

## CHAPTER 3

### METHODOLOGY

#### 3.1 Introduction

A research methodology refers to analyzing and determining the rationale for a particular study's specific methods (Fellows & Liu, 2015).

There are sequentially organized activities that have to be followed in any research method. These generally include data collection and analysis steps to achieve the research objectives. Consequently, the research methods outcomes reflect the overall development of the research. To ensure quality in such outcome, appropriate methods have to be selected based on the research objectives and nature.

Research methodology has also been described as the plan outlining the collection and analysis of data and the relationship between the research findings and implications (Dawson, 2002). Thus, a research method has to be straightforward to guarantee that mistakes are cleared off in the research process, enabling the researcher to know how the research activities can be accomplished and for the readers to understand the research directions and contents.

Therefore, this chapter is dedicated to presenting the research methodology that covers the research design, research settings, population and sample and the instrument for collecting data. The chapter is divided into many sections, with the contents of each section as follows; explains the research design.

The population and sampling procedures follow this, and then there is a discussion on the questionnaire design. After that, there is a presentation on the techniques for data collection and the employed methods of analysis. Lastly, there is a conclusion of a summary of the chapter.

### **3.2 Research Design**

A research design refers to a blueprint upon which the study is conducted with the utmost control over factors that could interfere with the finding's validity (Burns & Grove, 2003). According to Parahoo (1997), a research design is a plan describing the way, the time and the place data are gathered and analyzed.

Meanwhile, in Polit et al. (2001) study, the authors referred to research design as the overall method of determining answers to the questions and testing the research hypotheses. Thus, this research design is formulated based on the research questions and objectives in Table 3.1.

The research approach can be selected from five main approaches, which are: (1) descriptive approach to identify specific problem(s); (2) remedial approach seeks to formulate plans to correct or improve undesirable social, economic, political, and environmental conditions; (3) methodological approach attempts to devise, test or improve new research methods in planning based on newly developed techniques; (4) The historical approach aims to facilitate a deeper understanding of historical processes and is not merely an attempt to fill gaps in our factual knowledge; (5) the explanatory approach to find answers for specific questions.

**Table 3.1:** Research Objectives and Questions

Research Objectives	Research Questions
To determine the relationship between Training Practice and Innovative Work Behavior (IWB) of Jordanian Islamic banks.	Does Training Practice have significant impact on Innovative Work Behavior (IWB) in Jordanian Islamic banks?
To determine the relationship between Direct Compensation and Innovative Work Behavior (IWB) of Jordanian Islamic banks.	Does Direct Compensation Practice have significant impact on Innovative Work Behavior (IWB) in Jordanian Islamic banks?
To analyze the effect of Innovative Work Behavior (IWB) on Competitive Advantages (CA) in Jordanian Islamic Banks.	Does Innovative Work Behavior (IWB) affect Competitive Advantage (CA) in Jordanian Islamic Banks?
To investigate the mediation effect of Innovative Work Behavior (IWB) between Training, Direct Compensation Practices, and Competitive Advantage (CA) in Jordanian Islamic banks?	How does Innovative Work Behavior (IWB) mediate the effect of Training and Direct Compensation Practices, on Competitive Advantage (CA) in Jordanian Islamic banks?
To examine the moderating effect of Indirect Compensation Practice on the mediation relationship between Innovative Work Behavior (IWB) and Competitive Advantage (CA) in Jordanian Islamic banks.	Is there moderating effects of Indirect Compensation Practice on the mediation relationship between Innovative Work Behavior (IWB) and Competitive Advantage (CA) in Jordanian Islamic banks?

Whatever the selected research approach based on the research nature, the research design could be determined depending on three data collection methods; (1) quantitative methods, such as a questionnaire to collect numerical information and analyze it statically, (2) qualitative methods, such as interview and document analysis to collect and analyze qualitative information, and (3) mixed methods which combine between the quantitative and qualitative methods.

Based on the research objectives and questions of the current study, as shown in Table 3.1, this research approach is defined as explanatory. It attempts to find the answer to an enigmatic question (e.g., does, what, and how). The explanatory examinations explore beginning, cause, or impact connections. The average review incorporates the assortment of practical information for the plan

of hypothesis or less pompous hunches and the resulting trial of these speculations by any of various ways accessible to the scientist.

A quantitative method using the questionnaire is chosen to investigate the expected logical hypotheses in this research which could then answer the research questions and achieve the research objectives. The quantitative method helps collect data for exploratory studies due to many reasons, such as being able to collect data from a large sample size, simplifying the collection of data, being flexible in examining all aspects of the problems being studied, striving to develop new knowledge and the ability to test the various research hypotheses (Cohen et al., 2013; Trochim & Donnelly, 2001).

Dawson (2002) and Jassimet et al. (2015) argued that four main stages would be conducted as a research methodology design, which are stated as follow:

**Preliminary Stage:** This stage defines the main research directions, such as initial ideas, problem statement, objectives and questions.

