

Relationship between Digital Stress and Career Stress Levels of Sports Science Students

Ahmet Dinç^{1*}, Abdullah Altunhan², Ünsal Tazegül³

Abstract

In recent years, there has been a marked increase in the use of the internet and internet-based systems. This study aims to explore the relationship between digital stress and career stress among students in the Faculty of Sports Sciences at Iğdır University. A survey model was employed, with the research population comprising students from the Faculty of Sports Sciences at Iğdır University. The sample included 446 voluntary participants (270 female and 176 male). Statistical analyses were conducted using the SPSS 25.0 software, employing both descriptive statistics and Pearson correlation analysis. The findings indicate that both digital stress and career stress scores among sports science students were above average. Furthermore, a highly significant positive correlation was found between digital stress and career stress levels.

Keywords: Career Stress, Digital Stress, Physical Education, Sports.

Introduction

Recent years have witnessed a substantial increase in internet usage and internet-based systems, including telephones, smart homes, personal health devices, and wearables (Zis et al., 2021). In 2000, only 7 percent of the global population used the internet; however, this figure surged to 60 percent by 2020 (Li & Ding, 2022). The COVID-19 pandemic, which began in 2019, has significantly accelerated this increase in internet usage (Sigurvinsdottir et al., 2020). The proliferation of information and data flow on the internet has become integral to daily life. Despite the value of this information, it also presents a downside by contributing to digital stress, which has been linked to various adverse effects such as anxiety, significant disorders, and burnout (Kautish et al., 2022).

The World Health Organization defines stress as a state of anxiety or mental strain caused by challenging circumstances. It is a typical human response that drives individuals to address obstacles and threats in their lives (Arbona et al., 2021). Digital stress pertains to the strain experienced by both organizations and individuals due to the complexities associated with information and communication technologies, including their use, management, and outcomes (Fischer et al., 2021). Kalischko and Riedl (2021) identified several sub-dimensions of digital stress, including perceived benefit, dynamism, reliability, absence, speed of change,

monotony, invasion, overload, and control. Additionally, Anghel and Gati (2021) highlighted the positive effects associated with a digital mindset. It is often characterized as a persistent sense of curiosity regarding developments (Udeogalanya, 2022). Connection load refers to the demands associated with managing and maintaining online relationships and communication requests on social media platforms (Klein & McCarthy, 2022). Online attention, particularly the dimension of salience, denotes a general cognitive orientation and focus on the online environment in daily life. It also encompasses pathological forms of salience, such as cognitive preoccupation and obsessive thoughts, which are relevant to internet addiction (Koob et al., 2021). University students face numerous stressors during their education, including academic challenges, financial issues, social relationships, and career concerns. Career-related stressors are particularly prominent among these (Schettino et al., 2022). The university years represent a crucial period for students to establish post-graduation goals and develop career plans (Capone et al., 2020). Albikawi (2023) found that most university students experience difficulties with career decisions, with their levels of psychological distress (including stress, anxiety, and depression) exceeding those of the general population.

This study explores the sub-dimensions of digital stress, which include accessibility stress, approval anxiety, fear of

¹Iğdır University, Faculty of Sport Sciences, Iğdır, Turkey. ORCID iD: <https://orcid.org/0000-0003-0441-3673>, Email: ahmet.dinc@igdir.edu.tr

²Mardin Artuklu University, School of Physical Education and Sports, Mardin, Turkey. ORCID iD <https://orcid.org/0000-0001-7588-4099>, Email: abdullahaltunhan@artuklu.edu.tr

³Iğdır University Faculty of Sports Sciences, Iğdır, Turkey. ORCID iD <https://orcid.org/0000-0001-9772-9305>, Email: unsal.tazegul@igdir.edu.tr

*Correspondence: abdullahaltunhan@artuklu.edu.tr

missing out, connection load, and online attention. Accessibility stress refers to the frustration experienced when individuals are unable to connect to the internet and remain updated with current developments (Plakhotnik et al., 2021). Approval anxiety involves the significant influence of others' expectations and judgments on individual behaviour, which adapts to social interactions (Garakani et al., 2020). The fear of missing out, commonly known as FOMO, is a globally recognized phenomenon, which is also referred to as "Fear of Missing Out" in Turkish literature. The primary aim of this research is to investigate the relationship between digital stress and career stress among sports science students at Iğdır University.

