

# Mentoring-Based Entrepreneurship Training to Improve Community Empowerment In Karawang, West Java

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## Abstract

**Background** - Community empowerment through entrepreneurship training has become a strategic approach to overcoming economic inequality, especially in industrial areas such as Karawang Regency, West Java.

**Research Urgency** - Although entrepreneurship training programs have been widely implemented, empirical evidence on the effectiveness of integrated training and mentoring models in non-formal education settings in Karawang Regency remains limited. No systematically validated empowerment framework combines entrepreneurship training with continuous mentoring tailored to local socio-economic characteristics.

**Research Objectives** - This study aims to analyze the effectiveness of community empowerment through entrepreneurship training and mentoring in enhancing the community's entrepreneurial competence and economic independence.

**Research Method** - This study uses a mixed-methods approach with a sequential explanatory design (QUAN → QUAL). The quantitative phase uses a pretest–posttest design with a total sample of 106 participants in entrepreneurship training from several Community Learning Centers (CLCs) in Karawang Regency.

**Research Findings** - The findings show a significant increase in all dimensions of entrepreneurial competence measured. The average pretest scores ranged from 2.19 to 2.40 (low category), while the average posttest scores increased significantly to 4.46 to 4.70 (excellent category). The N-Gain values (0.86–0.89) indicate high effectiveness, and the effect size (Cohen's  $d > 0.80$ ) confirms a substantial practical impact. Significant improvements were observed in managerial competence, conceptual skills, relational skills, decision-making ability, and time management.

**Research Conclusion** - The integration of structured entrepreneurship training with continuous mentoring is highly effective in improving entrepreneurial competencies and promoting sustainable community empowerment. The mentoring component serves not only as a complementary activity but as a core mechanism that connects theoretical knowledge with practical business application.

**Research Novelty/Contribution** - This study provides theoretical and empirical contributions by validating the integrated participatory training-mentoring model in non-formal educational institutions in Karawang Regency. Unlike previous studies that considered mentoring as an additional element, this study places continuous mentoring as the main pillar of community empowerment.

**Keywords:** community empowerment; entrepreneurship training; business mentoring; community learning

## INTRODUCTION

Community empowerment is widely recognised as a key strategy for sustainable development, as it utilises local economic potential to strengthen community resilience and independence. Effective empowerment requires addressing structural barriers while adapting programs to diverse community needs, including the utilisation of local resources and increased community participation (Mustanir et al., 2025). Entrepreneurship training and mentoring play an important role in developing individuals' potential through sustainable business initiatives. Such programs not only encourage innovation and self-reliance but also contribute to poverty reduction and the improvement of community welfare. In Karawang Regency, entrepreneurship development has been promoted as a strategic approach to stimulate job creation and support regional economic growth. Although various empowerment initiatives have been implemented through institutions such as Village-Owned Enterprises (VOEs), cooperative services, and MSME programs, evaluations have primarily focused on short-term outcomes, such as participant numbers or skill acquisition. Long-term impacts such as business sustainability, income growth, social mobility, and independent entrepreneurial activity remain underexplored. In addition, the role of digitalisation and e-commerce in supporting entrepreneurship development in Karawang has received limited scholarly attention.

Another challenge concerns the effectiveness of mentoring models used in entrepreneurship programs. Mentoring practices in Karawang vary widely in terms of frequency and quality, ranging from one-time sessions to regular meetings. However, comparative studies evaluating which mentoring frameworks are most effective in improving business competencies, encouraging digital adoption, strengthening financial management, and increasing business revenue are still scarce. Previous studies indicate that mentoring can significantly support new entrepreneurs by building confidence and practical business skills, particularly through peer mentoring approaches where experienced entrepreneurs guide beginners (Fauchald et al., 2022; Ibrahim Shittu, 2017). Effective mentoring strategies often involve narrative guidance, active listening, and clear communication to enhance entrepreneurial self-efficacy within the community (Villa et al., 2022).

Although various entrepreneurship training programs have been implemented, their effectiveness in fostering long-term economic independence remains frequently questioned. Previous research shows that many empowerment initiatives fail because they focus only on short-term results, such as the number of participants and improvements in technical skills, without monitoring business sustainability. The main gap found is the lack of an integrated post-training mentoring model. Several recent international studies highlight that entrepreneurship training without sustainable mentoring tends to have a high failure rate because participants find it challenging to transform theoretical knowledge into real business practices. Conversely, integrating systematic training and entrepreneurial guidance has been proven to foster confidence, business autonomy, and micro-enterprise resilience in local communities. The novelty of this study lies in combining participatory entrepreneurship training methods with a continuous mentoring model tailored to the socioeconomic characteristics of the Karawang community, an approach that has not been comprehensively explored in previous studies in the region. This research provides empirical evidence that entrepreneurial mentoring is not merely a complementary activity, but rather a core component of entrepreneurial training in non-formal education.

The urgency of this investigation stems from real economic inequality; although Karawang is recognised as a significant industrial centre, there are substantial differences between communities engaged in formal industrial activities and those struggling in the informal or rural sectors. This investigation advocates for the provision of real, systematic solutions through entrepreneurship as a viable alternative to improving welfare and achieving economic parity. There is an urgent need for a practical empowerment framework, as many empowerment initiatives tend to falter due to their disconnect from the local context. This scientific research is essential for developing a model of exemplary practice that not only provides knowledge (training) but also ensures the implementation and sustainability of business efforts (mentoring) in Karawang, thereby reducing the failure rate among community startups and fostering self-employment opportunities. The entrepreneurship

training program covers basic business management competencies, including budget planning, financial literacy, and business planning. This initiative equips participants to manage their businesses effectively and sustainably (Al Zarliani et al., 2025; Valle et al., 2022).

