

The Influence of Employability Skills on Career Maturity in Yogyakarta Industrial Vocational School Students

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Abstract. This research aims to determine the influence of employability skills on career maturity in Yogyakarta Industrial Vocational School students. Quantitative research method with explanatory research type. The population was 152 Yogyakarta Industrial Vocational School students, with a sample of 60 students. The sampling technique is simple random sampling. The data collection method is a questionnaire instrument with two scales, namely the employability skills scale and the career maturity scale. Data validity uses content validity by expert validators, as well as validity testing using the product moment correlation formula. The reliability test obtained a Cronbach's Alpha value for the employability skills scale of 0.883 and the career maturity scale of 0.917. Data analysis uses simple linear regression. The research results show that the employability skills of Yogyakarta Industrial Vocational School students are mostly in the medium category (48.3%). The career maturity of Yogyakarta Industrial Vocational School students is mostly high (45%). The results of the regression test obtained a regression coefficient of 0.882 with a p value (0.000) smaller than α =0.05. Based on these results, it shows that employability skills (X) have a positive and significant effect on career maturity (Y) in Yogyakarta Industrial Vocational School students. The higher the employability skills, the more the student's career maturity will increase with an effective contribution of 42%.

Keywords: employability skills, career maturity, vocational school students

1 Introduction

Education is essentially an effort to develop the capacity of human resources (HR) which is carried out consciously through learning activities. The education system that is oriented towards the world of work is vocational education. According to Callan & Clarke's study, there are differences between the educational environment and the work environment. Graduates with high grades in a fast time are considered to have high competence in the educational environment, while competent graduates who are technically competent and have a good attitude are more desired by the industrial world [1]. This condition shows that there are still differences in views regarding the quality of human resources between the world of education and the work environment.

The largest composition of unemployed is vocational school graduates, namely 8.49%, due to the number of vocational school graduates being disproportionate to the

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cational school graduates to have career maturity, so that after graduating they do not increase the number of unemployed. Mastery of skill groups in both hard skills and soft skills aspects is the design of the vocational education curriculum. This is intended to prepare students to enter the work environment and have attitudes that are in accordance with the norms of life in society.

One component in developing career maturity is employability skills [3]. Employability skills are strongly related to the various skills needed for vocational school graduates to better prepare themselves to enter and/or obtain work, make it easier to develop at work, and ultimately achieve success at work. Students who have work skills are ready to apply their knowledge through a career according to the stage of development which can be seen from being able to plan a career, being willing to explore a career, having good knowledge about careers, having extensive knowledge about the world of work, being realistic in choosing a career, and being oriented. Careers are not gender biased.

2 Results and discussion

The research results show that there is a significant relationship between career maturity in students at vocational high schools. Indicators of employability skills perceived by students include nine aspects such as communication skills, working skills in groups, problem solving skills, skills in taking initiative and making efforts, skills in planning and organizing activities, self-management skills, learning skills, skills in using technology, and health skills. and work safety. Meanwhile, career maturity indicators include aspects of planning, exploration, informational competence and decision making.

Based on the research results, among vocational school students, 2 students (3.4%) had very high employability skills, 26 students (43.3%) had high employability skills, and 29 students (48.3%) had high employability skills. and low as many as 3 students (5%). The tendency for subjects to have medium category employability skills, namely 29 of the 60 students in the sample. The distribution of employability skill categories is in the following table.

Variable	Interval	Frequency	Percentage	
Low	X<118,60	3	5,0	
Medium	118,60≤X<135,52	29	48,3	
Height	$135,52 \le X < 152,44$	26	43,3	
Very High	X≥152,44	2	3,4	
	Tota	al 60	100	

Table 1. Employability Skills Distribution Table

The research results showed that 29 students (48.3%) tended to have medium employability skills and 26 students (43.3%) had high employability skills. Supported by the results of previous research by Hardiman in 2021 which showed that vocational school students have a high level of employability skills. So it is important for schools

to socialize employability skills to students and teachers in the era of the Industrial Revolution 4.0. Developing employability skills in the era of the Industrial Revolution 4.0 since vocational school. Through socialization, students are expected to have an understanding and prepare themselves for the Revolution 4.0 era by developing employability skills [4].