Review of Literature

In the digital media era, mobile devices play a crucial role in the dissemination of information (Chowdhury et al., 2022; Hu, 2023). Information shared through social media platforms significantly impacts individuals' daily lives. Reliable information can provide comfort, as assumptions and facts are evaluated based on the available data (Atiqullah, 2024; Zis et al., 2021). Consequently, the management of information is critical. The strategic dissemination of information related to everyday activities affects individuals' behaviours and values (Hassan, 2024; Kautish et al., 2022). Additionally, information concerning government activities and unemployment can influence students, who are often motivated to secure employment to launch their careers. However, when information shared on these platforms lacks significance or reliability, it diminishes its overall impact (Arbona et al., 2021; Jali & Nyide, 2023). While employee-related information aims to assist potential job candidates, its effectiveness is compromised if it is not sourced from reliable channels (Udeogalanya, 2022). Therefore, the information shared on social media is valuable for public understanding of current trends. The significance of information sharing is shaped by public perception and understanding of behaviour (Ginting et al., 2022; Willson & Given, 2020). The attention and engagement of students can be adversely affected when reliable information is lacking, which can impair their productivity (Anghel et al., 2021). Therefore, students are advised to critically engage with information sharing and networking to achieve meaningful goals.

Student mental health plays a crucial role in their overall decision-making processes (Al-Mawadieh et al., 2023; Capone et al., 2020). However, there is often an underestimation of the importance of harnessing positive energy to achieve personal goals. Social media can be a

valuable resource for students to enhance their understanding, but it is essential for them to approach this information with a positive mindset to avoid negative influences (Zheng et al., 2021). While digital access to information is a fundamental right for students, a lack of access can diminish their overall perception of its value. Therefore, it is highly recommended that students enhance their access to digital information as a means to support their learning and development (Akula & Singh, 2023; Stockinger et al., 2021). Reducing accessibility stress is achievable through positive behaviour and active support, which can improve overall student health (Öztemel & Akyol, 2021). Conversely, approval anxiety poses a challenge to mental health, potentially impeding participation and performance in various activities (Koob et al., 2021; Muthuswamy & Umarani, 2023). It is advisable for students to manage their anxiety to enhance their engagement and performance. Motivation towards a sense of acceptance is essential for maintaining health and improving performance, and students should avoid activities that hinder their performance (Willson et al., 2020). Ultimately, fostering positive psychology among students can significantly impact their performance.

The fear of missing out poses a significant challenge for students, contributing to stress (Arbona et al., 2021). It is crucial for students to avoid engaging in activities that exacerbate mental health issues and hinder their performance. Misleading information disseminated through social media and other digital platforms can adversely affect students' mental well-being (Plakhotnik et al., 2021). To enhance overall performance, it is essential for students to avoid unreliable information and approach their studies strategically (Schettino et al., 2022). Students should focus on developing their personal attributes to foster a better understanding and effective work habits. Those who are highly motivated to achieve their goals need to address mental health challenges significantly. Additionally, excessive participation in digital media trends and the desire for online attention can negatively impact performance and behaviour (Anghel et al., 2021). Therefore, students are encouraged to improve their mental health, as this positively influences their psychological development. Effectively managing digital stress is crucial for overcoming health-related challenges and enhancing performance (Kautish et al., 2022). Thus, students' performance is likely to improve when they are not constrained by digital stress.

Digital stress negatively impacts students' academic performance (Zis et al., 2021). However, when students are motivated to manage this stress, their overall performance improves. It is crucial for students to be trained to handle

misleading information on digital platforms and to address modern challenges effectively (Capone et al., 2020; Willson et al., 2020). Adopting a positive approach is key to enhancing performance (Fischer et al., 2021). While career-related challenges are common, motivation and effective behaviour management can help students overcome these obstacles (Koob et al., 2021). Psychological resilience is essential for managing digital stress, and targeted training can improve students' ability to handle career-related challenges and enhance their performance (Plakhotnik et al., 2021; Zheng et al., 2021). Thus, reducing digital stress through training can positively impact students' career-related perceptions and overall performance. In line with the information disclosed by the previous studies, the hypotheses of our research are as follows.

H1: There is a relationship between students' digital stress levels and career stress levels.

H2: There is no relationship between students' digital stress levels and career stress levels.

Method

This study employed a survey model, a quantitative research method, to examine the relationships under investigation. According to Bergman (2009), "the purpose of quantitative research is to objectively measure people's behaviour using standardized tools such as tests and surveys, and to explain it through numerical data." Prior to data collection, comprehensive information about the study was provided to mitigate potential biases. It was first established that the questions used were both valid and reliable, based on scientific research. Subsequently, a suitable population and sample for the research were selected.