**Review Stage:** This stage reviews the research concepts and related works and identifies the research gap. A literature review is considered a helpful approach at this stage.

**Data Collection Stage:** This stage describes the data collection methods. Many research methods, such as questionnaires and interviews, can be adopted to collect the research data.

**Data Analysis Stage:** This stage analyzes the relationship between the study variables to test the research hypotheses and address the research objectives.

This research adopts the above research methodology phases due to its effectiveness in managing the research activities in accordance with the five “Ws”

theory (Dawson, 2002): (i) What is the research about? (ii) Why does this research need to be done? (iii) Who are the participants of the research? (iv) Where is research data collected? (v) When does each research process accomplish (process sequence)?

In the preliminary stage, the main directions of this research are determined. In Chapter 1, the problem statement is clarified as well as the research objectives, questions, and scope. To support these research objectives, a research conceptual model and research hypotheses were constructed based on the related theories, past studies and identified factors. The details of the research model and hypotheses have been discussed and presented in Chapter 2. The nature of the research objectives and hypotheses requires a data collection method for investigation purposes.

This investigation is to examine the effect of (IWB) on the relationship between the HRM practices (training and compensation) on the (CA) of Islamic banks in Jordan. For this purpose, data will be collected from a large number of employees who are working in banks. Besides fulfilling the research objectives, the research hypotheses would be tested based on the collected data.

To ensure the effective achievement of the research objectives and testing of the research hypotheses, the selected data collection method is characterized by the following features: The ability to collect data from a large number of respondents, the ability to find the relationships of the various research factors or variables, simple data collection in a short period and minimal efforts, the ability to investigate the opinions of the respondents about various study factors in a structured and transparent manner, reflect the actual situation of the respondents

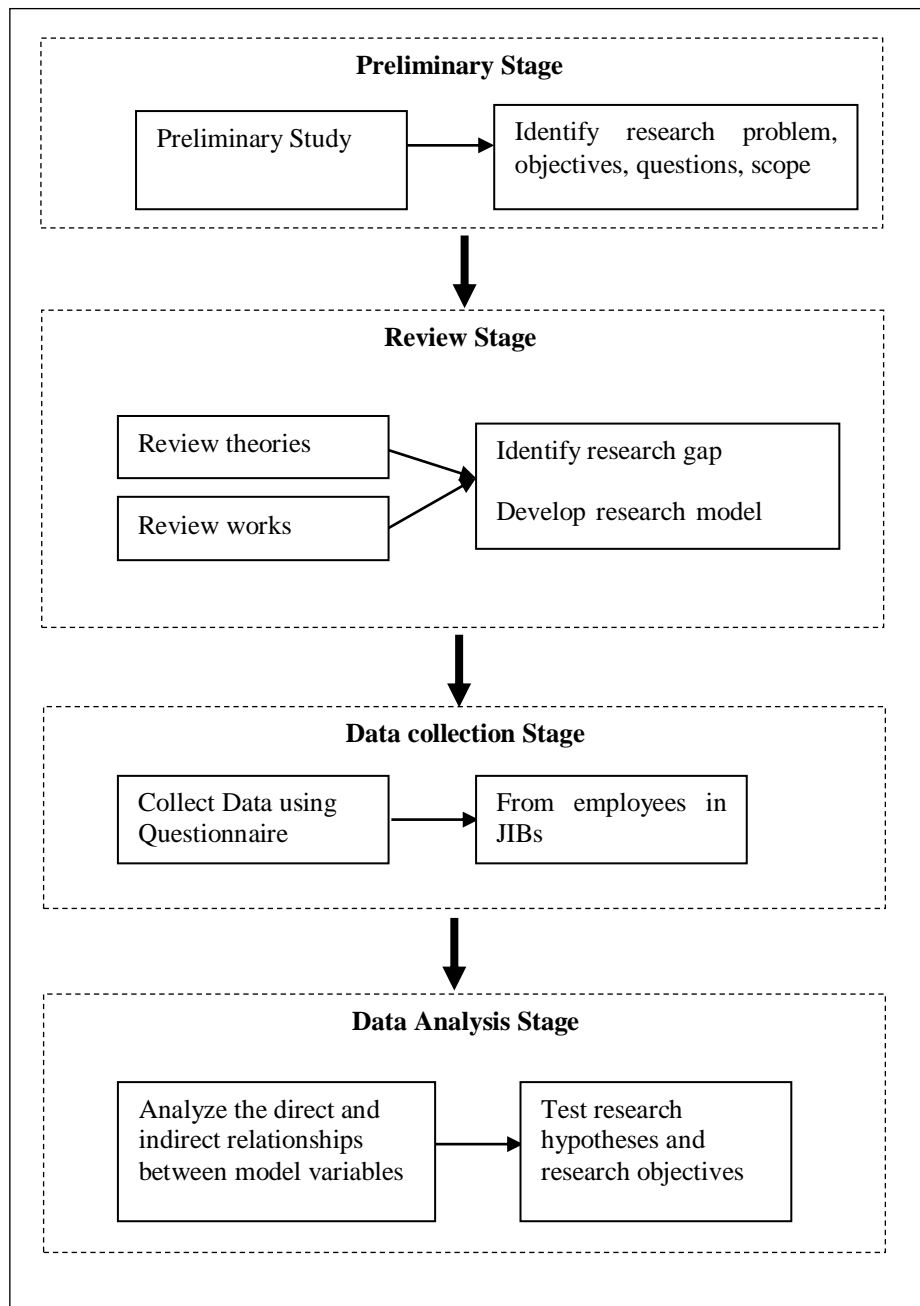
in the research area, and the ability to find the relationships or connections among the collected data to support the research paradigm.

