

THE IMPACT OF HUMAN CAPITAL INVESTMENT AND LABOR MARKET INFORMATION ON GENERATION Z STUDENTS' EMPLOYMENT READINESS AND PARENTAL SOCIO ECONOMIC STATUS

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Abstract

This study aims to analyze the influence of human capital investment, labor market information, and parental socioeconomic status on Generation Z students' employment readiness. The study employed a quantitative approach using an explanatory research design. The research was conducted among final-year students of the Economic Education Study Program at Universitas Jenderal Soedirman with a total sample of 96 respondents selected using total sampling techniques. Data were collected through Likert-scale questionnaires and analyzed using multiple linear regression with SPSS software. The results indicate that human capital investment positively and significantly affects students' employment readiness with a regression coefficient of 0.412 and a standardized beta value of 0.344. Labor market information also demonstrates a positive and significant influence with a regression coefficient of 0.365 and a beta value of 0.256. In addition, parental socioeconomic status positively affects employment readiness with a regression coefficient of 0.287 and a beta value of 0.317. Simultaneously, all independent variables significantly influence employment readiness with an F-value of 32.517 and a significance level of 0.000. The coefficient of determination (R^2) value of 0.648 indicates that 64.8% of the variation in students' employment readiness can be explained by the independent variables. The findings suggest that competency development, access to labor market information, and family support are important factors in improving Generation Z students' employment readiness.

Keywords: Human Capital Investment, Labor Market Information, Employment Readiness, Parental Socioeconomic Status, Generation Z Students

INTRODUCTION

Changes in the workplace during the digital age have led companies to no longer focus solely on academic abilities, but also on adaptability, communication, collaboration, and digital literacy in their recruitment processes (Nuzleha et al., 2026). According to Nuzleha et al (2026), students' work readiness is shaped by a combination of practical experience, psychological abilities, and social competencies that support the employability of college graduates.

The number of unemployed college graduates in Indonesia has continued to rise in recent years. Data from the Central Statistics Agency BPS (2026) shows that the number of unemployed graduates with Diploma IV, Bachelor's, Master's, and Doctorate degrees reached 1,010,652 in February 2025, marking the highest figure in the past four years. Additionally, the open unemployment rate for college graduates in 2025 reached approximately 6.23 percent, indicating that higher education has not yet fully been able to fully ensure that graduates are ready to enter the job market. The rising unemployment rate among college graduates indicates a gap between the competencies of college graduates and the needs of the business world a

phenomenon known as a skills mismatch. Jackson & Tomlinson (2020) state that the main challenge for college graduates in the digital age is not merely finding a job, but also the ability to adapt their skills to the changing needs of the modern workforce. Jackson & Tomlinson (2020) Succi and Canovi explain that students' employability in the era of the digital revolution is influenced by a combination of hard skills, soft skills, access to career information, and the ability to adapt to changes in the workplace.

Generation Z is a generation that has grown up in a digital environment and is therefore more adaptable to developments in information and modern work technologies (Nuzleha et al., 2026). Nevertheless, many college graduates in Indonesia still face a skills gap relative to industry needs, resulting in low employability among graduates (Nuzleha et al., 2026). Work readiness is an individual's state of readiness in terms of knowledge, skills knowledge, skills, attitudes, and abilities needed to enter the workforce professionally (Muspawi & Lestari, 2020). Muspawi & Lestari (2020) explain that work readiness is influenced by technical skills, soft skills, physical health, work experience, and an individual's mental preparedness to cope with the work environment

From the perspective of human capital theory, education, training, skills, experience, and health are forms of investment in human resources that can increase individual productivity (Goldin, 2024). Gaol (2014) states that human capital encompasses the knowledge, abilities, skills, and expertise possessed by individuals as their primary capital in the workforce. According to Becker (1993), investment in human capital is a key factor in improving the quality of the workforce and individual competitiveness in the modern labor market (Hastuti & Dewi, 2019). Lugiani & Rosgani (2023) study shows that human capital has a significant impact on students' employability, accounting for 54.7 percent of the total influence on their employability. Lugiani & Rosgani (2023) found that students who actively develop their skills, organizational experience, and formal education have a higher level of employability compared to students who are passive in their self-development.

In addition to investment in human capital, information about the job market is also a key factor in shaping students' employability in the digital age (Nuzleha et al., 2026). Information about the job market includes knowledge regarding job opportunities, industry competency requirements, professional developments, and the workforce recruitment process (Nuzleha et al., 2026). Students with good access to information about the world of work tend to be better able to align their competencies with the needs of the job market (Nuzleha et al., 2026). Advances in digital technology have also expanded students' access to career information through digital platforms, professional social media, career seminars, and industry internship programs (Nuzleha et al., 2026).