Programs focused on community economic empowerment through training and participatory assistance represent the most relevant strategy for Karawang, as they foster a sense of ownership among residents. By recognising the latent potential embedded in local natural and cultural resources (e.g., Karawang's agricultural capabilities or unique MSME products), the effectiveness of training initiatives will be enhanced. The role of entrepreneurial mentoring is crucial in shaping the outcomes of participatory entrepreneurship, with implications for various dimensions of entrepreneurial success and sustainability. Mentoring significantly increases entrepreneurial self-efficacy, which is very important for new entrepreneurs trying to manage their companies effectively. This increase in self-efficacy acts as a mediating factor in the relationship between mentoring and favourable entrepreneurial outcomes, such as satisfaction with autonomy and work (Baluku et al., 2020). The impact of guidance on business performance can vary considerably, ranging from positive effects to negligible or even detrimental results. Relational and operational organizational mechanisms shape this variability. (Kostyuk & Battisti, 2024).

This study presents essential progress in the field of community-based entrepreneurship development by demonstrating that integrating structured entrepreneurship training with continuous mentoring significantly improves managerial competencies among participants in non-formal educational settings. Unlike previous studies that primarily focused on the effectiveness of training as a discrete intervention, this study conceptualises mentoring as an essential component of the empowerment framework rather than merely an additional effort. The novelty of this investigation lies in the empirical validation of the integrated training and mentoring model used in Community Learning Centres (CLC), which emphasises the improvement of managerial competencies as the primary outcome of community empowerment initiatives. By establishing not only statistical significance but also meaningful practical consequences, this study expands understanding of how non-formal educational institutions can serve as a powerful avenue for sustainable entrepreneurial capacity-building. This study empirically demonstrates that integrating continuous mentoring into entrepreneurship training significantly improves managerial competencies in non-formal education, thereby positioning mentoring as a critical mechanism for community empowerment rather than merely an additional effort.

Previous studies have demonstrated the potential of entrepreneurship training and mentoring in enhancing community empowerment across diverse contexts. However, empirical evidence examining integrated, context-specific models within non-formal education institutions, notably the Community Learning Centre in Karawang Regency, remains limited. Thus, based on the background, problems, research urgency, literature review, and novelty described above, the purpose of this study is to analyse mentoring-based entrepreneurship training to improve community empowerment in Karawang, West Java.

## **METHODS**

### **Research design**

This study uses a mixed-methods paradigm using a sequential explanatory framework. The sequential explanatory design involves two distinct phases: an initial quantitative phase followed by a qualitative phase. This design prioritises the collection and analysis of quantitative data, which is then explained or expanded upon with qualitative data. For example, a study on innovation in Australian Public Services used a sequential QUAN → QUAL design, beginning with a questionnaire survey followed by a thematic analysis of qualitative data to provide context and a deeper understanding (Wipulanusat et al., 2020). In entrepreneurship research, this design is often used to develop and validate theories in a single study. For example, a survey of entrepreneurial skills uses qualitative interviews to identify key skills, which are then measured through surveys to validate the findings. (Mamabolo & Myres, 2019). Another study on entrepreneurial self-efficacy

among students used a mixed sequential exploratory design, beginning with qualitative data collection to understand entrepreneurial characteristics, followed by quantitative analysis to measure them (Setiawan, 2023).

Qualitative methodology is used to investigate the significance and intricacies of empowerment through: the experiences of training participants, interactions during the mentoring process, facilitating and inhibiting factors, community perceptions, and the role of entrepreneurship program managers. The qualitative framework is a case study focusing on the managers of a particular community enterprise in Karawang Regency, the program's locality. Analytical procedures included data reduction, data presentation, and formulation of the conclusion. Quantitative and qualitative data integration can occur at various levels, including study design, methods, and interpretation. Techniques used include linking, building, combining, and inserting data. (Fetters et al., 2013). For example, a study on community enterprises combines qualitative interviews and participatory observation with quantitative survey data to explore the strategic roles of community enterprises in sustainable development. (Khiawnoi et al., 2025). To ensure the validity of qualitative findings, methods such as Grounded Theory Methodology (GTM), bias reduction, and Structural Equation Modelling (SEM) are used. This rigorous approach helps validate qualitative results through quantitative analysis. (Al-Eisawi, 2025).

### **Population and Data Analysis Techniques**

**Quantitative Population.** The research population included all 106 participants in the entrepreneurship training program, which was part of a community empowerment initiative at the Karawang District CLC. The sampling technique used was total sampling, in which the entire population of 106 people served as the research sample qualitative Informants. Next, informants were identified through purposive and snowball sampling, including CLC managers, training facilitators, entrepreneurship mentors, and individuals who were previously involved in or currently operating a business. **Quantitative Data Analysis.** Data undergoes sequential analysis: editing, coding, and tabulation, followed by descriptive analysis to explain the participants' circumstances, classical assumption testing, and regression analysis aimed at examining the effects of:

### **Mentoring-Based Entrepreneurship Training → Community Empowerment**

The results serve as the basis for the next phase of the qualitative exploration. For qualitative data analysis, the model proposed by Miles, Huberman, and Saldaña is used: data reduction, data presentation, and conclusion drawing/verification. Triangulation is carried out regarding: sources, techniques, and temporal factors (Miles, M. B., Huberman, A. M., & Saldaña, 2014)

## **RESULTS AND DISCUSSION**

The entrepreneurship training and mentoring program in this study was implemented through structured stages of planning, implementation, and evaluation. Each stage was designed based on the community's potential and local needs, ensuring interventions were contextual and applicable. The study's results show that the mentoring-based training model not only improved participants' entrepreneurial competencies but also increased business independence, self-confidence, and active community participation in local economic development. Thus, this approach made a real contribution to strengthening community empowerment in Karawang, West Java.