Based on the above features, it is logical to use the questionnaire as a research instrument to collect data for the research objectives and hypotheses.

Silverman (2006) argued that data collection using a questionnaire is suitable for collecting data from the natural environment of the research setting, can collect and analyze data collected from a large number of respondents and has the ability to collect data on various research factors, variables and assumptions. In addition, quantitative data collection using a questionnaire allows the determination of the direct and indirect relationships among the research variables and tests the research hypotheses (Trochim & Donnelly, 2001; Cohen et al., 2003).

Based on the analysis of the collected data using a questionnaire, the model outcomes could be developed at the fourth stage of the research process.

Figure 3.1 illustrates the research methodology design and the process taken at each research stage.



**Figure 3. 1:** Research Design

### 3.3 Population and Samples

This section describes the targeted population, sampling frame and the sampling technique used in this research to determine the sample and its size.

### 3.3.1 Unit of Analysis

The unit of analysis is the primary entity being analyzed in research; it is the ‘what’ or ‘who’ being studied (Trochim, 2006). For instance, analysis units could include individuals, groups, and artifacts such as books, photos and newspapers, geographical teams like towns, census tracts and states, and social interactions like dyadic relations, divorces and arrests. The Jordanian Islamic Banks are the research scope, and this research focuses on the effect of (IWB) on the relationship between HRM practices (Training and compensations) and the (CA) of the bank's services. Hence, it is helpful to collect data from individuals.

For effective data collection and analysis, the unit of analysis in this research is individuals, whereby the data were collected from the bank employees to study their behaviors toward innovation in the working environment in the context of the relationship between motivation practices and (CA). The unit of analysis is the bank's employee responsible for conducting strategic banking services such as accounting, cash draw, HRM, and loans. The supportive employees, such as security, are excluded from the unit of analysis in this research.

### 3.3.2 Population of the Research

Parahoo (1997: 218) defined population as “the total number of units from which data can be collected,” such as individuals, artifacts, events or organizations.

Burns and Grove (2003) described the population as the elements that meet the criteria for inclusion in research. Out of 25 banks in Jordan, there are three local Islamic banks: Jordan Islamic Bank, Islamic International Arab Bank, and

Safwa bank. The total number of employees in these three banks is 3203, which represents the population of this study. The sample is employees of the Jordanian population, as more than 80 percent of the population will be aged between 20 and 60 years ([www.dos.gov.jo](http://www.dos.gov.jo)). Table 3.2 shows the population of local Islamic banks that will be used in this study.

**Table 3.2:** Population of The Study

Bank	Total employees in 2014/2021	Official Site
Jordan Islamic Bank	2,051/2439	<a href="http://www.jodanislamicbank.com">www.jodanislamicbank.com</a>
Islamic International Arab Bank	795/385	<a href="http://www.iabank.com.jo">www.iabank.com.jo</a>
Safwa Bank	357/246	<a href="http://www.safwabank.com">www.safwabank.com</a>
Total	3203/3070	

### 3.3.3 Research Sample and Sampling Technique

Sampling refers to selecting a subset of persons or things from a larger population (Scott & Morrison, 2005). The sample is intended to represent a particular population (Gall et al., 2007; Neuman, 2011).

In terms of using the questionnaire and according to Yount (2006), the sampling percent should be 5% at minimum for the size of the population between 1001-5000.

Table 3.3 summarizes the required sampling percentage according to the size of the population.

**Table 3.3: Sampling Rates**

Size of Population	Sampling Rate
0-100	100%
101-1000	10%
1001-5000	5%
5001-10000	3%
10000+	1%

Source: Yount (2006)

Thus, a minimum sample that should be collected in this research is about 160 employees from the research population.

The study utilizes a convenience sampling technique. The researcher chooses members based on proximity and doesn't consider whether they represent the entire population. This technique allows habits, opinions, and viewpoints to be easily observed. The justification behind using the convenience sampling method is due to the confidentiality policies in the banking sector. This confidentiality prevented the researchers from acquiring data about the employees, such as positions and working roles (Albdour & Altarawneh, 2014).

