CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this Chapter is to explain the Methodology of this study. The Chapter consists of a detailed description of the Method and Procedures used to carry on the current study, such as Sampling, Data Collection, Instrumentation, Validation, Statistical Methods for Data Analysis and Pilot Study. It is worth emphasizing here that the main objective of this study is to investigate the relationship between leader-member exchange and organizational learning culture on the one hand and employees' job satisfaction on the other. It also attempted to explore the pivotal role that human resource management practices play in mediating between two significant variables. More precisely, the study examines the direct impact of Leader-Member Exchange (LMX) and Organization Learning Culture (OLC) on Human Resource Management Practices and, on the other hand, the subsequence impact of Human Resource Management Practices on Employees' Job Satisfaction. Hence, this chapter describes the methodology used to answer the research questions stipulated in Chapter One to achieve this ultimate goal. Subsequently, Research Design is Elaborated, the Instrumentation is Enumerated, the Validity and Reliability Issues are Addressed, Pilot Study is Reported, and Data Analysis Procedures are Explained.

3.2 Research Design:

There were many definitions of Research Design. According to Kelliher (2005), the research design is the blueprint for fulfilling research objectives and answering stipulated questions. The research design was also defined as an activity and time-based plan that guide the researcher in selecting sources and types of information to obtain answers to questions. (Blumberg et al., 2005). A sound research design aims to provide results that are judged to be credible. In other words, the Research Design helped to overcome threats to Internal and External Validity. In this study, the survey approach will be employed for data collection from the population.

In the present study, the researcher used the quantitative method to investigate the research problem and research questions that aimed to determine the relationship between the variables. A quantitative method of inquiry allows the researcher to collect information from any source. Furthermore, Zhang (2000) claimed that one of the significant advantages of a quantitative approach is the ability to measure many people's reactions and get a wide range of responses. Thus, facilitating the comparison and statistical aggregation of the data

The Quantitative consists of the collection and analysis of survey data. Within Quantitative Methods, such data collection is often referred to broadly as a descriptive research design (Leedy and Ormrod, 2005). More specifically, it is referred to as simply survey research. Groves et al. l (2004) describe survey research as a systematic method for gathering information from a sample of entities to construct quantitative descriptors of the attributes of a larger population of which the entities are members.

According to Hair, Bush, and Ortinau (2003), survey design was the most useful research method when the researcher discusses specific characteristics of existing phenomena. He was able to redefine problems and objectives within the primary data

collection through a set of standardized to structured questions from the large population and quantitative analysis in nature.

The Survey Research Design Methodology tends to be in the mainstream of the market in business and management research (Hair, Bush, and Ortinau,2003) and social research (Baker,2002, Babbie, 2004). Ahmed et al. (2019) labelled the survey method the method that tends to collect data from a large population in structured questions and uses quantitative analysis to determine the relationships and differences of the phenomenon. According to Zikmound (2003) and Hair, Bush, and Ortinau (2003), the survey method can provide more benefits to the research in accommodating large sample sizes at relatively low cost. It can also cover the ease of administrating and collecting quantitative data ripe for advanced statistical analyses.

Cooper and Schindler (2001) that there are three methods of Data Collection in Survey Method: Mail Survey, Telephone Survey and Interview Survey. According to Mohd Shariff (2003), Mail Survey was popularly used by many researchers when they attempted to collect important information through structured questions from a dispersed population sample.

The quantitative method was based on the collection and analyses 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 and Airasian, 2003). It is a technique that relies less on interviews and observations and involves only small numbers of questionnaires, focus groups, subjective reports and case studies. It is much more focused on collecting and analysing numerical data and statistics (Gay and Airasian, 2003).

This research used the survey method and tested an adapted model using Structural Equation Modelling to investigate strategic management and its relationship

with human resource practices and employees' job satisfaction. According to Frey, Botan, and Kreps (2000), the survey method is based on obtaining information about the experiences and feelings of the subjects regarding services or products to evaluate effectiveness. The study employs the quantitative research method as a design intended to ensure objectivity, generalizability and reliability. The quantitative research method, also previously highlighted, is a technique in which participants were selected randomly from the study population unbiasedly. It is used to provide a complete picture of the issue being studied, including the target respondents and the program's effectiveness, to help identify the strengths and weaknesses that could not be achieved.

