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Higher Education Graduates' Perceived Employability in Indonesia: Careeredge Development Model

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ABSTRACT

The lack of empirical research concerning graduate employability, particularly within the Indonesian context, has been evident, and the availability of diagnostic tools in this field is considerably limited. This research aims to investigate the factor structure of higher education graduates' perceived employability by utilizing the CareerEDGE development model proposed by Pool and Sewel. The research is carried out among both current undergraduate students and alumni of a higher education institution in Indonesia. A total of 223 individuals are included in the data collection process. The collected data was analyzed using reliability analysis, exploratory factor analysis, and confirmatory factor analysis. SPSS and AMOS were the statistical software employed for data processing and analysis. The findings of this study contribute to a deeper understanding of the factor structure of the perception of graduate employability and provide insights into the effectiveness of the CareerEDGE model in the Indonesian context.

Kata Kunci:
Pengembangan karier,
Kemampuan kerja,
Pendidikan yang lebih tinggi,
Alat diagnosa
Analisis faktor

SARI PATI

Terdapat hanya sedikit penelitian empiris tentang kelayakan kerja lulusan khususnya di Indonesia, dan ketersediaan alat diagnostik di bidang ini sangat terbatas. Penelitian ini bertujuan untuk mengetahui struktur faktor persepsi kelayakan kerja lulusan perguruan tinggi dengan memanfaatkan model pengembangan CareerEDGE yang diusulkan oleh Pool dan Sewel. Penelitian ini berfokus pada mahasiswa dan lulusan dari perguruan tinggi di Indonesia. Data sejumlah 223 digunakan untuk dianalisa dalam penelitian ini. Data yang dikumpulkan diolah dengan menggunakan analisis reliabilitas, analisis faktor eksplorasi, dan analisis faktor konfirmatori. Program perangkat lunak statistik yaitu SPSS dan AMOS, digunakan untuk memproses dan menganalisa data. Temuan dalam penelitian ini berkontribusi pada pemahaman yang lebih dalam terkait struktur faktor persepsi kelayakan kerja lulusan dan memberikan wawasan tentang efektivitas model CareerEDGE di Indonesia.

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INTRODUCTION

Over the past few years, Indonesia has experienced a substantial increase in the number of higher education graduates, resulting in a progressively competitive labor market. Nevertheless, the country has grappled with notable challenges in its employment landscape. According to the National Labor Force Survey conducted in February 2021, findings reveal that out of the entire workforce in Indonesia, a mere 13 percent consisted of individuals who had attained a higher education level, totaling 18,186,951 people. Within this group, there were 1,254,000 individuals classified as "openly unemployed" (Kemnaker, 2021), indicating the presence of a significant portion of educated individuals struggling to secure employment opportunities. The Covid-19 pandemic is highly likely to be one of the influential factors contributing to this situation during this period. The adverse effects of the pandemic on the employment sector have led to a rise in open unemployment as various business sectors have struggled to adapt and carry out their normal processes of goods and service production, resulting in significant challenges and disruptions (Badan Pusat Statistik, 2020; Kemnaker, 2021). Furthermore, it is undeniable that several other factors have contributed to the growth in open unemployment figures. These factors include the mismatch between higher education knowledge and skills and the needs of companies, limited access to information within communities, cultural factors, societal customs, and other relevant variables (Kemnaker, 2021).

In the current highly competitive job market, inevitably, employers seek candidates who possess not only academic knowledge but also the necessary skills, competencies, and attributes to excel in their careers (AWPA, 2013; Ergün & Şeşen, 2021). To meet these expectations, graduates need to foster the qualities sought after by these organizations. These qualities go beyond academic achievements and encompass the necessary experience, knowledge, and skills required by the labor market (Ergün & Şeşen, 2021). Consequently, higher education institutions are under growing pressure to expand the range of education beyond traditional learning resources.

Institutions of higher education are expected to play an active role in enhancing their students' abilities to effectively participate in the job market and position themselves for employment opportunities (Krouwel et al., 2020). These institutions should also contribute to fostering economic growth by not only facilitating the development of students' knowledge, understanding, and skills but also through the direct contributions that the institutions make to the advancement of society (Qenani et al., 2014). In this regard, these institutions provides an important role in facilitating the enhancement of qualities among students (Ergün & Şeşen, 2021), and investigating graduates' perceived employability is essential due to the increasing importance of preparing graduates for successful transitions into the workforce.