Population and Sample

The research population comprised students from the Faculty of Sports Sciences at Iğdır University. The sample included 446 students (270 female, 176 male) who voluntarily agreed to participate. The study utilized the simple random sampling method, which ensures that each individual has an equal probability of being selected. Following data collection, a total of 461 responses were gathered. After reviewing the data, 15 erroneous entries were discarded, resulting in analyses based on the remaining 446 valid responses.

Voluntary Participant

Prior to the commencement of the study, participants attended an explanatory session lasting approximately one hour, during which they received comprehensive

information about the research. They were informed that participation was entirely voluntary, and consent forms were distributed to those who chose to participate. Participants were briefed on the research procedures, requirements, potential risks, and benefits. The study adhered to the principles set forth in the Declaration of Helsinki. Criteria for exclusion from participation included unwillingness, lack of consent, or a desire not to contribute to the study.

Data Collection Tools

The researcher collected the data using online scales distributed to participants via Google Forms. Prior to data collection, ethical approval was obtained from the Iğdır University Non-Interventional Clinical Research Ethics Committee, with approval dated November 17, 2023, and decision number 2023-21. The study adhered to the ethical guidelines of the Declaration of Helsinki for research involving human subjects.

Career Stress Scale

Ozden and Sertel-Berk (2017) translated the scale developed by Choi et al. (2011) into Turkish. This measure comprises 20 items and is structured into three factors: job search pressure, external conflict, and career uncertainty and lack of information. The internal consistency coefficient of the scale was determined to be .84.

Multidimensional Digital Stress Scale

Erinç (2023) translated the scale developed by Hall et al. (2021) into Turkish. The instrument comprises 24 items and is categorized into five factors: online attentiveness, connection load, fear of missing out, accessibility stress, and approval anxiety. Responses are rated on a 5-point Likert scale, ranging from "Strongly disagree" to "Strongly agree." The internal consistency coefficient of the scale was found to be .86.

Data Analysis and Findings

The initial analysis focused on the descriptive characteristics of the respondents. As detailed in Table 1, the study included 270 female and 176 male participants. In terms of nutritional status, 58.5% of the participants reported an irregular diet, while 45.5% maintained an organized diet. Additionally, 33.9% of the participants were in the teaching section, 32.7% were in management, and 33.4% were in coaching. Regarding weight status, 144 participants were classified as underweight, 290 as normal weight, and 12 as overweight. By class category, 110 participants were in the first year, 108 in the second year, 111 in the third year, and 117 in the fourth year.

Table 1

Descriptive Statistics Findings for the Sample

Variables	N	%
Age M =21.6	446	100
Gender		
Female	270	60.5
Male	176	39.5
Nutritional Status		
Irregular	261	58.5
Organised	185	41.5
Section		
Teaching	151	33.9
Management	146	32.7
Coaching	149	33.4
Weight Status		
Weak	144	32.3
Normal	290	65.0
More	12	2.7
Class		
First class	110	24.7
Second class Third Class	108 111	24.2 24.9
Fourth grade	117	26.2

The skewness and kurtosis values were analysed to assess the normality of the data. As shown in Table 2, the skewness and kurtosis for all sub-dimensions of the digital stress and career stress scales fell within the range of -1 to +1. These results, as reported in Table 2, indicate that the data are normally distributed and reliable for the study. Cronbach's alpha was used to evaluate the reliability and validity of the scale. A Cronbach's alpha value above 0.70 is generally regarded as indicative of a reliable and valid scale. According to Sekaran (2016), a Cronbach's alpha value exceeding 0.70 supports the scale's validity for use in

further research. As presented in Table 3, the Cronbach's alpha for the digital stress scale was .86, and for the career stress scale, it was .84. Thus, the scale items were deemed reliable for subsequent analysis. The results of the research investigating the relationship between digital stress and career stress levels among sports science students are presented in Table 4. The correlation analysis, as shown in Table 4, revealed a strong, statistically significant positive relationship between digital stress and career stress levels among these students ($r = .685, p < .05$)

Table 2

Skewness and Kurtosis Values for the Sub-Dimensions of the Digital Stress and Career Stress Scale

