

## Evaluation of the Effectiveness of Conflict Management Training of Trainer (ToT) for Prospective Community Empowerment Facilitators in Magelang City

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### ABSTRACT

This study evaluates the effectiveness of a Conflict Management Training of Trainers (ToT) program in Magelang City, motivated by the complex social dynamics that demand highly competent community facilitators. Utilizing a novel empirical evaluation model for reflective-experiential training in a heterogeneous Southeast Asian urban context, this paper contributes to knowledge by focusing on the transfer of learning across cognitive, psychomotor, and affective domains. The methodology employed a quantitative pre-test and post-test design on 67 participants (N=67). Data observation involved tests (multiple-choice/essay) to measure conceptual mastery and implementation skills, and a Likert-scale questionnaire for attitudes toward conflict. Data were analyzed using paired-sample t-tests and Cohen's d effect sizes. Results showed statistically significant improvements ( $p < 0.001$ ) across all domains, with the largest effect observed in implementation skills (Cohen's  $d = 1.34$ ).

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## **INTRODUCTION**

In local social development, the facilitator plays a pivotal role as the main driver for community empowerment (Harinurdin et al., 2025). Facilitators include public servants, as defined in Law No. 25 of 2025 on Public Services. They act as links between the government and the public, and also mediate when social conflicts arise during citizen engagement. The facilitator's effectiveness as a public servant is a key measure of government performance. This enables the public to directly assess service efficiency and quality (Armawaty et al., 2024). Conflicts often arise due to differences in interests, perceptions, or values among community members, or between communities and stakeholders (Ariani, 2024). Such situations also occur in Magelang City, where complex social dynamics in empowerment initiatives can create group tensions. Here, facilitators with strong conflict management skills are essential. They ensure conflicts are managed constructively and help achieve both empowerment and good governance.

The Training of Trainers (ToT) program is a strategic approach to enhancing facilitators' ability to understand, manage, and share conflict management skills within the community (Baron, 2006). It also stresses the importance of professionalism, accountability, and legal certainty in delivering services. The ToT model has proven effective in building professional competencies through a step-by-step learning approach. This cascade training has a broader impact on more participants (Martinez Leal et al., 2022). In social training, ToT focuses on more than knowledge it builds reflective, interpersonal, and practical facilitation skills (Adham, 2023). However, studies have found that training success relies on local context, instructional design, and a good balance of theory and practice (Chen et al., 2025). Thus, evaluating ToT's effectiveness for local conflict management is crucial. This ensures the program stays relevant and meets the community's needs.

Numerous prior investigations have substantiated that conflict management training can markedly enhance communicative competencies, problem-solving capabilities, and collaborative efforts among diverse groups within various organizational and educational settings (Badriyah et al., 2024; Chen et al., 2025). In the context of the Southeast Asia region, particularly with respect to community development and governance in the Philippines (De Guzman et al., 2023) or in the augmentation of facilitator roles within social sustainability initiatives in Malaysia and Thailand (Kuitert et al., 2023; Malik et al., 2021). The research illustrated the significance of conflict management in facilitating the efficacy of community development initiatives (World Bank, 2018), wherein facilitators frequently function as *de facto* mediators in addressing social tensions and resource-related conflicts at the grassroots level. In Indonesia, the capacity to Manage Conflict within Society has been acknowledged as a critical competency requisite for Community Empowerment Facilitators (BNSP, 2024).

Nonetheless, the majority of studies investigating the efficacy of such training predominantly concentrate on relatively structured professional environments such as those involving healthcare practitioners, educators, or organizational leaders and have not specifically scrutinized the efficacy of conflict management training for community empowerment facilitators operating within urban locales. Conversely, community empowerment facilitators navigate a considerably more intricate social milieu. They confront elevated levels of social, economic, and cultural heterogeneity (urban multiculturalism), the intensity of social interactions necessitating adaptive and empathetic skill sets, and the potential emergence of dynamic interest-based conflicts. This contextual complexity serves as a crucial foundation for the present study, particularly in comprehensively understanding how Training of Trainers (ToT) can transform conceptual competencies, implementational skills, and reflective dispositions of prospective facilitators in Magelang City.