The large number of students who have medium and high employability skills is because the school has implemented a scientific approach. Operationalization of the scientific approach according to Minister of Education Regulation no. 103 of 2014 is in the form of learning activities containing the content of learning experiences, namely making observations, asking questions, summarizing information, reasoning and communicating.

The scientific approach in vocational schools is implemented with a student-centered learning model, namely problem-based (PBL) and project-based (PjBL) models. Both models enable students to be helped in gaining employability skills or generic skills, because they make learning interesting and relevant because they provide a contextual environment. Students are involved in gaining knowledge and various types of skills through systematic PBL and PjBL learning methods. Research reveals that employability skills can be achieved if educational institutions are able to manage PjBL well [5].

The results of this research show that there are students who have low employability skills, namely 3 people or 5%. Previous research conducted by Amiruddin et al in 2023 found that 1.36% of vocational school students had low employability skills. Students with low employability skills, for example who are not good at self-management and time management, will find it difficult to exercise self-discipline in shaping themselves to suit their career choices so that their control dimension will also be low [6]

. Individuals who lack control in their careers often experience doubts in choosing a career, and even delay career preparations so that they are less able to determine a career in the future (career indecision) [7]

In the career maturity variable, researchers obtained the results of the distribution of career maturity with very high category 2 (3.4%), high category 27 (45%), medium category 26 (43.3%), and low category 5 (8.3%). The career maturity trend of the subjects is in the high category, as many as 27 of the 60 students in the sample. The trend of student career maturity is more clearly depicted in the following table.

Variable	Interval	Frequency	Percentage	
Low	X<94,13	5	8,3	
Medium	94,13≤X<117,17	26	43,3	
Height	117,17 ≤X<140,21	27	45	
Very High	X≥140,21	2	3,4	
	Total	60	100	

Table 2 Career Maturity Distribution

From the results of this research, it can be seen that the tendency for subjects to be in the medium employability skill category, while the tendency for career maturity is in the high category. Based on research conducted by researchers, researchers also found that most respondents had a high category of student career maturity, namely 27 students (45%) and 26 students (43.3%) who were moderate. Supported by the results of previous research by Lindawati et al in 2022 which showed that the majority of vocational school students had a medium level of career maturity [8]. In line with Hasibuan & Irawan's 2020 research which shows that students' career maturity is generally in the high or mature category [9].

Students with career maturity are seen choosing careers consistently according to their major, being able to solve problems they encounter while working, selecting jobs that support and build their careers and when faced with failure, they don't give up easily. Students will also be able to make plans, short term, medium and long term, try to gather information, and align with their experiences when working. Crites stated that career maturity is indicated by having an understanding of oneself, knowing one's job, being able to select jobs, but not being able to determine a job that suits oneself and still experiencing difficulties in determining their final career goals [9]. The research obtained data on career maturity in the high category, high career maturity is indicated by understanding oneself, understanding about work, the ability to select and choose a job and the ability to choose the right steps towards a career [10].

The results of this research also found that 5 students (8.3%) had low career maturity. Previous research conducted by Rusmania et al in 2015 found that 10 out of 67 vocational school students had low career maturity. This shows that students' thinking about career choices is immature or still changing, career choices are unrealistic and they do not have independence in making career decisions so they are still hesitant in making career decisions [11].

Based on data obtained by researchers, for vocational school students, there is a relationship between employability skills and career maturity. The following is a test table for the linearity of employability skills with student career maturity.

Table 3. Linearity Test Of Employability Skills With Student Career Maturity

Variable	Deviation from Linearity	Interpretation
Employability Skill Kematangan Karir	0,051	Linear

Based on the linearity test table between employability skills and career maturity, a significance value of 0.051 was obtained, which means this value is greater than the significance level (α) , namely 0.05. This means that there is a relationship between employability skills and student career maturity.

Next, researchers conducted a simple linear regression analysis test to determine the effect of employability skills on career maturity. The following is a simple linear regression analysis test table.

