significance level was accepted as $p < 0.05$.

Population and Sample: Participants each completed a set of questionnaires that delivered and collected through online. The subjects of the study population was composed of college sports sciences students from Serhat provinces (Kars, Ağrı, Iğdır) universities in 2020-2021. The study population size is (N = 390) (216 women, 174 men). In order to be able to maintain representable population size we included N = 390 subjecks, and the reason for using this population size is described by to Ural and Kılıç¹³ "the sample number that should be taken for 0.05 tolerable error from a population of 30,000 is 379 people."

Data Collection Tools: *Social Media Scale:* The social media scale was developed by Şahin,¹⁴ The scale consists of 4 sub-dimensions: virtual tolerance, virtual communication, virtual problem and virtual information. The Cronbach's alpha coefficient of the scale is 0.92. The internal consistency coefficients of the sub-dimensions are between .81 and .86. It is a 5-point Likert type scale.

Career Stress Scale: Career Stress Scale was developed by Choi et al.¹⁵ and adapted to Turkish by Özden and Serten Berk.¹⁶ The scale consists of three sub-dimensions: career uncertainty and lack of information, external conflict, and pressure to find a job. The Cronbach's alpha coefficient of the scale is 0.94. The internal consistency coefficients of the sub-dimensions are between .83 and .94. It is a 5-point Likert type scale.

Findings:

Table 1. Means, standard deviations, internal consistency and Pearson correlation coefficients of the variables

Dependent Independent	\bar{x}	ss	$\alpha=$	Career uncertainty and lack of info		External conflict		Employment pressure	
				$\bar{x}= 3.33$ ss= 1.06	$\alpha= .91$	$\bar{x}= .3.16$ ss= 1.11	$\alpha= .80$	$\bar{x}= 3.42$ ss= .981	$\alpha= .81$
Virtual tolerance	3.10	1.02	.79	-.01		.05		.02	
Virtual communication	3.17	.915	.85	.12		.15		.11	
Virtual problem	3.22	1.05	.91	.17		.23		.15	
Virtual information	3.23	.970	.82	.04		.06		.07	

* P <.05 and ** P <.001

Table 2. Canonical Correlation Coefficients and Significance Tests

	Canonical Correlation	Eigenvalue	Wilks Lambda	F	Numerator Degrees of Freedom	Denominator Free Degree K	P Value
1	.277	.083	.905	3,247	12,000	1013,614	.000
2	.128	.017	.980	1,289	6,000	768,000	.260
3	.060	.004	.996

As seen in Table 1, there are positive and negative relationships between the social media set (independent) and career stress set (addict) ($r = -.01 - .23$). It has been observed that there is a weakly positive relationship between virtual problem and external conflict ($r = .23$, $p < 0.05$). It was observed that there was a weak negative relationship between virtual

tolerance and Career uncertainty and lack of knowledge ($r = .-, 01, p < .05$). According to Cohen, Pearson correlation values of $r = \pm .50$ are considered strong, $r = \pm .30$ medium and $r = \pm .10$ weak. The Cronbach's alpha coefficients of the sub-dimensions of the dependent and independent variables vary between .79 - .91.

As a result of the canonical correlation analysis made in Table 2, three canonical correlation coefficients were obtained. The calculated value for the first canonical correlation was .27 (1% shared variance) and .12 (0.02% shared variance) for the second canonical function. The third canonical correlation is not statistically significant. In the canonical model that includes all canonical variables, $F(12, 1014.6) = 3.24; P = .000$; The following canonical variable pairs are not statistically significant. Thus, the significant relationships between the two data sets were tested with the first canonical root.

Table 3. The Correlation Coefficients of Variable Sets with Canonical Variables, Standardized Canonical Coefficients, Explained Variance and Redundancy Values.