The investigation was executed employing a quantitative methodology utilizing pre-test and post-test designs to appraise the effectiveness of conflict management ToT training. The assessment concentrated on three primary dimensions: (1) the comprehension of conflict management principles, (2) the capacity to execute conflict management strategies within the facilitation framework, and (3) the perceptions and attitudes of facilitators regarding the significance of conflict management in community empowerment. Initial findings indicated that participants exhibited a high level of conceptual mastery at the onset of the training; however, their implementation skills and attitudes demonstrated a more pronounced enhancement subsequent to the training. These outcomes underscore the critical importance of practice-oriented training and reflective engagement in augmenting the efficacy of ToT, while also illustrating learning dynamics that encompass not only cognitive aspects but also affective and conative dimensions (Martinez Leal et al., 2022). In alignment with this, the findings of this investigation further endorse the trajectory of human resource development policy aimed at fortifying social cohesion. This is congruent with the global commitment to the realization of the Sustainable Development Goals, particularly SDG 16, which accentuates the significance of peace, justice, and resilient institutions as foundational elements for sustainable development.

Therefore, this research possesses significant theoretical and practical implications. From a theoretical perspective, this research enhances the comprehension of the efficacy of Training of Trainers (ToT) models within the realm of social conflict management, particularly in urban settings characterized by diverse societal attributes such as those found in Magelang City. From a practical standpoint, the findings of this research are anticipated to provide guidance for local governmental bodies, educational institutions, and civil society organizations in the formulation of more contextually relevant, participatory, and reflective practice-oriented ToT initiatives. In terms of policy implications, the outcomes of this study are expected to facilitate the development of competency standards and certification frameworks for

community empowerment facilitators, aimed at fostering the constructive and sustainable management of social conflicts.

## **IMPLEMENTATION AND METHODS**

This study employed a quantitative research approach utilizing a single-group pre-test and post-test design (Hirose and Creswell, 2023). The sample consisted of 67 prospective community empowerment facilitators (N=67) from various urban areas within Magelang City, Indonesia. All participants completed the training program and both assessment stages. The intervention lasted three full days, emphasizing hands-on simulations, case studies based on local conflicts, and reflective group discussions.

### ***Instruments and Data Collection***

The effectiveness of the ToT program was measured across three distinct domains:

1. **Concept Mastery (Cognitive Domain):**  
Assessed through a five-item Multiple-Choice Test (Max Score: 5), focusing on core conflict management theories and models.
2. **Implementation Skills (Psychomotor Domain):**  
Assessed through an Essay Test (Max Score: 3 per question, Max Total Score: 6), requiring participants to analyze a mock conflict scenario and develop a facilitation strategy. This test directly evaluates the ability to apply learned concepts.
3. **Attitude Perception towards Conflict (Affective Domain):**  
Measured using a five-item Likert Scale questionnaire (1 = Strongly Disagree, 5 = Strongly Agree, Max Score: 25), assessing participants' confidence, willingness, and reflective approach to engaging in community conflict.

The internal consistency (reliability) of the instruments was previously verified (e.g., using Cronbach's Alpha where appropriate, following (Taber, 2018).

### ***Data Analysis***

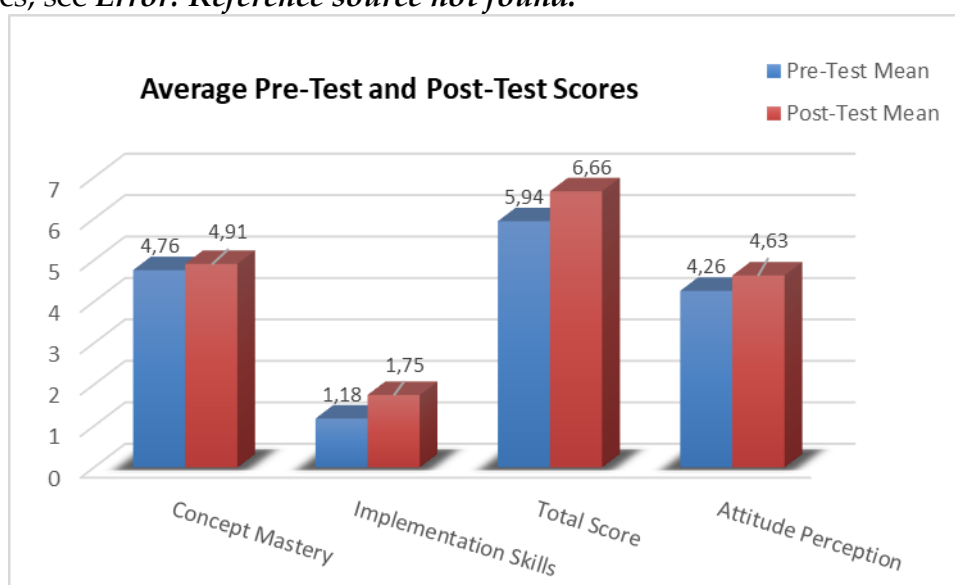
Data analysis employed both descriptive and inferential quantitative methods. The paired sample t-test was used to evaluate differences between pre-test and post-test scores. This approach clarifies the significance of changes in participants' knowledge and skills following the training intervention (Stellefson et al., 2020). Descriptive analysis was also conducted to determine mean score improvements in concept mastery, implementation skills, and attitude development. This facilitated the identification of the most significant learning patterns.

