OPEN ACCESS
Jurnal Ilmiah Ilmu Terapan Universitas Jambi
Vol. 10 No. 2. April 2026, pp. 1043-1055 DOI. 10.22437/jiituj.v10i2.54253
Research Article

INTEGRATING THE *INDUAK SAMANG-ANAK SAMANG* PHILOSOPHY INTO A PSYCHOEDUCATIONAL MODEL TO ENHANCE THE EMPLOYABILITY SKILLS OF VOCATIONAL SCHOOL STUDENTS

Yenni Elfira[1], Neviyarni[2], Afdal[1,*]

[1] Universitas Negeri Padang, Sumatera Barat, Indonesia
Corresponding author email: afdal.kons@fip.unp.ac.id

Article Info
Received: Feb 19, 2026
Revised: Mar 08, 2026
Accepted: Apr 19, 2026
OnlineVersion: Apr 30, 2026

Abstract
Vocational high school graduates in Indonesia face the highest unemployment rates, largely due to deficient employability skills. This study developed and validated the BIDASAN psychoeducational model a culturally responsive intervention rooted in the Minangkabau "Induak Samang-Anak Samang" philosophy to strengthen vocational students' career readiness. Following the ADDIE instructional design model, a needs analysis was conducted with 322 students in West Sumatra, followed by a quasi-experimental trial with 20 students at Vocational secondary education 1 Enam Lingkung. Data were collected using a 63-item validated employability scale and analyzed via paired and independent sample t-tests. Expert validation (85.33%) and practitioner practicality (87%) confirmed the model's high feasibility. The experimental group showed a significant improvement in employability skills (N-Gain 0.38) compared to the control group (N-Gain 0.21). The BIDASAN model effectively bridges the gap between cultural values and professional demands, offering a novel approach for school counselors to reduce graduate unemployment.

Keywords: BIDASAN Model, Employability Skills, Philosophy BIDASAN, Unemployment, Vocational High School Students.

© 2026 by the author(s)
This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

INTRODUCTION

Vocational secondary education has a strategic role in preparing work-ready, entrepreneurial, intelligent, and competitive human resources (Budiarto et al., 2024; Meirani & Intania, 2023; Prianto et al., 2021). It is even considered as a solution to solve the unemployment problem (Korumaz & Ekşioğlu, 2022; Sarigoz, 2022; Susantiningrum et al., 2023). However, in reality, Vocational secondary education graduates are still unable to work and entrepreneurship in accordance with their expertise or experience academic problems related to their career development (Gestiada & Nazareno, 2017; Inderanata & Sukardi, 2023) and become the highest contributor to unemployment compared to graduates at other educational levels, especially in Padang Pariaman district (Suryaman et al., 2023; Zulmi & Tentama, 2024). The high number of unemployment in Vocational secondary education graduates, especially in Padang Pariaman district, must certainly be a problem that needs to be improved. The results of (Hariyani & Syamwil, 2022) research at one of the Vocational secondary education in Padang Pariaman district revealed that only 45.43% of Vocational secondary education graduates were able to work and 5.37% of graduates were able to become entrepreneurs, meaning that 34.70% of these Vocational secondary

education graduates were not yet employed. This phenomenon indicates the low ability of Vocational secondary education graduates to enter the world of work or achieve the expected career.

The trigger for high unemployment in Vocational secondary education graduates is influenced by low employability skills (Nadarajah, 2021; Tentama & Nabilah, 2020). Employability skills are an important foundation, especially for vocational high schools as a provision for better career management and provision for entering the world of work (Tentama & Nur, 2021), as well as abilities that can help individuals to be able to adapt and survive in various work situations and conditions (Idkhan et al., 2021; Pusriawan & Soenarto, 2019; Singh & Singh, 2017), and the ability to seek or find, create, and maintain employment. Someone who has low employability tends to have low self-esteem, effort, and willingness to enter the world of work (Benabou & Tirrole, 2002; Giorgi et al., 2015) or tends to experience more difficulties when entering the world of work or achieving the expected career (Zulmi & Tentama, 2024). However, the reality in the field is that the employability skills possessed by graduates are low (Donina & Lapina, 2020) it seems that students of Vocational secondary education 1 Enam Lingkung, which is one of the schools in Padang Pariaman district. based on the results of the initial analysis, it was found that 45.71% of students had moderate employability skills, and 41.43% of students had employability skills in the low category. On the other hand, psychoeducation in the implementation of these activities is preventive and instructional, functions affective, existential, cognitive, behavioral for providing information, practicing skills, cooperation, communication, building skills and trust and can be applied in various fields such as the field of education as well as in various settings such as schools in participating in the process of learning activities, and college services and conveying new information (Berg et al., 2018; Brown, 2004; DeLucia-Waack, 2006; Furr, 2000; Henderson & Thompsom, 2016; Sahrani & Hastuti, 2018) that are effectively used for student career advancement.

Furthermore, one of the techniques in the psychoeducation group is provision, provision being defined by the use of video, film, audio tape, computer presentation (DeLucia-Waack, 2006). Therefore, in this study, the implementation of psychoeducation was planned by utilizing videos and films. In the provision of guidance and counseling services, the use of videos and films is one of the modeling techniques, which will be more effective if combined with other techniques such as being associated with culture (Erford, 2016).

Local wisdom can be used as a means of providing services (Husein et al., 2020). In Minangkabau, culture strongly influences a person's behavior (Myers et al., 2014). Employability skills are not just about getting a job but also related to how a person can survive and succeed in their career (Suarta & Suwintana, 2020). In line with the way some Minangkabau people achieve business success. With the spirit of harmony that boils down to the talent of inter-ethnic intermingling taught by Minangkabau customs and culture, namely "*di mano bumi dipijak di sinan langit dijunjuang"*,"*kalau buyuang pai marantau, induak cari dunsanak cari, induak samang cari dahulu*", meaning that the support or foundation of a footing in a new area needs to be sought and strengthened first (Latief, 2002). This means that in career development, some Minangkabau people try to adapt to the local area and try to find *induak samang* or are willing to become *anak samang*.

