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The Relationship Between Study Approaches and the Use of Virtual Social Networks among University Students

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Abstract

Purpose: The main objective of this research is to examine the correlation between study approaches and the frequency of virtual social network usage among university students.

Methodology: This study utilized a quantitative approach and survey method to gather data from 276 students at Azarbaijan Shahid Madani University. Two questionnaires were employed, with reliabilities confirmed using Cronbach's alpha coefficient. Data analysis was conducted at both descriptive and inferential levels using SPSS software.

Findings: The average virtual network usage was 3.80, while deep, strategic, and superficial study approaches scored 3.82, 3.91, and 3.20 respectively. Pearson correlation revealed a positive relationship between superficial study approach and virtual network usage, while a negative correlation was found with deep and strategic approaches. Significant relationships were noted between GPA and virtual network usage (negative), GPA and deep/strategic approaches (positive), and GPA and surface approach (negative). Only the strategic approach showed a negative predictive power with a beta coefficient of -0.32.

Conclusion: The predominant study approach among students was strategic. Increased virtual network usage was associated with a decrease in strategic and deep approaches. Students adopting strategic and deep approaches exhibited better academic performance.

Value: This study aims to bridge the gap in research on the use of new media and its impact on students' study approaches.

Key Words: *Deep Study Approach, Surface Study Approach, Strategic Study Approach, Use of Virtual Social Networks*

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Extended Abstract

Introduction: Study approaches refer to the unique and habitual behaviors, such as strategy and motivation, that learners use to acquire knowledge, skills, and attitudes through studying their course materials. These approaches are preferred by learners as a way to effectively study and learn (Saif & Fathabadi, 2009).

Purpose: The primary aim of this research is to explore the connection between study approaches and the extent of usage of virtual social networks among students. Additionally, the study also examined these two variables in relation to demographic characteristics such as gender, field of study, grade, and grade point average, as well as the social networks that interest students. Furthermore, the research investigated how study approaches influence the use of social networks.

Methodology: This applied research utilized a quantitative approach with a survey method. The statistical population consisted of 6300 students from Azarbaijan Shahid Madani University in 2019, with the study including 276 individuals. Convenient sampling was employed for online data collection, allowing for easy access and proximity to the researcher. The reliability of the questionnaires used was confirmed through Cronbach's alpha coefficients, and the normal distribution of data was assessed using skewness and kurtosis indices. Analysis of the findings was conducted using descriptive and inferential statistics in SPSS software.

Findings:

1-Preferred Social Networks: The most favored social networks were Telegram, Instagram, and WhatsApp, while the least utilized was Soroush. The overall average usage of virtual networks was 3.80, with average ratings of 3.82 for deep approach, 3.91 for strategic approach, and 3.20 for superficial approach.

2-The Status of Using Virtual Social Networks and Study Approaches: The average usage of virtual networks was 3.80 overall, with 3.87 for female students and 3.68 for male students, slightly below the hypothetical average of 4. Average ratings for deep, strategic, and surface study approaches were 3.82, 3.91, and 3.20 respectively. It should be noted that in this study, the hypothetical average for social networks was four due to the 7-point Likert scale, and for study approaches, it was 3 due to the 5-point Likert scale.

3-Significance Level of Average Rates of Use of Virtual Social Networks and Study Approaches Based on Gender: An independent t-test revealed a significant difference in the average use of social networks ($t: 1.997$, Sig: 0.047) and deep study approaches ($t: -2.711$, Sig: 0.007) with 95% confidence based on gender. There was no statistically significant difference in the average of strategic and surface study approaches based on students' gender.

4-Significance Level of Average Rates of Use of Virtual Social Networks and Study Approaches based on the Grade: An independent t-test showed a significant difference in the average of the surface study approach ($t: 6.545$, Sig: 0.000) and the strategic approach ($t: -3.225$, Sig: 0.000) with 95% confidence between undergraduate and graduate students.

5-Significance Level of Average Rates of Use of Virtual Social Networks and Study Approaches based on the Field of Study: The results of the Anova test ($F: 4.920$, Sig: 0.008) indicated a significant difference in the strategic approach of the study based on the students' field of study. However, there was no significant



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difference in using social networks, deep, and superficial study approaches based on field of study.

