

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the study methodology, study design, research approach, and procedures. It also describes the study population and its sample with tools and validation. The study population, consisting of the Palestinian Civil Police, numbering 8104 employees, was analyzed. Moreover, this chapter explains the necessary procedures to implement the study and clarifies the appropriate statistical methods for analyzing the collected data. The present study is explanatory research, and it uses the quantitative approach. The purpose of quantitative research is to answer the research questions and generalize other specific circumstances. It aims to develop, confirm, or test relationships, as well as develop theoretical relationships. Apuke (2017) added that quantitative research provides an opportunity to collect data from a variety of participants to generalize results. On the other hand, Lewis (2015) believes that the use of quantitative statistical methods allows verification of the results.

3.2 Research Design

The research design is the framework of research methodologies and procedures the researcher selects to perform a study (Salter, 2023). It enables researchers to fine-tune research methodologies appropriate for the topic matter and put their studies up for success (Lewis, 2015; Salter, 2023). This study investigates the impact of competency-based training on employee performance. This study also investigates the impact of applying creative thinking on employee performance. This will necessitate

verifying the impact of the training environment, and training strategy on components of employee performance, which are work, quality, and employee innovation. moreover, verifying the impact of the leader's vision, and creative thinking culture on components of employee performance, which are quality of work, and employee innovation at the Palestinian Civil Police.

Explanatory research has been used to attain this purpose statement by setting five goals to explain the researcher's views and ideas on the topic of 'employee performance' to explore his hypotheses further. The purpose of using explanatory research in the current study is to test the relationship between the hypothesis's results. The study highlights the topic's unknown features and details of the research questions of what, how, and why, as nine research questions were constructed to investigate the study's goal (Alase, 2017).

The present study's data collection methods, which focus on hypothesis testing and the number of eight, include opinion polls in the study population. Palestinian Civil Police officers were selected as the research population to test hypotheses. Closed surveys are determined by questions that provide respondents with response alternatives on a five-point *Likert* scale and they are distributed to the population sample (Jebb, Ng, & Tay, 2021). The stratified sample to which the questionnaire will be delivered was likewise determined using Richard's equation (List & Radu, 2016). To accomplish this goal, a questionnaire that rests on the literature review was created to assess the study's hypotheses. Considering ethical norms to guarantee honesty and openness in data gathering, clarity of data in surveys, and the researcher's neutrality (Krosnick, 2018). Figure 3.4 depicts the research design model that was employed following the nature of the study.

In the present study, data analysis goes through many steps. The study can attain the intended outcome and fulfill the goal by applying statistical analysis to convert statements that have no value individually into statements that have tremendous value. The data analysis process begins with inputting the acquired data into a computer using a computer application IBM® SPSS® Amos (Ong & Puteh, 2017). The data is then processed to count the cases that are associated and related to each variable, to clarify the frequent distribution of the variables under consideration and the summary or descriptive description of the arithmetic mean and percentages. The final stage is translating the data into useful information and clarifying each hypothesis and its verification outcomes (Flick, 2015).

The present study focuses on overcoming the problems that the researcher may or would meet in data collection and analyses. Thus, the researcher foresaw some challenges and created answers to them from the start. The researcher acquired the Director General of Police's consent to ease data collection and dissemination of the questionnaire to the study sample. The researcher also constructed the questionnaire seamlessly, making it simpler for the sample to reply since he utilized familiar words for the population sample. The researcher further guaranteed the secrecy of the given data, stating that it would only be used for scientific studies (Cascio, Weiss, & Racine, 2021).

3.2.1 Research Approach

The present study employs a quantitative approach to achieve this objective. The quantitative approach is one of the most essential and widely used scientific research methodologies. This approach's diversity and comprehensiveness are critical to its success (Alase, 2017). The researcher tested the results of the relationship between the

hypotheses in detail using this method. The questionnaire was able to measure the effect of one variable on another variable and thus answer the study questions accurately (Queirós, Faria, & Almeida, 2017). Quantitative research is preferred over qualitative research in the current study to ensure that the outcomes of the study's hypotheses relationship are investigated. Quantitative research is more scientific, objective, quick, focused, and acceptable (Sürücü & Maslakçi, 2020).

