The Effect of Students' Social and Scholastic Background and Environmental Impact on Shaping Their Pattern of Digital Learning in Academia: A Pre- and Post-COVID Comparative View

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Abstract : The purpose of the study was to inquire whether there was a change in the shaping of undergraduate students' digitally-oriented study pattern in the pre-Covid (2016-2017) versus post-Covid period (2022-2023), as affected by three factors: social background characteristics, high school, and academic background characteristics. These two-time points were cauterized by dramatic changes in teaching and learning at institutions of higher education. The data were collected via crosssectional surveys at two-time points, in the 2016-2017 academic school year (N=443) and in the 2022-2023 school year (N=326). The guestionnaire was distributed on social media and it includes guestions on demographic background characteristics, previous studies in high school and present academic studies, and questions on learning and reading habits. Method of analysis: A. Statistical descriptive analysis, B. Mean comparison tests were conducted to analyze the variations in the mean score for the digitally-oriented learning pattern variable at two-time points (pre- and post-Covid) in relation to each of the independent variables. C. Analysis of variance was performed to test the main effects and the interactions. D. Applying linear regression, the research aimed to examine the combined effect of the independent variables on shaping students' digitally-oriented learning habits. The analysis includes four models. In all four models, the dependent variable is students' perception of digitally oriented learning. The first model included social background variables; the second model included scholastic background as well. In the third model, the academic background variables were added, and the fourth model includes all the independent variables together with the variable of period (pre- and post-COVID). E. Factor analysis confirms using the principal component method with varimax rotation; the variables were constructed by a weighted mean of all the relevant statements merged to form a single variable denoting a shared content world. The research findings indicate a significant rise in students' perceptions of digitally-oriented learning in the post-COVID period. From a gender perspective, the impact of COVID on shaping a digital learning pattern was much more significant for female students. The socioeconomic status perspective is eliminated when controlling for the period, and the student's job is affected - more than all other variables. It may be assumed that the student's work pattern mediates effects related to the convenience offered by digital learning regarding distance and time. The significant effect of scholastic background on shaping students' digital learning patterns remained stable, even when controlling for all explanatory variables. The advantage that universities had over colleges in shaping a digital learning pattern in the pre-COVID period dissipated. Therefore, it can be said that after COVID, there was a change in how colleges shape students' digital learning patterns in such a way that no institutional differences are evident with regard to shaping the digital learning pattern. The study shows that period has a significant independent effect on shaping students' digital learning patterns when controlling for the explanatory variables.

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Keywords : learning pattern, COVID, socioeconomic status, digital learning

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