The results of the data analysis were expressed as mean differences and effect sizes (Cohen's *d*) to assess the impact of the training on participants' competencies. This approach recognizes that training effectiveness should be evaluated not only by score changes but also by the magnitude of the intervention's effect on learning behavior (Mazzolari et al., 2022).

To ensure data validity and reliability, Cronbach's alpha was calculated for each measurement variable, with a criterion of  $\geq 0.70$  (Taber, 2018). The data were then presented using comparative graphs and spider charts to illustrate multidimensional improvements in participants' abilities. Additionally, qualitative analysis was conducted using open-ended reflection sheets completed by participants, which supplemented the quantitative findings with experiential narratives from the training process.

## RESULTS AND DISCUSSION

The following section presents a comprehensive dataset of Pre-Test and Post-Test values, clearly illustrated in the accompanying graph. The data demonstrate a significant improvement across all evaluated aspects, with the tested measures resulting in the most substantial increase in performance metrics, see *Error! Reference source not found.*



**Figure 1 Visual Comparison of The Pre-Test And Post-Test for Four Components**

The comparative analysis of pre-test and post-test mean scores is presented in Table 1, along with the results of the paired sample t-test and Cohen's d.

**Table 1. Comparison of Pre-Test and Post-Test Mean Scores (N=67)**

Evaluation Aspect	Pre-Test Mean	Post-Test Mean	Mean Increase ( $\Delta M$ )	t (df=6)	p-value	Cohen's d	Effect Size
Concept Mastery (PG)	4.76	4.91	+0.15	3.51	< 0.001	0.43	Moderate
Implementation Skills (Essay)	1.18	1.75	+0.57	10.98	< 0.001	1.34	Large
Total Score	5.94	6.66	+0.72	10.45	< 0.001	1.28	Large

Attitude Perception	4.26	4.63	+0.37	8.87	< 0.001	1.09	<b>Large</b>
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**Key Findings:**

1. All four measured aspects showed a statistically significant increase from pre-test to post-test ( $p < 0.001$ ).
2. The intervention resulted in a large practical effect (Cohen's  $d \geq 1.0$ ) on Implementation Skills, Total Score, and Attitude Perception.
3. The highest mean increase and largest effect size were observed in Implementation Skills ( $d = 1.34$ ).

The assessment of the Training of Trainer (ToT) Conflict Management program showed notable improvements in all evaluated dimensions, including conceptual comprehension, application capability, cumulative score, and attitudes toward conflict. Quantitative data were collected through pre- and post-tests using a mixed-format assessment that included multiple-choice questions for conceptual mastery and essay questions for practical application.

The most significant improvement was observed in the implementation dimension, measured by essay responses, which increased by 0.57 points from a mean of 1.18 in the pre-test to 1.75 in the post-test. This result demonstrates substantial progress in participants' ability to analyze conflict scenarios and develop contextually relevant resolution strategies. The aggregate combined score (PG plus Essay) also increased by 0.72 points, indicating overall gains in competence in both cognitive and practical domains.

The conceptual mastery dimension (PG) started with a relatively high mean score of 4.76, likely because most facilitators had up to three years of experience. This dimension increased moderately by 0.15 points by the end of the training. These results indicate that participants already possessed a strong conceptual foundation, but the ToT activities further deepened their understanding of conflict management theories and principles. Attitudes toward conflict also improved by 0.37 points, from 4.26 to 4.63, reflecting a positive shift in participants' perceptions and responses to social conflict within the community.

These outcomes corroborate the effectiveness of the pedagogical approach employed in ToT training, which synthesizes reflective learning, practical engagement, and case simulation. Training strategies grounded in experiential learning (Kolb, 2014) have been demonstrated to enhance participants' abilities to connect theoretical knowledge with real-world practice. Moreover, group discussions and reflective sessions afford participants the opportunity to internalize the principles of empathic communication, collaboration, and consensus-based conflict resolution (Baldwin and Ford, 1988; Rahim, 2023; Rahim et al., 2022).