Variables	I. Canonical Variable		II. Canonical Variable	
	Coefficient	Correlation	Coefficient	Correlation
Social Media (set of predictions)				
Virtual tolerance	,57	-,10	-1,32	-,72
Virtual communication	-,33	-,54	1,25	-,15
Virtual Problem	-1,14	-,83	-,69	-,39
Virtual information	,39	-,18	,15	-,21
Variance Explained	,25		,18	
Redundancy	,02		,00	
Career stress				
Career uncertainty and lack of information	-,51	-,83	1,67	,44
External conflict	-,80	-,96	-1,11	-,25
Pressure to find employment	,32	-,62	-,53	,06
Variance Explained	,66		,08	
Redundancy	,05		,00	

As seen in Table 3, the explained variance rate of the Social Media set in the 1st canonical variable is 25, while the average variance rate (excess) explained is 02. The variance rate explained for the Career Stress set is 66, while the average variance rate (excess) explained is .05.

When the standardized coefficients of the four variables in the social media set in Table 3 are analyzed, it is understood that the virtual problem (-1.14) contributes the most to the first canonical couple. In other words, when the effect of other variables in the predictor set is kept constant, an increase of 1 SD in the virtual problem variable causes a -1.14 s decrease in the canonical variable scores. In addition, a 1 SD increase in the virtual tolerance variable causes an increase of .57 SD in the canonical variable scores.

The standardized coefficients of the three variables in the career stress set are also examined in Table 3. It was determined that the variable that contributed the most to the I. canonical variable was external conflict (-.80), followed by certainty and lack of knowledge (-.51) and job-finding pressure (.32). When the effects of other variables are kept constant, an increase of 1 SD in the dimension of external conflict leads to an increase of .80 SD in the canonical variable scores.

Independent variable social media settings virtual problem (-, 83) and virtual communication (-, 54) were found to have the highest relationship with the first canonical variable in the social media set. In the dependent variable Career stress set, external conflict (-, 96) and Career uncertainty and lack of information (-, 83) were found to have the highest relationship with the first canonical variable.

Considering the standardized coefficients and correlations in the first canonical variable and the explanatory rates of the canonical variations in both

clusters, the increase in employment pressure was associated with the virtual problem score.

DISCUSSION AND CONCLUSION

It appears to be that while there have been several studies that address the question of social media and career stress relationship, very few studies have been conducted to address the significant relationship between *social media addiction and students' career stress*, Baz,¹⁷ Dinç,¹⁸ Griffiths,^{4,5}

This current study's purpose was to examine the relationship between social media addiction and career stress, and to define which social media sub-dimensions are prominent in career stress and to show the effect of the sub-dimensions on both owned and other variables.

When the canonical correlation coefficient (0.277) of the first canonical function, (which is statistically significant from the 3 canonical functions obtained regarding the relationship between social media and career stress) was examined, it was found that there is a significant and positively weak relationship between social media and career stress set.

For this purpose, the primary focus was given whether social media usage in general has an effect on career stress, and as a result of the analysis, it was determined that social media sub-dimensions, which are independent variables, played an explanatory role on career stress.

When examining which dimensions contribute to this manner in the process of explaining career stress of four factors of social media features; virtual problem, virtual tolerance, virtual information and virtual communication features were observed to be factors, respectively.

Considering both the standardized coefficients and correlations in the first canonical variable and the

explanatory rates of the canonical variations in both clusters, the increase in employment pressure was associated with the virtual problem score. In a study conducted by Günay and Çelik,¹⁹ which supports my research findings, it was seen that psychological well-being and public relations were among the characteristics that affect career stress. Social media is of great importance in taking the right step for a career.²⁰

CONCLUSION

It has been observed that there is a significant and positively weak relationship between social media addiction and career stress set of sports science students. In this context, it is important for sports sciences students to be open minded and be aware of the detrimental features of the social media set in order not to be negatively affected by the detrimental features of social media when they are engaging in use of social media for career CV creation.

As a result, it has been observed that there is a significant yet positive weak relationship between social media addiction and career stress of sports science students with high mean scores between social media and career stress. In this context, it is important for sports sciences students to be open minded and be aware of the detrimental features of the social media set in order not to be negatively affected by the unfavorable features of social media when they are engaging in use of social media for career CV creation.