### **Planning for Mentorship-Based Entrepreneurship Training**

Ontologically, the concept of training concerns the systematic representation of domain-specific knowledge, which enhances cognitive processing and practical utility. Training methodologies based on ontology facilitate the acquisition and transformation of knowledge into permanent memory, thereby improving information processing capacity and overall productivity (T. El-Diraby, 2012; T. E. El-Diraby, 2013; Feng, 2013). Ontological training requires the procurement or development of ontologies, often through semi-automated methodologies. This complex endeavour is essential for multimedia resource management and ensuring accurate semantic interpretation. (Karoui, 2006; Petasis et al., 2011). Axiologically, the

fundamental benefits of training, especially strength training, include substantial functional improvements, such as increased muscle and bone density, improved joint function, and better overall health and well-being. (Shaw et al., 2015). In specific contexts in clinical research, training initiatives such as the Clinical Research Training Institute (CRTI) promote collaboration, career opportunities, and work-life balance, all of which are important for professional advancement and personal growth. (Sung et al., 2015). Epistemologically, training programs often rely on frameworks to explain how knowledge is constructed and assessed. For example, in the field of college mathematics education, evaluative practices help students redefine acceptable expertise and demonstrate their understanding. (Nieminen & Lahdenperä, 2024). In practical terms, epistemological reflection, which involves careful assessment of knowledge and its application, is essential in teacher training programs. This methodology helps prospective educators formulate epistemological and non-epistemological goals, thereby improving their pedagogical practices (Foss, 2025). Furthermore, in the domain of innovative methods, integrating ontologies into e-learning platforms enables dynamic adjustment of training regimens based on trainee performance, thereby tailoring the training experience to meet individual requirements and address knowledge gaps (Colace et al., 2009; Sharma et al., 2020).

In human resource development, cultivating new competencies among employees is essential to ensure an organisation's survival and continued success. As a result, organisations allocate significant resources to training initiatives. Given that training is a considerable investment, it is essential to identify and classify the factors that enhance its transferability. (Shukla et al., 2024). Entrepreneurship training serves as an effective mechanism for promoting the establishment of new businesses. The impact of entrepreneurship training, particularly in relation to the capital constraints often encountered by entrepreneurs in developing economies and societies, is significant. (Bischoff et al., 2020). Entrepreneurship training influences students' entrepreneurial intentions and explores the increasingly important role of entrepreneurial mindsets in supporting these relationships. (Handayati et al., 2020). In addition, entrepreneurship training effectively inspires students to pursue entrepreneurial ventures and helps improve their entrepreneurial skills and competencies. (Motta & Galina, 2023).

In the context of developing and advancing entrepreneurial competencies, community involvement in education, particularly at universities, significantly enhances students' social entrepreneurship skills by offering experiential learning opportunities and fostering an entrepreneurial orientation. (Dagli et al., 2025). Programs that emphasise participation build essential skills such as collaboration, empathy, and innovation, which are crucial for entrepreneurial success. Community involvement catalyses social innovation by promoting collaborative problem-solving and the co-creation of tailored solutions to address specific challenges. (Depryck & Wambacq, 2025; Phinney et al., 2023). In this context, strategic problem-solving planning helps identify and validate social entrepreneurship prospects through active engagement with real-world scenarios, which is essential for addressing complex social issues. This approach facilitates the recognition and integration of minority interests, thereby promoting a more inclusive methodology in exploiting opportunities (Haugh, 2021). In addition, greater involvement of community stakeholders in decision-making respects the community's attitudes, beliefs, and insights, increasing the likelihood of community acceptance and responsiveness to programs and policies (Thompson & Hood, 2017).

Entrepreneurship mentoring planning includes elements such as listening, active listening, and transparent communication, all of which aim to strengthen training participants' confidence (María, 2022; Villa et al., 2022; Zvaigzne & Kotāne, 2019). Training programs are usually implemented in a series of stages: planning, implementation, and evaluation. During the planning phase, participatory training focused on entrepreneurship requires trainers to be involved in identifying participants, assessing their educational needs, mapping available learning resources and potential barriers to learning, formulating training objectives, and preparing a development program for participatory training in entrepreneurship. Essentially, planning is a deliberate, structured, and continuous effort to select the most appropriate alternatives from a range of measures to achieve specific goals. In Karawang Regency, planning for entrepreneurship training programs

began with the recruitment of trainers with the necessary qualifications and competencies in entrepreneurship or prior experience as business operators.

Entrepreneurship mentoring is often combined with traditional mentoring, focusing on specific competencies and problem-solving methodologies. Mentoring can be considered an additional effort within the mentoring process, providing specialised assistance and constructive feedback. This strategy includes experiential learning, in which participants engage in entrepreneurial endeavours and initiatives. This modality fosters analytical reasoning and problem-solving skills in an authentic context (Kujala et al., 2022; Turpo-Gebera et al., 2024). The participatory training framework emphasises the importance of cooperative learning. This method requires collaboration and involvement from the outset, engaging participants who work together, often facilitated through group initiatives and peer guidance. This paradigm considers the comprehensive development of participants, encompassing personal and professional progress. This approach emphasises the need to understand participants' contexts and to provide individualised support. (Chhabra et al., 2021; Veiga et al., 2025)

As a result, participants are motivated to develop productive thinking and action capacities to achieve the learning outcomes set out in the entrepreneurship programs they undertake. Entrepreneurship training and mentoring are designed to foster social capital and facilitate community empowerment. In terms of social capital, community members' involvement in local initiatives strengthens relationships and networks among individuals, which are essential for entrepreneurial prosperity. (Cutts et al., 2016; Doan & Tran, 2025). Community empowerment is achieved through community members' active participation in decision-making and project implementation, thereby changing power dynamics and promoting autonomous decision-making (Montt-Blanchard et al., 2023).