The quantitative approach earns numerical findings for each hypothesis in the study and translates these numerical results into highly relevant results to characterize the influence of the hypothesis. Having access to these data with precise and exact meaning allows the researcher to address the study's questions fully (Rahman, 2020). Quantitative research methods have a greater sample size and do not take much time to collect data. Some drawbacks include that quantitative research techniques provide snapshots of phenomena rather than in-depth analysis, and they ignore test-takers and testers' experiences and what they mean by something (Savela, 2018).

3.3 Population and Sampling

3.3.1 Population

The population represents all individuals who share these characteristics and are directly influenced by the problem. The researcher aims to make the conclusions more general and make recommendations that fix the issue or reduce its impact (Al-Khateeb & Al-Talib, 2016). Also, both PCP employees serving in the public administration and the governorate police (2019-2020) are part of the group in the present study. The number of PCP employees in the northern governorates of Palestine is 8104, in line with the police records of the HRD, as shown in the following table (PCP, 2020):

Table 3.1: Distribution of PCP Employees in Palestine

No.	Directorate classification	The Number
1	Public Department	2694
2	Ramallah Governorate Police	824
3	Hebron Governorate Police	845
4	Bethlehem Governorate Police	482
5	Jenin Governorate Police	679
6	Jerico County Police	374
7	Qalqilya Governorate Police	316
8	Salfit County Police	216
9	Tobas Governorate Police	237
10	District Police, suburbs of Jerusalem	249
11	Tulkarm Governorate Police	429
12	Nablus Governorate Police	759
	Total	8104

Source: HRD at the PCP

Service Law in the Palestinian Security Forces No. (8) of 2005 Military ranks consist of fourteen ranks. These military ranks contain three categories: the category of senior officers, the category of field officers, and the category of individuals. Table 3.2 shows the number of military ranks in the Palestinian Police (PCP, 2020).

Table 3.2: Distribution of Military Ranks

No.	Military Ranks	The Number
1	Major General	1
2	Brigadier	29
3	Colonel	295
4	Lift anal Colonel	458
5	Major	772
6	Captain	859
7	First lieutenant	1228
8	Lieutenant	653
9	First Assistant	915
10	Assistant	993
11	Employee Sergeant	655
12	Sergeant	376
13	Corporal	125
14	Policeman	745
	Total	8104

Source: HRD at the PCP

3.3.2 The Sample of the Study

Stratified sample: Stratified sampling entails segmenting the population into subpopulations that may differ significantly. It enables researchers to make more exact findings by ensuring that all subgroups are well represented in the sample. When researchers employ this sampling strategy, they split the population into subgroups (referred to as strata) revolving on the relevant attribute (e.g. gender, age range, rank, education) (Raghav, Ali, & Bari, 2014). The first step in the field of analysis provides reassurance to the researcher and gives the confidence to continue (Alase, 2017). In the present study, the researcher selects 30 employees from the study group to manage a test for assessing the questionnaire's validity and reliability as a primary research tool. Table 3.3 below shows the division of the exploratory sample size into the population.

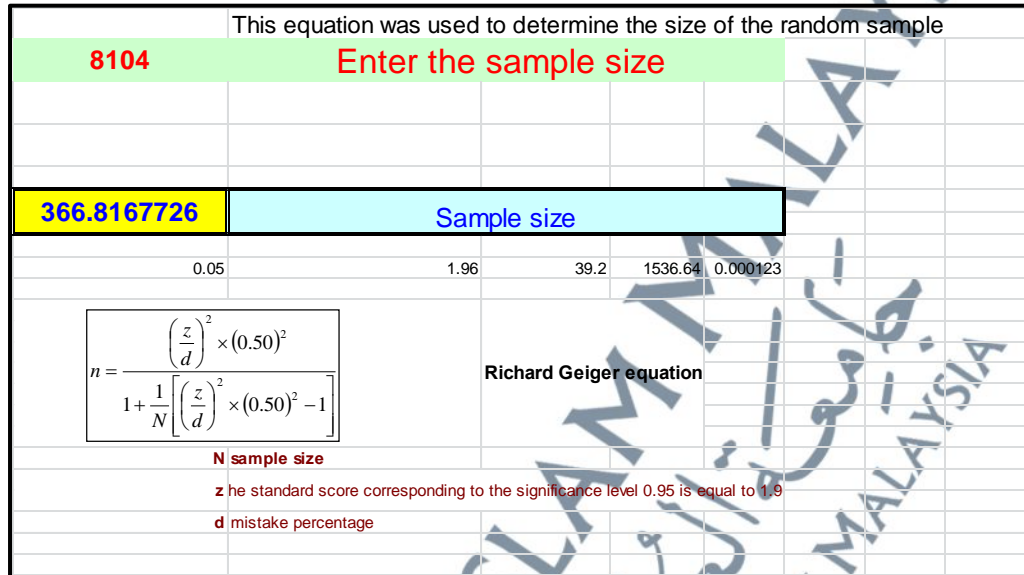
Table 3.3: Sample Size to Questionnaire's Validity