Sub-Dimensions	N	Minimum	Maximum	X	SS	Skewness	Kurtosis
Accessibility Stress	446	4.00	20.00	10.374	3.285	.910	.529
Approval Anxiety	446	6.00	30.00	21.145	5.454	-.941	.778
Fear of Missing Out	446	4.00	20.00	11.645	3.267	.223	.572
Connection Load	446	6.00	30.00	21.177	5.089	-.968	.990
Online Caution	446	4.00	20.00	13.435	2.990	-.748	1.272
Career Uncertainty and Lack of Information	446	10.00	50.00	29.172	7.590	-.004	.893
External Conflict	446	4.00	20.00	13.154	3.513	-.647	.289
Pressure to Find a Job	446	6.00	30.00	19.412	4.377	-.486	1.041

Table 3

Cronbach Alpha values of the Scales

Scales	Cronbach's Alpha
Digital Stress Scale (24 Items)	.86
Career Stress Scale (20 Items)	.84

Table 4

Correlation Analysis

		“Career Uncertainty and Lack of Information” (10 Articles)	“External Conflict” (4 matter)	“Pressure to Find a Job” (6 Articles)	“Career Stress Scale” (1-20)
Accessibility Stress (1-4)	Pearson Correlation	.356 **	.113 *	.212 **	.141
	Shallow. (2-tailed)	.000	.017	.000	.003
	N	446	446	446	446
Approval Anxiety (5-10)	Pearson Correlation	.439 **	.554 **	.432 **	.309 **
	Shallow. (2-tailed)	.000	.000	.000	.000
	N	446	446	446	446
Fear of Missing Out (11-14)	Pearson Correlation	.539 **	.413 **	.398 **	.355 **
	Shallow. (2-tailed)	.000	.000	.000	.000
	N	446	446	446	446
Connection Load (15-20)	Pearson Correlation	.464 **	.574 **	.478 **	.332 **
	Shallow. (2-tailed)	.000	.000	.000	.000
	N	446	446	446	446
Online Caution (21-24)	Pearson Correlation	.448 **	.497 **	.503 **	.343 **
	Shallow. (2-tailed)	.000	.000	.000	.000
	N	446	446	446	446
Digital Stress scale (1-24)	Pearson Correlation	.549**	.544**	.505**	.760**
	Shallow. (2-tailed)	.000	.000	.000	.000
	N	446	446	446	446

Discussion

The study aimed at examining the relationship between digital stress and career stress levels among sports science students at Iğdır University revealed a notable correlation between these variables. The findings confirm the research hypothesis, indicating a positive relationship between digital stress and career stress: as students' digital stress levels increase, their career stress levels also rise. This result is consistent with existing literature. [Arbona et al. \(2021\)](#) highlight the critical role of mobile devices in disseminating information through digital media. The impact of information shared on social media platforms on individuals' daily lives has been noted by [Kautish et al. \(2022\)](#). Furthermore, [Schettino et al. \(2022\)](#) observed that individuals often feel more at ease when provided with reliable information. [Klein et al. \(2022\)](#) emphasize that the evaluation of assumptions and facts relies on available information. [Öztemel et al. \(2021\)](#) argue that information management is significantly influenced by the quality of information being discussed. Additionally, [Choy and Yeung \(2023\)](#) suggest that the strategic dissemination of information related to daily routines can affect individuals' behaviour and values. The influence of information related to government activities and unemployment on students is also evident ([Mustafa et al., 2023](#)). According to [Stockinger et al. \(2021\)](#), while students are motivated to secure desirable employment to kickstart their careers, the impact

of information sharing is diminished when the information is not deemed significant.

[Kokila et al. \(2022\)](#) noted that while information about employment opportunities aims to aid prospective candidates in applying for jobs, the effectiveness of this information is compromised when it is not derived from reputable sources. [Arbona et al. \(2021\)](#) emphasized the significance of information shared on social media platforms, which enhances the public's understanding of recent trends. Effective information sharing is grounded in the public's perception and understanding of their own behaviour. Conversely, [Kautish et al. \(2022\)](#) observed that students' engagement and performance are significantly impacted when they lack access to reliable information, which can impede their ability to perform effectively. Consequently, it is highly recommended that students engage in critical thinking to achieve the core objectives of knowledge sharing and networking. [Chowdhury et al. \(2022\)](#) highlight the significant impact of mental health on the overall decision-making of students. Additionally, [Liu et al. \(2023\)](#) suggest that students are often undervalued in their ability to leverage their energy effectively to achieve their personal goals. [Capone et al. \(2020\)](#) argue that while social media can be a valuable tool for enhancing students' understanding, it is crucial for them to maintain a constructive approach to avoid the negative influence of online content. [Zheng et al. \(2021\)](#) assert that students' right to access digital information is fundamental; however,

limited access can adversely affect their overall perspective. Conversely, [Liu et al. \(2023\)](#) recommend that increasing access to digital resources is essential for students' educational growth and development.