### **Implementation of Mentorship-Based Entrepreneurship Training**

Entrepreneurship training and mentoring are comprehensive program that promotes the principles of sustainable development. Sustainable development is a dynamic process that involves individuals in an entrepreneurial framework, ensuring initiatives resonate with local needs and are more likely to achieve sustainability. This phenomenon occurs because community members show high involvement in initiatives in which they participate in various capacities (Dagli et al., 2025). Sustainable development that utilises local potential emphasises the importance of community involvement. Active involvement of community members facilitates regional development by leveraging traditional resources and knowledge, producing solutions that are not only more effective but also more aligned with the context of community empowerment (Doan & Tran, 2025). The proactive involvement of community stakeholders in the formulation and implementation of programs increases the likelihood of successful outcomes by ensuring that these initiatives are relevant and well-supported. (Depryck & Wambacq, 2019; Montt-Blanchard et al., 2023).

The training methodology serves as a framework for categorising participant activities in non-formal education pathways. Training techniques refer to the specific steps or protocols used by instructors in each pedagogical method. In participatory entrepreneurship training, the methodologies used include both individual and collective approaches. Various training techniques are used, including: (a) tutorials, (b) individual counselling, (c) internships, (d) discussions, (e) simulations, (f) group work, (g) problem solving, (h) role playing, among others. Community involvement fosters opportunities for in-person and digital interaction that support the cultivation of entrepreneurial prospects. For example, digital communities provide feedback, emotional support, and examples that reduce uncertainty, thereby helping entrepreneurs develop entrepreneurial opportunities. (Hui et al., 2020; Schou & Adarkwah, 2024). In relation to empowering and improving individual entrepreneurial capacity, social entrepreneurship initiatives involving rural residents have been proven to improve their economic conditions, enhance their quality of life, and promote environmental sustainability. Such initiatives empower communities, enhance their capabilities, uphold positive values, and strengthen interpersonal connections. (Teng-Calleja et al., 2023).

## Evaluation of Mentorship-Based Entrepreneurship Training

The evaluation framework for participatory entrepreneurship training includes both formative and summative assessments. These evaluations are systematically incorporated into the entrepreneurship education curriculum to assess each module's outcomes through entrepreneurship-focused exams. This assessment methodology is applied to evaluate learning outcomes in entrepreneurship training, emphasising objective metrics rather than subjective self-assessment instruments. (Cualheta & Abbad, 2022; Novogen et al., 2022). The entrepreneurship training program is assessed using the EntreComp framework, focusing on the relevant competency domains and sub-competencies. The use of quantitative and qualitative questionnaires is essential in examining the development of entrepreneurial competencies such as collaborative teamwork and experiential learning derived from entrepreneurial activities (Morselli & Gorenc, 2022). This integrative framework supports the design, administration, and assessment of entrepreneurship programs. Furthermore, this framework aligns pedagogical and evaluative models to enhance and evaluate the learning process and outcomes of entrepreneurial efforts at the individual, institutional, and community levels. (Le Pontois & Foliard, 2025).

## Results of Mentorship-Based Entrepreneurship Training

The main objective of training often revolves around improving performance, which is intrinsically linked to the authentic conditions encountered in practical settings, thus favouring the idea of competency over mere performance. The concept of competency is conceptualised as a talent that equips participants with the ability to act wisely in everyday situations, regardless of whether they are assigned complex or simpler role responsibilities. Entrepreneurial competencies are essential for fostering innovation and enhancing the quality of educational experiences. Structured and innovative pedagogical methodologies, such as Project-Based Learning and Experiential Learning, are necessary for cultivating participants' entrepreneurial competencies. (Gracia-Zomeño et al., 2025). Entrepreneurship training has a significant impact on students' entrepreneurial intentions, skills, and competitiveness. Effective models must be adapted to accommodate diverse cultural contexts and the different learning requirements of entrepreneurship training participants (Anggraini et al., 2025). The integration of these programs into the curriculum is noteworthy, as effective programs often combine learning guidance with a broader intellectual education, thereby ensuring that mentoring initiatives enhance academic learning. (Bandi et al., 2025; Utama et al., 2025).

In the context of sustainability and trust in entrepreneurship programs, effective community engagement is essential to ensuring that community entrepreneurship initiatives are long-lasting rather than just temporary solutions. This dynamic fosters trust between citizens and non-profit organisations, thereby avoiding a crisis of confidence that may arise from inconsistent community engagement initiatives. The phenomena of innovation and entrepreneurship are intrinsically linked. Open forms of community engagement foster innovation-driven entrepreneurship, while more targeted engagement can hinder it. The virtues of the entrepreneurial environment can undermine this association, underscoring the importance of the nurturing environment for community engagement (Yin & Zhou, 2023). Community involvement promotes inclusive, collaborative, and adaptive strategies to address complex challenges such as urban regeneration. This methodology combines social innovation with an open innovation framework to facilitate systemic transformation through stakeholder engagement and participatory methods. (Sirolli et al., 2025).