However, few studies have integrated culturally responsive approaches, especially those rooted in local wisdom, into psychoeducational interventions to improve employability skills. To date, evidence on the use of cultural models such as the Minangkabau Induak Samang-Anak Samang philosophy to design guidance interventions in vocational schools is limited. Therefore, this research not only contributes theoretically to culturally responsive guidance models, but also offers a practical, ready-to-use intervention for school counselors addressing the employability skills gap in vocational education named BIDASAN modeling psychoeducation, BIDASAN stands for "Induak Samang-Anak Samang" emphasizing role modeling, relationship building, and guided reflection, and delivered through BIDASAN modeling technique psychoeducation sessions designed to align cultural values with the career needs of vocational students. This study addresses the following questions: What is the BIDASAN psychoeducational model for improving the employability skills of vocational high school students?

RESEARCH METHOD

The study was conducted from June to September 2024 at the Tissue Culture Laboratory, Faculty of Agriculture, Universitas Sriwijaya, Palembang, Indonesia (2°59′23.4″S; 104°43′53.4″E). Leaf lamina explants were collected from healthy young seedlings of *Lansium domesticum*, selected based on uniform size and physiological condition to ensure experimental consistency. The explants were cultured on

Murashige and Skoog (MS) basal medium (Nugrahani et al., 2024; Shelepova et al., 2025) solidified with agar.

The research methodology carried out in the form of research and development (R&D) to be able to create a product (Hamid et al., 2020) with the ADDIE approach (Branch, 2009). The research begins with the analysis stage, where researchers conduct field information or obtain data in the form of information about the condition of employability skills of vocational students. The second stage, namely the design stage, researchers identified the respondents studied, designed the model (the model developed in the form of a model book and model implementation guide book as well as various videos accessed from the web and the internet to be produced or adapted and used in the process of delivering material to target participants. The third stage is the development stage, namely product assessment by three experts in the field of guidance and counseling, three media technology experts, and three potential product users. The fourth stage is the implementation stage, namely the product effectiveness test with limited subjects, product assessment is carried out through the evaluation stage carried out on small groups of students to obtain the effectiveness of the products developed. Finally, the evaluation stage, the evaluation of this model is carried out to see the suitability of the product that has been developed with the initial development plan and needs analysis carried out at the initial stage. The subjects of this study were eleventh-grade students of state vocational high schools in Padang City, Payakumbuh City, Padang Pariaman Regency, and South Solok Regency. The sampling technique recommended by several researchers (Campbell et al., 2020) was used. Furthermore, 20 students from 322 students were selected, with 10 students assigned to the treatment and control groups. This small sample size was chosen to increase control over external variables. Using a quasi-experimental approach, this study tested two dependent variables simultaneously for both groups during the pre-test and post-test stages (Janssen & Kollar, 2021).

The study used various instruments such as observation sheets, interview guides, questionnaires, validation sheets, and pre-test/post-test assessments. Data were collected using a scale for employability skills of vocational high school students, a scale the researchers developed based on the opinions of (Trought, 2017) and the (World Economic Forum, 2020). The indicators for employability skills of vocational high school students in this study relate to work skills related to problem-solving skills, self-management skills, teamwork skills, and technology management skills.The observation sheets were used to observe the implementation of the model. In-depth interviews with guidance and counseling teachers were conducted regarding the employability skills of vocational high school students and their perceptions of the model. Based on the results of the analysis, after a preliminary study revealed the employability skills of vocational high school students, the scale was proven to be reliable with a Cronbach's alpha (α) value of 0.896, which is categorized as very high reliability with a range of item differentiation index (corrected item-total correlation) ranging from 0.145 to 0.723 valid and reliable items that will be used in the study, namely 63 items. Furthermore, an observation sheet was also used to observe the implementation of the model adapted from the program evaluation criteria by the Organization for Economic Cooperation and Development (OCDE, 2015), relevance, efficiency, effectiveness, impact, and attractiveness based on the model design that has been developed. Finally, in-depth interviews were also conducted with guidance and counseling teachers regarding the work skills of vocational school students and their perceptions of the model design

Data analysis was qualitative and quantitative. Qualitative data in the form of observations and interviews were analyzed descriptively and thematically to identify the strengths, weaknesses, and contextual challenges of the model implementation. Furthermore, quantitative data were processed using SPSS v.25 because SPSS features an intuitive graphical user interface (GUI), allowing users to perform statistical analyses via drop-down menus without having to write complex code or syntax, comprehensive data analysis features: SPSS can handle a wide range of statistical analyses, from basic descriptive statistics to complex inferential statistics (such as regression, t-tests, ANOVA, and factor analysis), clear and informative results: analysis results are presented in informative, engaging, and easy-to-understand tables and graphs, making data. Practicality was assessed through descriptive statistics (mean score and percentage of agreement) derived from teacher/student responses and observation assessment. Normality test (Kolmogorov-Smirnov) and homogeneity test (Levene's Test) were conducted as prerequisites. Paired Sample T-Tests were used to compare pre- and post-test scores within each group. Independent Sample T-Tests compared the performance of the experimental and control groups, providing evidence of the impact of the BIDASAN modeling psychoeducational model.

RESULTS AND DISCUSSION

Analysis of Vocational High School Students' Employability Skills

In this study, the employability skills scale was administered to XI grade students at Vocational secondary education Kota Padang, XI grade students at Vocational secondary education Kota Payakumbuh, XI grade students at Vocational secondary education Kabupaten Padang Pariaman, and XI grade students at Vocational secondary education Kabupaten Solok Selatan. The research locations were determined based on the categories of areas with the highest and lowest unemployment rates in West Sumatra Province. The results of the respondent analysis are described in Table 1.