[Choy et al. \(2023\)](#) found that students who demonstrate positive behaviour and receive active support experience reduced stress related to accessibility issues. [Bui et al. \(2023\)](#) recommend that students enhance their overall behaviour to improve their health. [Öztemel et al. \(2021\)](#) noted that digital media can negatively impact students' mental health, particularly when they face stress related to approval anxiety. It is advised that students take measures to alleviate their anxiety, as this can otherwise diminish their engagement in activities and hinder their performance. [Klein et al. \(2022\)](#) emphasize that for students to enhance their performance in terms of health, it is essential for them to seek a sense of acceptance. [Fischer et al. \(2021\)](#) also concluded that students aiming to improve their performance should avoid activities detrimental to their progress. Ultimately, fostering positive psychology in students is likely to enhance their overall performance. The anxiety students experience due to the fear of missing out is a significant contributor to their overall stress ([Zheng et al., 2021](#)). [Zis et al. \(2021\)](#) assert that students should refrain from engaging in various activities that may negatively affect their mental health and, subsequently, their academic performance. Exposure to inaccurate information on social media and other digital platforms does not benefit students' mental health ([Choy et al., 2023](#)). [Klein et al. \(2022\)](#) highlight that improving students' overall performance, which presents a challenge, can be achieved through reliable methods. Additionally, they emphasize that when students are highly motivated to enhance their performance, it is crucial for them to adopt a systematic approach.

[Plakhotnik et al. \(2021\)](#) found that avoiding erroneous information improves students' learning and performance. [Koob et al. \(2021\)](#) emphasized the importance of personality development for better comprehension and productivity. [Fischer et al. \(2021\)](#) highlighted that highly motivated students should address mental health challenges to achieve their goals. [Willson et al. \(2020\)](#) noted that seeking online attention can negatively affect students' performance and behaviour. [Anghel et al. \(2021\)](#) recommended that students improve their mental health to enhance psychological growth. Managing digital stress is crucial for preventing health-related issues and improving performance ([Plakhotnik et al., 2021](#)). [Zis et al. \(2021\)](#) noted that digital technology-induced stress negatively impacts students' academic performance. Conversely, [Udeogalanya \(2022\)](#) observed that students demonstrate

improved overall performance when effectively managing digital stress. [Capone et al. \(2020\)](#) emphasized the need for research and education on handling misinformation on digital platforms. [Murad et al. \(2024\)](#) highlighted that strong motivation is essential for students to navigate contemporary challenges. [Koob et al. \(2021\)](#) recommended that students adopt a positive working approach to enhance their performance, while [Klein et al. \(2022\)](#) stressed the importance of persistence in overcoming career-related challenges.

[Willson et al. \(2020\)](#) noted that students' mixed psychology can negatively affect performance. [Schettino et al. \(2022\)](#) recommended that teachers work on improving student behaviour to boost performance. [Plakhotnik et al. \(2021\)](#) emphasized the need for a strong psychological foundation to manage digital stress. [Udeogalanya \(2022\)](#) and [Anghel et al. \(2021\)](#) highlighted that effective training in handling digital issues enhances the overall environment and reduces stress. [Sisu et al. \(2024\)](#) suggested encouraging career-related training to address various challenges, while [Stockinger et al. \(2021\)](#) found such training improves students' career perspectives and reduces digital stress. The analysis revealed a notable moderate relationship between connection load and external conflict among the sub-dimensions. Furthermore, students' scores for both digital stress and career stress were above average. Within the sub-dimensions of digital stress, "Connection Load" had the highest mean score ($M = 3.547$), while "Accessibility Stress" had the lowest mean score ($M = 2.599$). For career stress, "External Conflict" recorded the highest mean score ($M = 3.290$), whereas "Career Uncertainty and Lack of Information" had the lowest mean score ($M = 2.940$). These findings diverge from those of [Park et al. \(2011\)](#) and [Aşık and Akgül \(2022\)](#), who reported higher career stress scores in their studies. Overall, the literature indicates that students generally experience significant career stress.

Conclusion

In conclusion, the study identified a significant relationship between digital stress and career stress, indicating that digital stress contributes to career-related challenges for students. It is advised that students enhance their skills to better navigate the external environment. Given the increasing issue of unemployment, timely and effective strategies are essential for mitigation. Therefore, students are encouraged to prepare for challenging situations to improve their overall understanding and performance, which will positively impact their career prospects and enhance their professional profiles.