REFERENCES

- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68.
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing Cobras: Exploring motivations for brand-related social media use. *International Journal of advertising*, 30(1), 13-46.
- Kuang-Tsan, C., & Fu-Yuan, H. (2017). Study on relationship among university students' life stress, smart mobile phone addiction, and life satisfaction. *Journal of Adult Development*, 24(2), 109-118.
- Griffiths, M. D. (2000). Internet addiction: Time To Be Taken Seriously? *Addiction Research*, 8, 413-418. doi:https://doi.org/10.3109/16066350009005587
- Griffiths, M. D. (2012). Facebook addiction: Concerns, Criticism, And Recommendations:A Response To Andreassen And Colleagues. *Psychological Reports*, 110, 518-520. doi:https://doi.org/10.2466/01.07.18.PR0.110.2.518- 520
- Balakrishnan, V., & Shamim, A. (2013). Malaysian Facebookers: Motives and addictive behaviours unraveled. *Computers in Human Behavior*, 29, 1342-1349. doi:https://doi.org/10.1016/j.chb.2013.01.010
- Błachnio, A., Przepiorka, A., Senol-Durak, E., Durak, M., & Sherstyuk, L. (2017). The role of personality traits in Facebook and Internet addictions: A study on Polish, Turkish, and Ukrainian samples. *Computers in Human Behavior*, 68, 269-275. doi:https://doi.org/10.1016/j.chb.2016.11.037
- Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction: A review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8, 3528-3552. doi:https://doi.org/10.3390/ijerph8093528
- Tang, J. H., Chen, M. C., Yang, C. Y., Chung, T. Y., & Lee, Y. A. (2016). Personality traits, interpersonal relationships, online social support, and Facebook addiction. *Telematics and Informatics*, 33, 102-108. doi:https://doi.org/10.1016/j.tele.2015.06.003
- Zaremozhzabieh, Z., Samah, B. A., Omar, S. Z., Bolong, J., & Kamarudin, N. A. (2014). Addictive Facebook use among university students. *Asian Social Science*, 10, 107. doi:https://doi.org/10.5539/ass.v10n6p107
- Griffiths, M. D. (2010). The Role of Context in Online Gaming Excess and Addiction: Some Case Study Evidence. *International Journal of Mental Health and Addiction*, 8, 119-125. doi:https://doi.org/10.1007/s11469-009-9229-x
- Ilkım and Mergan (2021), Examination Of Exercise In Individuals With Disabilities And Inquiry Skills Of Students In Sports Education Department, Int J Life Sci Pharma Res. ISSN 2250-0480; SP-14; "Health and Sports Sciences.
- Al-Menayes, J. J. (2015). Social media use, engagement and addiction as predictors of academic performance. *International Journal of Psychological Studies*, 7, 86-94. doi:http://dx.doi.org/10.5539/ijps.v7n4p86
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Boston: Pearson.
- Sönmez, V., & Alacapınar, F. (2013). Exemplified Scientific Research Methods. Ankara: Anı Yayınları.
- Ural., A. & Kilicim I (2011). Scientific Research Process and Data Analysis with SPSS. Ankara: Detay Publishing. 3rd Edition.
- Şahin, C. (2018). Social media addiction scale - student form: The reliability and validity study. *The Turkish Online Journal of Educational Technology*, 17(1), 169-182.
- Özden, K., & Sertel-Berk, Ö. (2017). Adapting the Career Stress Scale (CSI) to Turkish and testing its psychometric properties. *Journal of Psychological Studies*, 37 (1), 35-51
- Choi, B. Y., Park, H. R., Nam, S. K., Lee, J., & Lee, S. M. (2011). The development and initial psychometric evaluation of the Korean Career Stress Inventory for college students. *Career Development Quarterly*, 59, 559-572.
- Dinç, A. (2021). Investigation of Social Media Addiction and Healthy Nutrition Attitudes of Sports Science Students (İğdır Province Example). *İğdır University Journal of Social Sciences*, S 25, 812-821.
- Baz, F. Ç. (2018). Social media addiction: The study of college students. *OPUS International Community*
- Günay, A., & Çelik, R. (2019). Prediction of Career Stress with Psychological Well-being and Optimism. *Süleyman Demirel University Journal of Social Sciences Institute*, 2 (33), 205-217.
- Eskalen, S. (2021, 01 10) Career. Retrieved from https://www.kariyer.net/kariyer-rehberi/is-arama-surecinde-stresi-yonetmek/, *Journal of Researches*, 9 (16), 276-295.