Table 1. Employability Skills of Students in Grade XI of Vocational Schools in West Sumatra Province (n=322)

No	School	Skills Area	Employability Skills (63 items)	
			Mean	%
1	Vocational secondary education 3 Padang City	Computer Network Engineering Department (n=33)	210.18	66.72
		Marketing Management (n=61)	191.00	60.63
2	Vocational secondary education 3 Payakumbuh City	Culinary (n=29)	214.45	68.08
		Fashion (n= 27)	216.00	68.57
3	Vocational secondary education 1 Enam Lingkung	Broadcasting (n=14)	146.86	46.62
		Visual Communication Design (n=20)	166.25	52.78
		Marketing Office (n=22)	164.68	52.28
4	Vocational secondary education 1 South Solok	Culinary (n=25)	219.04	69.54
		Marketing Management (n=48)	202.65	64.33
5	Vocational secondary education 4 South Solok	Automotive (n=22)	206.68	72.59
	Vocational secondary education 5 South Solok	Computer Network Engineering Department (n=21)	228.67	65.61

Table 1 above shows that the lowest employability skills are owned by class XI students of Vocational secondary education 1 Enam Lingkung in the field of Broadcasting, namely with an average overall score of 146.86 or 46.62% which ultimately became the experimental group in the product trial. The next lowest overall average score was occupied by class XI students in the field of office management expertise. Where in this study it was used as a control group in product trials.

BIDASAN Model Syntax Design

The syntax of the BIDASAN psychoeducation model is first: pre-psychoeducation is the initial stage of implementing the BIDASAN psychoeducation technique model to improve the work skills of vocational school students, namely fostering relationships carried out by group leaders (counseling teachers/school counselors or researchers) with group members (vocational students). During the meeting, it was explained about the purpose and objectives of the implementation of psychoeducation, psychoeducation is group guidance or group education (Alle-Corliss & Alle-Corliss, 2009; Brown, 2011), focused on the use of educational methods to improve skills (Henderson & Thompsom, 2016). Furthermore, explaining the modeling technique, in this study the modeling technique is a technique where the application can be in the form of organizing videos with the aim of introducing employability skills that must be possessed by vocational students. Finally, explaining the philosophy of "induak samang-anak samang", induak samang is another term for employers or superiors who are very famous for their family system at work such as full discipline, openness, mutual support, generosity, fun, and not seeing the reed (Putri & Putra, 2021). Meanwhile, anak samang is a subordinate. In addition, induak samang is defined as a toke or juragan who functions as a protector (Osira et al., 2014, 2017). In this guide, the philosophy of induak samang-anak samang is someone who is considered a protector or motivator for anak samang in carrying out life, both to achieve success in carrying out daily activities and in achieving future careers and goals. In this guide, the parties considered to be parents in developing work skills in vocational schools are addressed to parents, teachers, siblings, grandparents, mothers, peers, idols, and so on. This determination is so that students can easily identify "induak samang-anak samang"

figures in the workplace and understand the concept of someone who can be a "parent-child" in the workplace.

The second syntax is psychoeducational activities the first step is for group members to identify a model that is considered a motivator. The second step, group members are directed to be able to analyze the employability skills possessed by the chosen model. Step three, group members are directed to formulate or describe the employability skills possessed by the model. Step four, group members are asked to be able to classify or observe, record, and classify all information as new knowledge in achieving increased employability skills. The fifth step, group members are asked to be able to construct or develop new behaviors and practice the new skills obtained, and the sixth step group members can conclude or summarize important ideas obtained from activities to improve employability skills. The third syntax is post-psychoeducation this activity is carried out to determine the development and changes in behavior after treatment. The group leader provides an opportunity for vocational students who are group members in the implementation of psychoeducation to convey new employability skills owned by vocational students and then evaluate them. The counselor also provides motivation so that vocational students are consistent with these changes. The syntax development results of the psychoeducation modeling BIDASAN model are described in Figure 1.