Students' access to skills development and information about the workforce is still influenced by their family's socioeconomic background, as students from high-income families tend to have greater opportunities to obtain quality education, additional training, and career development support compared to students from low-income families (Sirin, 2005). Parents' socioeconomic status is also linked to students' ability to access technology, professional networks, learning experiences, and educational resources that support the improvement of college graduates' employability (Dumais & Ward, 2010). In addition, students who receive better educational support and resources from their families generally have higher levels of self-confidence, competence, and career readiness when facing the competition of the modern job market (Tomlinson, 2017). From a human capital perspective, investment in education, training, and skills development has been shown to improve individual competencies and strengthen the competitiveness of the workforce in the global job market (Becker, 1993).

On the other hand, the rise of the digital age has begun to open up broader access to learning opportunities and career information, suggesting that the influence of parents' socioeconomic status on students' work readiness is beginning to shift (Nuzleha et al., 2026). Research on the relationship between human capital investment, information about the job market, and parents' socioeconomic status on the work readiness of Generation Z students has been relatively limited in

Indonesia (Lugiani & Rosgani, 2023). The novelty of this study lies in its examination of the relationship between human capital investment, labor market information, and the employability of Generation Z students in the context of digital transformation, as well as its investigation of whether parents' socioeconomic status remains a dominant factor amid increasingly open access to digital learning and labor market information. This study is important because its findings are expected to contribute to the development of higher education policies, specifically in enhancing graduates' employability by strengthening investment in human capital and ensuring more equitable access to information about the job market. In addition, this study is also expected to serve as a foundation for higher education institutions in designing learning strategies and competency development programs that are better aligned with the needs of the future job market.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Human capital theory posits that education, skills, experience, and training constitute forms of investment in human resources that can enhance individuals' productivity and competitiveness in the modern labor market (Becker, 1993). Tomlinson (2017) explains that the employability of college graduates is not only determined by academic ability but is also influenced by the accumulation of various forms of capital, such as human capital, social capital, and psychological capital. According to Chang et al (2022), human capital has a positive relationship with the employability and innovative work behavior of college graduates. Chang et al (2022) also explain that students with good skills, adaptability, and professional competencies tend to have higher work readiness compared to students with low competency development. Twinomuhwezi et al (2026) found that human capital investment through education, skill development, and academic support significantly influences graduates' readiness to enter the workforce. Research by Tang et al (2025) indicates that human capital comprising professional knowledge, skills, and communication abilities is a key factor in enhancing the employability of university graduates. Based on the above discussion, the first hypothesis of this study is:

H1: Human capital investment has a positive effect on the employability of Generation Z students.

Labor market information refers to the knowledge individuals possess regarding job opportunities, industry competency requirements, professional developments, and the workforce recruitment process. Souto-Otero & Białowolski (2021) state that graduates' employability is influenced by access to information networks, institutional reputation, and the ability to obtain labor market information relevant to industry needs. Advances in digital technology have also expanded students' access to career information through digital platforms, professional social media, and technology-based career development services. Pham et al (2024) explains that students with better access to career information tend to be better prepared to face the transition from the educational world to the professional workforce. Chang et al (2022) found that student employability increases when students have a good understanding of industry needs and the work competencies required by companies.

Based on the above discussion, the second hypothesis of this study is:

H2: Information about the workforce has a positive impact on Generation Z students' job readiness.

Parents' socioeconomic status reflects their level of education, employment, income, and family resources, all of which can influence students' competency development and career readiness. Research by Choi & Kim (2021) shows that students from families with higher socioeconomic status tend to have better access to educational facilities, digital technology, and skill development opportunities that support the employability of college graduates. Marginson (2016) study explains that family economic conditions influence students' opportunities to gain

learning experiences, professional networks, and broader career development during higher education. Additionally, Pham et al (2024) research found that family support in the form of economic resources, a conducive learning environment, and access to career information contributes to

However, advances in digital technology have begun to expand students' access to online learning, skills training, and career information, so the impact of socioeconomic status on employability is gradually changing. Research by Van Laar et al (2020) indicates that digital literacy and access to technology can help students improve their employability regardless of their socioeconomic background.

Based on the above discussion, the third hypothesis of this study is:

H3: Parents' socioeconomic status has a positive effect on the work readiness of Generation Z students.

Student employability is the result of the interaction between human capital investment, access to information about the job market, and the support of the family's socioeconomic environment. Chang et al (2022) explain that human capital and employability have a positive relationship in enhancing individuals' readiness to face the modern workplace. Pham et al (2024) found that graduates' employability is influenced by a combination of human capital, social capital, and adequate access to career information. Twinomuhwezi et al (2026) state that universities capable of developing the quality of students' human capital will produce graduates who are better prepared to face global job competition.