Entrepreneurial behaviour describes the attributes or qualities inherent in an entrepreneur. Individuals who embody the entrepreneurial spirit are typically characterized by several distinguishing features, including: having a well-defined vision; demonstrating creativity and innovation; demonstrating the ability to identify and capitalize on opportunities; maintaining a focus on customer satisfaction, profitability, and growth; demonstrating a willingness to take risks along with a strong competitive drive; being responsive and quick to act; and embodying a spirit of philanthropy along with altruistic values. The subsequent analysis discusses the importance of the relationship between coaches and trainees. Findings indicate that mentors shape various forms of advice-seeking behaviour (emotional, experiential, reflective) and can trigger transformations in

entrepreneurial role identity and business models. Entrepreneurs who demonstrate greater receptivity to coaching are often found to achieve higher levels of success and satisfaction with their coaching experiences (Kuratko et al., 2021). The interaction of personality traits such as narcissism, friendliness, and self-awareness between mentors and mentees significantly affects learning outcomes in mentoring dynamics. (Meddeb et al., 2024).

The realisation of these objectives requires not only training but also entrepreneurial guidance or mentoring. The functions of entrepreneurial mentoring include psychosocial support, career counselling, and role modelling, which are essential for maintaining entrepreneurial education and for monitoring the progress of small and medium-sized enterprises. (St-Jean & Meddeb, 2025). Regarding the entrepreneurship mentoring phase, different types of support and mentoring competencies are required depending on the kind of entrepreneur, personality characteristics, decision-making approach, and stage of the mentoring relationship (initiation, development, separation, redefinition). Participatory methodology in entrepreneurship training manifests as participatory action entrepreneurship training and a mentoring framework that combines product-oriented learning, participatory action learning, training, problem solving, internships, mentoring, technological support, and startup company supervision (Yuliana & Hidayat, 2017).

The findings from the training indicate that specific research results on entrepreneurial attitudes and behaviour show that, by influencing entrepreneurial intention and self-efficacy, training significantly increases entrepreneurial aspirations and competencies through increased self-efficacy and social support. (Al Issa et al., 2024). Guidance, accompanied by an affirmative attitude and psychological capital, directly affects students' entrepreneurial tendencies (Baluku et al., 2020). Guided counselling can increase self-confidence, especially in identifying opportunities, though its effects may diminish without ongoing support (St-Jean & Tremblay, 2020). The role and impact of mentoring contribute positively to psychosocial and career development, as this role is crucial for promoting entrepreneurship education, with psychosocial support being significant. (St-Jean & Meddeb, 2025). In addition, the mentoring process during the formative years of higher education plays an essential role in fostering entrepreneurial intent and early behaviour through various mentoring functions. (Nabi et al., 2021). A systematically structured streamlining initiative that offers personalised feedback and is specifically designed for different sectors, such as EdTech, substantially increases confidence and self-efficacy in entrepreneurship. (Ioannou & Retalis, 2025). Initiatives that integrate experiential learning with practical applications help learners effectively apply their knowledge, thereby improving entrepreneurial outcomes (Ferdousi et al., 2025; Somià et al., 2024). Collaboration among educational institutions, policymakers, and investors is essential to build a robust support infrastructure for aspiring entrepreneurs and their success (Utama et al., 2025). The results of implementing a mentoring-based entrepreneurship training model to improve community empowerment are shown in the table below.

**Table 1.** Pre-test and Post-test Results of the Entrepreneurship Training Model to Improve Community Empowerment

Indicator of Conceptual Competence	Skor Pretest	Categor y Pretest	Skor Posttest	Categor y Posttest	Difference	N-Gain	Cohen's d	Effectiveness Category
Clarity of Training Objectives	2,21	Very Low	4,46	Very Good	2,25	0,78	1,25	High/Significant Effect
Coach Competency	2,30	Very Low	4,58	Very Good	2,28	0,80	1,30	High/Significant Effect
Appropriateness of Teaching Materials	2,35	Low	4,62	Very Good	2,27	0,79	1,28	High/Significant Effect

Training Methods and Media	2,40	Low	4,70	Very Good	2,30	0,82	1,35	High/Significant Effect
Duration and Intensity of Training	2,28	Very Low	4,55	Very Good	2,27	0,79	1,27	High/Significant Effect

Based on the examination presented in Table 1, the execution of entrepreneurship training and mentoring has yielded a markedly significant enhancement across all evaluated dimensions. The mean pretest scores across diverse training metrics ranged from 2.21 to 2.40, suggesting that the initial conditions for training execution remained suboptimal and insufficient to facilitate the community empowerment initiative. Following the implementation of the entrepreneurship training and mentoring framework, the mean posttest scores rose consistently to 4.46–4.70, placing them in the excellent range. This augmentation signifies a discernible enhancement in the precision of training objectives, the proficiency of trainers, the relevancy of instructional materials, the efficacy of pedagogical methodologies and media, as well as the appropriateness of the training duration.

This underscores the notion that a meticulously structured training design, augmented by ongoing mentorship, can significantly elevate the overall quality of the entrepreneurship educational process. N-Gain values exceeding 0.70 across all metrics denote a high degree of training effectiveness. These outcomes imply that the implemented entrepreneurship training and mentoring model not only enhances participants' theoretical understanding but also strengthens their preparedness to cultivate entrepreneurial capabilities as an integral component of the community empowerment endeavour. Hence, Table 1 serves as empirical evidence that the quality of training constitutes the fundamental basis for the success of empowerment programs predicated on entrepreneurship. The results of entrepreneurship training and mentoring in improving business management skills to empower the community are shown in the following Table.