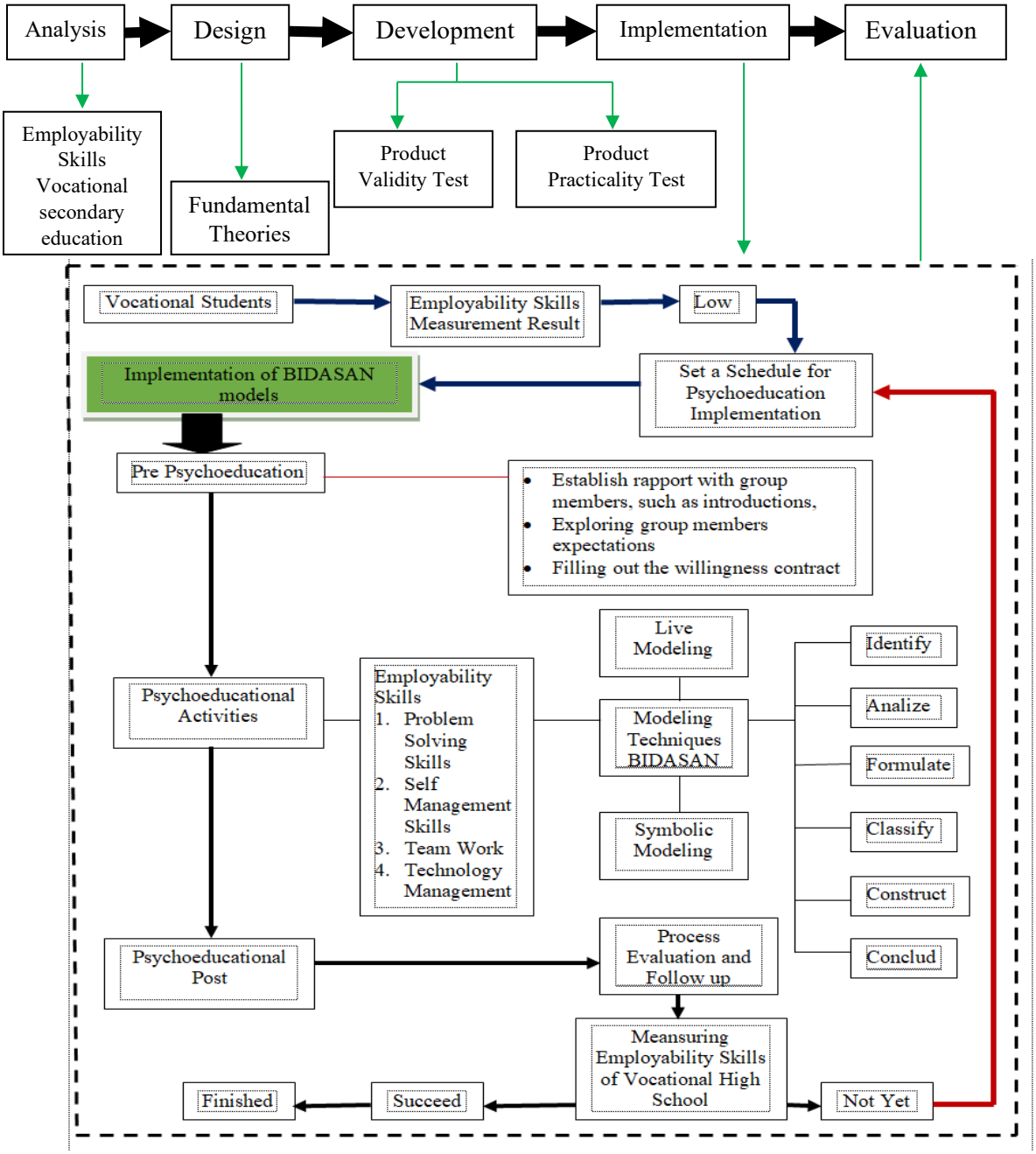

Figure 1. Results of the Development of Psychoeducational Modeling BIDASAN Model

The Psychoeducational Modeling BIDASAN Model Development Results

The development stage of the BIDASAN model was carried out by conducting a model validation test conducted by three lecturers from the Guidance Counseling Department, Faculty of Education, Universitas Negeri Padang and three media experts from the Master of Educational Technology Study Program, Universitas Negeri Padang. Furthermore, three guidance and counseling teachers who teach at Vocational secondary education 1 Enam Lingkung, Padang Pariaman Regency, West Sumatra Province, Indonesia. First, the validity of guidance and counseling experts and the validity of media experts to validate product feasibility based on aspects of supporting theory and product syntax. Meanwhile, the model was validated by practitioners regarding the feasibility of product implementation in improving the employability skills of vocational high school students. The validation results can be seen in Table 2.

Table 2. Experts Validation of Guidance and Counseling Experts, Media Validity, and Model Practicality

No.	Dimension	Aspect	Mean	Category
1	Expert Validity (N=3)	Relevance of Model	0.86	High
		Efficiency of Model	0.87	High
		Effectiveness of Model	0.85	High
		Impact of Model	0.79	High
		Clarity of Model	0.88	High
		Mean	0.85	High
2	Media validity (N=3)	Relevance of Model	0.85	High
		Efficiency of Model	0.83	High
		Effectiveness of Model	0.88	High
		Impact of Model	083	High
		Clarity of Model	079	High
		Mean	0.84	High
3	Practicality (N=3)	Efficiency of Model	0.92	High
		Effectiveness of Model	0.93	High
		Impact of Model	0.83	High
		Clarity of Model	0.81	High
		Mean	0.87	High

Note: Rating scale: ≤ 0.4= Low , 0.5-0.7= Medium , ≥ 0.8= High (Aiken, 1985)

According to the Table 2 provided, it can be seen that the guidance and counseling experts gave a high level of validation assessment to the psychoeducation modeling BIDASAN model, namely an average assessment score of 0.85. Likewise, the results of the media expert assessment gave a high level of validation assessment to the psychoeducation modeling BIDASAN model, with an average assessment score of 0.84. Furthermore, the results of the practitioners' assessment also gave a high assessment of the model's validation, namely with an average assessment score of 0.87. The overall assessment scores of 0.85, 0.84 and 0.87 were within ≥ 0.8, which indicated that the product created by the researchers was assessed with high validation or very feasible (Aiken, 1985).

Implentation of Psychoeducation Modeling BIDASAN Model

The implementation stage was carried out to test the effectiveness of the BIDASAN psychoeducational modeling design. This model was tested on grade XI students of Vocational secondary education 1 Enam Lingkung in the “Broadcasting” area of expertise as an experimental group and grade XI students of Vocational secondary education 1 Enam Lingkung in the “Office Management” area of expertise as a control group. The model will be implemented by piloting the model on respondents (limited group testing) who are indicated to have low employability skills. The currently developed model will be implemented in a group format with 10 students per group. Description of the psychoeducation modeling BIDASAN model implementation activities in the experimental group can be seen in Table 3.

