

# Identifying Components of Effective Police Training Through Factor Analysis

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**Abstract.** This paper explores the critical elements contributing to the effectiveness of organizational training programs, particularly for police. Key factors include the relevance of training content to police job roles, the clarity and simplicity of the material, and the use of interactive methods such as simulations and role-playing. The research employs a quantitative approach using factor analysis. The respondents are police officers who have already undergone training, with 114 participants involved in the study. Data analysis was conducted using SPSS. The results emphasize the role of trainers, highlighting the importance of their subject matter expertise, continuous professional development, and adaptability to diverse learning styles. The research indicates that relevant and engaging training significantly enhances employee productivity, job satisfaction, and retention. By integrating these elements, organizations can design training programs that improve police performance and contribute to overall organizational success.

**Keywords:** organizational training programs, training effectiveness, training content relevance, interactive training methods

## INTRODUCTION

Training effectiveness is a critical factor in the success and productivity of both individuals and organizations. Effective training programs equip employees with the necessary skills, knowledge, and competencies to perform their job duties efficiently and effectively. When employees are well-trained, they can contribute to the overall success of the organization by increasing productivity, reducing errors, and enhancing the quality of their work (Jin et al., 2020). The importance of training effectiveness is further highlighted by the fact that it directly impacts an organization's ability to adapt to changing market conditions and technological advancements. Well-trained employees are better equipped to embrace new challenges, implement innovative solutions, and contribute to the organization's long-term success (Jain et al., 2021).

The effectiveness of a training program is influenced by a variety of factors, including the quality of the training content, the delivery methods used, the engagement and motivation of the participants, and the support provided by the organization. Another important factor in training effectiveness is the alignment between the training objectives and the organization's strategic goals. When the training program is designed to address specific skill gaps and development needs, it is more likely to have a tangible impact on employee performance and organizational outcomes (Umar et al., 2020). The learning environment and the instructor's facilitation skills also play a crucial role in training effectiveness. Furthermore, the

transfer of learning from the training program to the workplace is a critical factor in determining its effectiveness. When employees are provided with opportunities to apply their newly acquired skills and knowledge in their day-to-day work, they are more likely to retain and effectively utilize what they have learned (Abich et al., 2021). The evaluation and measurement of training effectiveness is essential to ensure that the program is achieving its intended goals and delivering the desired outcomes. Organizations that regularly assess the impact of their training programs, using metrics such as employee performance, productivity, and satisfaction, are better equipped to make informed decisions about future training initiatives (Yaqoot et al., 2021).

To enhance the effectiveness of training programs, organizations can implement a range of strategies. One such strategy is the use of blended learning approaches, which combine traditional classroom instruction with online and digital learning resources. This approach allows for greater flexibility, personalization, and accessibility, leading to improved learner engagement and knowledge retention. Another effective strategy is the incorporation of experiential learning activities, such as simulations, role-playing, and case studies. These hands-on learning experiences enable participants to apply their newfound knowledge and skills in a safe and controlled environment, fostering a deeper understanding and better transfer of learning to the workplace (Williams et al., 2019).

Providing ongoing support and coaching to employees after the training program is also crucial for enhancing its effectiveness. This can include regular check-ins, feedback sessions, and opportunities for employees to discuss and address any challenges they are facing in applying their new skills (Ramshaw & Soppitt, 2018).

Additionally, organizations can leverage the power of technology to enhance the effectiveness of their training programs. This can include the use of virtual reality (VR) and augmented reality (AR) to create immersive learning experiences, as well as the integration of learning management systems (LMS) to facilitate the delivery, tracking, and evaluation of training content. This highlights the direct correlation between effective training and improved organizational outcomes. Nonetheless, not all training programs can be considered effective. The effectiveness of training is greatly influenced by various factors, such as the design of the training program, the methods used, the competence of the instructors, and the readiness and motivation of the trainees (Sudiyatno & Wulandari, 2020). Therefore, it is crucial for organizations to understand the factors affecting training effectiveness to design and implement training programs that truly have a positive impact on employee performance.