6-Relationship between Study Approaches, Amount of Use of Social Networks, and Students' GPA: The Pearson correlation test revealed a positive relationship between the use of social networks and superficial study approach, but negative relationships with deep and strategic approaches. Significant correlations were also found between the use of social networks, GPA, and different study approaches, with varying intensity and direction.

Table 1. Results of independent t-tests, ANOVA, and Pearson's tests for variables

Variables	Name of test	Value	Sig
Use of social networks and gender	T-test	1.997	0.047
Deep approach and gender		-2.711	0.007
Surface approach and gender		-0.367	0.714
Strategic approach and gender		-1.320	0.188
Use of social networks and grade	T-test	1.601	0.111
Deep approach and grade		-1.696	0.091
Surface approach and grade		6.545	0.000
Strategic approach and grade		-3.225	0.001
Use of social networks and field	Anova	1.248	0.289
Deep approach and field		1.499	0.225
Surface approach and field		2.562	0.079
Strategic approach and field		4.920	0.008
Use of social networks and GPA	Pearson	-0.25	0.000
Deep approach and GPA		0.24	0.000
Surface approach and GPA		-0.29	0.000
Strategic approach and GPA		0.46	0.000



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7- The Dimensions of Study Approaches Affect the Use of Virtual Social Networks: A multiple linear regression test was used to investigate the predictive role of study approaches on social network usage. Out of the three study approaches, only the strategic study approach had a negative predictive power, indicating that an increase in the strategic approach score led to a decrease in the use of virtual social networks. The model was found to be significant at a 99% confidence level.

Table 2. Summary of the Regression(study approaches on the use of social networks)

Model	R	R ²	F	Sig
1	0.35	0.13	12.99	0.000
Variable/ indicator	B	Beta	t	Sig
Constant	5.081	-	12.757	0.000
Deep approach	-0.37	-0.32	-4.260	0.000

Conclusion: Among students, the strategic approach was found to be the most dominant. Interestingly, the strategic and deep approaches decreased with increased use of virtual networks. Students who leaned towards the strategic and deep approach exhibited better academic performance.

Value: This research contributes to bridging the gap in understanding the utilization of new media and its correlation with students' study approaches.

References

- Ahmadi, A. (2018). *The effects of using Virtual social networks on the academic performance of undergraduate students through study approaches* [Master dissertation, University of Birjand]. Irandoc.
- Akbari, M., Fathabadi, J., Almasi, I., & Mohammadzadeh, J. (2019). Relationship between study approaches with academic achievement and student's conception of learning. *Research in Curriculum Planning*, 16(61), 75-84. Doi: 10.30486/JSRE.2019.665145 [in Persian]
- Alsaqri, S. H., Alkwiese, P. J. and Hernandez, T. (2016). Influence of utilization of social networking sites (sns) on study habits among Saudi nursing students in Ha'il University. *Journal of Biology, Agriculture and Healthcare*, 6 (24), 45-56.
- Bachtold, M., Papet, J., Asensio, D. B., Borne, S., De Checchi, K., Jeziorski, A., ... & Cassagnol, F. (2023). Effects of motivation, evaluativism, and perceived social support on deep approach to learning at university. *European Journal of Psychology of Education*, 1-24. <https://doi.org/10.1007/s10212-023-00722-4>
- Bakhshi Parikhani, S., Hamed Nasab, S., & Pourshafei, H. (2018). The Role of Virtual Social Networks in Self-Regulatory Learning Strategies and Student Future Student's Student's Development. *Future study Management*, 29(114), 1-15. [in Persian]
- Bickerdike, A., O'Deasmhunaigh, C., O'Flynn, S., & O'Tuathaigh, C. (2016). Learning strategies, study habits and social networking activity of undergraduate medical students. *International journal of medical education*, 17(7), 230-236. <https://doi.org/10.5116/ijme.576f.d074>
- Biggs, J., & Tang, C. (2003). *Teaching for quality learning at university*. Buckingham.
- Boyd, D. M. & Ellison, N. B. (2007). Social network sites: Definition, history, and holarship. *Journal of computer-mediated Communication*, 13 (1), 210-230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.
- Chris, L. A. (2015). Influence of social media on study habits of undergraduate students in Kenyan universities. *International Journal of Novel research in Humanity and Social sciences*, 2(4), 42-55. DOI:10.24940/theijhss/2021/v9/i8/HS2108-070
- DaLomba, E., Mansur, S., Bonsaksen, T., & Greer, M. J. (2021). Exploring graduate occupational and physical therapy students' approaches to studying, self-efficacy, and positive mental health. *BMC Medical Education*, 21(1), 1-8. <https://doi.org/10.1186/s12909-021-02550-w>
- Entwistle, N. J., McCune, V., & Tait, H. (2013). *The approaches and study skills inventory for students (ASSIS)*. Edinburgh: Centre for Research on Learning and Instruction, University of Edinburgh.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Gezgin, D. M., & Kurtça, T. T. (2023). Deep and surface learning approaches are related to fear of missing out on social networking sites: A latent profile analysis. *Computers in Human Behavior*, 149, 107962. <https://doi.org/10.1016/j.chb.2023.107962>