Table 3. BIDASAN Model Activities

No	Psychoeducation Modeling BIDASAN Model	Description of Activities
1	Pre-Psychoeducation	• Establishing rapport, explaining the implementation of psychoeducation • Group members are asked to "identify" people they consider to be "induak samang" or people who can provide motivation or role models in carrying out activities. • Group members are directed to be able to "analyze" the employability skills possessed by the "induak samang." • The next activity is the "formulating" stage, at this stage group members are asked to formulate aspects of a person's employability skills that they consider to be "parents" in work.
2	Psychoeducation Activities	• The activity continued to the "classification" stage. At this stage, to increase group members' knowledge of employability skills, the researcher invited group members to watch a video related to the abilities of a "induak samang" who possesses employability skills at work. • The next activity is the "construction" stage. In this stage, group members are asked to develop and practice new behaviors regarding the employability skills necessary for work. • Finally, in this activity, namely "summarizing", group members take turns conveying the new understanding they gained after participating in the activity.
3	Psychoeducation-Post	Process evaluation and follow-up

Table 3 above shows the implementation of the BIDASAN psychoeducational model. The model was implemented in the experimental group, while the control group received regular group guidance. The results of the effectiveness test of the model implementation can be seen in Table 4.

Table 4. Employability Skills of Students in the Experimental and Control Groups

Class	Avg. Pretest	Avg. Posttest	Imporvement	N-Gain	Category
Experiment	48.41	68.03	+19.62	0.38	Medium
Control	51.40	61.59	+10.19	0.21	Low
Defference	-2.99	+6.44	+9.43	+0.17	

Figure 2. Employability Skills of Students in the Experimental and Control Groups

The BIDASAN Psychoeducational Model showed significant effectiveness: Experimental class: 19.62 point increase (48.41 → 68.03), N-Gain 0.38 (Medium) (Hake, 2009). Control class (conventional): Increase of 10.19 points, N-Gain 0.21 (Low). The difference in N-Gain (0.17) indicates the superiority of BIDASAN Psychoeducation in improving employability skills. Follow-up Analysis Based on Table 4,

prerequisite tests (e.g., normality test for experimental/control class) were conducted using SPSS 25 (see next table for details).

Table 5. Results of the Employability Skills Normality Test.

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-test control	.135	10	.200*	.918	10	.343
Post-test control	.152	10	.200*	.970	10	.889
Pre-test experiment	.221	10	.180	.918	10	.337
Post-test experiment	.210	10	.200*	.921	10	.365

The results of the Kolmogorov-Smirnov normality test show that the pretest and posttest data in both classes generally follow a normal distribution: Control Class: Pretest significance: 0.200 (>0.05) - normally distributed. Posttest significance: 0.200 (>0.05) - normally distributed. Experiment Class: Posttest significance: 0.200 (>0.05) - normally distributed. Pretest significance: 0.180 (>0.05). The results of the Shapiro-Wilk normality test showed that the pretest and posttest data in both classes generally followed a normal distribution: Pretest significance value:0.343 (>0.05) - normally distributed, Posttest significance value: 0.889 (>0.05) - normally distributed. In experimental class: Posttest significance value: 0.365 (>0.05) - normally distributed, Pretest significance value: 0.337 (>0.05).

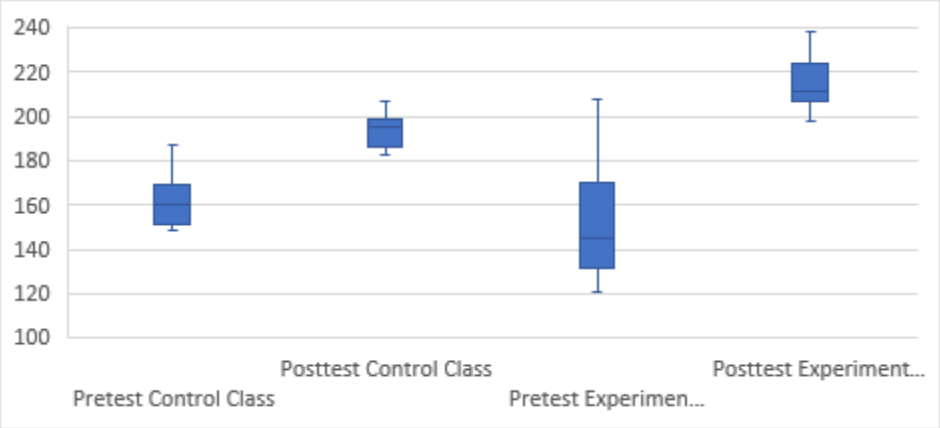

Figure 3. Normality Test Results for Employability Skills.

Using the conventional threshold of $\alpha = 0.05$, all values above this level confirm normal distribution. This indicates that the data meets the assumptions of the parametric test for subsequent analysis. The visual representation in Table 5 further supports this statistical finding. Test of Homogeneity of Variance.

Table 6. Test of Homogeneity of Variance

Levene Statistic	df1	df2	Sig.
1.205	1	18	.287

Validation of statistical assumptions ensured suitability for parametric analysis. Shapiro-Wilk test showed normal distribution for all pretest and posttest data ($p > 0.05$). Levene's Test showed homogeneous variances across posttest measures: Based on the probability value of 0.287 exceeding $\alpha=0.05$. With the assumptions of normality and homogeneity met, an independent sample t-test was appropriately conducted to test for group differences. The fulfillment of these strict parametric prerequisites ensures a reliable interpretation of the comparative results between instructional approaches and strengthens the validity of claims regarding differences in outcomes.

Once the experimental class pretest and posttest data met the assumption of normality based on After confirming parametric assumptions through the Shapiro-Wilk test ($p>0.05$ for normality) and Levene's ($p>0.05$ for homogeneity), a Paired Sample T Test was conducted to assess the impact of the BIDASAN psychoeducational model on employability skills. The analysis showed a statistically

significant mean score increase of 61.80 points (SD = 22.125) between the pretest and posttest measurements in the experimental group, with a standard error of 6.99 indicating high precision. The 95% CI [-77.63, -45.97] confirmed the superiority of the posttest, while the substantial t-value (-8.83, df=9, p<0.000) emphatically rejected the null hypothesis (α=0.05). These results validate that the implementation of Bidasan psychoeducation significantly improves employability skills. Separately, Independent Samples T-Test was conducted after verifying the same parametric assumptions, comparing the results between Bidasan psychoeducation in Table 7.