Implications

The study's examination of the relationship between digital stress and career stress provides a valuable contribution to the existing body of knowledge. Previous research on this relationship has yielded inconsistent results, but this study clarifies that digital stress is significantly associated with career-related stress among students. This finding enhances the scholarly understanding of this relationship and offers a more cohesive perspective. Additionally, the research sample is representative of the student population, which strengthens the generalizability of the findings. Practically, the study underscores the need to address digital stress as it relates to career stress, advocating for interventions to mitigate this stressor. Practitioners are advised to focus on reducing digital stress among students to improve their mental health and overall well-being. The study also emphasizes the importance of skill development to enhance students' behaviour and adaptability. A positive approach to overcoming mental health challenges is crucial for improving students' understanding and performance.

Consequently, policymakers are encouraged to create policies that integrate effective educational strategies aimed at reducing digital stress and promoting better mental health and behaviour among students.

Future Directions

This research examined the relationship between digital stress and career stress among university students. However, several limitations should be addressed in future studies. First, data were collected from a single university, which may limit the generalizability of the findings. Future research should include data from multiple universities to enhance the broader applicability of the results. Second, while this study focused on the relationship between digital stress and career stress, it did not account for other external factors, such as students' mental health. Future research should investigate the moderating role of mental health to provide a more comprehensive understanding of these dynamics. Addressing these limitations would significantly advance the literature on this topic.

References

- Akula, S. C., & Singh, P. (2023). Effect of Microfinance on Women's Entrepreneurship in Telangana State During COVID-19. *International Journal of Instructional Cases*, 7(1), 58-73. <https://ijicases.com/menuscript/index.php/ijicases/article/view/44>
- Al-Mawadieh, R. S., Al-Harahsheh, M. A., Adheisat, M., Alsabatin, H., Al-Sartawi, A., Nureldeen, W., & Kanan, M. (2023). Management by Objectives and Its Relationship to the Application of Total Quality Management Standards Among Administrators. *International Journal of eBusiness and eGovernment Studies*, 15(4), 21-36. <https://sobiad.org/menuscript/index.php/ijebeq/article/view/1872>
- Albikawi, Z. F. (2023). Anxiety, depression, self-esteem, internet addiction and predictors of cyberbullying and cybervictimization among female nursing university students: a cross sectional study. *International Journal of Environmental Research and Public Health*, 20(5), 4293. <https://doi.org/10.3390/ijerph20054293>
- Anghel, E., & Gati, I. (2021). The associations between career decision-making difficulties and negative emotional states. *Journal of Career Development*, 48(4), 537-551. <https://doi.org/10.1177/0894845319884119>
- Arbona, C., Fan, W., Phang, A., Olvera, N., & Dios, M. (2021). Intolerance of uncertainty, anxiety, and career indecision: A mediation model. *Journal of Career Assessment*, 29(4), 699-716. <https://doi.org/10.1177/10690727211002564>
- Atiqullah. (2024). Prophetic Leadership Strengthening Model towards Excellent Education in Indonesian Universities. *Eurasian Journal of Educational Research*, 110(110), 18-32. <https://ejer.com.tr/manuscript/index.php/journal/article/view/1639>
- Bergman, M. (2009). *Peirce's Philosophy of Communication: The Rhetorical Underpinnings of the Theory of Signs*. A&C Black. <https://www.bloomsbury.com/uk/peirces-philosophy-of-communication-9781441135377/>
- Bui, D. T., Vu, T. N., Tran, T. V. H., Duong, C. D., & Le, T. L. (2023). Impact of institutional environment on social entrepreneurial intentions. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(3), 100120. <https://doi.org/10.1016/j.joitmc.2023.100120>
- Capone, V., Caso, D., Donizzetti, A. R., & Procentese, F. (2020). University student mental well-being during COVID-19 outbreak: what are the relationships between information seeking, perceived risk and personal resources related to the academic context? *Sustainability*, 12(17), 7039. <https://doi.org/10.3390/su12177039>
- Choi, B. Y., Park, H., Nam, S. K., Lee, J., Cho, D., & Lee, S. M. (2011). The development and initial psychometric evaluation of the Korean Career Stress Inventory for college students. *The Career Development Quarterly*, 59(6), 559-572. <https://doi.org/10.1002/j.2161-0045.2011.tb00976.x>