Convenience sampling is helpful to involve the sample being drawn from that part of the population that is close to hand. That is, readily available and convenient. The sample size is chosen using the following formula:

$$(1.1) \quad \text{Sample Size} = z^2 * p(1 - p)e^2N + z^2 * (1 - p)e^2N$$

Where N is the population size, n is the sample size, and the precision (e) level is 0.05 at a 95% confidence level. Table 3.4 presents the required sample numbers based on convenience technique according to available data about the Islamic bank's population and the sampling rate (Yount, 2006).

**Table 3.4:** Sample Numbers Based on Sampling Techniques

Bank	Population	Required Sample
Jordan Islamic Bank	2,051	103
Islamic International Arab Bank	795	80
Safwa Bank	357	36
Total	3203	219

Based on the convenience technique, the sample number that should be collected from Jordanian Islamic banks is 219; 103 from Jordan Islamic Bank, 80 from Islamic International Arab Bank, and 36 from Safwa bank.

The judgment of sample selection depends on the usefulness of segmenting the proposed sample based on a specified proportion. One of the most valuable proportions of employees is those in the north of the kingdom branches.

### 3.4 Data Collection Method

The study employs a quantitative method. A quantitative approach is based on the collection and analysis of numerical data obtained from questionnaires, tests, checklists and other formal paper and pencil instruments to answer questions on the current topic of study (Gay & Airasian, 2003).

The collection of quantitative data uses the deductive approach by scientific principles and moves from theory to data analysis by collecting information from a large number of people and generalizing the results (Creswell, 2005). In this study, the researcher will use computer software packages designed for analyzing the quantitative data statistically, such as SPSS and AMOS.

Using a questionnaire for employees of Jordanian Islamic Banks is the primary strategy to achieve the study objectives. Conducting several parts, items,

or questions for such methods is essential to merge the overall hypothesis through statistical analysis (Refer to appendix 1).

### 3.4.1 Development of Questionnaire

The questionnaire will be distributed to the employees of Jordanian Islamic Banks as adopted from many resources as presented in the following table:

**Table 3.5:** Development of The Questionnaire

Factor	Variable	Items	Type	Source
<b>Demographic Data</b>		Gender, qualifications, experiences, age	Ordinal	-
<b>Training</b>	Courses Quality	I can use knowledge, and behaviors learned in training at work.	Scaled	(Demo et al., 2012)
		All training programs are of high quality		Dechawatana paisal, 2005)
	Training Methods	The organization I work for helps me develop the skills I need for the successful accomplishment of my duties (e.g., training, conferences, etc.).		(Demo et al., 2012)
<b>Compensation</b>	Salary	Salary and benefits are competitive Pay survey is conducted regularly	Scaled	(Nurul Absar et al., 2010)
		In the organization where I work, my salary is influenced by my results		(Demo et al., 2012)
	Allowances	The organization I work for offers me a salary and allowances that is compatible with my skills, training, and education.		Nurul Absar et al., 2010)
	Bonus	Salary and benefits are offered on the basis of competencies or abilities of the employees		
	End of Service Indemnity	Non-financial benefits are emphasized		
<b>Indirect Compensation</b>	Rewards	The organization I work for remunerates me according to the remuneration offered at either the public or private marketplace levels.	Scaled	(Demo et al., 2012)
	Insurance	In the organization where I work, I get incentives such as promotions, commissioned functions, awards,		

	Travel	bonuses, etc		
	Social Security	The organization I work for considers the expectations and suggestions of its employees when designing a system of employee rewards.		
<b>IWB</b>	Opportunity Exploration	Employees are looking for opportunities to improve an existing process, technology, product, service or work relationship. Employees recognizing opportunities to make a positive difference in your work, department, and organization or with customers. Employees are paying attention to non-routine issues in your work, department, organization or market place.	Scaled	(Kleysen & Street, 2001)
	Idea Generation	Employees searching out new work methods, techniques or instruments.		(Jong & Hartog, 2007)
		Employees generate original solutions to problems. Employees find new approaches to execute tasks.		(Kleysen & Street, 2001)
	Championing	The employees encourage key organization members to be enthusiastic about innovative ideas. Employees Attempt to convince people to support innovative ideas.		(Jong & Hartog, 2007)
	Application	The employees systematically introduce innovative new ideas into work practice. Employees contribute to implementation of new ideas. Employees put effort into the development of new things.		
<b>CA</b>	Time	Provide fast deliveries Meet delivery promises on-time Reduce lead (waiting) time between order and service delivery Recognizing the regular customer	Scaled	(Verma & Young, 2000)
	Quality	Knowledge/skills of employees in dealing with customers Friendly and polite customer service personnel Maintain consistent & reliable quality of services Process improvement for better service quality		