Training effectiveness is a concept that describes the extent to which training objectives can be achieved. Training effectiveness can be measured through four levels: reaction, learning, behavior, and results (Mohanty et al., 2019). At the reaction level, training effectiveness is seen from how positively trainees respond to the training program. At the learning level, it is measured by the extent to which trainees experience increased knowledge, skills, and attitudes after the training. At the behavior level, it is assessed by the extent to which trainees apply the knowledge and skills acquired in their jobs. At the results level, training effectiveness is evaluated based on the positive impact of the training program on organizational performance.

Various studies have shown that training effectiveness positively impacts employee performance. Training effectiveness is influenced by various factors, including the design of the training program, training methods, instructor competence, and trainee readiness and motivation. A well-designed training program, such as one that aligns the training material with employee needs, uses interactive training methods, and has managerial support, can enhance training effectiveness. Furthermore, adequate instructor

competence and trainee motivation are crucial factors that can influence training effectiveness. Employee performance is the work result achieved by an employee in executing their tasks and responsibilities. Employee performance can be measured through several indicators, such as work quality, work quantity, punctuality, effectiveness, independence, and work commitment. Various factors can influence employee performance, including ability, motivation, leadership, organizational culture, and performance management systems (Hanaysha, 2016).

Based on the above description, it can be concluded that training effectiveness is an important factor that can influence employee performance. Effective training can improve employees' knowledge, skills, and attitudes, thereby positively impacting their performance. Therefore, organizations need to design and implement effective training programs to enhance employee performance and achieve organizational goals. Police performance is a crucial aspect in maintaining public safety and order (Hagen et al., 2023). Various efforts have been made to improve police performance, one of which is through police training. Police training aims to enhance the knowledge, skills, and attitudes of police officers in carrying out their duties and responsibilities (Lester & Constable, 2020).

Previous research has shown that police training can have a positive impact on police performance. For example, a study conducted by Santoso & Riyadi (2023) found that effective communication training can improve police officers' ability to handle conflict situations. Nevertheless, there are still gaps in understanding the factors that influence the effectiveness of police training. Individual characteristics, such as age and education level, can affect police officers' perceptions of the benefits of training. Therefore, further research is needed to comprehensively explore the impact of police training.

The aim of the research is to systematically identify and understand the key components that contribute to the effectiveness of police training programs. By employing factor analysis, the study seeks to uncover underlying patterns and relationships among various training elements. This approach will allow the research to distill complex data into distinct factors that are most influential in shaping successful police training outcomes. Ultimately, the goal is to provide evidence-based insights that can guide the development and refinement of training programs, ensuring that they effectively equip police officers

with the necessary skills and knowledge for their roles.

**METHODS**

This study employs a quantitative approach to analyze the factors in police training that enhance police officers' performance. A quantitative approach is chosen because it provides numerical and statistical data that can be objectively analyzed (Sugiyono, 2018). Additionally, the quantitative approach allows researchers to test hypotheses and generalize the study's findings to a broader population. The respondents of this study are 114 police officers who have undergone training. Respondents were selected using purposive sampling, where participants were chosen based on specific criteria, namely, police officers who have completed training. This selection method is expected to provide relevant and accurate data regarding the factors in police training that improve police officers' performance. Data analysis in this study is conducted using factor analysis. Factor analysis is chosen because it can identify the main factors that influence police officers' performance after training (Hair et al., 2014). It also helps reduce the number of variables into simpler, more interpretable factors.

**RESULTS AND DISCUSSION**

This study outlines a factor analysis to establish the effectiveness of police training. The data were tested using the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test, followed by Communalities and the Rotated Component Matrix to identify important contributing factors. In the first stage, a data adequacy test was conducted on the obtained sample, based on the result Kaiser-Meyer-Olkin (KMO) and Bartlett's Test showed in Table 1.