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- Glass, G. V. (1966). Testing homogeneity of variances. *American Educational Research Journal*, 3(3), 187-190. <https://doi.org/10.3102/00028312003003187>
- Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson Educational International.
- Hasnor, H. N., Ahmad, Z., & Nordin, N. (2013). The relationship between learning approaches and academic achievement among Intec students, Uitm Shah Alam. *Procedia-Social and Behavioral Sciences*, 90, 178-186. <https://doi.org/10.1016/j.sbspro.2013.07.080>
- Hosseini, L. (2010). *The relationship between cognitive styles (holistic- partial and verbal-visual), study approaches (deep and surface) with the academic performance of female students in the third year of high school* .[Master dissertation, Allameh Tabataba'i University]. Irandoc. [in Persian]
- Izadpanah, S. (2008). *Investigating the relationship between learning styles and study approaches of Arak University students in the academic year 2007-2008* [Master dissertation, Arak University]. Irandoc. [in Persian]
- Judilla, A. R., & Gemora, R. B. (2015). Influence of social networking on the study habits and performance of students in a state university. *Journal of Social Science and Humanities Research, JSSHR*, 22, 1-12.
- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in human behavior*, 26(6), 1237-1245. <https://doi.org/10.1016/j.chb.2010.03.024>
- Kreber, C. (2003). The relationship between students' course perception and their approaches to studying in undergraduate science courses: A Canadian experience. *Higher education research & development*, 22(1), 57-75. <https://doi.org/10.1080/0729436032000058623>
- Lehmann, T. (2022). Student teachers' knowledge integration across conceptual borders: the role of study approaches, learning strategies, beliefs, and motivation. *European Journal of Psychology of Education*, 37(4), 1189-1216. <https://doi.org/10.1007/s10212-021-00577-7>
- López, B. G., Cerveró, G. A., Rodríguez, J. M. S., Félix, E. G., & Esteban, P. R. G. (2013). Learning styles and approaches to learning in excellent and average first-year university students. *European journal of psychology of education*, 28(4), 1361-1379. <https://doi.org/10.1007/s10212-012-0170-1>
- Mahmoodzadeh, A., Javadi, A. & Mohammadi, Y. (2016). Relationship between Studying Approaches and Academic Performance in Students of Birjand University of Medical Sciences. *Research in Medical Education (RME)*, 8 (3),9-16. [in Persian]
- Mehdinezhad, V, & Esmaeeli, R. (2015). Students' Approaches to Learning Superficial, Strategic and Deep. *Educ Strategy Med Sci*, 8 (2),83-89. [in Persian]
- Mirzaei pur, O. (2016). *The relationship between learning styles whit studying approaches and academic self-concept in 2014 new entered students of RafsanjanVali-Asr University* [Master dissertation, RafsanjanVali-Asr University]. Irandoc. [in Persian]
- Nezakati, F. (2018). *Mobital Lifestyle in University Student Society A Study in State Universities of Tehran* [PhD Thesis,Allameh Tabataba'i University] Tehran, Iran. [in Persian]
- Obilor, E. I. (2023). Convenience and purposive sampling techniques: Are they the same. *International Journal of Innovative Social & Science Education Research*, 11(1), 1-7.
- Phan, H. P. (2011). Deep processing strategies and critical thinking: Developmental trajectories using latent growth analyses. *The Journal of Educational Research*, 104(4), 283-294. <https://doi.org/10.1080/00220671003739382>