Based on the above discussion, the fourth hypothesis of this study is:

H4: Human capital investment, information about the job market, and parents' socioeconomic status simultaneously have a positive effect on the work readiness of Generation Z students.

RESEARCH METHODS

This study employs a quantitative approach with an explanatory research design aimed at analyzing the influence of human capital investment, labor market information, and parents' socioeconomic status on the work readiness of Generation Z students. A quantitative approach was chosen because this study is oriented toward empirically testing relationships between variables through inferential statistical analysis, thereby enabling the generation of objective and measurable conclusions.

The study was conducted among Generation Z students currently enrolled in higher education, specifically final-semester students in the Economics Education program at Jenderal Soeriman University, Class of 2022, who are considered to have more mature academic experience, competency development, and career orientation in preparing for the workforce. The population in this study consists of all 96 active final-semester students of the 2022 cohort. The sample was determined using total sampling because the population size was less than 100 respondents; thus, all final-semester students in the Economics Education Program at Jenderal Soedirman University were included as the research sample. This technique was employed to ensure that the data obtained could comprehensively represent the conditions of the population.

The types of data used in this study consist of primary and secondary data. Primary data were obtained directly through the distribution of questionnaires to research respondents, while secondary data were obtained from publications by the Central Statistics Agency (BPS), scientific articles, reputable national and international journals, and various supporting documents relevant to the research topic.

Data collection was conducted using a questionnaire instrument based on a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." The research instrument was designed based on variable indicators developed from human capital theory and relevant prior research. The

questionnaire was distributed online via digital media to facilitate respondent access and align with the characteristics of Generation Z students, who are tech-savvy.

The human capital investment variable is measured using indicators of education, training, organizational experience, skill development, and digital literacy. The labor market information variable is measured using indicators of access to career information, understanding of industry needs, knowledge of job opportunities, and understanding of the recruitment process. The parents' socioeconomic status variable is measured based on parents' educational level, parents' occupation, family income level, and the learning facilities available to students. Meanwhile, the work readiness variable is measured through communication skills, adaptability, work skills, self-confidence, and students' readiness to face a professional work environment.

Before being used in the study, the research instrument was first tested for validity and reliability. The validity test was conducted using Pearson's Product-Moment correlation to determine the accuracy of each statement item in measuring the research construct. Next, reliability testing was conducted using Cronbach's alpha coefficient, with a minimum value of 0.70 as an indicator that the research instrument has a good level of consistency. The data analysis technique in this study employed multiple linear regression analysis using the Statistical Package for the Social Sciences (SPSS) software. Multiple linear regression analysis was used to identify both the partial and simultaneous effects of the independent variables on the dependent variable.

RESULTS AND DISCUSSION

The results of the multiple linear regression analysis indicate that all independent variables in this study have a positive and significant effect on the work readiness of Generation Z students in the Economics Education Program at Jenderal Soedirman University. The analysis examined the variables of human capital investment, information about the workforce, and parents' socioeconomic status.

Table 1. Results of the Multiple Linear Regression Analysis

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)
Constant	5,757	2,087	-
Human Capital Investment	0,412	0,050	0,344
Career Information	0,365	0,059	0,256
Parents' Socioeconomic Status	0,287	0,033	0,317

Source: Processed primary data, 2026

Based on Table 1, the results of the multiple linear regression analysis in the table above yield a constant value of 5.757. This value indicates that if the variables Human Capital Investment, Information on the Job Market, and Parents' Socioeconomic Status are held constant or set to zero, the value of students' work readiness is 5.757.

The Human Capital Investment variable has a regression coefficient of 0.412 with a Standardized Beta Coefficient of 0.344. These results indicate that Human Capital Investment has a positive effect on students' work readiness. This means that the higher the students' investment in education, training, organizational experience, and skill development, the higher their work readiness. A beta value of 0.344 indicates that this variable has a fairly strong influence on work readiness.

The Work World Information variable has a regression coefficient of 0.365 and a beta value of 0.256. These results indicate that Work World Information has a positive effect on students' work readiness. This means that the better students' access to career information, industry needs, and job opportunities, the higher their readiness to enter the workforce. A beta value of 0.256 indicates that this variable has a positive influence with a moderate level of effect.

Furthermore, the Parental Socio-Economic Status variable has a regression coefficient of 0.287 with a beta value of 0.317. These results indicate that Parental Socio-Economic Status has a positive influence on students' work readiness. This means that students who receive economic support, educational facilities, and a good learning environment from their families tend to have higher work readiness. A beta value of 0.317 indicates that this variable has a fairly significant influence on students' work readiness.