**Table 1.** Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.898
Bartlett's Test of Sphericity	887.16

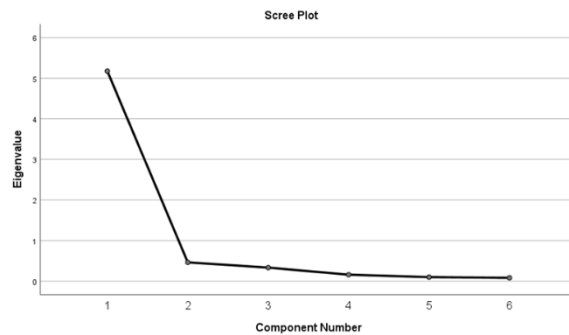
The results of the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test indicate that the data is suitable for factor analysis. The KMO measure of sampling adequacy is 0.898, which falls within the "meritorious" range, suggesting that the sample is adequate for factor analysis. Additionally, Bartlett's Test of Sphericity yields an approximate

Chi-Square value of 887.16 with 15 degrees of freedom and a significance level of 0.000.

**Table 2.** Communalities

Dimension	Initial	Extraction
relevance	1.152	0.975
clarity	1.228	0.995
engagement	1.125	0.833
expertise	1.012	0.845
delivery	0.861	0.716
adaptability	0.939	0.811

These values in Table 2 indicate the amount of variance each dimension contributes initially and after extraction.



**Figure 1.** Scree Plot

The high extraction values suggest that the factors are well represented in the data. The scree plot suggests that the first component is the most significant, and possibly one or two components should be retained for further analysis, as they contribute the most to explaining the variance in the data.

**Table 3.** Rotated Component Matrix

Dimension	Value
relevance	0.987
clarity	0.998
engagement	0.913
expertise	0.919
delivery	0.846
adaptability	0.900

The rotated component matrix in Table 3 indicates that clarity and relevance are the most strongly associated with the underlying factor, followed closely by engagement and expertise. Adaptability and delivery also contribute

significantly but to a slightly lesser extent. Overall, these dimensions collectively represent a strong factor, with clarity and relevance being the most critical components.

Based on the test results, effective training programs are crucial for organizations to develop their employees' skills and knowledge, ultimately improving overall performance. One of the key factors that contribute to the success of a training program is the relevance of the content to the trainees' job roles and responsibilities. When the training material is directly applicable to the trainees' daily tasks and challenges, they are more likely to engage with the content and apply the learned skills in their work. Research has shown that relevant training can lead to a significant increase in employee productivity and job satisfaction (Ardiansyah et al., 2022). Providing relevant training can also help organizations retain their top talent. When employees feel that the training they receive is directly applicable to their work, they are more likely to feel valued and invested in the company's success. To ensure the relevance of training content, organizations should conduct a thorough needs assessment to identify the specific skills and knowledge gaps of their employees. This can be done through surveys, focus groups, or one-on-one interviews with both employees and their managers. By understanding the precise training needs of the target audience, organizations can design and deliver content that is tailored to their specific job roles and responsibilities.

To ensure the clarity and simplicity of training content, organizations should use plain language, avoid technical jargon, and break down complex topics into manageable chunks. Additionally, they should provide visual aids, such as diagrams, infographics, and videos, to help trainees better understand and retain the information. Furthermore, organizations should seek feedback from trainees to identify areas where the content may be unclear or confusing, and then make the necessary adjustments to improve the clarity and simplicity of the material. This can be done through post-training surveys, focus groups, or one-on-one discussions with trainees. By prioritizing clarity and simplicity in their training programs, organizations can ensure that their employees are able to fully comprehend and apply the acquired knowledge and skills in their daily work, ultimately contributing to improved job performance and organizational success (Truitt, 2011). Interactive and engaging training methods can help trainees better understand and apply the

concepts being taught by allowing them to actively participate in the learning process. Simulations, for example, can provide trainees with a realistic, hands-on experience that closely mimics their actual job responsibilities, enabling them to practice and refine their skills in a safe and controlled environment. Role-playing exercises, on the other hand, can help trainees develop their communication and problem-solving skills by putting them in real-world scenarios and requiring them to respond accordingly. These interactive activities not only enhance learning but also foster a sense of collaboration and teamwork among the trainees, further contributing to the overall effectiveness of the training program (Thorpe et al., 2023).

Effective trainers must possess a deep and comprehensive understanding of the subject matter they are teaching. This expertise is essential for providing accurate, up-to-date, and relevant information to trainees. Trainers who lack expertise may struggle to answer questions, provide meaningful examples, or address complex issues, ultimately undermining the effectiveness of the training. Maintaining expertise requires continuous learning and professional development. Trainers should actively engage in research, attend industry conferences, and participate in ongoing training to stay abreast of the latest trends, best practices, and emerging technologies within their field (Mishra & Mishra, 2018). In addition to formal education and training, practical experience is also crucial for trainers to develop their expertise. Trainers who have worked in the industry or have directly applied the concepts they are teaching are better equipped to provide real-world examples, address common challenges, and offer practical solutions. Trainers should also be able to effectively communicate their expertise to trainees. This involves the ability to break down complex topics, use clear and concise language, and provide relevant examples that resonate with the audience (EL Hajjar & Alkhanaizi, 2018). Trainers should also be adept at creating a positive and inclusive learning environment that encourages participation and active engagement. This involves the ability to manage group dynamics, facilitate discussions, and provide constructive feedback. Effective trainers must be able to adapt their teaching style to the diverse needs and preferences of their trainees (Yaqoot et al., 2021). Different individuals learn in different ways, and a one-size-fits-all approach to training is often ineffective. Trainers who can recognize and cater

to these differences are more likely to achieve successful learning outcomes.

Adaptability in training requires a deep understanding of different learning styles and the ability to identify the preferences of individual trainees. Some learners may respond better to visual aids, while others may prefer hands-on activities or group discussions. Effective trainers should be able to assess the learning needs of their trainees and adjust their delivery accordingly. Adaptability also involves the ability to respond to unexpected challenges or changes during the training session. Trainers should be able to think on their feet, adjust their plans, and provide alternative solutions to ensure that the training remains engaging and effective. Ultimately, the ability to adapt to the needs of different learners is a critical skill for effective trainers. By demonstrating flexibility, responsiveness, and a willingness to tailor their approach, trainers can create a more engaging and impactful learning experience for their trainees. This adaptability not only enhances the effectiveness of the training but also fosters a positive and inclusive learning environment that supports the diverse needs of the participants.

## CONCLUSION

The research aimed to identify the key factors contributing to the effectiveness of police training programs. Through comprehensive analysis, six critical components were identified: relevance, clarity, engagement, expertise, delivery, and adaptability. These factors are essential in shaping the quality and success of training initiatives within police organizations. Relevance ensures that the training content is directly applicable to the officers' daily responsibilities, enhancing their ability to apply learned skills in real-world scenarios. Clarity refers to the importance of delivering information in a clear and understandable manner, ensuring that officers fully grasp the concepts being taught. Engagement emphasizes the necessity of actively involving participants in the training process, which enhances retention and application of knowledge. Expertise highlights the need for trainers who possess not only theoretical knowledge but also practical experience in the field, which lends credibility and depth to the training. Delivery pertains to the methods and techniques used to present the training material, which should be varied and dynamic to maintain attention and interest. Finally, adaptability underscores the

importance of flexibility in training programs, allowing them to evolve and respond to the changing needs and challenges faced by the police force. These findings provide a structured framework for designing and evaluating police training programs, ensuring they are effective, relevant, and responsive to the demands of modern law enforcement.

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