The Overview of Employability Theories

The topic of employability has consistently sparked ongoing discussions and garnered significant interest among academicians (Huang et al., 2022; Small et al., 2018). These discussions have yielded various definitions of employability from different perspectives, while the debate has progressively adopted a more individualistic viewpoint (Krouwel et al., 2020). One particular definition emphasizes

employability as the ability to secure and maintain fulfilling employment (Pool & Sewell, 2007), while another definition highlights employability as the ability to continuously navigate and progress within the job market, maximizing one's capabilities and realizing their full potential (Pauceanu et al., 2020). From alternative perspectives, employability is defined as a predetermined collection of desirable qualities that employers actively seek within specific industries or sectors. It is also perceived as the capability to accurately perceive and proficiently utilize one's existing attributes in a broader professional setting. Moreover, there is an awareness that employability can contribute to the perpetuation of societal advantages based on academic, cultural, and social-economic factors (Holmes, 2013). Additionally, scholars further explore employability by examining its perception through the lenses of cognitive and social psychology (Knight & Yorke, 2002) and placing emphasis on the importance of collaboration with employers (O'Regan et al., 2022).

Despite the abundance of definitions related to employability, there is a lack of empirical studies examining the perceived employability of graduates from higher education (Álvarez-González et al., 2017; Pool et al., 2014). This research gap is particularly evident in the context of Indonesia. Moreover, there is a notable lack of employability assessments specifically designed for higher education students. The existing measures may not be well-suited for the higher education setting and may fail to effectively support the progress of higher education graduates' employability (Pool et al., 2014). Therefore, to address these gaps, this research aims to investigate the factor structure of higher education graduates' perceived employability by utilizing the CareerEDGE development model proposed by Pool and Sewel (2007). The model is applicable to this research since it was designed specifically for developmental work with students at any institution of higher education. It is widely acknowledged that incorporating opportunities for higher education students to enhance their employability is an increasingly significant component of teaching and learning strategies. In this context, CareerEDGE development serves as a framework to facilitate and guide these activities (Dacre-Pool, 2020).

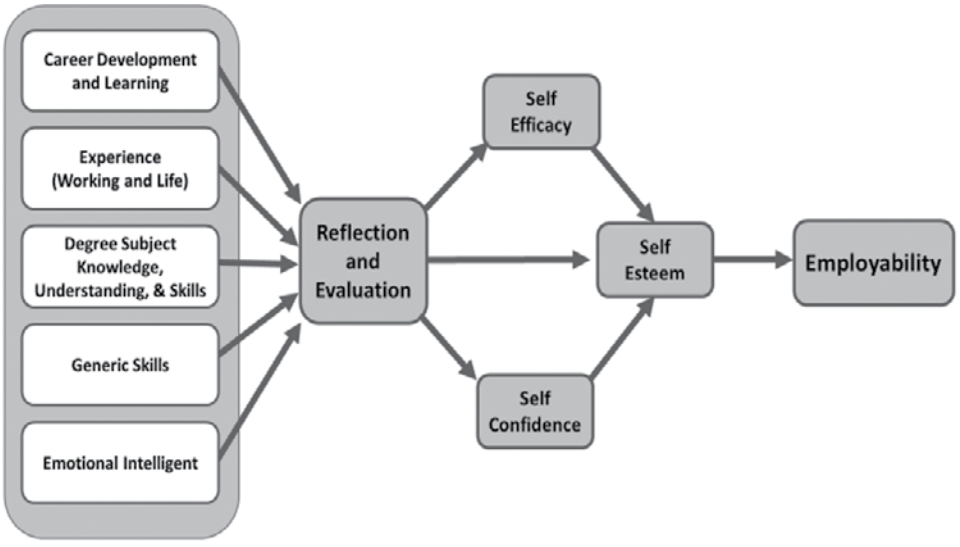

Figure 1. CareerEdge Development Framework of Graduate Employability
Source: (Pool & Sewell, 2007)

As highlighted by Pool (2017), graduates must embrace and give precedence to all dimensions encompassed within the CareerEDGE development model, acknowledging their significance and indispensability. This approach is crucial for graduates to effectively maximize their potential for employability. The dimensions depicted in the model encompass (1) career development and learning; (2) working and life experience; (3) degree subject knowledge, understanding, and skills ability; (4) generic skills; and (5) emotional intelligence (Pool & Sewell, 2007). Figure 1 presents the diagram of the CareerEdge model that outlines the fundamental constituents of employability and demonstrates the interrelationships between these different dimensions.