	Cost	Reduce operating cost by process improvement Reduce operating cost by automation Reduce the net cost of service to the customer Reducing operating cost by improving productivity		
	Flexibility	Offer a large number of service features and variety Developing and providing innovative and unique services Developing and introducing new services Developing a more comprehensive line of services		

The questionnaire draft was then forwarded to a panel of HRM and business management experts in Jordanian universities and banks for validation. The expert panel was composed of many experts, and they matched the questionnaire items and the questions and objectives of the research and reviewed them based on clarity and understanding. The final draft of the questionnaire was finalized based on the feedback obtained from the panel of experts (refer to Appendix 2 for details). Based on the final questionnaire draft, the pilot study was conducted.

The items in the questionnaire were gauged through a 5-point Likert scale that focused on the lower rankings, generating relative responses over their high counterparts (Dawes, 2008). In other words, the 5-point Likert scale depicted the following levels; 1 depicting strongly disagree (SD), 2 depicting disagree (D), 3 depicting neutral (N), 4 depicting agree (A), and finally, 5 depicting strongly agree (SA). Data were gathered based on the criteria mentioned by Qawasmeh et al. (2013) concerning instrument development (Table 3.6).

**Table 3.6:** Questionnaire Creterion

Scale Index	Answer	Answers Level
1-1.49	Strongly Disagree	Very Low
1.5-2.49	Disagree	Low
2.5-3.49	Neutral	Moderate
3.5-4.49	Agree	High
4.5-5	Strongly Agree	Very High

Qawasmeh et al. (2013)

### 3.4.2 Variables Measurement

Ruane (2005) and Svensson (2005) referred to variable operationalization as the link between its theoretical and measurable definition. In other words, the question of what will be measured and how it will be measured is answered along with its measurable values moving from abstract to measurement (actual world) (Shields & Tajalli, 2006). This was supported by Svensson (2005), who explained that operationalization makes something abstract more observable and measurable. Therefore, this study developed a model to make the research questions visible and quantifiable and to relate theoretical and measurable definitions of the variables (in chapter 2) based on the reviewed literature.

### 3.4.3 Data Collection Procedures

Data is gathered during the study investigation (Polit & Hungler, 1999). In the present study, the questionnaire is the main instrument used to collect the required data to answer the research questions and achieve its objectives. Data collection using a questionnaire was carried out through the following steps; the questionnaire was translated from English to Arabic to ensure that the data collected was accurate. Since the mother tongue of the respondents is Arabic, the researcher took permission to administer the questionnaires to the employees of

the bank's branches (in the north of Jordan due to the homestay of the researcher, so there was an ease of access to collect the research data) from the central management of the banks in the study area in 2018. The questionnaire was administered to employees of the banks in the study area with English and Arabic hard copies of the questionnaire. Before issuing the questionnaires, the researcher introduced the research, clarifying its aim and the questionnaire's role in it, ensuring the respondents of the justification of providing accurate answers. Data was collected using hard copies of the questionnaire that were later entered into electronic tools and software (AMOS) to be analyzed.

#### **3.4.4 Questionnaire Translation**

The respondents to the questionnaire were more familiar with Arabic as their mother tongue; thus, to guarantee accurate and timely data collection, the original questionnaire version was translated into Arabic. This enabled effective communication with the sample. Two translation steps were carried out to ensure that the concepts in the questionnaire remained true to the actual meaning of the items; first, the questionnaire was translated into the Arabic language by the international translation office (refer to Appendix 3), and second, two experts in HRM reviewed the translated questionnaire and compared it with the original English version to guarantee the accuracy of concepts meanings.

The back-translated method was adopted following (Brislin, 1970) to ensure the questionnaire's validity also by experts to assure. The translated questionnaire to Arabic was retranslated to English to compare the stability of the questionnaire in the two languages. Back-interpreted things might contrast with their partners in the first survey in the etymological structure they accept and the significance they

convey. The idea is that comparing items has comparative implications and comparable types of language. The closeness of importance, even to the detriment of the likeness of structure, is substantially more alluring than the inverse. The system might be purposefully fluctuated to ensure proportionality of significance. As needs are, we independently survey apparent similitude of structure and significance to upgrade the peculiarity of the aspects. Any other way, appraisals might reflect, generally speaking, similitude, joining importance and structure.

A pilot study was conducted using Arabic questionnaire copies to ensure the translated version's reliability and validity.

### **3.5 Pilot Study**

The pilot study can be described as a small-scale preliminary study conducted to evaluate the effectiveness of the study scope and instrument (statistical variability) to predict an appropriate sample size and improve upon the study design before the performance of a full-scale research instrument (Hulley, 2007).

According to Sekaran (2003), the pilot study should be conducted to ensure that the survey questionnaire is free of errors and ambiguities. The minimum sample of the pilot study should be 10% of the total study sample. Thus, the main aim of the pilot study was to avoid participants' confusion and misinterpretations and to identify and detect any errors and ambiguities.