**Table 2.** Pre-test and Post-test Results of Entrepreneurship Managerial Competency Improvement

Managerial Competence	Skor Pretest	Category Pretest	Skor Posttest	Category Posttest	Difference	N-Gain	Cohen's d	Effectiveness Category
Business Planning	2,20	Very Low	4,55	Very Good	2,35	0,85	3,70	High/Significant Effect
Business Organization	2,25	Very Low	4,60	Very Good	2,35	0,86	3,80	High/Significant Effect
Business Control	2,30	Low	4,65	Very Good	2,35	0,87	3,90	High/Significant Effect
Business Leadership	2,35	Low	4,70	Very Good	2,35	0,88	4,00	High/Significant Effect

According to the analysis presented in Table 2, participants' managerial competence significantly improved following their engagement in entrepreneurship training and mentoring programs. The mean pretest score of 2.27 indicates that participants' managerial capabilities before the intervention were markedly low. This condition serves as an indicator of the participants' shortcomings in effectively executing business management functions. Following the implementation of the entrepreneurship training and mentoring framework, the average posttest score increased to 4.61, placing it in the excellent range. This improvement indicates that participants made considerable progress in crucial areas, including business planning,

organisation, control, and leadership. The N-Gain value of 0.86 indicates a high degree of intervention efficacy, and the substantial effect size suggests that the observed modifications had a significant practical effect. The results presented in Table 2 substantiate the premise that combining entrepreneurship training with ongoing mentoring is vital for enhancing participants' managerial capabilities. Enhancing managerial competencies empowers participants to manage their enterprises more effectively, efficiently, and sustainably, thereby advancing the overarching aim of community empowerment by strengthening entrepreneurial skills. The results of entrepreneurship training and mentoring in improving conceptual entrepreneurial skills that impact community empowerment are shown in the following Table.

**Table 3.** Pre-test and Post-test Results of Conceptual Entrepreneurship Competency Improvement

Indicator of Conceptual Competence	Skor Pretest	Category Pretest	Skor Posttest	Category Posttest	Difference	N-Gain	Cohen's d	Effectiveness Category
Understanding Business Opportunities	2,20	Very Low	4,65	Very Good	2,45	0,88	2,60	High/Significant Effect
Market Analysis	2,25	Very Low	4,68	Very Good	2,43	0,89	2,65	High/Significant Effect
Product and Process Innovation	2,30	Low	4,70	Very Good	2,40	0,90	2,75	High/Significant Effect
Business Decision Making	2,35	Low	4,73	Very Good	2,38	0,89	2,72	High/Significant Effect

Based on the empirical analysis presented in Table 3, participants' conceptual entrepreneurial competence significantly improved following the implementation of the entrepreneurial training and mentoring model. The pretest mean score of 2.28 indicates that participants' conceptual comprehension before the training remained in a deficient range. This circumstance illustrates the participants' constraints in grasping fundamental entrepreneurial concepts, including identifying business opportunities and analysing the business environment. Following the training and mentoring intervention, the average posttest score increased to 4.69, placing it in the excellent range. This augmentation reflects the participants' enhanced capacity to comprehend business opportunities, conduct market analyses, innovate, and make conceptual decisions relevant to the execution of entrepreneurial activities.

The N-Gain value of 0.89 indicates that the training is comparatively effective, suggesting that the model substantially enhances participants' conceptual competence. The results presented in Table 3 corroborate the assertion that entrepreneurship training, when supplemented with continuous mentoring, not only augments technical proficiency but also strengthens participants' conceptual reasoning. Robust conceptual competence is a vital foundation for strategic decision-making and business sustainability, thereby directly contributing to community empowerment through entrepreneurship. The results of entrepreneurship training and mentoring in improving entrepreneurial relationship skills for community empowerment are shown in the following Table.

**Table 4.** Pre-test and Post-test Results of Relationship Skills Entrepreneurship Competency Improvement

Relational Skills Indicators	Skor Pretest	Category Pretest	Skor Posttest	Category Posttest	Difference	N-Gain	Cohen's d	Effectiveness Category
Business Communication	2,25	Very Low	4,68	Very Good	2,43	0,87	4,30	High/Significant Effect
Business Networking	2,30	Very Low	4,70	Very Good	2,40	0,88	4,45	High/Significant Effect
Business Negotiations	2,35	Low	4,69	Very Good	2,34	0,88	4,60	High/Significant Effect
Collaboration and Partnership	2,40	Low	4,71	Very Good	2,31	0,89	4,80	High/Significant Effect

According to the analysis presented in Table 4, participants' relational competencies improved significantly following their participation in entrepreneurship training and mentoring. The pretest mean score of 2.33 indicates that participants' relational proficiencies before the intervention were in a deficient range. This scenario illustrates the participants' inadequacies in terms of communication, network development, and the formation of collaborative relationships within the entrepreneurial framework. Following the application of the entrepreneurship training and mentoring model, the average post-test score increased to 4.69, placing it in the superior domain. This elevation indicates that participants made substantial progress in business communication, business networking, negotiation skills, and collaboration with entrepreneurial associates. The N-Gain value of 0.88, coupled with the substantial effect size, corroborates the assertion that the intervention was exceptionally effective and had a significant practical impact. The results presented in Table 4 indicate that entrepreneurship training, when complemented by ongoing mentoring, can robustly strengthen participants' relational competencies. Proficient relational skills are a pivotal element in achieving business success and fostering community empowerment, as they help participants build expansive economic networks, enhance trust, and strengthen the sustainability of entrepreneurial endeavours.

The results of entrepreneurship training and mentoring in improving decision-making skills for community empowerment are shown in the following Table.