Furthermore, structural equation modelling (SEM) was used in this study to investigate the proposed complex relationship among the selected variables. SEM also has an enormous statistical power to examine and confirm mutual relationships between variables not directly observed but inferred by other observable and measurable variables. The ultimate objective for using SEM in research is to depict the pattern of a series of inter-correlated relationships among the variables simultaneously among a set of latent constructs, each measured by one or more manifest variables. SEM is a combination of factor analysis and multiple linear regression. Although SEM was used to investigate relationships like multiple regression, the earlier statistical method was more robust than the latter (Ibrahim, 2018).

For practical reasons, the researcher prefers to use structural equation modelling to obtain meaningful and accurate results. However, SEM's advantages strongly depend on the theory of the research being used. The purpose of SEM was to establish whether the previously decided relation web could be verified by the data obtained. Despite being developed in genetics (Alharrasi, 201), it is a recent systematic instrumentsed, especially

for evaluating the relations among variables and testing theoretical models in the fields of Education, Psychology, Sociology, Business, and so on.

3.3 Population and Sample:

According to Furlong et al. (2000), a Population is referred to as "a Large Group of Interest". In other words, a Population is a group of individuals who possess the same characteristics. An accurate definition of Population is essential for quantitative study because the researchers draw their subjects from the target population. Thus, the precise definition would enable the researchers to target the population precisely, select their process randomly, and consequently generalize their results on a similar situation due to the sample representativeness. Thus, public sector employees from various Sultanate of Oman's ministries were the sample of this study.

3.3.1 Sample Size and Procedures

Sampling means "the selection of a subset of individuals from within a statistical population to estimate characteristics of the whole population". According to Creswell (2012), a sample is a subgroup of the target population on which the researchers attempt to generalize their findings. Hence, the sample size should be representative if the aim of generalization was to be achieved.

As previously mentioned, the subjects of this study were randomly selected among the public sector employees from different Ministries in the Sultanate of Oman. The samples were selected in relation to their respective population to maintain the representativeness of each group in the population. The randomization of sample selection means that each member of the specified population had the same probability of being drawn (Ibrahim, 2018). Everyone in the population had a known Nonzero Chance of being included in the sample. Consequently, selection biases could minimize.

Since the researcher was going to employ confirmatory factor analysis and structural equation modelling to test the Hypothesized Model, a large sample size was needed.

The sample size was determined based on the number of the population and statistical techniques the researcher attempted to employ to answer the research questions stipulated in chapter one. The sample size is robust enough to represent this study's population and sufficient to investigate the variables' differences meaningfully. According to Ibrahim (2018), a large sample size is desirable because it would represent the population. Furthermore, the sample size is crucial in statistical analysis or, more precisely, in quantitative research. When the researchers compute a sample means, they try to generalise the population mean by placing a confidence limit or by testing hypotheses about the population means (Gopal, 2017). Thus, since the population mentioned in Table 3.1 is 176,406 employees and because the researcher attempts to use Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), which need a large sample size, the researcher distributed 800 questionnaires following stratified random sampling technique across sectors.

It is worth mentioning that although 384 participants are enough for the analyses, 384 participants are just a minimal size, not a maximum. However, the researcher distributed the instrument to 800 participants to maximize the representativeness of the population. Additionally, since the researcher employed advanced statistics (CFA and SEM), a large sample is highly warranted irrespective of the minimal calculation of the sample size (Hancock, & Mueller, 2013; Wang, & Wang, 2019; Collier, 2020).

Gopal (2017) suggested that the main advantage of Stratified Sampling is to capture key population characteristics in the sample and to ensure conformity with unwanted representation sub-groups. Thus, by utilizing the Stratified Sample

Technique, the researcher attempts to select a representative sample for each sub-group in the study to avoid unwanted biases and selection errors. Moreover, after the population had been fully identified and stratified technique had been chosen, the researcher selected a sample for each stratum by following the Simple Sampling Technique.

Therefore, stratified **r**andom sampling involved stratifying the elements and meaningful levels and taking proportionate or disproportionate samples from the strata. This sampling design is more efficient than simple random sampling because of the same sample size. Each population segment is better represented, and more valuable and differentiated information is obtained concerning each group (Ibrahim, 2018). The researcher determined the size of the population and the number of the category from the public sector organizations that made up the size of each layer. It also determined the required sample and the number of individuals to be selected from each layer.