No.	Directorate classification	Number	Sample Volume
1	Public Department	2694	8
2	Ramallah Governorate Police	824	4
3	Hebron Governorate Police	845	4
4	Bethlehem Governorate Police	482	2
5	Jenin Governorate Police	679	3
6	Jerico County Police	374	1
7	Qalqilya Governorate Police	316	1
8	Salfit County Police	216	1
9	Tobas Governorate Police	237	1
10	District Police, suburbs of Jerusalem	249	1
11	Tulkarm Governorate Police	429	1
12	Nablus Governorate Police	759	3
	Total	8104	30

Source: HRD at the PCP

In the second step: a Stratified sample containing the number of employees is selected by the researcher in the present study (Singh & Masuku, 2014). The scales of the sample are 367 out of 8104. The Richard Geiger equation is used to determine the

size of the Stratified sample. Furthermore, the total number of police employees is 8104. Thus, the size of the sample is 367 by using the equation. The following equation shows the appropriate sample number in Figure 3.1: The Richard Equation.



Source: Colton and Kress (2013)

Figure 3.1: The Richard Equation

In the present study, the questionnaires are submitted by hand to respondents. One of the most essential aspects of the study is ethical considerations. If this component is lacking, dissertations may be condemned to fail. The following ten criteria, as mentioned by Sroka and Szántó (2018), constitute the most essential principles connected to ethical considerations in dissertations.

- i. Research participants should not be subjected to any kind of harm.
- ii. The dignity of study participants should be a top priority.
- iii. Before the study, the participants' full agreement should be obtained. It is necessary to ensure that the privacy of study participants is protected.
- iv. The confidentiality of the study data should be protected to an adequate level.
- v. Individuals and organizations participating in the study must maintain their anonymity.

- vi. Any misrepresentation or exaggeration about the research's goals and objectives must be avoided.
- vii. Any affiliations, funding sources, and conflicts of interest must be disclosed.
- viii. Any research-related communication should be conducted with honesty and transparency.
- ix. Any false information, as well as a skewed depiction of main data findings, must be avoided.

The distribution of the study sample concerning the Richard Geiger equation is shown in Table 3. 4, by classifying the population following the equation:

Table 3.4: Distribution of Sample in line with Richard Geiger Equation

No.	Directorate classification	The number	Sample size	Percentage
1	Public Department	2694	122	0.33
2	Ramallah Governorate Police	824	38	0.10
3	Hebron Governorate Police	845	38	0.10
4	Bethlehem Governorate Police	482	21	0.05
5	Jenin Governorate Police	679	31	0.08
6	Jerico County Police	374	17	0.04
7	Qalqilya Governorate Police	316	14	0.03
8	Salfit County Police	216	10	0.02
9	Tobas Governorate Police	237	11	0.02
10	District Police, suburbs of Jerusalem	249	11	0.03
11	Tulkarm Governorate Police	429	20	0.05
12	Nablus Governorate Police	759	34	0.09
	Total	8104	367	% 100

Source: HRD at the PCP

To ensure that the questionnaire covers the three categories of military ranks, the questionnaire will be distributed in keeping with the percentage of the number of military ranks. Table 3.5 shows the distribution of the study sample just as the percentage of the number of each military rank of the population.

