Gain or Loss? The Internet Use among Generation Z and its Impact on Their Academic Achievement

Youxi Jiao, Xiulan Yu
Nanjing University, Nanjing 210008, Jiangsu, China

Abstract: Generation Z as digital natives are distinguished by their intense engagement in online activity. This article is an analysis of the impact of the internet use on academic performance in Gen Z based on data from the China Family Panel Studies (CEPS) 2020. Research findings show that there exist divides in the internet use among members of Gen Z with distinct family origins and that the impact of the internet use on students’ academic achievement varied according to their educational phases and prior academic rankings. The multi-categorical ordinal logistic regression model was adopted in the analysis.


Keywords: Internet Use, Digital Divide, Academic Achievement, Internet-Based Learning Preference

Correspondence to: Xiulan Yu, Institute of Education, Nanjing University, Nanjing 210008, Jiangsu, China. E-mail: yuxiulan@nju.edu.cn

Conflict of Interests: None.
Introduction

There have been widespread concerns over the educational inequality caused by the digital divide in the internet era. This article aims to explore the differences in the internet use among members of Generation Z (Gen Z) with distinct family origins; the impact of internet-based learning behavior on Gen Z’s academic success; and the disparities in the impact between Gen Z students at various educational phases. The study has its implications for promoting educational equity by ascertaining the specific effects of information technology in the digital transformation of education.

Research Hypotheses

H1: There are social-status differences in the use of the internet. Higher-status Gen Z students are inclined to use the internet for learning purposes, whereas their lower-status peers are more likely to use it for recreation.

H2: The internet use preference poses significant impacts to student academic achievement. Internet-based learning has positive effects on students’ academic ranking; Internet-based recreation has negative effects on students’ academic ranking.

H3: There are age differences in the impacts of the internet use preference on academic performance in Gen Z students.

Research Methodology

The Source of Data

The present study sourced data from the China Family Panel Studies (CEPS) 2020 published by Peking University’s Institute of Social Science Survey (ISSS). Members of Gen Z born between 1995 and 2009 were selected as subjects. A sample of 4827 was established after the process of data sorting and screening.

Variables

Student academic performance is the dependent variable in this study, which is indicated by the individual’s academic ranking in their grade among secondary school students or by the individual’s ranking in a certain major among university students. The Gen Z student’s family background and internet use behavior are the independent variables. The variable of student family background is represented by the parental education level and family social status; student internet use behaviors incorporate internet-based learning, online gaming, online shopping, and short video watching. The control variables are divided into school and personal dimensions. The school-related control variables are “being with a prestigious school or not” and “being in an elite class or not;” the personal-level control variables include gender, age, parental political status, etc.

Data Analysis
The dependent variable in this study is a unitary, ordinal categorical variable, the independent variable of student family background is a continuous variable, and student internet use behavior is set as a dichotomous variable. Thereby, the software STATA 17.0 was used to conduct the multicollinearity test and Wald test on independent variables (Qu & Min, 2019), and the multi-categorical ordinal logistic regression model was adopted for data analysis.

**Research Findings**

The research findings of the study include: (i) There were significant differences in “digital habits” among members of Gen Z with differential family status. Higher-status students showed a stronger preference for internet-based learning, whereas their lower-status peers exhibited a stronger preference for online recreation, which represents a new form of digital divide. (ii) There was heterogeneity in the effects of the internet use on student academic achievement, which generally confirmed the hypotheses about the impacts of the “preference for learning” and “preference for recreation” on student performance. (iii) The impacts of the internet use on academic achievement among members of Gen Z varied according to their individual educational phases and prior academic rankings. Internet-based learning considerably contributes to academic success of university students but had no significant positive effect on academic performance of secondary school students. The negative impacts of online recreation are significant and universal, particularly impairing academic achievement of secondary school students. Therefore, it is imperative to bridge the digital divide of any form, foster legitimate digital habits in students, and maximize digital dividends to optimize Gen Z’s educational attainments and advance educational equity in the digital era.

**References**