- Chowdhury, U., Suvro, M. A. H., Farhan, S. M., & Uddin, M. J. (2022). Depression and stress regarding future career among university students during COVID-19 pandemic. *PloS One*, 17(4), e0266686. <https://doi.org/10.1371/journal.pone.0266686>
- Choy, M. W., & Yeung, A. S. (2023). Person-environment fit: Does it matter for tourism students' career outcomes in an era of crisis? *Journal of Hospitality, Leisure, Sport & Tourism Education*, 32, 100414. <https://doi.org/10.1016/j.jhlste.2022.100414>
- Erinç, Z. Ö. (2023). *Turkish Validity and Reliability Study of the Multidimensional Digital Stress Scale National Dissertation Center*. National Dissertation Center. https://toad.halileksi.net/olcek/cok-boyutlu-dijital-stres-olcegi/#google_vignette
- Fischer, T., Reuter, M., & Riedl, R. (2021). The digital stressors scale: development and validation of a new survey instrument to measure digital stress perceptions in the workplace context. *Frontiers in Psychology*, 12, 607598. <https://doi.org/10.3389/fpsyg.2021.607598>
- Garakani, A., Murrough, J. W., Freire, R. C., Thom, R. P., Larkin, K., Buono, F. D., & Iosifescu, D. V. (2020). Pharmacotherapy of anxiety disorders: current and emerging treatment options. *Frontiers in Psychiatry*, 11, 595584. <https://doi.org/10.3389/fpsyg.2020.595584>
- Ginting, L., Kamello, T., & Yamin, M. (2022). The Principle of Horizontal Separation in Banking Guarantee Practices in Indonesia. *Cuadernos de Economía*, 45(128), 61-70. <https://cude.es/submit-a-manuscript/index.php/CUDE/article/view/263>
- Hall, J. A., Steele, R. G., Christofferson, J. L., & Mihailova, T. (2021). Development and initial evaluation of a multidimensional digital stress scale. *Psychological Assessment*, 33(3), 230. <https://doi.org/10.1037/pas0000979>
- Hassan, R. A. H. S. A. (2024). The Effect of Using Podcasting on Developing Achievement and Attention Among Students of the Physics Department in The College of Education. *Arts Educa*, 38, 268-278. <https://artseduca.com/submissions/index.php/ae/article/view/272>
- Hu, H. (2023). Exploring the Mutualistic Win-win Mechanism of Industrial Transfer Between China and the Countries Along the Belt and Road. *Croatian International Relations Review*, 29(94), 43-83. <https://cirrj.org/menuscript/index.php/cirrj/article/view/827>
- Jali, N. P., & Nyide, C. J. (2023). The Adoption of Financial Technology to Improve the Financial Capability of Peri-Urban Teachers. *International Journal of Economics and Finance Studies*, 15(4), 64-80. <https://sobiad.org/menuscript/index.php/ijefs/article/view/1800>
- Kalischko, T., & Riedl, R. (2021). Electronic performance monitoring in the digital workplace: conceptualization, review of effects and moderators, and future research opportunities. *Frontiers in Psychology*, 12, 633031. <https://doi.org/10.3389/fpsyg.2021.633031>
- Kautish, P., Hameed, S., Kour, P., & Walia, S. (2022). Career beliefs, self-efficacy and VUCA skills: A study among generation Z female students of tourism and hospitality. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30, 100340. <https://doi.org/10.1016/j.jhlste.2021.100340>
- Klein, H. J., & McCarthy, S. M. (2022). Student wellness trends and interventions in medical education: a narrative review. *Humanities and Social Sciences Communications*, 9(1). <https://doi.org/10.1057/s41599-022-01105-8>
- Kokila, M., Chandra, S., & Raja Kamal, C. (2022). A study on career choice as entrepreneurs among undergraduate students in Bangalore. In *International Conference on Business and Technology* (pp. 230-239). Springer. https://doi.org/10.1007/978-3-031-26953-0_23
- Koob, C., Schröpfer, K., Coenen, M., Kus, S., & Schmidt, N. (2021). Factors influencing study engagement during the COVID-19 pandemic: A cross-sectional study among health and social professions students. *Plos One*, 16(7), e0255191. <https://doi.org/10.1371/journal.pone.0255191>
- Li, L., & Ding, H. (2022). The relationship between internet use and population health: A cross-sectional survey in China. *International Journal of Environmental Research and Public Health*, 19(3), 1322. <https://doi.org/10.3390/ijerph19031322>
- Liu, M., Gorgievski, M. J., Zwaga, J., & Paas, F. (2023). How entrepreneurship program characteristics foster students' study engagement and entrepreneurial career intentions: A longitudinal study. *Learning and Individual Differences*, 101, 102249. <https://doi.org/10.1016/j.lindif.2022.102249>
- Murad, M., Othman, S. B., & Kamarudin, M. A. I. B. (2024). Entrepreneurial university support and entrepreneurial career: the directions for university policy to influence students' entrepreneurial intention and behavior. *Journal of Entrepreneurship and Public Policy*. <https://doi.org/10.1108/JEPP-08-2023-0082>