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- Rezaei, S. (2014). *The Casual Relationship Between Academic Motivation and Approaches to Studying With Mediating role of Coping Strategies During Academic Exam Preparation in Agricultural Students of Shahid Chamran University of Ahwaz* .[Master dissertation ,Shahid Chamran University of Ahwaz]. Irandoc. [in Persian]
- Richardson, J. T. (2010). Conceptions of learning and approaches to studying among White and ethnic minority students in distance education. *British Journal of Educational Psychology*, 80(4), 535-556. <https://doi.org/10.1348/000709910X489283>
- Saif, A. A., & Fathabadi, J. (2009). Different Approaches to Lesson Study and the Relationship of Study Skills with Academic Achievement, Gender and Educational Experience of University Students. *Teaching and Learning Research*, 6(2), 29-41. [in Persian]
- Shakurnia, A. H., GHaforian, M., & Elhampour, H. (2013). Approaches to Study and learning of Students in Ahvaz JundiShapur University of Medical Sciences. *Jundishapur Scientific Medical Journal*, 11(6), 577-586. [in Persian]
- Shi, Y., Luo, Y. L., Yang, Z., Liu, Y., & Cai, H. (2014). The development and validation of the social network sites (SNSs) usage questionnaire. In *Social Computing and Social Media: 6th International Conference, SCSM 2014, Held as Part of HCI International 2014, Heraklion, Crete, Greece, June 22-27, 2014. Proceedings 6* (pp. 113-124). Springer International Publishing. https://doi.org/10.1007/978-3-319-07632-4_11
- Statistical Centre of Iran (2015). *Statistical yearbook of the country 2014*. Tehran: Iran Statistics Center. [in Persian]
- Stone, D., Longhurst, G. J., Dulohery, K., Campbell, T., Richards, A., O'Brien, D., ... & Border, S. (2022). A multicentre analysis of approaches to learning and student experiences of learning anatomy online. *Medical Science Educator*, 32(5), 1117-1130. <https://doi.org/10.1007/s40670-022-01633-7>
- Stroud, K. C. (2006). *Development of the school motivation and learning strategies inventory*. Texas A&M University.
- Suen, L. J., Huang, H. M., & Lee, H. H. (2014). A comparison of convenience sampling and purposive sampling. *Hu li za zhi The Journal of Nursing*, 61(3), 105-111. <https://doi.org/10.6224/JN.61.3.105>
- Tafvizi, M., Abdian, T., Rayat dost, E., Hojati, S., Kargar, Z. & Kalani, N. (2017). Evaluating Study Approaches among Medical Students of Jahrom University of Medical Sciences: A Cross-Sectional Descriptive Study. *Journal of Education and Ethics in Nursing*, 6(2), 24-31. [in Persian]
- Tsingos, C., Bosnic-Anticevich, S., & Smith, L. (2015). Learning styles and approaches: can reflective strategies encourage deep learning?. *Currents in Pharmacy Teaching and Learning*, 7(4), 492-504. <https://doi.org/10.1016/j.cptl.2015.04.006>
- Yasbolaghi, B., Ghaffari, K., & Rahimi, Z. (2023). Comparative Study of Learning Strategies, Learning Styles and Study Approaches Amon High School Students Experimental, Mathematical, Human. *Educational Measurement and Evaluation Studies*, 12(40), 115-136. doi: 10.22034/emes.2023.540276.2313. [in Persian].
- Yosefi afrashte, M., rezaei, S., & sadeghi, T. (2021). The Relationship between Academic Well-being and Learning Approaches and educational fascination in Zanjan University of Medical Sciences Students. *Journal of Sabzevar University of Medical Sciences*, 28(2), 287-293. [in Persian]
- Zamaniyan, M. (2017). *The Role Of Social Network In Academic Performance With Mediation Of Informal Learning And Academic Engagement In Birjand Universities Students* .[Master dissertation, University of Birjand]. Irandoc. [in Persian]



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