Lastly, the researcher divided the samples into 31 groups; each group represented the different public organizations in the Sultanate of Oman and selected one of the employees in each organization to distribute the questionnaire electronically to his colleagues at work using a what's-up phone application. The researcher communicated with the selected employees and asked them to choose the required number randomly.

Additionally, Bornstein et al. (2013) argued that the sample could be used as Stratified Random Sampling if the population could be categorized into sub-layers so that the individuals within each layer are Identical. This study utilised the stratified random sampling technique to achieve representation for each population group. Hence, stratified random sampling was used to select a Balance Presentative Sample Size across different government organizations in Oman. It was worth mentioning that the

participants of this study were all employees in various government organizations across the Sultanate of Oman.

Based on the Ministry of Civil Service in the Sultanate of Oman, there were 31 Governmental Organizations, and the number of employees in the government sector until the end of 2018 was 176,406 employees. Therefore, the population of the study was the employees in the public sector in the Sultanate of Oman. To achieve representativeness for all groups across the stratum, The researcher distributed questionnaires to the targeted sample of 768 employees. Although based on Krejcie and Morgan (1970)'s suggestion, 384 is an adequate sample size for any population of more than 100 thousand, this figure is minimum, and the study could select more than 384 to maximize the representativeness and enhance statistical power (Hancock, & Mueller, 2013; Wang, & Wang, 2019; Collier, 2020).

Table 3. 1: Sample size according to the group

No	Group	size	No	Group	size
1	Information Technology Authority	28	17	Ministry of Social Development	24
2	Public Authority for Water	26	18	Ministry of Sports Affairs	24
3	General Electricity Authority		19	Ministry of Higher Education	
4	Public Authority for Craft Industries	25	20	Ministry of Transport and Communications	27
5	Oman Chamber of Commerce and Industry	24	21	The Ministry of Manpower	24
6	Oman News Agency	24	22	The Ministry of Education	25
7	General Authority for Social Insurance	25	23	Ministry of Information	24
8	Tender Board	24	24	Ministry Of Agriculture	26
9	Dhofar Municipality	24	25	Ministry of housing	24
10	Muscat Municipality	24	26	Ministry of Oil and Gas	27
11	Diwan of the Royal	24	27	The Ministry of Awqaf and Religious Affairs	25
12	Ministry of Civil Service	26	28	Ministry of Commerce and Industry	24
13	Ministry of Health	24	29	Ministry of Finance	25
14	Ministry of National Economy	25	30	Ministry of Interior Affairs	24
15	Ministry of Justice	24	31	Ministry of Legal Affairs	26
16	Ministry of Heritage and Culture	24			

3.4 Data Collection Method and Procedures

The quantitative method is collecting and analysing numerical data statistically using statistical methods. Within Quantitative Methods, such data collection was often referred to broadly as a descriptive research design (Leedy & Ormrod, 2005). More specifically, it is referred to as “Simply Survey Research”. Groves et al. (2004) described Survey Research as "A Systematic Method for gathering information from (a sample of) entities to construct quantitative descriptors of the attributes of a larger population of which the entities are members”. (p.2).

The Survey Research Design Methodology tends to be in the mainstream of the market in business and management research and also in social research (Cooper & Schindler, 2001; Hair, Bush & Ortinau, 2003). According to Hair, Bush, and Ortinau (2003), survey design is the most useful research method when the researcher attempts to present specific characteristics of existing phenomena. It can redefine problems and objectives within the primary data collection through a set of standardized or structured questions from the large population and quantitative analysis.

The reason for using this method was because the analysis of Quantitative Data provided a solid foundation for description and analysis. The interpretations and findings were based on measured quantities rather than impressions. These were quantities and measurements that could be checked and replicated by other researchers to check for their authenticity (Denscombe, 2002). The data collection procedure used to investigate the Purposes of this study is a questionnaire. The questionnaire provided enough data to illustrate the relationship between research variables.

Due to the circumstances accompanying the COVID-19 pandemic, the questionnaires were distributed electronically to the research samples using the what's-up application. They included an electronic letter explaining the purposes of the study.

There are many benefits of distributing the questionnaire; the amount of time required and assurance that only aggregate data is reported and that confidentiality is maintained. In an effort to ensure the participants' confidentiality and anonymity, no identifiable information was requested from respondents, and the identity of each respondent remained confidential. Only basic demographic information is requested.