Table 7. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair-1	pretest - posttest	-61.80	22.12	6.99	-77.62	-45.97	-8.833	9	.000

Evaluations of Psychoeducational Modeling BIDASAN model

Implementation of the BIDASAN psychoeducation model has been proven to improve the work skills of vocational school students. Several conditions during the implementation process, including the model guide, received several notes for further refinement. Based on the implementation process, several revisions are needed regarding the model guide to elaborate on the concept of induak samang. These revisions primarily concern the interpretation and evaluation stages.

Another area of concern during the implementation process is technical issues that arise before the model is implemented. During the implementation process for vocational high school students, technical constraints related to the learning process and student attendance frequency hindered the model's implementation. These technical issues are a concern for improving the service delivery process and optimizing it in the future. The finalization of this model after several revisions based on the validity testing of expert judgment, practicality and effectiveness testing, the hypothetical psychoeducation modeling BIDASAN model for improving the employability skills of vocational school students can then be categorized as a final model.

The novelty of this finding lies in the "BIDASAN" modeling technique. Unlike traditional vocational guidance that focuses purely on technical skills, BIDASAN leverages the Minangkabau philosophy of *"di mano bumi dipijak di sinan langit dijunjuang"*. Practically, school counselors can use the BIDASAN video modules to help students from low socio-economic backgrounds—who often prioritize immediate income over long-term skill development—to recognize the long-term value of professional apprenticeship. A primary limitation is the small, localized sample size at one vocational school, which may limit generalizability. Furthermore, the study focused on four specific skill dimensions. Future research should expand the sample to include general high schools and incorporate broader employability variables, such as entrepreneurial resilience and digital literacy in the Industry 4.0 context.

CONCLUSION

Based on the implementation process of the activity, the results of the analysis revealed that one of the factors influencing the low employability skills of students at Vocational High School N 1 Enam Lingkung is influenced by the students' socio-economic factors. Based on information from students and guidance counselors, the socio-economic picture of students is on average at the lower middle level, which results in students being more dominant in looking for living expenses without having work skills (motorcycle taxi drivers, brick makers, and construction workers). School is only for seeking social interaction or school image, so that the student attendance rate is low. The analysis revealed that socioeconomic factors were one of the factors influencing the low employability skills of students at Vocational High School N 1 Enam Lingkung. Based on information from students and guidance counselors, the average socioeconomic status of students was lower-middle class, resulting in students predominantly seeking a living wage without any work skills (motorcycle taxi drivers, bricklayers, and construction workers). School was seen as a means of socializing or enhancing the image of students,

resulting in low student attendance. This study develops the psychoeducation modeling BIDASAN model: A Cultural Approach to Strengthening Employability Skills in Indonesian Vocational High School Students based on the ADDIE Model. Several experts have validated this model in terms of content, the ADDIE Model, and problem-solving criteria. Thus, this model is appropriate and valid for improving the employability skills of vocational high school students, especially for improving problem-solving skills, self-management skills, team work skills, and technology management skills as one of the skills of vocational high school students, especially for work-oriented vocational high school graduates. This model significantly directs students to interpret "induak samang" and the significance of "induak samang" in one's success in work. Interestingly, this model also encourages seeking "induak samang" to train and gain work experience in developing skills in work until being able to develop their own skills according to their abilities. This model can be one of the models in developing the employability skills of vocational high school students by integrating cultural meanings.

ACKNOWLEDGMENTS

We want to express our deepest gratitude to the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia for funding this research. We would also like to thank this study's respondents and the article's reviewers for their constructive comments.

AUTHOR CONTRIBUTIONS

The research article was written by several authors; the contributions of each author are as follows: Conceptualization, Methodology, Validation, Formal Analysis, Investigation, Resources, Data Curation, Writing – Drafting, Writing – Review & Editing, Visualization, Supervision, X.X.; Project Administration, and Fund Acquisition carried out jointly.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the generation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

REFERENCES

Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, *45*(1), 131–142. https://doi.org/10.1177/0013164485451012

Alle-Corliss, L., & Alle-Corliss, R. (2009). *Group Work: A Practical Guide to Developing Groups in Agency Settings*. John Wiley & Sons, Inc. https://sk.sagepub.com/book/mono/groupwork-practice-for-social-workers/back-matter/s9781473910829.i656

Bapat, G. S., Chitnis, R. M., & Subbarao, P. S. (2022). The state of "Innovation" and "Entrepreneurship" in India-A post pandemic bibliometric analysis. *Journal of Positive School Psychology*, *6*(5), 6820–6826. https://journalppw.com/index.php/jpsp/article/view/8216/5363

Benabou, R., & Tirrole, J. (2002). Self-Confidence and personal motivation self-confidence and personal motivation. *The Quarterly Journal of Economics*, 871–915. https://www.tandfonline.com/doi/abs/10.1080/10400419.2012.650092?journalCode=hcrj20

Berg, C. C., Landreth, G. L., & Fallnseling, and K. A. (2018). *Group Counselling*. Routledge. https://doi.org/10.4135/9781446214800.n5

Branch, R. M. (2009). Instructional Design: The ADDIE Approach. In *Department of Educational Psychology and Instructional Technology University of Georgia*. Springer US. https://doi.org/10.1007/978-0-387-09506-6

Brown, N. W. (2004). *Psychoeducational Groups (Process and Practice)*. Brunner-Routledge.