- Mustafa, M. J., Lee, C., & Galloway, J. E. (2023). The importance of context: How university entrepreneurial climates enhances entrepreneurship in tourism and hospitality graduates. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 33, 100453. <https://doi.org/10.1016/j.jhlste.2023.100453>
- Muthuswamy, V. V., & Umarani, M. (2023). Integrating Physical, Cultural, and Psychological Factors in Understanding Employee Job Security: Ensuring Stability. *Journal of Human Security*, 19(2), 70-81. <https://jhumansecurity.com/menuscript/index.php/jhe/article/view/150>
- Ozden, K., & Sertel-Berk, O. (2017). Adaptation of career stress scale into Turkish and testing psychometric properties. *Journal of Psychology Studies*, 37(1), 35-51. <https://dergipark.org.tr/en/download/article-file/407171>
- Öztemel, K., & Akyol, E. Y. (2021). From adaptive readiness to adaptation results: Implementation of student career construction inventory and testing the career construction model of adaptation. *Journal of Career Assessment*, 29(1), 54-75. <https://doi.org/10.1177/1069072720930664>
- Plakhotnik, M. S., Volkova, N. V., Jiang, C., Yahiaoui, D., Pheiffer, G., McKay, K., Newman, S., & Reißig-Thust, S. (2021). The perceived impact of COVID-19 on student well-being and the mediating role of the university support: evidence from France, Germany, Russia, and the UK. *Frontiers in Psychology*, 12, 642689. <https://doi.org/10.3389/fpsyg.2021.642689>
- Schettino, G., Marino, L., & Capone, V. (2022). The impact of university-related variables on students' perceived employability and mental well-being: An Italian longitudinal study. *Sustainability*, 14(5), 2671. <https://doi.org/10.3390/su14052671>
- Sekaran, U. (2016). Research methods for business: A skill building approach. In: John Wiley & Sons.
- Sigurvinsdottir, R., Thorisdottir, I. E., & Gylfason, H. F. (2020). The impact of COVID-19 on mental health: The role of locus on control and internet use. *International Journal of Environmental Research and Public Health*, 17(19), 6985. <https://doi.org/10.3390/ijerph17196985>
- Sisu, J. A., Tirnovanu, A. C., Patriche, C.-C., Nastase, M., & Schin, G. C. (2024). Enablers of students' entrepreneurial intentions: findings from PLS-SEM and fsQCA. *International Journal of Entrepreneurial Behavior & Research*, 30(4), 856-884. <https://doi.org/10.1108/IJEER-07-2023-0689>
- Stockinger, K., Rinas, R., & Daumiller, M. (2021). Student adaptability, emotions, and achievement: Navigating new academic terrains in a global crisis. *Learning and Individual Differences*, 90, 102046. <https://doi.org/10.1016/j.lindif.2021.102046>
- Udeogalanya, V. (2022). Aligning digital literacy and student academic success: Lessons learned from COVID-19 pandemic. *International Journal of Higher Education Management*, 8(2). https://www.ijhem.com/cdn/article_file/2022-02-28-21-34-18-PM.pdf
- Willson, R., & Given, L. M. (2020). "I'm in sheer survival mode": Information behaviour and affective experiences of early career academics. *Library & Information Science Research*, 42(2), 101014. <https://doi.org/10.1016/j.lisr.2020.101014>
- Zheng, Q., Lin, X., He, L., Freudenreich, T., & Liu, T. (2021). Impact of the perceived mental stress during the COVID-19 pandemic on medical students' loneliness feelings and future career choice: a preliminary survey study. *Frontiers in Psychiatry*, 12, 666588. <https://doi.org/10.3389/fpsyg.2021.666588>
- Zis, P., Artemiadis, A., Bargiotas, P., Nteveros, A., & Hadjigeorgiou, G. M. (2021). Medical studies during the COVID-19 pandemic: the impact of digital learning on medical students' burnout and mental health. *International Journal of Environmental Research and Public Health*, 18(1), 349. <https://doi.org/10.3390/ijerph18010349>