Table 3.5: Distribution of Sample in the Manner of Military Ranks

No.	Military Ranks	The number	Sample size	Approximate Number of Respondents	Percentage
1	Major General	1	0.04	1	0.00
2	Brigadier	29	1.31	2	0.00
3	Colonel	295	14.3	15	0.03
4	Lift anal Colonel	458	20.7	21	0.05
5	Major	772	34.9	35	0.09
6	Captain	859	38.9	39	0.10
7	First lieutenant	1228	55.6	56	0.15
8	Lieutenant	653	29.5	30	0.08
9	First Assistant	915	41.4	42	0.11
10	Assistant	993	45.9	46	0.12
11	Employee Sergeant	655	29.6	30	0.08
12	Sergeant	376	17.1	18	0.04
13	Corporal	125	5.6	6	0.01
14	Policeman	745	33.8	34	0.09
		8104	367	375	%100

Afterward, the questionnaires collected for analysis will be analyzed by IBM® SPSS®. Amos is a robust structural equation modeling (SEM) program that extends basic multivariate analytic methods like as regression, factor analysis, correlation, and analysis of variance to assist research and hypotheses (Etzelstorfer et al., 2017).

3.4 Data Collection Method

In collecting data and information, the researcher relied on two sources, namely:
Main Source: The researcher relies on the collection of basic data through the questionnaire as the main research tool. Specifically, it is distributed to PCP employees, to address the analytical aspects of the research topic (Liang et al., 2015).

Secondary Source: The researcher reviewed the theoretical and conceptual context for analysis based on secondary data sources. These are portrayed in periodicals, journals, books, Arab and international studies, papers, reports, and analyses on the study topic and internet access. In addition to Palestinian police

reports and records, audit reports, and pro-development are also used (Brundin-Mather et al., 2018).

3.4.1 Research Instrument

As a study instrument, a questionnaire was created for this investigation. The purpose is to attain the objectives by posing problems as well as gathering data and expertise relevant to the topic of research. Sir Francis Galton invented the questionnaire, which is regarded as one of the instruments of scientific research (Taherdoost, 2016). This consists of a series of questions and areas in which data are collected and processed using a computer. To obtain information on the sample population, the questionnaires are set up in such a way that the results may be statistically analyzed. The questionnaire also includes basic standard responses, data collection, organization, and data identification (Taherdoost, 2016). The questionnaire is the primary instrument of analysis in this study and is used to collect data related to the research topic. The purpose of this study is to look into the perspectives of PCP employees on CBT and CTA as a means of boosting PCP employee performance. Following a review of the theoretical literature and prior research connected to the study's topic, a questionnaire is created, which is divided into three components (Dacakis, Oates, & Douglas, 2017) as explained below.

The first section entails the administration of a questionnaire containing the items. The purpose of the analysis, the type of data collected, and the information required of the study sample members are highlighted in this section. Also, a paragraph advising respondents to provide assistance and be careful when filling out the questionnaire is included (Pedersen, 2015). The second section contains general information about the employee (personal data). In the current study, this is entered as

a demographic variable. Gender, years of experience, educational qualifications, rank, and age are some examples (Pedersen, 2015).

The third section: is a questionnaire consisting of 70 paragraphs divided into 5 objectives. The first objective of the research, which is to explore the performance conditions of staff in PCP is verified by collecting secondary data from references and police reports. The second objective is related to identifying competency-based training (CBT) in improving staff performance in PCP. The third objective is to examine the application of creative thinking that improves employee performance in PCP. The fourth objective deals with analyzing the effect of the mediating variable, which is experienced in the effect of the relationship between competency-based training in improving employee performance in PCP. The fifth objective deals with analyzing the effect of the mediating variable, which is the experience in the effect of the relationship between examining the application of creative thinking in improving employee performance in PCP. The current study relied on the literature review and earlier questionnaires from related previous studies to identify questionnaire items that address the study's specific research questions, as indicated in Table 3.6:

Table 3.6: Questionnaire Items

Variables	Authors	Questionnaire Item
Training Environment	Larson (2020) Chepkemoi et al. (2022) Sugiarti (2022)	<ol style="list-style-type: none"> 1. The police want to set the time of training programs concerning the trainees. 2. The police are interested in selecting trainees according to their level of experience. 3. The police limit the number of learners in the training room to encourage optimal involvement. 4. Police utilize audio-visual technologies in training programs. 5. The police distribute the trainees in the training hall suitable for the courses in the police. 6. The police take care of the ventilation of the training facilities. 7. The police take tremendous care in lighting the training fields. 8. Sufficient sanitary facilities are serving the police training hall. 9. The police organize groups of trainees using scientific processes. 10. The trainers motivate the learners to interact and participate in the training activities.
Training Strategy	Benoit, (2017) Amabile (2012,1996)	<ol style="list-style-type: none"> 1. The police are keen to refresh the objectives of the training courses regularly. 2. In the police, there is a clear training strategy. 3. The police have distinct policies regarding the approach to training. 4. My capacity to carry out my tasks has developed after getting training and education in the police. 5. The police are interested in scientific training techniques in the training courses. 6. The police utilize creative thinking skills strategies in training sessions. 7. There is a link between the training plan and the general strategy of the institution. 8. Decisions are issued by the Police Command to design the training strategy. 9. The police later trained policies in step with technological advances. 10. The training classes I have taken are commensurate with my profession as the police.