Brown, N. W. (2011). *Psychoeducational Groups: Process and Practice. Third Edition*. Routledge Taylor & Francis Group.

Budiarto, M. K., Asrowi, Gunarhadi, Karsidi, R., & Rahman, A. (2024). E-Learning platform for enhancing 21st century skills for vocational school students: A systematic literature review. *Electronic Journal of E-Learning*, *22*(5), 76–90. https://doi.org/10.34190/ejel.22.5.3417

Campbell, S., Greenwood, M., Prior, S., Walkem, K., Young, S., & Bywaters, D. (2020). Purposive sampling: Complex or simple ? research case examples. *Journal of Research in Nursing*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206

DeLucia-Waack, J. (2006). *Leading Psychoeducational Groups for Children and Adolescents*. SAGE Publications, Inc. https://doi.org/10.4135/9781452204291

Donina, A., & Lapina, I. (2020). Employability skills: The needs of tourism industry versus the performance of graduates. *WMSCI 2020 - 24th World Multi-Conference on Systemics, Cybernetics and Informatics, Proceedings*, *3*(1), 48–53. https://www.researchgate.net/publication/353804041_Employability_Skills_the_Needs_of_Tourism_Industry_versus_the_Performance_of_Graduates

Erford, B. T. (2016). *40 Teknik Yang Harus Diketahui Setiap Konselor Edisi Kedua [40 Techniques Every Counselor Should Know Second Edition]*. Pustaka Pelajar (terjemahan).

Furr, S. R. (2000). Structuring the Group Experience: A format for designing psychoeducational groups. *The Journal for Specialists in Group Work*, *25*(1), 29–49. https://doi.org/10.1080/01933920008411450

Gestiada, G., & Nazareno, A. (2017). Development of a senior high school career decision tool based on social cognitive career theory. *Philippine Journal of Science*, *146*(4), 445–455. https://www.researchgate.net/publication/324546939_Development_of_a_Senior_High_School_Career_Decision_Tool_Based_on_Social_Cognitive_Career_Theory

Giorgi, G., Shoss, M. K., & Leon-Perez, J. M. (2015). Going beyond workplace stressors: Economic crisis and perceived employability in relation to psychological distress and job dissatisfaction. *International Journal of Stress Management*, *22*(2), 137–158. https://doi.org/10.1037/a0038900

Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American journal of Physics*, *66*(1), 64-74. https://doi.org/10.1119/1.18809

Hamid, M. A., Permata, E., Aribowo, D., Darmawan, I. A., Nurtanto, M., & Laraswati, S. (2020). Development of cooperative learning based electric circuit kit trainer for basic electrical and electronics practice. *Journal of Physics: Conference Series*, *1456*(1). https://doi.org/10.1088/1742-6596/1456/1/012047

Hariyani, D., & Syamwil, S. (2022). Pengaruh edupreneurship, kreativitas siswa dan praktik pengalaman industri terhadap minat berwirausaha siswa di SMK Negeri 1 Enam Lingkung [The influence of edupreneurship, student creativity and industrial experience practices on students' interest in entrepreneurship at SMK Negeri 1 Enam Lingkung]. *Jurnal Salingka Nagari*, *1*(2), 243-255. https://doi.org/10.24036/jsn.v1i2.39

Henderson, D. A., & Thompsom, C. L. (2016). *Counseling Children (Ninth Edition)*. Cengage Learning.

Husein, I. A., Mappiare-at, A., & Hanurawan, F. (2020). Proverbs on bibliocounseling as kipas counseling model. *Jurnal Pendidikan Humaniora*, *8*(2), 50–57. http://journal.um.ac.id/index.php/jph

Idkhan, A. M., Syam, H., Sunardi, & Hasim, A. H. (2021). The employability skills of engineering students': Assessment at the University. *International Journal of Instruction*, *14*(4), 119–134. https://doi.org/10.29333/iji.2021.1448a

Inderanata, R. N., & Sukardi, T. (2023). Investigation study of integrated vocational guidance on work readiness of mechanical engineering vocational school students. *Heliyon*, *9*(2), e13333. https://doi.org/10.1016/j.heliyon.2023.e13333

Janssen, J., & Kollar, I. (2021). Experimental and quasi-experimental research in CSCL. *International Handbook of Computer-Supported Collaborative Learning*, 497–515. https://doi.org/10.1007/978-3-030-65291-3_27

Jiang, P. (2022). Phenomenon of employment anxiety in higher vocational colleges and its influence on students' employability. *Psychiatria Danubina*, *34*(1), 26–88. https://hrcak.srce.hr/277023

Kallas, E. (2019). Environment-readiness entrepreneurship intention model: The case of Estonians and the Russian-Speaking minority in Estonia. *SAGE Open*, *9*(1). https://doi.org/10.1177/2158244018821759

Korumaz, M., & Ekşioğlu, E. (2022). Why do students in vocational and technical education drop out? a qualitative case study. *International Journal of Contemporary Educational Research*, *9*(1), 1–17. https://doi.org/10.33200/ijcer.935042

Latief, H. C. N. (2002). *Etnis dan Adat Minangkabau (Permasalahan dan Masa Depannya) [Minangkabau Ethnicity and Customs (Problems and Future)]*. Angkasa.