In summary, these findings indicate that ToT training enhances both technical knowledge and constructive attitudes toward conflict. This prepares participants more effectively for roles as community empowerment facilitators. Consistent improvements across all four dimensions demonstrate the value of training designs that integrate cognitive, affective, and psychomotor components.

The results provide compelling empirical evidence for the effectiveness of the experiential-reflective ToT model in strengthening the capacity of urban community facilitators.

### ***Implementation Skills: The Pinnacle of Success***

The most significant finding is the increase in Implementation Skills ( $d=1.34$ ), which far exceeds the cognitive gain ( $d=0.43$ ). This large effect size confirms that the training successfully facilitated the transfer of learning (Baldwin and Ford, 1988) from the classroom setting to a simulated field application. The high impact on practical skills suggests that the program's design which heavily relied on simulations, role-playing, and contextualized case studies of Magelang City was an appropriate pedagogical choice. For community services in the Asian context, where relational and nuanced conflict resolution (Musyawarah) is key, the capacity to implement flexible strategies (Thomas et al., 2023) is crucial. This finding empirically validates the use of situated learning (Wenger, 2000) in capacity building for social change agents.

### ***Transformation of Attitude (Affective Domain)***

The large effect size on Attitude Perception ( $d=1.09$ ) indicates a robust transformation in the affective domain. Participants shifted towards viewing conflict as a constructive opportunity rather than something to be avoided. This change is vital for facilitators, as a positive attitude promotes the use of collaborative and integrating conflict styles, which are generally more effective in generating sustainable solutions in collectivist societies prevalent across Asia (Rahim et al., 2022). This outcome aligns directly with Zimmerman's Empowerment Theory, where personal change (including psychological competence and confidence) is a necessary precursor for successful community-level change (Messman et al., 2022).

### ***Cognitive Gains (Concept Mastery)***

Although statistically significant ( $d=0.43$ ), the cognitive gain was the smallest effect size. This finding is likely a result of the high initial pre-test scores ( $M=4.76$  out of 5), suggesting participants already possessed a high baseline of theoretical knowledge. This confirms our initial hypothesis: the true measure of success for this cohort lay in the psychomotor and affective transfer, domains where the training achieved its highest impact (Hjellvik and Mallam, 2024).

From the perspective of theoretical development, the findings of this research significantly enhance the existing body of literature on the efficacy of facilitator training within the realm of social development. The implemented training model can be classified as an experiential-reflective facilitation methodology, which amalgamates conflict management theory, experiential learning, and participatory empowerment principles. These empirical results substantiate the assertion that the enhancement of facilitator competencies may be assessed not solely via cognitive outcomes, but also through quantifiable indicators reflecting modifications in attitudes and social skills (Isa et al., 2023), while exercising caution to avert potential abuses of authority that may incur

personal liability, be it administrative, civil, or criminal, in accordance with Law No. 30 of 2014 concerning Government Administration (Pemerintahan, 2014).

In summary, the Training of Trainers (ToT) program on Conflict Management, executed in Magelang City, has demonstrated its effectiveness in comprehensively enhancing the capacity of community empowerment facilitators. Through a practice-oriented learning framework, participants not only assimilate theoretical knowledge but also internalize the fundamental values of mediation, empathy, and critical reflection that are essential to the professionalism of a facilitator (Branch and George, 2017). Consequently, the replication and advancement of this program across various prospective regions could represent a strategic initiative in bolstering a network of proficient, integrative, and community-oriented facilitators aimed at facilitating constructive conflict resolution.

## **CONCLUSIONS AND RECOMMENDATIONS**

The Training of Trainer (ToT) Conflict Management program for prospective community empowerment facilitators in Magelang City was highly effective. The quantitative evidence shows a statistically and practically significant positive impact across all evaluated domains (cognitive, psychomotor, and affective), with a particularly large effect size on the transfer of knowledge into implementation skills ( $d=1.34$ ) and the development of positive attitudes towards conflict ( $d=1.09$ ). This model, which emphasizes experiential and reflective learning tailored to urban community dynamics, proves to be a successful strategy for capacity building in the context of community services in Southeast Asia.

1. **Replication:** The experiential-reflective ToT model, validated by the large effect size, is recommended for replication in other heterogeneous urban areas across Indonesia and Southeast Asia as a best practice for developing community change agents.
2. **Focus on Affective/Psychomotor:** Future training evaluations should prioritize measuring changes in implementation skills and attitudes, given the high cognitive baseline observed in prospective trainers.
3. **Longitudinal Study:** A follow-up longitudinal study is recommended to measure the long-term transfer of training, specifically the cascade effect (how well the participants train others) and its impact on actual conflict resolution rates within their communities.

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