As explained previously in this chapter, the community of this study is the three Islamic banks in Jordan, and the total number of employees in these banks is 3203. The required sample for this study should be 219 at least. Therefore, the

minimum required sample for the pilot study is 22 employees from the Islamic banks in Jordan.

In the pilot study, the researcher surveyed by personally visiting the three Islamic banks in Jordan. In total, 60 questionnaires were sent to the offices of these banks; 30 questionnaires for Jordan Islamic Bank, 15 questionnaires for Islamic International Arab Bank, and 15 questionnaires for Safwa Bank. The number of returned responses is 45 questionnaires with a response rate of 75%. The most significant number of returned responses was from Jordan Islamic Bank (26 responses), followed by Safwa Bank (11 replies) and Islamic International Arab Bank (8 answers).

The duration of the pilot survey was three weeks (7 May- 30 May 2018). Statistical analysis using SPSS 22.0 was conducted to analyze the pilot's study collected data. The primarily conducted investigations are frequency, reliability, validity, and descriptive analysis.

### **3.5.1 Demographic Data of the Pilot Study**

Table 3.7 summarizes the frequency analysis of the demographic data; gender, qualifications, experiences, and age.

The frequencies of demographic data of the pilot study show that the respondents are mixed between both genders (58% male and 42% female). On the other hand, all respondents have minimum degree qualifications (80% degree, 16% master, and 5% Ph.D.). Moreover, 38 % of respondents have experience of 5-10 years, and 13 % of the respondents are below five years of experience. Furthermore, 60% of the respondents are between 30-40 years old, and 7 % are between 50-60.

**Table 3.7:** Demographic Data of The Pilot Study

Variable	Category	Frequency	%
Gender	Male	26	57.8
	Female	19	42.2
Qualifications	Degree	36	80
	Master	7	15.5
	PhD	2	4.5
	Other	0	0
Experience	<5years	6	13.3
	5 -10years	17	37.7
	10 -15years	14	31.2
	>15years	8	17.8
Age	20-30	4	9
	30-40	27	60
	40-50	11	24
	50-60	3	7

Hence, the collected data is helpful for study purposes for many reasons, such as reflecting male and female opinions, sufficient qualifications of respondents, high level of experiences, and maturity of the respondents.

### 3.5.2 Reliability of Measurement

Table 3.8 presents the reliability analysis of the questionnaire. The questionnaire reliability indicates to which level the respondents understand the questionnaire items while accomplishing their responses.

The low-reliability level indicates the random filling of questionnaire responses, and the high level of reliability means the careful reviewing and filling of reactions. The Cronbach's Alpha test is one of the most known reliability tests. A generally accepted rule is that  $\alpha$  of 0.6-0.7 indicates an acceptable level of reliability, and 0.8 or greater is a very good level (Ursachi, Alexandra, & Zait, 2015). As noticed from Table 3.8 presents the reliability analysis of the pilot

study. The coefficient of the pilot questionnaire records 0.802 reflecting the high questionnaire reliability level.

**Table 3.8:** Pilot Study Reliability

Factor	Variable	Cronbach's Alpha	Number of Respondents	Number of Items
HRM	Training	0.871	45	3
	Direct Compensation	0.820		6
	Indirect Compensation	0.828		3
IWB	Opportunity Exploration	0.825	45	3
	Idea Generation	0.782		3
	Championing	0.781		2
	Application	0.744		3
CA	Time	0.757	45	4
	Quality	0.820		4
	Cost	0.836		4
	Flexibility	0.758		4
<b>Total</b>		0.802	45	39

As noticed from the above table, the reliability of each/all factors in the pilot questionnaire is above the acceptable Cronbach's Alpha, which reflects the clearness and understanding of the questionnaire items for respondents.

### 3.5.3 Validity of the Pilot Study

The validity of the questionnaire was tested by analyzing the interrelationship between items within each questionnaire part based on the collected responses. Factor Analysis using Kaiser-Meyer-Olkin (KMO) was conducted to measure the interrelation adequacy between the items of each questionnaire part. The accepted coefficient of KMO should be more than 0.5. Table 3.9 shows that the interrelation between all items in each questionnaire part adequately reflects the practical design of questionnaire items and features.

**Table 3.9:** Factor Analysis of The Pilot Questionnaire

Questionnaire Part	KMO	Number of Respondents	Number of Items
HRM	0.761	45	12
IWB	0.641	45	11
CA	0.702	45	16

The validity and reliability analyses confirm the clarity of questionnaire items, the good interrelationship between the questionnaire items, and the effectiveness questions design. Thus, validating the questionnaire's viability to achieve the research objectives based on the collected data is essential. For this purpose, the following point explains the descriptive analysis of the pilot study.