The respondents had been given approximately three weeks from the date they received the questionnaire to reply and respond to the survey. A short message was sent to the respondents as a follow-up process a week before two weeks overdue. The questionnaire was also alternatively translated into the Arabic Language to be on the safer side in case the respondents could not totally comprehend the English version of the instrument. The researcher translated the Questionnaire into Arabic and then gave it to a human resource management expert to back translate it into Arabic again. Precisely an Arabic lecturer in Oman was selected to proofread the questionnaire grammatically, if there were any misunderstandings in the vocabulary, and to compare it with the English version. After that, the researcher gave the Arabic copy to an Arabic Language Lecturer to audit the spelling and vocabulary mistakes and evaluate them before sending them.

3.5 Instrumentation

An Instrument was a tool for collecting information from the subjects. It was a channel where subjects, views, and opinions became known. More precisely, an instrument is a tool for collecting information from the subjects. For the instruments to attain credibility, they must be certain that it measures the phenomenon it is supposed to measure (Gopal,2015). Hence, the researcher employed a questionnaire as a means of Data collection. The questionnaire used for data collection was divided into four sections.

The researcher adopted many instruments from previous studies. The first instrument adopted is the Organizational Learning culture instrument (OLC) developed by Watkins and Marsick (2003) and consists of 20 items. The constructors tested its psychometric properties and found the instrument valid and reliable. The second section of the instrument is Leader-Member Exchange (LMX). This scale was developed by Alshamsi (2012) and also consisted of 20 items. The instrument was designed to measure the relationship between leaders and followers. It contains 20 items.

The third instrument used for this study was Human Resource Practice Scale. It consists of 24 items that measure the type of Human Resources Practice in an organization. The scale was adopted by Presbitero, Roxas and Chadee (2016) and was statistically digested into four underlying dimensions. These dimensions are Compensation, Reward and Training (13 Items), Career Development (5 Items) and Work-Life Balance (6 Items). The Fourth part consists of ten items, which were used to measure Job Satisfaction. This section consisted of 10 Items and was used to measure the extent of Employees Job Satisfaction. These instruments from different sources were combined together with three demographic variables such as gender, academic qualification and working experience.

These scales were compiled together in a single questionnaire with Demographic Variables (Gender, Experience and qualification). The total number of items was 77. The 5 Likert Scale was used to determine the extent to which the participants agree or disagree with the content of each item in the questionnaire. The scale ranged from Strongly Disagree to Strongly Agree. More precisely, the respondents were asked to state their opinion on each item using an ascending 5-point Likert scale (Number 1 is Strongly Disagree, and Number 5 is Strongly Agree). The 5 Likert Scale

was used to give participants different choices, which would subsequently and positively enhance the scale's reliability.

As previously highlighted, the questionnaire was translated into Arabic using the back-translation technique. This technique was the most frequently employed translation technique, where the original version of the questionnaire is translated into the target language and subsequently translated back into the source language by a second bilingual person (Harzing, Reiche & Pudelko, 2011).

3.6 Validity of the Instrument

Validity means "the appropriateness, meaningfulness, and usefulness of the specific inferences made from the test score. The inferences regarding the specific use of a test are validated, not the test itself" (American Psychological Association, 2015). There are many types of validity, such as Criterion Validity, construct validity, discriminant validity, content validity, face validity and predictive validity and so on. Criterion validity is the best and most accurate to decide whether the instrument measures precisely the phenomenon it purports to measure. It can be done by assessing specialists, external examiners, psychologists, and experts in the area. On the other hand, construct validity is the extent to which items belong to their respective factors or constructs. Construct validity is often considered the overarching type of measurement validity and should be tested after achieving face validity, content validity and criterion validity of the scale.

The criterion validity was examined, and the changes were made based on the experts' suggestions and recommendations. The researcher also examined the face validity of the scale by selecting five respondents from the targeted population. The main objective of examining face validity is to identify confusing, ambiguous, complex,

and incomprehensible items in the questionnaire. The researcher asked five selected respondents to identify any ambiguous or incomprehensible word or sentence item by underlining it. Adjustments were made after the exercise to ensure all the items were clear, simple, and understandable.