Table 4. SIMPLE LINEAR REGRESSION ANALYSIS

Model	Unstandardized Coeffi- cients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		

(Constant)	-2.357	18.513		127	.899
Perception	.882	.136	.648	6.478	.000

From a simple linear regression analysis test, it can be seen that the regression coefficient is positive (0.882) with a p-value of $0.000 < (\alpha=0.05)$, it can be concluded that employability skills have a positive and meaningful effect on the career maturity of Yogyakarta Industrial Vocational School students. The higher the employability skills, the more the student's career maturity will increase.

The results obtained from the research state that employability skills have a positive and meaningful effect on career maturity. In accordance with research by Prabowo et al in 2023 which concluded that one of the components for developing career maturity is employability skills. Schools must train to develop the employability skills of their students because employability skills can help them on their career path in the world of work after they graduate from school. Students with high employability skills will be ready to apply their knowledge through a career according to the stage of development which can be seen from being able to plan a career, willing to explore a career, good knowledge about careers, having a lot of understanding about the world of work, being realistic in choosing a career, and being oriented towards careers are not gender biased [3].

Employability skills consist of basic skills, interpersonal skills, communication, problem solving, teamwork, planning and organizing activities, initiative and business, self-management, using technology, learning, and occupational health and safety (K3). The employability skills possessed by students influence their careers. Students who believe that they have good work abilities will easily choose a career according to their skills and interests. However, students who are still unsure about their employability skills will have difficulty determining what career suits them [12]. Supported by the opinion that employability skills are knowledge, skills and competencies as an individual's ability to obtain work and maintain, develop and be able to face changes in the workplace, when laid off or wanting to get another job they can easily return to the world of work in the future [5].

Employability skills can mediate graduates' work readiness. Teamwork, innovation, communication and collaboration included in employability skills are the main things to be developed so that graduates have work readiness according to industry needs [13]. The industrial era 4.0 requires employability skills as provisions for entering the world of work. Several components related to employability skills such as critical thinking, adaptation, problem solving, communication and technical skills are really needed in industry 4.0 [14]. An important point that must be considered in providing graduates is employability skills. Supported by previous research conducted by Islam in 2022, it shows that there is a relationship between employability skills and work readiness [14].

Students' mastery of work skills will certainly help them work, stay in work and get a better career compared to individuals who do not master work skills. Work ability can determine a person's success in carrying out their work. Vocational High Schools must train work skills so that their graduates can be helped by their work performance with these skills. Vocational school graduates do not have the ability to compete in job competition without these skills. By mastering work skills, vocational school graduates' ability to compete in the industrial world will be higher and a brighter future career can be obtained [3]. The opinion is supported that employability also includes the possession of skills, attributes, attitudes and competencies to obtain and survive in the job market [15]

3 Research Approach

Quantitative research method with explanatory research type. The population is 195 Yogyakarta Industrial Vocational School students, with a sample of 60 students. The sampling technique is simple random sampling. The data collection method is a questionnaire instrument with two scales, namely the employability skills scale and the career maturity scale. Data validity uses content validity by expert validators, as well as validity testing using the product moment correlation formula. Based on the results of the employability skills scale validity test, five of the 40 statement items are invalid. Test the validity of the career maturity scale, five statements out of 38 statements are invalid. After elimination, these invalid statements were not included in the research. The reliability test obtained a Cronbach's Alpha value for the employability skills scale of 0.883 and the career maturity scale of 0.917. Data analysis uses simple linear regression

4 Conclusions

Based on the results of the research discussion presented above, it can be concluded that the employability skills of Yogyakarta Industrial Vocational School students are mostly in the medium category, 29 students (48.3%) and high, 26 students (43.3%). The career maturity of Yogyakarta Industrial Vocational School students is mostly high with 27 students (45%) and the medium group with 26 students (43.3%). Employability skills have a significant effect on career maturity in students at Yogyakarta Industrial Vocational School (p=0.000) with a regression coefficient of 0.822 and an effective contribution of 42%. Researchers realize that this research is not free from limitations. There are several limitations in this research, including the following: (1) the respondents in this research were limited to only being sampled from one level; (2) research data is collected on a scale without assistance when filling it in, so that the respondent's answer choices may not be appropriate