#### **3.5.4 Descriptive Analysis of the Pilot Study**

The descriptive analysis of pilot questionnaires was conducted on three main factors that consist of 11 variables. The HRM factor includes many variables; training, direct, and indirect compensations. On the other hand, the (IWB) factor includes many variables; opportunity exploration, idea generation, championing, and application. Lastly, the (CA) factor has many variables: time, quality, cost, and flexibility. The main aim of this research is to achieve (CA) through the role of training, compensation and (IWB) in Jordanian Islamic banks. However, the pilot study aims to identify the importance of the study variables in the banking sector before collecting the final data and achieving the research objectives.

Regarding the descriptive analysis of training variables in the HRM factor, the respondents see the training courses as an essential source to gain benefits

such as developing their knowledge and skills. However, the respondents are not sure about the quality of training courses provided by the organization.

In the context of direct compensation, the respondents said that the salary and the non-financial compensation match their skills and positions. The respondents are not sure that the salaries are competitive compared with salaries in other organizations. In other words, the organization should pay more attention to improving the employees' salaries based on their working efforts.

Regarding indirect compensation, most respondents agree with all items in this variable. For example, the respondents agreed that in the organization where they work, they get incentives such as promotions, commissioned functions, awards, and bonuses. This reflects the organization's strategies of providing indirect compensation based on employees' working efforts instead of giving direct compensation to encourage the employee's behaviors in the environment. Further descriptive information on HRM factors is attached in Appendix 4.

The second analyzed factor is the (IWB), which consists of four variables; opportunity exploration, idea generation, championing, and application. The descriptive analysis of the opportunity exploration shows that the respondents agreed with all items in this variable. The employees look for opportunities to improve an existing process, technology, product, service or work relationship. On the other hand, they recognize opportunities to make a positive difference in your work, department, and organization or with customers. Moreover, the respondents pay attention to non-routine issues in their career, department, organization or marketplace. This indicates employees' good behaviors toward exploring solutions in the working environment.

The second analyzed variable in (IWB) is the idea generated in the working environment. The respondents agreed in total with all items in this variable. The employees search out new work methods, techniques or instruments, try to generate original solutions to problems, and find new approaches to execute tasks. In other meaning, the employees' behaviors are good toward the new idea generation in the working environment.

Furthermore, the descriptive analysis of the championing variable shows that the respondents agree the employee encourages key organization members to be enthusiastic about innovative ideas. However, the respondents are not sure that the employees attempt to convince people to support innovative ideas. This indicates the challenge in keeping the championing the organization's innovative ideas.

Lastly, the descriptive analysis of the application variable shows that the total of respondents is not sure that the employee can systematically introduce innovative new ideas into work practice, and they are not sure that they are contributing to implementing new ideas. On the other, the respondents agreed that the employees put effort into developing new things. This reflects the good behaviors of employees toward the implementation of new ideas. However, they face challenges in applying the concepts as actual actions.

In conclusion, regarding the (IWB) factor, employees have good behaviors toward innovation in the working environment. However, they feel the organization should put more effort into supporting innovation in the active area.

About the third factor in the questionnaire (CA), the descriptive analysis is conducted on four variables (time, cost, quality and flexibility). Hence, the respondents see that the time of services needs to be enhanced in the organization.

This reflects that the knowledge of human resources in the organization should be supported to create new implementations to reduce the costs of the services in the organization.

The descriptive analysis of the variable (quality) shows that the respondents are neutral with all items in this variable. They are not sure that the operating cost is reduced by process improvement, operational cost by automation, reducing the net worth of service to the customer, and operational cost by improving productivity. This represents a bold challenge in managing the human resources in the organization to enhance the services process in the organization.

Lastly, the descriptive analysis of the variable (flexibility) shows that the respondents are not sure that the organization is developing and providing innovative and unique services, developing and introducing new services, and developing a more comprehensive line of services. This indicates that the organization offers many services, but these services need to be improved to be more fixable.

In total, through descriptive analysis of the pilot study, it can be concluded that the human resources in the study area have good behaviors toward the working environment. However, they see that the organization needs to put more effort into managing the human resources to enhance the (CA) of the services. The respondents believe the organization should support innovation and creativity in the working environment. The support should consider the human resource practices, such as training, direct, and indirect compensation. These practices could play an important role in encouraging the employees to utilize their knowledge and skills to enhance the (CA) variables in the organization.

Consequently, the initial findings support the importance of conducting this research to achieve the main aim of this research, which is to study the impact of (CA) through the role of training, compensation, and (IWB) in Jordanian Islamic banks. Hence, the final data collection was collected based on the designed questionnaire, and the collected data were analyzed by SEM using AMOS to fulfill the research objectives.