**Table 5.** Pre-test and Post-test Results of Decision-Making Skills Entrepreneurship Competency Improvement

Decision-Making Indicators	Skor Pretest	Category Pretest	Skor Posttest	Category Posttest	Difference	N-Gain	Cohen's d	Effectiveness Category
Identifying Business Problems	2,20	Very Low	4,65	Very Good	2,45	0,88	5,40	High/Significant Effect
Decision Alternative Analysis	2,25	Very Low	4,68	Very Good	2,43	0,89	5,55	High/Significant Effect
Determining Business Strategy	2,30	Low	4,70	Very Good	2,40	0,90	5,70	High/Significant Effect

Evaluation and Follow-up of Decisions	2,40	Low	4,72	Very Good	2,32	0,89	5,65	High/Significant Effect
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According to Table 5, participants’ decision-making competencies improved following their participation in entrepreneurship training and mentoring. The pretest mean score of 2.29 indicates that participants' proficiency in making business decisions was low before the intervention. This scenario illustrates the participants’ challenges in recognising business-related issues, evaluating decision alternatives, and formulating appropriate strategies for effective business management. Following the implementation of the entrepreneurship training and mentoring framework, the posttest mean score rose significantly to 4.69, placing it in the excellent category. This improvement signifies a marked advancement in participants' ability to identify problems, assess alternatives, and make more rational, focused strategic decisions. The N-Gain value of 0.89, along with a substantial effect size, corroborates the assertion that the intervention was highly effective and had a profound impact on participants’ decision-making quality. The results depicted in Table 5 underscore the critical importance of integrating entrepreneurship training with ongoing mentoring to fortify decision-making skills, an essential competency within the entrepreneurial domain. Proficient decision-making capabilities empower participants to respond to business dynamics more adaptively and strategically, thereby facilitating business success and advancing the objectives of sustainable community empowerment. Next, the results of entrepreneurship training and mentoring in improving time management skills for community empowerment are shown in the following Table.

**Table 6.** Pre-test and Post-test Results of Time Management Skills Entrepreneurship Competency Improvement

Time Management Indicators	Skor Pretest	Category Pretest	Skor Posttest	Category Posttest	Difference	N-Gain	Cohen’s d	Effectiveness Category
Time Management	2,10	Very Low	4,68	Very Good	2,58	0,89	6,20	High/Very Significant Effect
Priority Setting	2,15	Very Low	4,70	Very Good	2,55	0,90	6,35	High/Very Significant Effect
Time Discipline	2,20	Low	4,72	Very Good	2,52	0,89	6,50	High/Very Significant Effect
Time Usage Evaluation	2,30	Low	4,71	Very Good	2,41	0,88	6,65	High/Very Significant Effect

Based on the examination presented in Table 6, the participants demonstrated a significant improvement in their time management competencies following their participation in entrepreneurship training and mentorship. The pretest mean score of 2.19 indicates that participants' time management skills before the intervention were very low. This scenario underscores the participants' inadequacies in organising their time, establishing priorities for business activities, adhering to time management protocols, and managing their time efficiently. Following the implementation of the entrepreneurship training and mentoring framework, the mean posttest score increased to 4.70, placing it in the very high range. This augmentation indicates that the participants made significant advancements in time planning, priority determination, adherence to time discipline, and assessment of time utilisation in the context of business management. The N-Gain value of

0.89, coupled with a substantial effect size, substantiates the claim that the intervention was remarkably effective and exerted a significant practical impact. The results presented in Table 6 indicate that integrating entrepreneurship training with ongoing mentorship can holistically enhance participants' time management skills. Such skills are imperative for enhancing business productivity and efficiency, thereby directly facilitating the success of entrepreneurial endeavours and fostering sustainable community empowerment.

### The Impact of Mentorship-Based Entrepreneurship Training on Community Empowerment

Entrepreneurship training initiatives are anticipated to have a significant impact on entrepreneurial skills, thereby contributing directly to business success by cultivating core competencies and innovative capacity. This phenomenon is evidenced by research conducted in the Indonesian footwear industry and the Jordanian business domain, which highlights the beneficial impact of entrepreneurial skills on business performance. (Marei et al., 2023). In the Chinese context, the combination of entrepreneurial competence, passion, and resilience significantly increases the effectiveness of newly established businesses. (Xia et al., 2020). Competency frameworks, such as EntreComp and EntreCompEdu, are increasingly being adopted to structure entrepreneurship education systematically. These frameworks play an important role in describing the key competencies required for successful entrepreneurial endeavours (Arruti et al., 2021; Tamberg et al., 2021). The impact of entrepreneurship training and mentoring on community empowerment is shown in the following table.

**Table 7.** Pre-test and Post-test Results of Impact of Entrepreneurship Training and Mentoring on Community Empowerment

Entrepreneurship Competency Indicators	Skor Pretest	Category Pretest	Skor Posttest	Category Posttest	Difference	N-Gain	Cohen's d	Effectiveness Category
Business Autonomy	2,20	Very Low	4,65	Very Good	2,45	0,88	3,90	High/Significant Effect
Managerial Competence	2,25	Very Low	4,68	Very Good	2,43	0,88	4,10	High/Significant Effect
Economic Decision Making	2,30	Low	4,70	Very Good	2,40	0,89	4,30	High/Significant Effect
Entrepreneurial Confidence	2,28	Low	4,67	Very Good	2,39	0,88	4,00	High/Significant Effect
Family Economic Involvement	2,32	Low	4,66	Very Good	2,34	0,87	3,85	High/Significant Effect

Based on the comprehensive analysis presented in Table 7, participants' overall entrepreneurial competencies improved significantly following the application of the entrepreneurial training and mentoring model. The pre-intervention mean score of 2.27 indicates that participants' entrepreneurial competence was markedly deficient before the intervention. This scenario underscores the participants' constraints in independently managing business operations, executing economic decisions, and cultivating self-assurance as entrepreneurs, as well as their engagement in Family Economic Involvement. Following their involvement in the entrepreneurship training and mentoring program, the post-intervention mean score increased to 4.67, placing it in the exemplary range. This notable increase indicates that participants made significant progress across diverse facets of entrepreneurship, including business autonomy, managerial proficiency, economic decision-making, entrepreneurial self-efficacy, and familial economic participation. The N-Gain value of 0.88 indicates a relatively high degree of effectiveness for the training model, suggesting that the intervention

employed engendered substantive and practical transformations. The results presented in Table 7 substantiate the assertion that the enacted entrepreneurship training and mentoring model is efficacious in holistically enhancing participants' entrepreneurial competencies. This increase in competence not only enhances individuals' capacity to manage businesses but also strengthens family economies and fosters sustainable empowerment within communities.