References

- A. Wearring, H. Le, R. Wilson, and R. Arambewela, "The international student's experience: An exploratory study of students from Vietnam." 2014. [Online]. Available: http://iejcomparative.org
- B.P.S., "Februari 2020: Tingkat Pengangguran Terbuka (TPT) sebesar 4,99 persen."
 2020. [Online]. Available: https://www.bps.go.id/pressrelease/2020/05/05/1672/februari-2020--tingkatpengangguran-terbuka--tpt--sebesar-4-99-persen.html.
- 3. A. S. Y. Prabowo, A. Pajarini, D. W., C. R.Z., A. P.D.D., and S.A., "Development of Employability Skills of Vocational School Students in Bogor, Indonesia," *Jurnal Pendidikan Indonesia Gemilang*, vol. 3, no. 1, 2023.
- Hardiman, "Analisis Tingkat Employability Skills Siswa Sekolah Menengah Kejuruan (SMK) di Makassar Pada Era Revolusi Industri 4.0," S2 thesis, Universitas Negeri Makassar, 2021.
- 5. S. Munadi, J. Widarto, Y. M.A., R. N., and H. F., *Employability Skills Lulusan SMK dan Relevansinya terhadap Kebutuhan Dunia Kerja*. Yogyakarta: UNY Press, 2018.
- S. Amiruddin and Irmayanti, "Mengembangkan Employability Skills Siswa SMK Melalui Project Based Learning," in *Seminar Nasional Fakultas Teknik Universitas* Negeri Makassar, 2023.
- 7. D. A. W. Safitri and W. Indianti, "Peran Moderasi Self-Esteem Pada Hubungan Employability Skills Dan Adaptabilitas Karier Siswa SMK," *Jurnal Psikologi Sains dan Profesi (Journal Psychology of Science and Profession*, vol. 5, no. 2, 2023.
- 8. S. Lindawati, D. P. Lubis, and A. Fatchiya, "Pengaruh Komunikasi Siswa SMK dengan Orang Tua, Guru, dan Teman Sebaya terhadap Kematangan Kariernya," *Jurnal Komunikasi Pembangunan*, vol. 20, no. 02, 2022.
- [L. L. Hasibun and M. Irawan, "Profil Kematangan Karier Siswa Kelas XI SMA Negeri 15 Medan dan Implikasinya Terhadap Layanan Bimbingan dan Konseling Tahun Ajaran 2017/2018," *Journal Indonesia Counseling and Psychology*, vol. 1, no. 1, pp. 27–33, 2020.
- [D. N. Marpaung and N. Yulandari, "Kematangan Karier Siswa Smu Banda Aceh Ditinjau Dari Jenis Kelamin Dan Jenis Sekolah," *Psikoislamedia: Jurnal Psikologi*, vol. 1, no. 2, pp. 311–324, 2017, doi: 10.22373/psikoislamedia.
- 11. V. Rusmania, I. C. Chalik, and Herdi, "Gambaran Kematangan Karir Siswa Di Smk Musik Perguruan 'Cikini,'" *Insight Jurnal Bimbingan Konseling*, vol. 3, no. 2, 2015.
- 12. N. B. Zakaria, N. N. Ismail, and A. Ana, "The Relationship between Employability Skill and Career Choices among Vocational Skill Students," *Invotec*, vol. XII, no. 2, 2016.
- E. Tanius, S. Susah, and B., "Employability Skill Readiness among Business' Students," *International Journal of Science and Research*, vol. 4, no. 8, pp. 511–516, 2015.
- 14. M. Islam and A., "Industry 4.0: Skill set for employability," *Social Sciences & Humanities Open*, vol. 6, 2022.
- 15. C. Melinda, N. Ferreira, and I. L. Potgieter, "Assessing Employability Capacities and Career Adaptability in a Sample of Human Resource Professionals," *South African*

Journal of Human Resource Management, vol. 13, no. 1, pp. 1–9, 2015, doi: 10.4102/sajhrm.v13i1.682.

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