Based on the standardized beta coefficients, the variable with the most significant influence on students' employability is Human Capital Investment, with a beta value of 0.344, followed by Parents' Socioeconomic Status at 0.317, and Information on the Job Market at 0.256. These findings indicate that the development of competencies and the quality of human resources are key factors in enhancing the employability of Generation Z students.

Table 2. Results of the Simultaneous Test (F-Test)

Variabel	F Calculated	Sig.	Description
X1, X2, X3 → Y	32,517	0,000	Simultaneous Influence

Source: Processed primary data, 2026

Based on Table 2, the results of the simultaneous test indicate that human capital investment, information about the job market, and parents' socioeconomic status collectively have a positive and significant effect on students' employability. A significance value of $0.000 < 0.05$ indicates that all independent variables contribute to improving the employability of Generation Z students.

Table 3. Coefficient of Determination

Model	R Square
Regresi Linear Berganda	0,648

Source: Processed primary data, 2026

The coefficient of determination (R-squared) of 0.648 indicates that 64.8% of the variation in students' work readiness can be explained by the variables of human capital investment, information about the workforce, and parents' socioeconomic status. Meanwhile, the remaining 35.2% is influenced by other variables outside the research model.

Discussion

The results of this study indicate that human capital investment has a positive effect on students' employability. These findings suggest that students who actively develop their competencies through education, training, organizational experience, and skill development possess greater employability. Human capital investment helps students enhance the adaptability, communication skills, and professionalism required in the modern workplace. These findings align

with the research by Tang et al (2025), which states that human capital plays a crucial role in enhancing the employability and work readiness of college graduates. This study also supports Becker (1993) human capital theory, which explains that investment in education, skills, and training can improve the quality of human resources and individual competitiveness in the labor market.

Information about the job market has also been shown to have a positive impact on students' job readiness. Students who have access to information about job opportunities, industry needs, and career development tend to better understand the competencies required by the job market, enabling them to prepare themselves in a more focused manner. Advances in digital technology have further expanded students' access to various sources of career information and professional development resources. These findings align with Pham et al (2024) research, which states that access to career information and an understanding of industry needs are key factors in enhancing the employability of college graduates. These findings are further supported by Souto-Otero & Białowolski (2021), who explain that the ability to access information about the job market helps students prepare for the transition from the academic world to the professional workforce.

In addition, parents' socioeconomic status has a positive influence on students' employability. Family support in the form of educational resources, access to technology, a conducive learning environment, and support for personal development helps students enhance their competencies and readiness to face job competition. These findings align with the research by Tomlinson (2017), which states that family social and economic support contributes to the development of students' educational capital and career readiness. Research by Agnihotri et al (2023) also explains that students who receive good family resource support tend to have greater opportunities to develop competencies and readiness to face the world of work.

Simultaneously, the research findings indicate that human capital investment, information about the job market, and parents' socioeconomic status are key factors in enhancing the employability of Generation Z students. These findings suggest that students' employability is influenced not only by individual internal factors but also by family support and access to information about the job market that is relevant to current industry needs. These findings reinforce the research by Chang et al (2022), which states that a combination of human capital, access to career information, and social support contributes to improving the employability of college graduates.

CONCLUSION

This study shows that human capital investment has a positive and significant effect on the employability of Generation Z students in the Economics Education Program at Jenderal Soedirman University. Students who actively develop their competencies through education, training, organizational experience, and skill development tend to be better prepared for the modern workforce. In addition, information about the workforce has also been shown to have a positive effect on students' employability. Students who have access to career information, an understanding of industry needs, and knowledge of job opportunities demonstrate higher levels of work readiness.

This study also found that parents' socioeconomic status has a positive effect on students' work readiness. Family support in the form of educational facilities, access to technology, a conducive learning environment, and support for personal development helps students enhance their competencies and readiness to face job competition. Simultaneously, human capital investment, information about the job market, and parents' socioeconomic status were found to contribute positively to the work readiness of Generation Z students.

The implications of this study suggest that universities need to strengthen the development of student competencies through training, skills development programs, internships, and the enhancement of digital-based career information services. In addition, universities also need to

increase collaboration with the industry so that students gain work experience and understanding that is more relevant to the needs of the job market.

This study has several limitations: it was conducted only among final-semester students in the Economics Education Program at Jenderal Soedirman University, so the results cannot yet be generalized to all students in Indonesia. Furthermore, this study employed only a quantitative approach using a questionnaire, which did not allow for a deeper exploration of respondents' experiences.

Given these limitations, future research is recommended to expand the scope of respondents to include various universities and academic programs so that the research findings have a broader scope of generalizability. Future research could also employ a mixed-methods approach or include additional variables such as self-efficacy, digital literacy, career adaptability, and internship experience to gain a more comprehensive understanding of Generation Z students' work readiness.

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