3.7 Reliability of the Instrument

Like validity, there are several types of reliability tests, but the most commonly used one is Cronbach's alpha. It measured the internal consistency of an Instrument. The Cronbach's alpha was to determine the impact of the error on the actual score, and its value ranges between 0 (Lack of Internal Consistency) and 1 (Perfect Internal Consistency). Therefore, the closer the value was to 1, the higher the reliability coefficient of the item and the smaller the impact of measurement error on the test scores.

Hence the researcher conducted a pilot study on a set of participants selected from the population. A number of 55 questionnaires were distributed as a pilot study, and based on the results, the stability value for all items of the scale (74) items is ranged between(0.811-0.923).

Participants were selected, and Cronbach's alpha was used to examine the internal consistencies of the items involved in the instrument. These participants were excluded from the actual study. Although there are many methods to test the reliability of the instrument, the researcher prefers Cronbach's alpha due to its effectiveness. Cronbach's alpha is considered to be one of the most effective methods to examine the reliability of the instrument, and thus, many researchers use it to test the uniqueness and internal consistency of the scales (Coakes & Steed, 2007). The value of Cronbach's alpha ranges between 0 to 1, where 0 means Zero Reliability (Lack of Internal

Consistency) while 1 means complete reliability. However, getting one was almost impossible, but the more the value of Cronbach's Alpha is near 1, the more reliable the data. The instrument's reliability was tested through Cronbach's Alpha, and its items were found to be highly reliable, as shown in Table 3.5. This suggested that the items were highly reliable and could be meaningfully used for this research.

Table 3. 2: Distribution of items according to dimensions with their respective reliability

No	Dimensions	Number of items		Reliability
1	Organization Learning Culture	20	1, 2, 3, 4, 5,6,7,……20	0.923
2	Leader-Member Exchange	20	21, 22,23, 24……..40	0.955
3	HRM – Compensation, Reward and Training	13	41,42,43,44……53	0.932
5	HRM-Career Development	5	54,55,56,57,58	0.811
6	HRM - Work-Life Balance	6	59,60, 61, 62, 63, 64	0.882
7	Job Satisfaction	10	65,66,67,……..74	0.896

3.7.1 Organization Learning Culture (OLC)

After establishing the instrument's internal consistency across the factors, the researcher also tested the reliability of each item using Cronbach's alpha. According to Table 3.2, for organization learning culture, the value of Cronbach's alpha was 0.923, which indicated that the scale met the requirement of psychometric properties and can be meaningfully used for any academic exercises. The Organization Learning Culture items are presented in the table below.

Table 3. 3: Organization Learning Culture (OLC)

No	Items
1.	In my organization, people openly discuss mistakes to learn from them.
2.	In my organization, people identify skills they need for future work tasks.
3.	In my organization, people help each other learn.
4.	In my organization, people view problems in their work as an opportunity to learn.
5.	In my organization, people are rewarded for learning.
6.	In my organization, people treat each other with respect.
7.	In my organization, people spend time building trust with each other.
8.	In my organization, teams/groups have the freedom to adapt their goals as needed.
9.	In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences.
10	In my organization, teams/groups focus both on the group's task and on how well the group is working.
11.	In my organization, teams/groups revise their thinking as results of group discussions or information collected.
12.	In my organization, teams/groups are rewarded for their achievements as a team/group.
13.	In my organization, teams/groups are confident that the organization will act on their recommendations.
14.	My organization enables people to get needed information at any time quickly and easily.
15.	My organization maintains an up-to-date database of employee skills.
16.	My organization creates systems to measure gaps between current and expected performance.
17.	My organization measures the results of the time and resources spent on training
18.	My organization invites people to contribute to the organization's vision.
19.	My organization considers the impact of decisions on employee morale.
20.	My organization works with the external community to meet mutual needs.

3.7.2 Leader-Member Exchange (LMX)

The internal consistency of the LMX scale was tested on individual items basis. As was highlighted previously, the scale developed by Alshamsi, (2012) and other arbitrated items. The Scale consisted of 20 items with four dimensions. The result of the Internal Consistency via Cronbach's Alpha indicated that the scale was very reliable and could be used for academic research since the value of Alpha was 0.955. The leader-member exchange items are presented in the table below.