Table 3.6, continued

Variables	Authors	Questionnaire Item
The Culture of Creative Thinking.	Humera (2016) Yadi and Xing (2017) (Amabile & Pratt, 2016; GIZ, 2015)	1. The police are interested in developing innovative thinking tactics for personnel.
		2. The police use appropriate media to encourage employees to think imaginatively.
		3. In Police, Media Methodology is focused on fostering a culture of innovative thinking.
		4. The police allocate a reward for the implementation of creative thinking exercises.
		5. The police directed support for media plans to develop a culture of innovation.
		6. The police deploy technology to spread a culture of creative thinking.
		7. Police believe in forming media collaborations to foster innovative thinking.
		8. The police are interested in enhancing the creative state of the workforce through training.
		9. Police teach employees about workaround strategies at work.
		10. The police are interested in employee feedback to spread innovation at work.
leader's Vision	Karaman, Kök, Hasiloglu and Rivera (2008) (Klein et al., 2013)	1. The Police Command is interested in updating employee incentive systems.
		2. Police leadership transfers the expertise of pilot organizations to police officers.
		3. The police leadership makes clear decisions to improve the work.
		4. The police leadership is interested in developing training programs.
		5. Police leadership sets training policies in line with technological advancement.
		6. The Police Command attracts qualified personnel to achieve its objectives.
		7. Police leadership provides modern tools in training.
		8. The Police Command provides an effective communication plan between police departments.
		9. Police leadership is concerned with good relations between employees at work.
		10. Police leadership is constantly developing policies to spread creativity in action.

Table 3.6, continued

Variables	Authors	Questionnaire Item
Experience	(Dewey, 2019) (Fenwick, 2012)	<ol style="list-style-type: none"> 1. I have been enriched with knowledge in my job through training courses. 2. The obstacles I have encountered in my profession have provided me with problem-solving skills. 3. My work in more than one department in the police enhanced the degree of my talents at work. 4. The on-the-job training helped me acquire good communication skills. 5. I was inspired by training in creative thinking skills and the confidence in providing service. 6. The training sessions helped me develop my skills to use work tools. 7. Mentoring the managers has reduced the time I spend meeting my commitments at work. 8. The standard procedure manual allowed me to do my work without errors. 9. Job-oriented training helped me reduce work errors. 10. My supervisor encourages me to acquire new talents through learning.
Quality of Work	(Rajapathirana et al., 2018) (Zacharias et al., 2021)	<ol style="list-style-type: none"> 1. Completing job tasks on time improves the quality of services. 2. Enriching the employee's knowledge of his job duties increases the state of satisfaction for the service recipient. 3. Enriching the employee's skills with his job tasks increases his experience in solving work problems. 4. Developing the employee's skills with his job duties increases his confidence in performing his duties. 5. Updating the employee's work tools for his job tasks leads to completing his work on time. 6. Clarity of procedures and policies regarding job duties reduces work errors. 7. The existence of a learning plan for the employee enables him to keep pace with the development in the provision of services. 8. The availability of an effective communication system improves services. 9. Resolving differences between employees enhances the quality of work. 10. Job satisfaction enhances the quality of my work.

Table 3.6, continued

Variables	Authors	Questionnaire Item
Employee Innovation	(Gillespie, 2015) (Mathilde, 2017)	<ol style="list-style-type: none"> 1. The police help employees enhance their creativity by taking care of developing effective programs. 2. The police adopted innovative policies and procedures to develop its services to citizens. 3. The police gave employees the freedom to solve immediate problems related to the provision of their services. 4. The police take creative measures that help stimulate communication and the exchange of knowledge between employees. 5. Police have created new ways to build, modify and improve their service operations. 6. The police strive to retain qualified personnel to reduce costs. 7. The police are highly flexible in responding to changes in citizen services. 8. The police train staff on innovation strategies to provide improved services. 9. There is continuous development in the method of dealing with events and providing services. 10. The police develop the creative capabilities of employees in dealing with work problems.