Career Development and Learning

According to Dacre-Pool (2020), career development and learning encompass more than just preparing students for job applications and interviews. It involves significant efforts that begin well before graduation. The scope of career development skills encompasses a wide array of competencies essential for successfully navigating one's professional journey. These skills entail various activities, including conducting thorough research on job markets, assessing potential opportunities, and gaining a comprehensive understanding of the intricacies involved in the process of job applications (Pool & Sewell, 2007). Additionally, it is equally important to emphasize the development of self-awareness, as it plays a critical role in shaping a successful life beyond the higher education setting. Moreover, guidance should be provided to graduates regarding the diverse range of opportunities available to them. These aspects assist higher education students in making informed career decisions that maximize their chances of obtaining and maintaining fulfilling occupations that align with their interests and aspirations (Dacre-Pool, 2020).

Work Experience

For students in higher education, obtaining work experience before graduation can be achieved through informal activities, such as taking up part-time employment, or through a structured framework offered by a specific curriculum, such as participating in internships (Ergün & Şeşen, 2021; Finch et al., 2013). A study conducted in the United States revealed that the acquisition of work experience through internships played a pivotal role in augmenting students' perceptions of their own employability (Qenani et al., 2014). Similarly, in a pilot study conducted in the UK, which involved 233 employers from organizations of varying sizes (including small, medium, and large), it was found that both small and large organizations regarded work experience as an essential dimension of graduate employability (Archer et al., 2008). Hence, working experience holds significance and relevance to future career growth.

Knowledge, Understanding and Skills Ability

The observed decline in employability rates in many countries can be attributed to the mismatch between the knowledge and skills possessed by graduates and the evolving demands of the market. This social phenomenon extends beyond Asia and is also prevalent in other regions where graduates of higher education face uncertain employment prospects (Jonbekova, 2015). This notion aligns with Hillage and Pollard's (1998) proposition that the skills, knowledge, and attitudes individuals have, as well as their

ability to successfully present and leverage these attributes to prospective companies or recruiters, significantly influence their acceptance in the labor market in which they seek employment (Rothwell & Rothwell, 2017).

Generic Skills

In addition to career development and learning, it is crucial to provide students in higher education with opportunities to foster their generic skills, as emphasized by Dacre-Pool (2020). Generic skills have the capacity to assist individuals regardless of their academic background, as they can be transferred and applied in diverse environments, including both educational and professional settings (Jiang et al., 2023).

Emotional Intelligence

In today's job market, many employers incorporate emotional intelligence (EI) as a criteria in employment descriptions and candidate profiles (Dacre-Pool, 2020). Emotional intelligence encompasses an individual's capacity to effectively manage their emotions, demonstrate strong determination, and exhibit resilience when confronted with challenges. The term is also strongly associated with personal accomplishments and successes (Inveneo Pitan & Atiku, 2017; Jiang et al., 2023). Pool (2017) further suggests that the inclusion of activities that facilitate the enhancement of students' understanding, knowledge, and skills as well as their self-efficacy concerning EI is crucial, as it fosters the development of emotional skills and should be regarded as a fundamental aspect for universities to integrate into their curricula.

The Career EDGE model emphasizes that the attainment of these dimensions is crucial for individual development and advancement (Pool, 2017). Through processes like self-reflection and evaluation, employees can assess and enhance their own capabilities, eventually leading to the cultivation of self-efficacy and self-confidence, which are integral components of self-esteem (Ayala Calvo & Manzano García, 2021; Jiang et al., 2023). In essence, the dimensions within the model have a direct impact on an individual's self-efficacy, self-confidence, and self-esteem, subsequently influencing their employability. Therefore, the interconnectedness and interplay of these dimensions play a crucial role in shaping the overall framework of employability.

METHODS

The purpose of this study is to assess the factor structure associated with the perceived employability of graduates in higher education, utilizing the CareerEDGE development model as a framework for evaluation. In order to delve into the aspects that influence the perceived employability of graduates within the realm of higher education, this investigation adopts a quantitative research approach. The research specifically focused on higher education institutions in Indonesia and chose the Indonesia International Institute for Life Sciences as the institution to carry out the study. The research targeted undergraduate students and alumni of the institution who fell within the age range of 16 to 26 years.

The principal approach for data collection in this research involves the dissemination of questionnaires to the designated sample. The questionnaire is designed to gather relevant information regarding the participants' perceptions of employability. To ensure widespread participation and efficient data collection, the questionnaires are distributed electronically through email and personal

messages. Google Forms is utilized as the platform for administering the questionnaire, allowing for convenient and organized data collection. This method enables the research team to reach a larger number of participants efficiently (Malhotra et al., 2020). To process the data and conduct statistical analysis, statistical software such as Analysis of Moment Structures (AMOS) and Statistical Package for the Social Sciences (SPSS) is utilized. These software programs offer advanced features and functionalities for data computation, factor analysis, and model validation.

The collected data from the questionnaires is then subjected to data analysis using various statistical techniques. The initial stage of the exploratory factor analysis (EFA) involved identifying the number of latent factors present in the underlying data (Preacher et al., 2013). One of the methods used to identify latent factors is the Kaiser criterion. The Kaiser criterion, also known as the eigenvalue-greater-than-one rule, is frequently employed to determine whether a factor should be retained. In this regard, the eigenvalues quantify the extent to which a factor accounts for the variability in a set of variables that have undergone factor analysis (Beavers et al., 2013; Kaiser, 1960).

Nevertheless, reliance on the Kaiser criterion may lead to imprecise EFA models that entail a considerable loss of variance (Velicer & Jackson, 1990). To overcome this drawback, this research employed a scree plot to visually depict the suggested variables and their corresponding eigenvalues. This graphical representation allowed researchers to observe a gradual decline in eigenvalues, enabling them to identify a natural threshold for the purpose of finding the appropriate number of retained variables (Beavers et al., 2013; Cattell, 1966). In the context of the substantial reduction in total variance explained by additional factors, only those factors that collectively constituted over 95 percent of the total variance were retained. In addition, factors with eigenvalues less than 0.5 were omitted from further consideration (Feng et al., 2017).

For the purpose of determining whether or not the data set was appropriate for EFA, a Kaiser-Meyer-Olkin (KMO) test was carried out in this research. Greater values of the Kaiser-Maier-Olkin (KMO) statistic indicate satisfactory sampling for each factor in the model, with values exceeding 0.90 considered marvelous and 0.60 considered moderate (Beavers et al., 2013). Additionally, other researchers propose a KMO threshold greater than 0.5 as an acceptable criterion (Sadick & Issa, 2017; Shammi et al., 2020). Subsequently, this research employed Bartlett's test of sphericity to assess the adequacy of the correlation among variables with $p < 0.05$ (Pett et al., 2003). Then, factor rotations were executed with the aim of streamlining the solution and generating an accurate representation of the latent factors (Feng et al., 2017). In this research, the researchers employed SPSS, a widely recognized software tool utilized for conducting exploratory factor analysis (Watkins, 2021).

Reliability analysis is conducted to assess the data's consistency and reliability. Cronbach's alpha was calculated to determine the EFA model's reliability (Feng et al., 2017). In social science research, Cronbach's alpha is extensively used as a preferred indicator of scale reliability (Wang & Wang, 2019). It is a measurement of each factor's internal consistency, indicating the degree of association among the items within that factor (Sekaran & Bougie, 2016). To establish

a reliable model, it was necessary to have a Cronbach's alpha greater than or equal to 0.70 and a minimum of two variables per factor (Sekaran & Bougie, 2016).

Then, exploratory factor analysis (EFA) is utilized to ascertain the latent factor structure of a measuring instrument. EFA is a multivariate statistical technique that seeks to identify a minimum number of latent variables, factors, or constructs that describe the covariance among the observed variables (Watkins, 2018). In this research, the method is employed to identify and explore the underlying factors related to employability.

After an acceptable EFA model is produced, confirmatory factor analysis (CFA) is employed to evaluate the comprehensive adequacy of the entire measurement model and to acquire the ultimate estimations of the parameters within the measurement model (Gatignon, 2013). In this research, a CFA was carried out in order to validate the identified factors and evaluate their fit with the CareerEDGE development model. In this sense, this research employed goodness of fit (GOF) statistics to assess whether the solution derived from the sample adequately matched the data obtained from the validation sample. There are rules of thumb regarding acceptable levels of GOF in statistical modeling (Marsh et al., 2020). The $\chi 2$ index, which examines the hypothesis of an ideal fit to the data, should strive to be minimized as much as possible (Tabachnick et al., 2019). A Root Mean Square Error of Approximation (RMSEA) value is commonly interpreted in the following manner:

In addition, Marsh et al. (2020) recommend that the comparative fit index (CFI) should exceed 0.90 to indicate a satisfactory fit. Similarly, a higher NFI with values above 0.9 typically indicates an acceptable level of fit.

RESULTS AND DISCUSSION

Throughout the course of this research investigation, data was gathered from a combined sample of undergraduate students and alumni, resulting in the successful completion of the questionnaire by a total of 223 participants. The majority of the participants, who accounted for 38.57 percent of the total sample, were between the ages of 21 and 22. A set of 26 questions was administered to the respondents for assessment. The collected data underwent various statistical analyses, including reliability analysis, exploratory factor analysis, and confirmatory factor analysis. The primary outcomes of these analyses are presented succinctly below, along with their associated implications.

1. Determining values and model adequacy

In order to begin the process of evaluating the data for this research, the first step was to conduct an evaluation of the data using the Kaiser criteria. The results of a principal component analysis carried out on the datasets from undergraduate revealed the existence of six components each of whose eigenvalues was larger than the value of 1 (8.44; 1.95; 1.55; 1.51; 1.38; 1.25). The data that were calculated for alumni datasets also resulted in values larger than 1 (6.27; 2.66; 2.13; 1.66; 1.48; 1.37; 1.22; 1.05).

Table 1. A Root Mean Square Error of Approximation (RMSEA)

	Poor fit	Mediocre	Fair fir	Good fit	Perfect fit
RMSEA	>0.10	0.08 – 0.10	0.05 – 0.08	<0.05	0

Source: (Browne & Cudeck, 1992)

This serves as a reliable guideline for determining the appropriate number of factors to extract (Henson & Roberts, 2006). Furthermore, the scree plot graph confirmed the existence of six components that had eigenvalues surpassing the value of 1, as shown in Figure 2.

Subsequently, the data were subjected to analysis utilizing the rotation method. The purpose of the rotation method was to streamline the factor loadings by maximizing their values. The results of this analysis revealed that within the undergraduate data, there were six factors that attributed for 61.86 percent of the cumulative

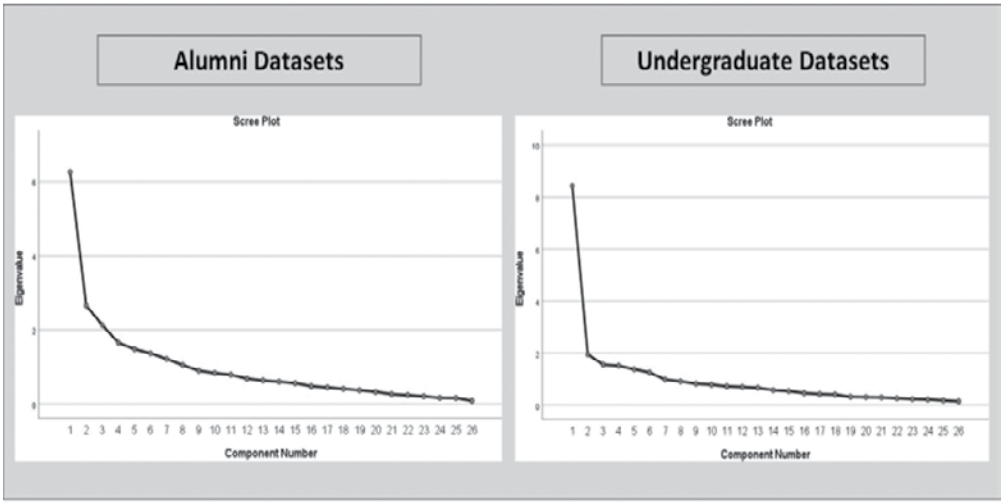

Figure 2. The scree plot diagram of undergraduate and alumni datasets

The evaluation of the Kaiser-Maier-Olkin (KMO) statistic and Bartlett's sphericity tests constituted the next stage in the data analysis for this research. The findings revealed that KMO values for the undergraduate and alumni datasets exceeded the recommended threshold of 0.50, reaching 0.84 and 0.69, respectively, indicating greater adequacy. Additionally, the significance of Bartlett's sphericity test at a threshold of $p < 0.01$, confirmed that the datasets in this research were suitable for exploratory factor analysis (EFA).

variation. In the case of the alumni data, eight components accounted for a cumulative variance of 68.59 percent.

2. Reliability Analysis

Following the preceding phase, it was necessary to evaluate the reliability analysis. In the undergraduate data, the first reliability assessment of the six subcomponents yielded the values shown in Table 3. However, modifications were implemented based on the findings from Cronbach's alpha analysis, and thus resulted in the elimination of a subscale, factor 6.

Table 2. Results of the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

		Undergraduate data	Alumni data
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.840	0.688
Bartlett's Test of Sphericity	Approx. Chi-Aquare	1609.632	930.961
	df	325	325
	Sig.	<0.001	<0.001

Table 3. Reliability test for undergraduates' datasets

Result:	1	2	3	4	5	6
	0.882	0.800	0.678	0.678	0.734	0.734

Similarly, for the alumni data, the reliability assessment of the eight subscales produced the coefficients as shown in Table 4. Adjustments were also made for the alumni data, which resulted in the elimination of three components from the subscales: factors 6, 7, and 8.

Table 4. Reliability test for alumni' datasets

Result:	1	2	3	4	5	6	7	8
	0.837	0.723	0.717	0.733	0.612	0.571	0.571	0.50

the Cronbach's alpha coefficients were examined to ascertain the reliability of the scales. The results indicated values exceeding 0.70, thus confirming reliability in this research (Surucu & Maslakci, 2020). After conducting adjustments using Cronbach's alpha, the outcomes of EFA and CFA for the undergraduate data are presented in Table 5, while the results for the alumni data can be found in Table 6.

Table 5. Factor loadings of EFA and CFA for undergraduates

Items	Questions	EFA	CFA
Career development and learning			
20	I know the types of job that suit my personality	0.821	0.70
21	Other than money, I know what I would like to have in my professional life.	0.813	0.74
17	I know what I want to do when I complete my higher education	0.783	0.81
18	I have the knowledge and understanding required to successfully obtain the desired employment I seek.	0.779	0.88
19	I know the appropriate sources to access information regarding the careers that capture my interest	0.602	0.69
26	I am able to explain my experience's worth to a potential employer	0.525	0.57
Working and life experience			
25	I have extensive work-related experience	0.743	0.59
22	I am satisfied with my numerical proficiency	0.663	0.61
24	I use information and communication technologies (ICT) with ease.	0.641	0.58
23	I am good at solving problems	0.559	0.59
Knowledge, skills and understanding ability			
12	I manage my time effectively	0.812	0.71
15	I have good planning and organisation skills	0.739	0.77
13	My academic achievement is currently satisfactory	0.629	0.63
14	My academic performance has been consistent with my professional goals	0.523	0.64
6	I can pay close attention to detail when required	0.476	0.44
16	I work well independently	0.442	0.47
Generic skills			
2	I have good communication skills	0.717	0.64
5	I am good at generating with new ideas	0.656	0.72
9	I am good at making presentations	0.534	0.72
Emotional intelligence			
10	I work well in a team	0.764	0.70
11	I am able to manage my emotions effectively	0.617	0.54
4	I am good at understanding other people feeling	0.588	0.51
1	I am able to adapt easily to new situations	0.497	0.58
3	I am good at recognizing my emotions	0.444	0.68

Table 6. Factor loadings of EFA and CFA for alumni

Items	Questions	EFA	CFA
Career development and learning			
20	I know the types of job that suit my personality	0.848	0.70
17	I know what I want to do when I complete my higher education	0.843	0.92
18	I have the knowledge and understanding required to successfully obtain the desired employment I seek.	0.725	0.78
16	I work well independently	0.626	0.55
21	Other than money, I know what I would like to have in my professional life.	0.620	0.55
19	I know the appropriate sources to access information regarding the careers that capture my interest	0.509	0.59
Working and Life Experience			
26	I am able to explain my experience's worth to a potential employer	0.781	0.73
25	I have extensive work-related experience	0.765	0.75
Knowledge, skills and understanding Ability			
14	My academic performance has been consistent with my professional goals	0.869	0.85
13	My academic achievement is currently satisfactory	0.787	0.76
15	I have good planning and organisation skills	0.568	0.48
12	I manage my time effectively	0.491	0.43
Generic Skills			
22	I am satisfied with my numerical proficiency	0.730	0.60
23	I am good at solving problems	0.576	0.77
3	I am good at recognizing my emotions	0.570	0.40
Emotional intelligence			
2	I have good communication skills	0.816	0.70
1	I am able to adapt easily to new situations	0.624	0.75
4	I am good at understanding other people feeling	0.455	0.60