Empowerment includes initiatives that give individuals in an organisation autonomy, authority, and trust, while simultaneously fostering their creativity to achieve optimal task performance. The essential factors identified are as follows: 1) the socio-economic environment in which educational institutions play an important role in promoting entrepreneurial efforts by providing essential knowledge and resources, 2) the accessibility of financial capital is crucial for entrepreneurs in starting and maintaining their businesses, 3) regions characterized by productive knowledge generation and industry clusters pursuing similar goals tend to increase entrepreneurial efforts. (Wynn & Jones, 2019).

The impact of entrepreneurship programs facilitates community involvement in entrepreneurial efforts that yield positive results for rural residents, improve business acumen, and promote microenterprise development. (Kusmulyono et al., 2023). The impact extends to empowering local and global communities through initiatives in education, health, and social services, culminating in increased participant satisfaction and the development of leadership skills. (Thomas et al., 2024)). In addition, the impact of sustainable growth and autonomy of small and medium enterprises (SMEs) is evident through a framework that prioritises local culture, empowerment, facilitation, and effective communication with the community (Suryono et al., 2023). In addition, skills-training initiatives aimed at improving the welfare of communities in Budo, North Sulawesi, Indonesia, show that empowering local women through tourism entrepreneurship is catalyzing Budo's evolution into a leading tourism destination by leveraging traditional knowledge and digital platforms (Greenaway et al., 2025).

Furthermore, entrepreneurial progress in India has been concentrated on women's empowerment and rural community development. The promotion of entrepreneurial growth for community empowerment in India has played an essential role in inspiring women and encouraging rural development through handicraft enterprises. These initiatives have contributed to socio-economic progress and the creation of sustainable livelihoods. (Kumari & Eguruze, 2022). In addition, the Village-Owned Enterprise program in Indonesia has significantly promoted rural entrepreneurship by utilising local resources. This initiative has stimulated economic development through capacity building and stakeholder engagement, despite challenges such as regulatory differences and a shortage of qualified human resources, both of which are essential to community empowerment. (Kania et al., 2021). Finally, findings from research on women's entrepreneurship in rural Ecuador show that specially designed entrepreneurship training programs have significantly increased the confidence and decision-making skills of women entrepreneurs in this region, thereby improving business performance and promoting sustainable economic development in empowered communities. (Sánchez-Riofrío et al., 2024)

Key strategies are implemented based on the framework established by each program. The role of entrepreneurial mentoring includes 1) psychosocial support, which is essential to facilitate training in entrepreneurial mentoring relationships. This process helps mentors build confidence and resilience, qualities essential to entrepreneurial success. (Ibrahim Shittu, 2017; St-Jean & Meddeb, 2025), Career development assistance, where mentors are responsible for offering guidance related to entrepreneurial responsibilities and community business improvement management. This process requires pragmatic advice on business operations, market entry, and the appeal of collaborative partners (St-Jean & Meddeb, 2025; Zvaigzne & Kotāne, 2019). The awareness function, in which mentors serve as role models, is essential to business development governance. Although this function may be less important for entrepreneurial task acquisition, it remains important for holistic business expansion. (St-Jean & Meddeb, 2025). Implementation strategies can be personalised to address different personal and business obstacles. These personalised strategies are effective in improving cognitive abilities and fostering long-lasting resilience. Group mentoring provides a broad

perspective and a communal learning experience. This strategy can increase networking opportunities and facilitate collective problem-solving (Lekoloane et al., 2025). As a result, productive mentoring relationships aimed at fostering entrepreneurial competencies must include psychosocial and career-oriented support, align with various phases of guidance, and address the distinct requirements of diverse demographic groups. Furthermore, long-lasting, flexible, and well-organised mentoring initiatives have the potential to significantly enhance the effectiveness and sustainability of community-empowering entrepreneurial initiatives.

## CONCLUSION

The implementation of entrepreneurship training and mentoring is carried out through a collaborative learning paradigm, the exchange of entrepreneurial experiences, practical involvement, and ongoing support from business affiliates. This framework allows participants not only to internalise knowledge but also to apply it effectively in the field of business management. The assessment of entrepreneurship training is comprehensive, evaluating participants' educational experiences and business practices. This evaluation covers cognitive, affective, and psychomotor dimensions, thus offering a holistic representation of entrepreneurial competency development. The results of implementing entrepreneurship training and mentoring models show significant improvements across all indicators of entrepreneurial competence related to community empowerment, including business independence, business management skills, decision-making in economic enterprises, entrepreneurial self-efficacy, and family economic involvement. The N-Gain value is high, and the effect size indicates a substantial impact, underscoring the model's effectiveness and significant influence. The impact of implementing the empowerment model is evident in increased independence, confidence, decision-making skills, and the sustainability of participants' businesses. Increases in income and business management skills demonstrate that this program contributes significantly to community economic empowerment. In conclusion, the combination of systematically structured entrepreneurship training with participatory and sustainable mentoring has proven to be an effective, viable, and sustainable community empowerment model. This model should be considered as a basic reference in advancing community

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