The present study items are drawn following the five-dimensional *Likert* scale to give weights to the paragraph, as shown in the following table (León-Mantero et al., 2020).

Table 3.7: Descriptive results of the Paragraphs as in the Five-dimensional *Likert* Scale

Positive paragraphs	Negative paragraphs
Strongly agree: five degrees strongly	Agree: One degree
Agree: Four degrees	Agree: Two degrees
Neutral: Three degrees	Neutral: Three degrees
Fairs: two degrees	Exhibits: Four degrees
Strongly opposed: one degree strongly	Opposed: Five degrees

Source: Connelly (2009)

Consequently, $1 \times 70 = 70$ is the lowest score on the scale, and $5 \times 70 = 350$ is the highest. Results interpretation (standard): The data are interpreted once arithmetic averages are determined. The researcher divides the high and low scores into five periods for this purpose. After calculating the range's length ($5 - 1 = 4$), it is divided into 5 intervals ($4/5 = 0.8$). Thus, the duration of the study is (0.8), and the researcher uses the following approximation to divide the grades following the (León-Mantero et al., 2020).

The researcher used unambiguous, non-open-ended questions, adhered to research ethics, and ensured information confidentiality when creating the questionnaire for the current study. Bhargavi and Yaseen (2016) believed that the researcher should consider the experimental parameters when creating the questionnaire to investigate the situation with precision, objectivity, and clarity of expression issues. Uncertainty and open-ended inquiries must also be avoided by the researcher. The researcher must maintain confidentiality since data collecting requires ethics. Also, the researcher must respect the privacy of the population sample in terms of their data and information. Following this, the questionnaire must include all instructions to ensure accurate and complete information that motivates the respondents to engage with the questionnaire and take action.

Based on previous studies of the study's variables, the researcher created the questionnaire. Before beginning to compose the themes and divide them into items that address all of the study's objectives, familiarize yourself with the literature, past research, and the theoretical framework. The researcher consulted experts and reviewed prior research and questionnaires before starting to draft the paragraphs. After the questionnaire was completed scientifically, the researcher considered confirming its quality and validity. Following the arbitrators' completion of their

revisions, the researcher validated the questionnaire by administering it to a survey sample consisting of a minimum of thirty employees (Ruel, Wagner, & Gillespie, 2015; Yanovski, Marcus, Wadden, & Walsh, 2015).

In light of the research questions, the researcher should create an English questionnaire. A professional translator should also translate the questionnaire into Arabic. The Palestinian police provide the population sample, and their language is Arabic. Dr. Nidal Al-Jayousi, a licensed translator at the Palestinian Ministry of Higher Education, received the questionnaire and translated it after swearing to the accuracy of the content and translation. The translator signed a book, which is linked to the research, confirming that the translation was done correctly and without prejudice.

3.4.2 Instrument Validation

The external validity of the instrument was verified by submitting it to a community of arbitrators with expertise and knowledge in universities and related institutions that meet the appropriate conditions. The questionnaire was sent to eight arbitrators in this research where they were requested to express their opinion on the paragraphs of the study instrument (Mentzel et al., 2016). This ensured the quality and suitability of the material of the paragraphs concerning the goals and variables of the study. Thus, the arbitrators were asked to show the validity of the assertion to assess what they have put to the test (Squara et al., 2021). The names of the arbitrators to whom the questionnaire was submitted are listed in Table 3.8.