Table 3. 4: Leader Member Exchange (LMX)

No	Items
1	I like my supervisor very much as a person.
2	My supervisor is the kind of person one would like to have as a friend.
3	My supervisor is a lot of fun to work with.
4	I usually know where I stand with my supervisor.
5	My supervisor gives me some advice that will help me in my life.
6	My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.
7	My supervisor would come to my defence if I were attacked by others.
8	My supervisor would defend me from others in the organization if I made an inadvertent mistake.
9	My supervisor will help me if I need financial help.
10	My supervisor understands my problems and needs.
11	I do work for my supervisor that goes beyond what is specified in my work description.
12	I am going to apply extra efforts beyond those normally required to further the interest of my work group.
13	I make any changes in my work that my supervisor asks of me without discussing it.
14	I don't mind my supervisor sacrificing my annual work leave if the supervisor asks me to do so
15	I do not mind stopping my annual leave and returning to work if the manager asks me to
16	I am impressed with my supervisor's knowledge of his/her job.
17	I respect my supervisor's knowledge of competence on the job.
18	I admire my supervisor's professional skills.
19	I admire the way my supervisor thinks about creating solutions to work problems.
20	I am amazed by the academic or senior professional degrees of my supervisor.

3.7.3 Human Resource Management Practices (HRM practices)

Cronbach's alpha was also used to investigate the human resource management scale's reliability. The result of the analysis suggested that the scale was highly reliable and fulfilled the psychometric properties of the scale. The value of the internal consistency via Cronbach's alpha for compensation, reward and training was 0.882, while the value of the Internal Consistency via Cronbach's Alpha for Career Development was 0.932, and the value of the internal consistency via Cronbach's alpha

for work-life balance was 0.932. The Human Resource Management items are presented in the table below.

Table 3. 5: Human Resource Management Practices items

No	Items
	Compensation, Reward and Training
1	The rewards and recognition I receive from this job are attractive.
2	The remuneration and rewards are fair.
3	I am satisfied with the income I receive.
4	I am satisfied with the benefits I receive.
5	My organization is not late in giving me my additional financial rights.
6	I am trying to raise my income through my organization.
7	When people start new jobs here, they are given enough guidance and training.
8	There is a commitment to ongoing training and development of staff.
9	The training and development I have received have improved my performance.
10	Training needs are determined through periodic performance evaluation.
11	There are useful training programs available in my organization to develop my professional capabilities.
12	The training programs offered in my institution are based on the employees ’needs for their professional development.
13	Enough time and effort are spent on career planning.
	Career development opportunities
14	I am given opportunities to develop skills needed for career progression.
15	There are enough opportunities for my career to progress in this organization.
16	My organization provides equal opportunities to develop all employees.
17	In my organization, I can define and make changes to the way I do my work.
18	I can have a good balance between work and other activities.
	Work-life balance
19	I can be involved in both work and non-work-related activities.
20	My work allows me to have time for social activities outside work.
21	I am satisfied with my standard of living, and I am in this job.
22	My organization organizes entertainment programs for employees, whether on or off the business, to achieve a work-life balance.
23	I can establish relationships and friendships outside the work environment.
24	I feel comfortable when I go to work.

Cronbach’s alpha was also used to investigate the reliability of the job Satisfaction scale. The result of the analysis suggested that the scale was highly reliable and fulfilled the psychometric properties of the scale. The value of the Internal

Consistency via Cronbach's Alpha was 0.896. The job satisfaction items are presented in the table below.

Table 3. 6: Job Satisfaction items

No	Items
1	I have friendly and supportive colleagues at work
2	I am satisfied with the amount of training given to me.
3	I have the chance to work independently of others.
4	I have the chance to do different things from time to time.
5	I have a chance to do a job that is a good ability.
6	I am satisfied with the way my supervisor involves me in the department.
7	I can do an important job suited to my job.
8	I have a chance to acquire new skills.
9	I am fairly paid for what I contribute to the organization.
10	Your satisfaction with your current work

3.8 Data Analyses Method and Procedure

As was indicated previously, the data for this research were analyzed using statistical software known as SPSS, usually used for descriptive analysis of the study samples for preliminary analysis such as outliers, univariate normality, linearity and missing values. Moreover, the multivariate normality was verified via the AMOS program during the Confirmatory Factor Analysis and the Structural Equation Modeling analysis. SPSS program was a software product used for statistical analysis. The program, called initially Statistical Package for the Social Sciences, was released in 1968 and quickly became one of the most widely used Statistics Programs in the Social Sciences, including in Healthcare, Government, