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Adaptation and Validation of General Self-Efficacy Scale for Higher Education

Fadila Dian Wardani[1], Damajanti Kusuma Dewi[1*], Miftakhul Jannah[1], Riza Noviana Khoirunnisa[1], Hanandita Veda Saphira[2]
[1] Surabaya State University, Surabaya, Indonesia
[2] University of Wollongong, Wollongong, Australia

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ABSTRACT

Objective: Self-efficacy is a psychological factor that plays a crucial role in students' academic success. However, its measurement instruments need to be adapted to the cultural characteristics and local population. This study aims to adapt and validate the General Self-Efficacy Scale (GSES) within the context of higher education in Indonesia. **Method:** This study involved 748 third-semester students from various faculties at the State University of Surabaya. The adaptation process followed the five stages proposed by Beaton et al. (2000), which include translation, synthesis, back translation, expert committee review, and pretesting. The validation test was conducted using Confirmatory Factor Analysis (CFA). **Results:** After a successful adaptation process, the scale demonstrated high reliability, ranging from 0.760 to 0.801. The CFA results showed a Kaiser-Meyer-Olkin (KMO) score of 0.949, indicating that the data met the requirements for factor analysis. Strong factor loadings (0.752–0.810) were observed for each item, confirming their alignment with the self-efficacy construct. Cross-cultural comparisons with countries such as Germany, Spain, and China further affirmed the validity of the GSES in the Indonesian context, despite minor differences in certain items. **Novelty:** The cultural adaptation of the GSES for higher education in Indonesia provides a valid and reliable measurement tool, making this study a novel contribution to the field.

INTRODUCTION

Every student encounter various challenges throughout their higher education journey, whether related to assignments, exams, or other academic demands. Their responses to these challenges vary, depending on their belief in their own abilities. When faced with difficulties, students assess themselves—determining whether they feel capable of overcoming them or instead doubting their own capacity. Self-efficacy was first introduced by Bandura (1977) as an individual's belief in their capacity to regulate and execute the actions necessary to achieve specific goals. This belief plays a crucial role in shaping how individuals think and act when facing various situations. In the context of higher education, self-efficacy is particularly important, as students' ability to cope with academic pressure, complete assignments, and adapt to evolving learning environments is often influenced by their confidence in their own skills (Bhati & Sethy, 2022; Maharani & Purnama, 2023). Evidence suggests that low self-efficacy can be a significant barrier preventing students from reaching their full potential, leading to difficulties in managing stress, low learning motivation, and academic failure (Sari & Budiyani, 2020; Honicke et al., 2023; Liu et al., 2023).

Self-efficacy plays a significant role in supporting students' academic and personal development (Muchtar et al., 2023). In higher education, students face challenges that

require strong self-confidence, such as meeting tight deadlines, overcoming emotional obstacles, and collaborating in interdisciplinary teams (Ahola et al., 2023). Students with high self-efficacy often demonstrate increased confidence, greater motivation, and resilience in overcoming challenges (Moussa, 2023; Figueiredo et al., 2024). Conversely, those with low self-efficacy tend to struggle with completing tasks, experience high levels of stress, and lack motivation (Fior et al., 2022; Meng & Zhang, 2023). Assessing self-efficacy is essential for understanding students' psychological conditions. By identifying students' self-efficacy levels, higher education institutions can design intervention programs to enhance their academic performance (Al-Qadri et al., 2024). Given the critical role of self-efficacy in student success, efforts should be made to monitor and strengthen it within higher education (Liu et al., 2023; Louis et al., 2024). One effective way to assess students' self-efficacy is through regular evaluations. Therefore, a standardized self-efficacy measurement instrument is necessary.

Various measurement tools have been developed to assess self-efficacy, ranging from scales tailored to specific domains to more general instruments. These include the Academic Self-Efficacy Scale (Darmayanti et al., 2021; Ifdil et al., 2019), the Social Self-Efficacy Scale (Salado et al., 2022; Zhao et al., 2024), the Work Self-Efficacy Scale (Gjengedal et al., 2021; Tramontano et al., 2021), and the General Self-Efficacy Scale (Farnia et al., 2020). Due to its adaptability across various situations, the General Self-Efficacy Scale (GSES) is among the most widely used instruments. The GSES is designed to measure an individual's confidence in their ability to handle challenging situations and obstacles. This instrument has been translated and validated in multiple countries, making it one of the most utilized scales. The GSES allows researchers to obtain a general overview of an individual's self-efficacy without being limited to a specific context (Brunes et al., 2021).

Although the GSES has been widely developed, each population possesses unique characteristics that influence the interpretation and validity of its measurements. Several studies have indicated that scale adaptation is necessary to ensure its relevance to specific populations (Putra et al., 2019; Lidya et al., 2024). The aim of this study is to adapt and validate the GSES using Confirmatory Factor Analysis (CFA) within the framework of higher education in Indonesia. This research is expected to advance psychometric tools in Indonesia and enhance understanding of students' self-efficacy by creating a valid and reliable instrument.

RESEARCH METHOD

This study employs a quantitative approach, using primary data collected through questionnaire distribution. A total of 748 third-semester students from the State University of Surabaya participated in the study. The inclusion criteria consisted of students who were willing to complete all tests and assessments, while the exclusion criteria applied to those who did not complete the questionnaire. Ethical considerations were addressed in this study, with informed consent obtained from all respondents before participation. All participants signed a consent form as proof of voluntary participation. Details of the study subjects based on gender and faculty are presented in Table 1 and Table 2.

Table 1. Distribution of subjects by gender.

Gender	Frequency	Valid Percent	Cumulative Percent
Female	489	65.37	65.37
Male	259	34.62	100.00
Total	748	100.00	

Table 2. Distribution of subjects by faculty.

Faculty	Frequency	Valid Percent	Cumulative Percent
Psychology	235	31.41	31.41
Engineering	123	16.44	47.86
Languages and Arts	91	12.16	60.02
Economics and Business	85	11.36	71.39
Mathematics and Natural Sciences	81	10.82	82.21
Social and Political Sciences	46	6.14	88.36
Vocational	41	5.48	93.85
Sports and Health Sciences	37	4.94	98.79
Education	7	0.93	99.73
Law	2	0.26	100.00
Total	748	100.00	

The GSES developed by Schwarzer & Jerusalem (1995) was used as the instrument in this study. This instrument was selected due to its numerous advantages, including its widespread use across various countries and research contexts, its high item validity, and its relatively small number of items—consisting of only 10 questions. GSES is a four-point Likert scale ranging from "strongly agree" to "strongly disagree" to measure general self-efficacy levels. The practicality and ease of administration of this scale make it an ideal choice for research involving large populations, such as university students. Additionally, this scale has been translated into multiple languages and culturally adapted, demonstrating its flexibility across diverse populations. The examples instrument used in this study is presented in Table 3.

Table 3. Examples of instrument.

Items	Very Disagree	Disagree	Agree	Very Agree
I can solve all problems, if I put effort in it.	1	2	3	4
If my desire hindered by others, then I will find another way to still achieve that desire.	1	2	3	4

The developers of the GSES, Jerusalem and Schwarzer, permitted the adaptation of the study. The adaptation process involved translation and cultural contextualization to ensure the instrument's relevance to the characteristics of the research subjects. The professionals involved were selected based on specific criteria, including a background in psychology, fluency in both Indonesian and English, cultural awareness, and experience with psychological assessments to ensure the quality of the adaptation. This

adaptation process followed the stages developed by Beaton et al. (2000). The first stage is translation, in which the original instrument is translated into the target language by two independent translators who are proficient in both languages and have a background in psychology. Next is synthesis, where the two translations are combined to produce a more comprehensive version. The following stage is back translation, in which the synthesized version is translated back into the original language by two different translators who have no prior knowledge of the original instrument. This process aims to ensure that the meaning of the instrument remains unchanged throughout the translation process.

After that, an expert committee review is conducted, in which a team of experts, including psychologists and linguists, evaluates the back-translated version and adjusts it to the cultural context while ensuring it remains true to the original instrument's intent. The final stage is pretesting, where the adapted instrument is tested on a small sample from the target population. Respondents are asked to provide feedback on clarity, readability, and their understanding of each item. The results of the pretesting phase are used to make final revisions before the instrument is ready for use in the main study. The adaptation process flowchart can be seen in Figure 1.

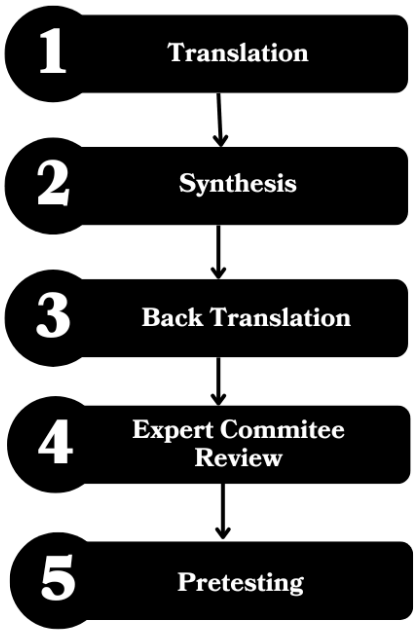

Figure 1. Adaptation flowchart.

The reliability and validity of the scale were reassessed to ensure that the measurement results accurately reflect the actual condition of the student group. The scale's reliability was evaluated using Cronbach's alpha coefficient, while its validity was tested through the CFA method. CFA was chosen to identify factors based on established theories and concepts, as well as to determine which variables belong to each constructed factor (Verdian, 2019). The SPSS statistical software was used to analyze and process the collected data. CFA produced several key outputs, including the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test, Communalities Test, and Component Matrix (Faisal et al., 2023). First, the KMO and Bartlett's Test were used to assess sample adequacy. The KMO index compares the magnitude of observed correlation coefficients with partial correlation coefficients, where a KMO value greater than 0.50 is required for factor analysis to proceed. Additionally, the Bartlett's Test of Sphericity was applied to

determine the degree of interdependence among variables and to ensure that the data were suitable for factorization. For factor analysis to be conducted, the significance level in Bartlett's test must be less than 0.05.

Next, the Communalities Test is used to determine whether at least 50.00% of the variance in the original variable data can be explained. The higher the communalities value, the stronger the relationship between the examined indicators and the resulting factor. Finally, the Component Matrix displays the coefficients that represent the standardized variables, referred to as factors. The factor loading coefficients indicate the correlation between the original variables and their respective factors, where higher correlation values suggest a stronger relationship. Variables with factor loadings greater than 0.5 are considered to have a strong contribution to the formed factor. The confirmatory factor analysis flowchart can be seen in Figure 2.

Figure 2. CFA flowchart.

RESULTS AND DISCUSSION

Results

Cultural and content adjustments in the Indonesian version of the GSES were made due to differences in population size, culture, and research context. Utari & Lestari (2022) stated that cultural adaptation must be accompanied by content adjustments to align with the cultural context of the research subjects. Following the adaptation stages proposed by Beaton et al. (2000), the process began with translation by two independent translators into the target language, Indonesian. This was followed by a synthesis stage, where the two translations were combined to produce a more comprehensive version, which can be seen in Table 4, Translation 1 (Indonesian Version) column. The next stage is back translation, in which the synthesized version is translated back into the original language, English. This translation can be seen in Table 4, Translation 2 (English Version) column. Following this, an expert committee review was conducted, where a panel of experts examined the back-translated version and adjusted it to the cultural context while ensuring that it remained true to the original instrument's intent. The purpose of this step was to ensure that the content of the translated version remained consistent with the original. The outcome of this stage was the first adaptation format, as presented in Table 4.

Table 4. GSES - The first adaptation format

No.	Original Version	Translation 1 (Indonesian Version)	Translation 2 (English Version)
1	I can always manage to solve difficult problems if I try hard enough.	*Saya selalu dapat menyelesaikan masalah yang sulit jika saya berusaha cukup keras.*	I can always solve difficult problems if I try hard enough.
2	If someone opposes me, I can find the means and ways to get what I want.	*Jika ada yang menentang saya, saya bisa menemukan cara dan jalan untuk mendapatkan apa yang saya inginkan.*	If someone opposes me, I can find ways and paths to get what I want.

No.	Original Version	Translation 1 (Indonesian Version)	Translation 2 (English Version)
3	It is easy for me to stick to my aims and accomplish my goals.	*Sangat mudah bagi saya untuk tetap berpegang teguh pada tujuan saya dan mencapai sasaran saya.*	It is very easy for me to stick to my goals and achieve my objectives.
4	I am confident that I could deal efficiently with unexpected events.	*Saya yakin bahwa saya dapat menangani kejadian-kejadian yang tidak terduga secara efisien*	I am confident that I can handle unexpected events efficiently
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	*Berkat akal sehat saya, saya tahu cara menangani situasi yang tidak terduga.*	Thanks to my resourcefulness, I know how to handle unexpected situations.
6	I can solve most problems if I invest the necessary effort.	*Saya dapat menyelesaikan sebagian besar masalah jika saya menginvestasikan upaya yang diperlukan*	I can solve most problems if I put in the necessary effort.
7	I can remain calm when facing difficulties because I can rely on my coping abilities.	*Saya bisa tetap tenang saat menghadapi kesulitan karena saya bisa mengandalkan kemampuan mengatasi masalah.*	I can stay calm when facing difficulties because I can rely on my problem-solving abilities.
8	When I am confronted with a problem, I find several solutions.	*Ketika saya dihadapkan pada suatu masalah, saya biasanya dapat menemukan beberapa solusi.*	When I face a problem, I find several solutions.
9	If I am in trouble, I usually think of a solution.	*Jika saya berada dalam masalah, saya biasanya bisa memikirkan solusinya.*	If I am having difficulties, I can come up with a solution.
10	I can handle whatever comes my way.	*Saya biasanya dapat menangani apa pun yang menghadang.*	I manage whatever challenges arise.

The first translated version of the GSES was then tested on a group of students with characteristics like the research population. The results of this pilot test provided valuable insights for researchers to revise the scale based on the students' initial feedback. These revisions led to the development of the second adaptation format of the GSES, which is presented in Table 5.

Table 5. GSES - The second adaptation format.

No.	Translation 1 (Indonesian Version)	Translation 2 (English Version)	Adaptation
1	*Saya selalu dapat menyelesaikan masalah yang sulit jika saya berusaha cukup keras.*	I can always solve difficult problems if I try hard enough.	*Saya dapat menyelesaikan semua masalah, jika mau berusaha keras*
2	*Jika ada yang menentang saya, saya bisa menemukan cara dan jalan untuk mendapatkan apa yang saya inginkan.*	If someone opposes me, I can find ways and paths to get what I want.	*Jika keinginan saya terhalang oleh orang lain, maka saya akan mencari cara lain agar bisa tetap mencapai keinginan tersebut*

No.	Translation 1 (Indonesian Version)	Translation 2 (English Version)	Adaptation
3	*Sangat mudah bagi saya untuk tetap berpegang teguh pada tujuan saya dan mencapai sasaran saya.*	It is very easy for me to stick to my goals and achieve my objectives.	*Mudah bagi saya untuk tetap pada tujuan saya dan mencapai tujuan saya*
4	*Saya yakin bahwa saya dapat menangani kejadian-kejadian yang tidak terduga secara efisien*	I am confident that I can handle unexpected events efficiently	*Saya yakin bahwa saya mampu mengatasi kejadian yang tidak terduga, secara efisien*
5	*Berkat akal sehat saya, saya tahu cara menangani situasi yang tidak terduga.*	Thanks to my resourcefulness, I know how to handle unexpected situations.	*Berkat kecerdikan saya, saya tahu bagaimana menangani situasi yang tidak terduga*
6	*Saya dapat menyelesaikan sebagian besar masalah jika saya menginvestasikan upaya yang diperlukan*	I can solve most problems if I put in the necessary effort.	*Saya dapat menyelesaikan sebagian besar masalah jika saya melakukan upaya yang diperlukan*
7	*Saya bisa tetap tenang saat menghadapi kesulitan karena saya bisa mengandalkan kemampuan mengatasi masalah.*	I can stay calm when facing difficulties because I can rely on my problem-solving abilities.	*Saya dapat tetap tenang ketika menghadapi kesulitan karena saya mampu menemukan beberapa solusi*
8	*Ketika saya dihadapkan pada suatu masalah, saya biasanya dapat menemukan beberapa solusi.*	When I face a problem, I can usually find several solutions.	*Saat menghadapi masalah, saya bisa menemukan beberapa alternatif solusi*
9	*Jika saya berada dalam masalah, saya biasanya bisa memikirkan solusinya.*	If I am in difficulties, I can come up with a solution.	*Saya mampu menemukan sebuah tindakan, meskipun dalam kondisi terjepit*
10	*Saya biasanya dapat menangani apa pun yang menghadang.*	I am generally able to manage whatever challenges arise.	*Apa pun yang terjadi, saya biasanya mampu mengatasinya*

Before conducting Confirmatory Factor Analysis (CFA), the reliability of the adapted GSES was evaluated using Cronbach's Alpha coefficient. This test aimed to assess the internal consistency of the scale items, ensuring that they are reliable for measuring the intended construct. The Cronbach's Alpha test results are presented in Table 6.

Table 6. Cronbach's alpha test.

Items	Cronbach's Alpha (α)
I can solve all my problems, if I want to put in the effort	.76
If my desire is hindered by others, then I will find another way to still achieve that desire	.77
It is easy for me to stick to my goals and achieve my goals	.76
I am confident that I can cope with unexpected events, efficiently	.78
Thanks to my ingenuity, I know how to handle unexpected situations	.78
I can solve most probles if I make the necessary effort	.77
I was able to stay calm when facing difficulties because I was able to find some solutions	.78

Items	Cronbach's Alpha (α)
When I encounter a problem, I can find several alternative solutions	.80
I was able to find an action, even in a pinched condition	.77
I can solve all problems, if I want to put in the effort	.79

Based on the Cronbach's Alpha test results presented in Table 6, the Cronbach's Alpha values for each item range from 0.76 to 0.80. This indicates that each element contributes significantly to the overall reliability of the scale. A value greater than 0.60 demonstrates high internal consistency, confirming the scale's reliability (Aulia et al., 2024). Subsequently, the KMO test and Bartlett's test were conducted to determine whether the data were suitable for factor analysis. The results of the KMO and Bartlett's tests are presented in Table 7.

Table 7. KMO dan Bartlett test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.94
Bartlett's Test of Sphericity	Approx. Chi-Square	4452.01
	Df	45
	Sig	.00

Based on Table 7, the KMO value is 0.94. Factor analysis can proceed if the KMO value exceeds 0.5, as it meets the required conditions (Faisal et al., 2023). Next, a Communalities Test was conducted to determine the relationship between the examined indicators and the formed factors. The results of the Communalities Test are presented in Table 8.

Table 8. Communalities.

	Initial	Extraction
Item 1	1.00	.56
Item 2	1.00	.59
Item 3	1.00	.58
Item 4	1.00	.60
Item 5	1.00	.61
Item 6	1.00	.59
Item 7	1.00	.61
Item 8	1.00	.65
Item 9	1.00	.61
Item 10	1.00	.62

Based on Table 8, the extraction values, which indicate the percentage of variance for each item explained by the extracted components, range from 0.56 to 0.65. Since all elements have satisfactory values (> 0.50), they can be used to explain these factors (Faisal et al., 2023). Next, the Component Matrix presents the coefficients representing the standardized variables, referred to as factors. The factor loading coefficients indicate the correlation between the original variables and their respective factors, where higher correlation values suggest a stronger relationship (Cardoso et al., 2022; Cheung et al., 2024; Kassa, 2021; Oktaviyanthi & Agus, 2023). The Component Matrix is presented in Table 9.

Table 9. Component matrix.

	Component
	1
Item 1	.75

	Component
	1
Item 2	.77
Item 3	.76
Item 4	.77
Item 5	.78
Item 6	.77
Item 7	.78
Item 8	.81
Item 9	.78
Item 10	.79

Based on Table 9, each item has a factor loading value greater than 0.5, ranging from 0.75 to 0.81. This indicates a strong correlation between each item and its underlying factor (Faisal et al., 2023). Thus, each item can be considered to have good construct validity in measuring self-efficacy.

Discussion

Comparing the CFA results from this study with previous research conducted by Schwarzer et al. (1997) in Germany, Spain, and China using student participants, the coefficient values from the 10 analyzed items can be found in Table 10.

Table 10. Comparison of factor loading general self-efficacy scale with Germany, Spain, and China.

Items	Indonesia	German	Spain	China
Item 1	.75	.42	.29	.70
Item 2	.77	.48	.39	.49
Item 3	.76	.55	.38	.56
Item 4	.77	.63	.63	.81
Item 5	.78	.67	.68	.78
Item 6	.77	.75	.72	.76
Item 7	.78	.60	.73	.81
Item 8	.81	.54	.56	.62
Item 9	.78	.62	.61	.74
Item 10	.79	.52	.58	.75

The factor loadings in this study were higher than those in Germany and Spain, according to Table 10. However, some items from the Chinese study (Item 4 & Item 7) had higher factor loadings than those found in this research. Based on the results from all four countries, all GSES statements were found to be valid for measuring the general self-efficacy construct. The construct validity analysis of the adapted GSES demonstrated that the scale items exhibited a single-dimensional structure, meaning that they measured only one construct—general self-efficacy. This finding confirms that there were no discrepancies between the collected data and the underlying theoretical framework. The factor loadings of the GSES between Chinese and Indonesian students were then compared. Table 11 presents the factor loading values from both countries, along with the differences between them. These differences were calculated as the difference between the values in Indonesia and China for each GSES item. This comparison aims to identify the suitability of the measurement tool in both countries and evaluate the

relevance and validity of the GSES instrument in the context of students in Asian countries.

Table 11. Differences of factor loading general self-efficacy scale Indonesia and China.

Items	Indonesia	China	Differences
Item 1	.75	.70	.05
Item 2	.77	.49	.28
Item 3	.76	.56	.20
Item 4	.77	.81	-.04
Item 5	.78	.78	0.00
Item 6	.77	.76	.01
Item 7	.78	.81	-.03
Item 8	.81	.62	.19
Item 9	.78	.74	.04
Item 10	.79	.75	.04

The difference values, especially those close to zero in Table 11, indicate that there are no significant differences in the factor loadings of GSES among students in China and Indonesia. The highest difference was found in item 2 (0.28), suggesting a significant variation in perception or response to this item between the two countries. However, for most of the other items, the difference values are low (e.g., GSES item 5, with a deviation of 0), indicating that the factors measured by this instrument function consistently in both countries. Nevertheless, the difference in item 2 is intriguing and requires further investigation. This item may be influenced by certain cultural factors that are not fully accommodated by the GSES instrument. For example, the interpretation of the statement or the situation described in the item may vary between the two groups of students. There has yet to be a comprehensive study comparing the GSES measurement tool across various Asian countries, making this research a preliminary step in exploring this issue. Further studies can be conducted to examine culturally relevant aspects in the development of self-efficacy in Asian countries. These findings support the validity and applicability of the GSES instrument for use among students in Asian countries, including Indonesia.

CONCLUSION

Fundamental Finding: The GSES has been successfully adapted and validated within the context of higher education in Indonesia. The scale demonstrates high reliability and high validity, making it suitable for measuring self-efficacy among university students. **Implication**: These findings have practical implications for higher education institutions, enabling them to utilize GSES as a culturally relevant tool for designing intervention programs that support students' academic and personal development. **Limitation:** This study has certain limitations, including a sample restricted to a single university and a lack of in-depth exploration of cultural factors influencing item interpretation. **Future Research**: Future studies are recommended to expand the population scope, explore cultural factors more deeply, and evaluate the effectiveness of GSES in predicting academic outcomes through longitudinal studies.

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REFERENCES

Ahola, S., Malmberg, J., & Järvenoja, H. (2023). Investigating the relation of higher education students' situational self-efficacy beliefs to participation in group level regulation of learning during a collaborative task. *Cogent Education*, *10*(1), 1–17. https://doi.org/10.1080/2331186X.2022.2164241

Al-Qadri, A. H., Mouas, S., Saraa, N., & Boudouaia, A. (2024). Measuring academic self-efficacy and learning outcomes: The mediating role of university English students' academic commitment. *Asian-Pacific Journal of Second and Foreign Language Education*, *9*(1), 1–22. https://doi.org/10.1186/s40862-024-00253-5

Aulia, U., Junaidi, H., Setiawan, D., Kurnia, D., Meidatuzzzahra, D., Nirmala, I., Nadjib, H., Sari, M., Syifli, Astuti, Y., & Larasati, R. (2024). *Statistik parametrik teori dan aplikasi dengan spss*. Media Sains Indonesia.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. https://doi.org/10.1016/0146-6402(78)90002-4

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *SPINE*, *25*(24), 3186–3191. https://doi.org/10.1097/00007632-200012150-00014

Bhati, K., & Sethy, T. (2022). Self-efficacy: Theory to educational practice. *The International Journal of Indian Psychology*, *10*(1), 1-11. https://doi.org/10.25215/1001.112

Brunes, A., Hansen, M. B., & Heir, T. (2021). General self-efficacy in individuals with visual impairment compared with the general population. *PLoS ONE*, *16*(7), 1-12. https://doi.org/10.1371/journal.pone.0254043

Cardoso, A., Gabriel, M., Figueiredo, J., Oliveira, I., Rêgo, R., Silva, R., Oliveira, M., & Meirinhos, G. (2022). Trust and Loyalty in Building the Brand Relationship with the Customer: Empirical Analysis in a Retail Chain in Northern Brazil. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(3), 109-120. https://doi.org/10.3390/joitmc8030109

Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, *41*(2), 745–783. https://doi.org/10.1007/s10490-023-09871-y

Darmayanti, K. K. H., Anggraini, E., Winata, E. Y., & Mardianto, M. F. F. (2021). Confirmatory factor analysis of the academic self-efficacy scale: An indonesian version. *Jurnal Pengukuran Psikologi Dan Pendidikan Indonesia*, *10*(2), 118–132. https://doi.org/10.15408/jp3i.v10i2.19777

Faisal, M., Dinata, S., & Sari, D. (2023). Analisis komponen utama pada dinas ketenagakerjaan bagian penempatan dan perluasan kerja mencari pekerjaan menurut golongan pekerjaan. *Journal of Innovation Research and Knowledge*, *2*(12), 4561–4568. https://doi.org/https://doi.org/10.53625/jirk.v2i12.5627

Farnia, V., Asadi, R., Abdoli, N., Radmehr, F., Alikhani, M., Khodamoradi, M., Behrouz, B., & Salemi, S. (2020). Psychometric properties of the persian version of general self-efficacy scale (GSES) among substance abusers the year 2019–2020 in kermanshah city. *Clinical Epidemiology and Global Health*, *8*(3), 949–953. https://doi.org/10.1016/j.cegh.2020.03.002

Figueiredo, E., Fonseca, C., & Paiva, T. (2024). Self-efficacy and academic performance in higher education: A case study. *European Public and Social Innovation Review*, *9*, 1–16. https://doi.org/10.31637/epsir-2024-960

Fior, C. A., Polydoro, S. A. J., Pelissoni, A. M. S., Dantas, M. A., Martins, M. J., & da Silva Almeida, L. (2022). Impact of self-efficacy and academic performance in the dropout of higher education students. *Psicologia Escolar e Educacional*, *26,* 1-11. https://doi.org/10.1590/2175-353920222352l8T

Gjengedal, R. G. H., Lagerveld, S. E., Reme, S. E., Osnes, K., Sandin, K., & Hjemdal, O. (2021). The return-to-work self-efficacy questionnaire (RTW-SE): A validation study of predictive abilities and cut-off values for patients on sick leave due to anxiety or depression. *Journal of Occupational Rehabilitation*, *31*(3), 664–673. https://doi.org/10.1007/s10926-021-09957-8

Honicke, T., Broadbent, J., & Fuller-Tyszkiewicz, M. (2023). The self-efficacy and academic performance reciprocal relationship: The influence of task difficulty and baseline achievement on learner trajectory. *Higher Education Research and Development*, *42*(8), 1936–1953. https://doi.org/10.1080/07294360.2023.2197194

Ifdil, I., Bariyyah, K., Dewi, A. K., & Rangka, I. B. (2019). The college academic self-efficacy scale (CASES); An indonesian validation to measure the self-efficacy of students. *Jurnal Kajian Bimbingan Dan Konseling*, *4*(4), 115–121. https://doi.org/10.17977/um001v4i42019p115

Kassa, E. T. (2021). Factors influencing taxpayers to engage in tax evasion: evidence from Woldia City administration micro, small, and large enterprise taxpayers. *Journal of Innovation and Entrepreneurship*, *10*(1), 8-22. https://doi.org/10.1186/s13731-020-00142-4

Lidya, H., Noviana, U., Alim, S., & Setiyarini, S. (2024). Validity and reliability of the indonesian version of general self-efficacy (GSES) with disasters. *Global Health Science Group*, *5*(2), 707–716. https://doi.org/10.37287/jlh.v5i2.3762

Liu, X., Ji, X., & Zhang, Y. (2023). Trajectories of college students' general self-efficacy, the related predictors, and depression: A piecewise growth mixture modeling approach. *Heliyon*, *9*(5), 1-11. https://doi.org/10.1016/j.heliyon.2023.e15750

Louis, M. M., Hayes, D., & Jiang, M. (2024). Self-efficacy: College students and instruments. *Literature Reviews in Education and Human Services Fall 2024*, *3*(2), 35–46.

Maharani, I. A., & Purnama, I. G. A. V. (2023). The influence of self-efficacy on students' academic achievement. *Jurnal Pendidikan Bahasa Inggris Indonesia*, *11*(2), 2615–4404. https://doi.org/10.23887/jpbi.v11i2.2645

Meng, Q., & Zhang, Q. (2023). The influence of academic self-efficacy on university students' academic performance: The mediating effect of academic engagement. *Sustainability*, *15*, 1–14. https://doi.org/10.3390/su15075767

Moussa, N. M. (2023). Promoting academic achievement: The role of self-efficacy in predicting students' success in the higher education settings. *Psychological Science and Education*, *28*(2), 18–29. https://doi.org/10.17759/pse.2023280202

Muchtar, D. Y., Wahyuni, Z. I., Murniasih, F., & Rasaki, A. F. (2023). Academic self-efficacy as a predictor of college student's mental health and study progress. *TAZKIYA Journal of Psychology*, *11*(2), 132–142. https://doi.org/10.15408/tazkiya.v11i2.33531

Oktaviyanthi, R., & Agus, R. N. (2023). Evaluating Graphing Quadratic Worksheet on Visual Thinking Classification: a Confirmatory Analysis. *Infinity Journal*, *12*(2), 207–224. https://doi.org/10.22460/infinity.v12i2.p207-224

Putra, M. D. K., Rahayu, W., & Umar, J. (2019). Indonesian-language version of general self-efficacy scale-12 using bayesian confirmatory factor analysis: A construct validity testing. *Jurnal Penelitian Dan Evaluasi Pendidikan*, *23*(1), 12–25. https://doi.org/10.21831/pep.v23i1.20008

Salado, V., Díaz-Milanés, D., Luna, S., & Velo, S. (2022). Study of the psychometric properties of the social self-efficacy scale with spanish adolescents by gender, age and family socioeconomic level. *Healthcare*, *10*, 1–10. https://doi.org/10.3390/healthcare10061150

Sari, M., & Budiyani, K. (2020). Relationship between academic self-efficacy with depression to college students. *Proceeding International Conference on Psychology*, *450*.

Schwarzer, R., Bäßler, J., Kwiatek, P., Schröder, K., & Zhang, J. X. (1997). The assessment of optimistic self-beliefs: Comparison of the German, Spanish, and Chinese versions of the general self-efficacy scale. *Applied Psychology*, *46*(1), 69–88. https://doi.org/10.1111/j.1464-0597.1997.tb01096.x

Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In *Measures in health psychology: A user's portfolio*. NFER-NELSON.

Tramontano, C., Grant, C., & Clarke, C. (2021). Development and validation of the e-work self-efficacy scale to assess digital competencies in remote working. *Computers in Human Behavior Reports*, *4*, 1-11. https://doi.org/10.1016/j.chbr.2021.100129

Utari, D., & Lestari, R. (2022). Cross-cultural adaptation methods of kidscreen-27 instruments in asia: An integrative review. *Jambura: Journal of Health Science and Research*, *5*(2), 195-222. https://doi.org/10.35971/jjhsr.v5i2.18195

Verdian, E. (2019). Analisis faktor yang merupakan intensi perpindahan merek transportasi online di surabaya. *Agora*, *7*(1), 1-12.

Zhao, Y., Niu, J., Wang, Y., & Wang, P. (2024). Assessment of the psychometric properties of the perceived empathic and social self-efficacy scale in chinese adolescents. *Psychology Research and Behavior Management*, *17*, 3677–3688. https://doi.org/10.2147/PRBM.S484649

Fadila Dian Wardani
Department of Psychology Faculty of Psychology,
Surabaya State University,
Jl. Lidah Wetan, Surabaya, East Java, 60213, Indonesia
Email: fadila.21065@mhs.unesa.ac.id

***Dr. Damajanti Kusuma Dewi, S.Psi., M.Si. (Corresponding Author)**
Department of Psychology Faculty of Psychology,
Surabaya State University,
Jl. Lidah Wetan, Surabaya, East Java, 60213, Indonesia
Email: damajantikusuma@unesa.ac.id

Dr. Miftakhul Jannah, S.Psi., M.Si., Psikolog.
Department of Psychology Faculty of Psychology,
Surabaya State University,
Jl. Lidah Wetan, Surabaya, East Java, 60213, Indonesia
Email: miftakhuljannah@unesa.ac.id

Dr. Riza Noviana Khoirunnisa, S.Psi., M.Si.
Department of Psychology Faculty of Psychology,
Surabaya State University,

Jl. Lidah Wetan, Surabaya, East Java, 60213, Indonesia
Email: rizakhoirunnisa@unesa.ac.id

Hanandita Veda Saphira
Faculty of the Arts, Social Sciences and Humanities
University of Wollongong,
Northfields Ave, Wollongong NSW 2500, Australia
Email: hanandita.saphira346@uowmail.edu.au