Table 3.8: List of the Arbitrators' Names

Name	Academic Degree	Faculty	Position
Dr. Suhail Salha	PhD	Curriculum and Instructional Techniques	An-Najah National University's Basic Stage Teacher Department Head
Dr. Bilal Abu Eideh	PhD	Curriculum and Instructional Techniques	An Assistant Professor at An-Najah National University's College of Education
Dr. Khalid Abu Zahra	PhD	Methods of scientific research	The PCP's statistical analysis expert
Dr. Nedal AL Jayoisi	PhD	Methods of scientific research	Assistant Professor at An-Najah National University's Faculty
Dr. Nafiz Ayoub	PhD	Formal education	Assistant Professor at Al-Quds Open University's Faculty of Education
Dr. Amjad Hassan	PhD	The rule of law	Assistant Professor at An-Najah National University's Faculty
Dr. Atia Mosliah	PhD	Administration	Assistant Professor at Al-Quds Open University's Faculty of Education
Dr. Ayoub Ayoub	PhD	Methods of scientific research	Analytical statistics expert

The researcher considered, reviewed, compared, and contrasted all the gathered comments. Comments, subsequently, were validated and modified in light of the arbitrators' feedback. The researcher modified, as well, the questionnaire's relevancy with the questions of the study; the language of paragraphs; along the compatibility with the subject under consideration. Moreover, the suitability of each part to their milieu is considered (Squara et al., 2021). The arbitrators' feedback was considered. In case of controversial feedback, the researcher considered the feedback of the majority (not less than 75% of the members of the arbitrators), and the questionnaire was validated (Bichi et al., 2019).

The questionnaire underwent revisions and modifications based on the feedback provided by the eight arbitrators. While some comments focused on the terminology, others offered suggestions that were thoroughly examined. Taking into account the arbitrators' remarks, specific changes were made to three items in the initial section of

the questionnaire related to the "training environment." The second item, originally stated as "The employee performance is affected by the intellectual abilities of the trainees in training," was updated to read as follows: "The police are interested in selecting trainees according to their level of experience." Likewise, the third item, previously phrased as "The employee performance was affected by the age group of the trainees in the training hall," was modified to state: "The police limit the number of learners in the training room to encourage optimal involvement." Similarly, the seventh item, initially expressed as "The employee's performance is affected by his knowledge of the technological tools used in the training rooms," was revised to read: "The police take tremendous care in lighting the training."

Within the questionnaire section of the training strategy, two components underwent revisions. The first item, previously stated as "Employee performance is affected by the number of training courses constantly," was amended to read as follows: "The police are keen to refresh the objectives of the training courses regularly." Similarly, the third item, originally expressed as "The employee performance is affected by the presence of directives regarding the training strategy," was modified to state: "The police have distinct policies regarding the approach to training."

Simultaneously, adjustments were made to three aspects concerning the culture of creative thinking. The second item, initially phrased as "The employee performance is affected by the media materials in the media department," was revised to read: "The police use appropriate media to encourage employees to think imaginatively." Moreover, the fourth item, previously stated as "The employee performance is affected by the presence of the rewards and incentives system," was amended to read: "The police allocate a reward for the implementation of creative thinking exercises."

Furthermore, the seventh item, initially expressed as "Employee performance is affected by the presence of media partnerships," was updated to read: "Police believe in forming media collaborations to foster innovative thinking."

Lastly, a modification was made to one item from the leader's perspective. The fifth item, originally stated as "The employee's performance is affected by the leader's belief in the importance of policies directed toward the application of creative thinking," was amended to read: "The police leadership sets training policies in line with technological progress."

3.4.3 Instrument Stability

In writing scientific research, the most important characteristic that should be present in the data collection method is the ability to obtain accurate and reliable results for scientific research. It should be remembered that if the researcher relies on a fluctuating and imprecise instrument, the study's results will be inaccurate. As a result, research will take a longer time and will be a waste of the researcher's time (Glier et al., 2019). In a scientific study, the accuracy of the scale refers to the degree to which the scale achieves close readings each time it is used. The dependability of scientific research is calculated in a variety of ways. The most common of these methods, however, is the measurement of the Cronbach alpha coefficient which is the reliability coefficient used in this study. This research uses the Cronbach alpha equation separately for each field and the overall axis consisting of a group of domains. Through an exploratory survey of 30 employees, the researcher depends on the criterion (0.60) and above as a measure of stability for the questionnaire paragraphs. The following Table 3.9 shows the stability coefficients for the axes of the resolution (Amirrudin, Nasution, & Supahar, 2021).