Lau, P. L., Chung, Y. B., & Wang, L. (2019). Effects of a career exploration intervention on students' career maturity and self-concept. *Journal of Career Development*, *48*(4), 311–324. https://doi.org/10.1177/0894845319853385

McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies*, *42*(2), 197–219. https://doi.org/10.1080/0042098042000316100

Meirani, R. K., & Intania, N. (2023). Key elements of total quality management implementation in vocational high school. *Proceedings of International Conference on Research in Education and Science*, *9*(1), 424–439. https://doi.org/10.62383/parlementer.v2i3.1090

Myers, D. J., Nyce, J. M., & Dekker, S. W. A. (2014). Setting culture apart: Distinguishing culture from behavior and social structure in safety and injury research. *Accident Analysis and Prevention*, *68*, 25–29. https://doi.org/10.1016/j.aap.2013.12.010

Nadarajah, J. (2021). Measuring the gap in employability skills among Malaysian graduates. *International Journal Od Modern Trends in SocialSciences (IJMTSS)*, *4*(15), 81–87. https://doi.org/10.35631/IJMTSS.415007

OCDE. (2015). The Measurement of Scientific, Technological and Innovation Activities. In *The Measurement of Scientific, Technological and Innovation Activities.* http://www.oecd-ilibrary.org/science-and-technology/frascati-manual-2015_9789264239012-en

Osira, Y., Afrita, D., & Hendrika, N. (2014). Induak semang sebuah model perlindungan sosial bagi kelompok nelayan Jakat Makmur Kota Bengkulu Tahun 2013 [Parenting is a social protection model for the Jakat Makmur fishermen group in Bengkulu City in 2013.]. *Jurnal Ilmiah Pekerjaan Sosial*, *13*(1), 1–15. https://doi.org/10.31595/peksos.v13i1.35

Osira, Y., Afrita, D., & Himawati, I. P. (2017). Sikap induak komunitas nelayan kota bengkulu terhadap undang-undang perlindungan dan pemberdayaan nelayan [The attitude of the parents of the Bengkulu City fishing community towards the law on the protection and empowerment of fishermen]. *Jurnal Prossional FIS UNIVED*, *4*(1), 45–59. https://doi.org/10.37676/professional.v4i1.449

Prianto, A., Winardi, & Qomariyah, U. N. (2021). The effect of the implementation of teaching factory and its learning involvement toward work readiness of vocational school graduates. *International Journal of Instruction*, *14*(1), 283–302. https://doi.org/10.29333/IJI.2021.14117A

Pusriawan, & Soenarto, S. (2019). Employability skills of vocational school students in Palu City for entering the work world. *Jurnal Pendidikan Vokasi*, *9*(1), 33–42. https://doi.org/10.21831/jpv.v9i1.23351

Putri, N. A., & Putra, Y. Y. (2021). Karakteristik induak samang dalam menjalankan usaha kawa daun di biaro Kecamatan Ampek Angkek Kabupaten Agam [Characteristics of samang parents in running the kawa daun business in Biaro, Ampek Angkek District, Agam Regency]. *Nusantara:*, *8*(1), 283–288. https://doi.org/10.31604/jips.v8i1.2021.283-288.

Sahrani, R., & Hastuti, R. (2018). Psikoedukasi siswa mengenai quality of school life [Student psychoeducation regarding quality of school life]. *CARADDE: Jurnal Pengabdian Kepada Masyarakat*, *1*(1), 1–6. https://doi.org/10.31960/caradde.v1i1.2.

Sarigoz, O. (2022). Examination of the Problems that Teachers Face During Vocational Education. *The Asian Institute of Research Education Quarterly Reviews*, *5*(3), 410–420. https://doi.org/10.31014/aior.1993.05.03.555.

Setiawan, A., Munoto, Nurlaela, L., & Ekohariadi. (2021). Analysis Of The Effect Of Knowledge On Entrepreneurship Readiness Using Random Forest Classification Machine Learning. *Technium Social Sciences Journal*, *23*, 134–149. https://doi.org/10.47577/tssj.v23i1.4500.

Singh, A., & Singh, L. B. (2017). ScienceDirect E-Learning for Employability Skills : Students Perspective. *Procedia Computer Science*, *122*, 400–406. https://doi.org/10.1016/j.procs.2017.11.386.

Suarta, I. M., & Suwintana, I. K. (2020). The New Framework of Employability Skills for Digital Business. *International Conference on Technology and Vocational Teachers (ICTVT)*, 1–9. https://doi.org/10.1088/1742-6596/1833/1/012034.

Suryaman, Zaki, A., Suharyanto, & Winoto, S. (2023). Tripartite Interconnection to Serve High Quality and Competitiveness of Vocational School Students in Industry. *Journal of Social Studies Education Research*, *14*(2), 75–96. https://jsser.org/index.php/jsser/article/view/4900/615.

Susantiningrum, Siswandari, Joyoatmojo, S., & Mafruhah, I. (2023). Leveling Entrepreneurial Skills of Vocational Secondary School Students in Indonesia: Impact of Demographic Characteristics.

International Journal for Research in Vocational Education and Training, *10*(1), 113–137. https://doi.org/10.13152/IJRVET.10.1.6.

Tentama, F., & Nabilah, B. R. (2020). The Contribution of Future Orientation Towards Employability in Students of Vocational High School. *Journal of Education and Learning (EduLearn)*, *14*(4), 623–628. https://doi.org/10.11591/edulearn.v14i4.17053.

Tentama, F., & Nur, M. Z. (2021). The Correlation Between Self-Efficacy and Peer Interaction Towards Students' Employability in Vocational High School. *International Journal of Evaluation and Research in Education*, *10*(1), 8–15. https://doi.org/10.11591/ijere.v10i1.20573.

Trought, F. (2017). *Brilliant Employability Skills*. Person.

World Economic Forum. (2020). The Future of Jobs Report 2020. In *The Future of Jobs Report* (Issue October). https://www.weforum.org/reports/the-future-of-jobs-report-2020/digest.

Zulmi, N., & Tentama, F. (2024). The Effect of Entrepreneurial Readiness, Adversity Quotient, and Social Intelligence on Employability Students. *Journal of Education and Learning*, *18*(1), 26–36. https://doi.org/10.11591/edulearn.v18i1.20770.