3. Confirmatory Factor Analysis

Following the examination of the EFA outcomes and their adjustment with Cronbach's alpha, the data underwent CFA to validate the identified factors using model fit indices. The software tool Amos 26 was employed to carry out CFA for both datasets: undergraduate students and alumni. The 26-question assessment captures five-factor structures in both datasets. While the factor structure exhibits satisfactory fit in the undergraduate and alumni datasets, there were notable differences in the factors derived from the data analysis for both populations. The findings pertaining to the model fit or the chi-square goodness of fit (GOF) for the undergraduate and alumni datasets are shown in Table 7.

Table 7. The model fits for undergraduates and alumni datasets

Datasets	$\chi 2$ (df=207)	p	CMIN	RMSEA	CFI	NFI
Undergraduate	189.910	p<0.797	0.917	0.000	1	0.879
Alumni	89.010	p<0.776	0.890	0.000	1	0.865

According to the rules of thumb, the fit indices suggested that the solution derived from the sample closely matched the validation data, as indicated by the low $\chi 2$ index. The RMSEA values for both undergraduate and alumni data were equal to 0, indicating a perfect fit. Additionally, the CFI values for both datasets exceeded 0.90, which is considered acceptable. However, the NFI values were below 0.90 for both undergraduate (0.879) and alumni (0.865) data, suggesting a slightly lower fit. These model fit indices suggested satisfactory outcomes in accordance with the general rule of thumb, with the exception of the NFI index. Therefore, the derived factor structure demonstrates acceptable fit.

MANAGERIAL IMPLICATION

The findings from both exploratory and confirmatory factor analyses revealed that the obtained factor structure exhibits an acceptable level of fit, indicating that the measure used to assess perceived employability exhibited acceptable psychometric properties (Pool et al., 2014).

The diagnostic tool utilized in this study served a dual purpose as both a developmental instrument and a means to engage students in introspection regarding their employability. It facilitated the identification of strengths and areas for improvement. Although the tool relies on self-reported data, Dacre-Pool (2020) proposed that prior research shows that self-perceptions frequently coincide with actual behaviors. Consequently, actively engaging with their employability and taking proactive measures to address areas of concern can empower higher education students and graduates to maximize their abilities, unlock their full potential, cultivate personal resilience (Dacre-Pool, 2020), and ultimately enhance their prospects of securing graduate employment (Pool et al., 2014).

This research offers higher educational institutions a deeper insight into students' perspectives regarding their own employability capabilities. The self-assessment questionnaire utilized as a measurement tool enables the evaluation of whether the programs offered by higher educational institutions effectively enhance students' awareness of employability. Understanding the factors that impact graduate employability enables educational institutions, policymakers, and stakeholders to identify areas for improvement in curriculum development, career services, and support systems. Furthermore, studying graduate employability helps bridge the gap between academia and industry, ensuring that graduates are equipped with the skills and attributes demanded by employers, ultimately enhancing their prospects for meaningful employment and contributing to economic growth (Qenani et al., 2014).

CONCLUSION

This research provides a significant contribution to the field of higher education by emphasizing the unique factor structure of the CareerEDGE development employability model proposed by Pool and Sewel (2007). The model was implemented for both undergraduate students and alumni of a higher education institution in Jakarta, Indonesia. In addition, the study incorporated a 26-item employability development assessment that encompassed five dimensions, as recommended by Pool et al. (2014). The findings presented in this research offer a valuable contribution for future scholars aiming to enhance their comprehension of the factor structure of employability using the

CareerEDGE development model, particularly within the context of Indonesia.

Given that the current research focused solely on a single higher education institution and a specific time period, forthcoming research endeavors should determine the degree of generalizability of the current findings. Additional research studies are needed to assess whether comparable outcomes would emerge from diverse samples. It is recommended that future investigations explore the effectiveness of the CareerEdge development model in explaining graduates' perceived employability across various timeframes, encompassing a more extensive range of samples, and involving multiple universities from diverse regions in Indonesia. By obtaining extensive sample coverage from wider higher education institutions in Indonesia, the research has the potential to yield more conclusive and improved findings.

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