Table 3.9: Stability Coefficients of the Questionnaire

The Axes	Number of Items	Cronbach Alpha
The training environment.	10	0.72
The training strategy.	10	0.76
The leader's vision.	10	0.76
The culture of creative thinking.	10	0.72
The experience.	10	0.73
The quality of work.	10	0.76
Employee innovation.	10	0.71

3.5 Data Analysis

Seven hypotheses total—two to measure the indirect effect of the mediator and five to measure the direct effect between variables—are included in the present study. The method for handling data analysis to verify the study hypotheses was the main topic of this section. Working with the data started with examining the response rate that was discovered following the data-gathering phase. To identify demographic features, it was crucial to examine and characterize the characteristics of the respondents.

Additionally, before executing a confirmatory factor analysis (CFA), it is crucial to carry out a thorough study of the main data and assess the necessary assumptions (Steenkamp & Maydeu-Olivares, 2023). Such assumptions include sampling adequacy, outliers, normality assumption, collinearity of indicators in each factor, and multicollinearity (Steenkamp & Maydeu-Olivares, 2023). Before doing SEM, it is critical to evaluate the latent constructs' validity and reliability and confirm that the measurement model as a whole satisfies the requirements for excellent fit (Jhantasana, 2022). The CFA approach is typically used to assess the latent construct's validity and reliability (Joseph Hair et al., 2021). Without a doubt, the next crucial step is to focus on delivering first-order CFA results to guarantee construct validity and reliability for

every latent construct as well as to perform EFA analysis and the entire measurement model (Manata & Grubb, 2022).

Moreover, second-order CFA results for employee performance must be displayed in the data analysis. The building of the structural model and measurements of its fit are also necessary for this investigation. SEM is the next stage to assess the study hypotheses once the CFA technique to confirm construct validity and composite reliability is finished (Elias, Ismail, & Basri, 2022). The AMOS software's data imputation method will be used to simplify the model and get the latent variable scores for each of the latent variables in the model (Sharif, Mostafiz, & Guptan, 2022). In the end, data analysis made it possible to test hypotheses and assess both direct and indirect effects. The analysis of the relationship between variables was based on the second dimension to produce more comprehensive results.

3.6 Study Procedures

In terms of research procedures, the study is conducted according to Gallo et al. (2014) where the research tool is completed. PCP also identifies the research community. Then the population of the study sample is determined. Subsequently, the approval of the relevant authorities is obtained, which is in the form of written approval from the Director-General of the Police. The study hypotheses were relied upon to accomplish the research objectives and provide answers to the research questions. The methodology employed to address the research questions and objectives is displayed in Table 3.10 below:

Table 3.10: Methodology Employed to Address the Research Questions and Objectives

Research Objectives	Research Questions	Research Instrument	Hypotheses
RO1	RQ1	Questionnaire	H1
RO2	RQ2	Questionnaire	H2
RO3	RQ3	Questionnaire	H3
RO4	RQ4	Questionnaire	H4
RO5	RQ5	Questionnaire	H5
RO6	RQ6	Questionnaire	H6
RO7	RQ7	Questionnaire	H7

3.7 Chapter Summary

The third chapter dealt with the methodology and design of the study. Furthermore, this chapter discussed the use of the scientific process for the procedure to be employed to answer study questions. This allows the establishment of the design of explanatory research within the context of scientific standards. Furthermore, the present study method was explained, such as the use of the quantities approach which is one of the most essential and well-known scientific research methods. Accordingly, the hypotheses of the sample, the independent variables, and their relationship to the dependent variable and its components were also explained. This chapter also included the framework to study the relationship between variables, and demographic variables.

More so, the methods used to collect data and knowledge, which depend on two sources, were also explained. The main source concentrates on gathering basic data via a questionnaire as the main research tool. While the second source addresses the

theoretical and conceptual context of the study and rests on secondary data sources. These include periodicals, journals, books, studies, Palestinian police reports, documents, audits, and pro-development reports.

The present chapter showed how the questionnaire is prepared as a study tool. It also clarified the process for designing and the scientific criteria to be followed. The five-dimensional Likert scale further indicated the resolution components and the mechanism for treating vertebral weights. The verification of resolution and the criterion of reliability were also explained in the context of the scientific principles. Nevertheless, Chapter Three recorded the investigation steps within the scientific foundation's hinges on previous studies of the subject area.

Lastly, the present chapter addressed the population and clarified the number of police officers and their classification by geographical distribution and rank. The methods for taking Stratified Random samples were also explained, including the procedure for taking the exploratory sample of 30 and the actual sample of 375, which used the Spearman method to determine the sample size.