### **3.6 Ethical Considerations**

Bank employees are often faced with ethical issues in their day-to-day tasks, which holds the same for researchers, mainly when using participants in the study. Researchers to be careful not to breach the institution's/ individuals' rights and keep them protected throughout the research (Walker, 2007). In the process of data collection, the ethical considerations to be taken into account include the following:

- Permission to conduct the study – the researcher sought permission from the bank managers to conduct the research, and the participants were informed of such consent. The respondents' cooperation was requested, and confidentiality was promised. The researcher was careful not to disrupt the banks' running and assured the respondents that the data provided would be kept confidential and used only for the study.
- Principle of beneficence – Walker (2007) described this principle as encompassing freedom from harm and exploitation in that the respondents were promised that they would not come into any damage from the questionnaire completion. However, they may experience some

psychological discomfort from the item's nature. The researcher left his contact number for any respondent that wished to discuss the matter further.

- Principle of respect for human dignity – this principle is related to self-determination and full-disclosure right (Walker, 2007) in that the respondent's self-determination were respected; they were left to decide without being coerced to participate in the study, and they had the right to refrain answering any item that made them uncomfortable, to disclose any personal information and to clarify any ambiguity with the researcher. The study respected the right to full disclosure as the nature of the study was fully described to the respondents before participating.
- In addition, the participants were requested to sign a consent form before the questionnaire completion. Each questionnaire was placed in a separate file so no signed consent form could be matched to a specific questionnaire. This guaranteed that the respondents remained anonymous and no names were disclosed in the research report. Those who wished to obtain a research report were welcome to contact the researcher.

### **3.7 Data Analysis Techniques**

In this study, the researcher uses the quantitative method. To examine the influence or effect of one variable on another variable, the researcher either utilize regression analysis or structural equation modeling (SEM). In this study, the researcher employed SEM by using AMOS software. The study employs a path analysis using (SEM) to justify the different relationships, correlation analysis to find the relationships between training –like training courses and methods- with (IWB), direct compensation –like salary, allowances, bonus, and end of service

indemnity - with (IWB), and mediating the relationship between (IWB) with the (CA). Also, the final relationship will be tested by the moderator variable, indirect compensation –like rewards, insurance, social security and travel- towards the previous relationship; (IWB) with (CA).

Generally speaking, SEM is a robust multivariate analysis method and is extensively utilized to assess unobservable latent constructs. According to Ullman and Bentler (2003), the relationships among the constructs may be estimated by SEM with the independent regression equations or involved methods. In model pathways specifications, the researcher can propose two relationship types; free pathways (where the hypothesized causal/counterfactual relationships of the variables are tested and are free to vary, and where the relationships among the variables have been estimated based on prior literature, they remain fixed in the model. SEM covers the tests of confirmatory factor analysis, path analysis, partial least squares path analysis, LISREL and latent growth modeling.

The primary condition demonstrating is a multivariate measurable investigation strategy utilized to break down underlying connections. This strategy is the blend of element examination and various relapse investigations, and it is used to break down the underlying relationship between estimated factors and inactive builds. This scientist likes this technique since it appraises the numerous and interrelated reliance in a solitary examination. In this investigation, two kinds of factors are utilized: endogenous and exogenous factors. Endogenous factors are identical to subordinate elements and are equivalent to the free factor.

Primary condition demonstrating (SEM) incorporates an assorted arrangement of numerical models, PC calculations, and factual techniques that fit the organization of builds to information. SEM includes corroborative component

investigation, cross-examination, way investigation, halfway least squares way demonstrating, and inactive development displaying. The idea should not be mistaken for the connected concept of underlying econometrics models or with primary financial models. Direct condition models are frequently used to evaluate inconspicuous 'dormant' builds. They regularly summon an estimation model that characterizes inactive factors utilizing at least one noticed factor and a primary model that ascribes connections between dormant elements. The relationships between develops of a prior condition model might be assessed with free relapse conditions or through more elaborate methodologies, for example, those utilized in LISREL.

SEM is usually legitimized in sociologies due to its ability to attribute connections between unnoticed builds (inactive factors) from recognizable characteristics. To give a basic model, the idea of human knowledge can't be estimated straightforwardly as one could quantify tallness or weight. Therapists foster a theory of insight and compose estimation instruments with things (questions) intended to gauge knowledge as per their speculation. They would then utilize SEM to test their hypothesis using information from individuals who took their knowledge test. With SEM, "insight" would be the static variable, and the test things would be the noticed factors.

SEM was deemed to be accurate and effective in analyzing the mediating effects of (IWB) on the training & compensations practices relationship towards (CA) among Jordanian Islamic banks and capable of testing the research hypotheses proposed by the research.

### 3.8 Chapter Summary

This chapter was dedicated to presenting the research methodology encapsulating the research design and procedures used for population selection and sampling. The chapter also presented the questionnaire design, the techniques for data collection, the methods of data analysis and the general settings. The next chapter provides the research analysis and findings based on the hypotheses tested using SEM's AMOS.

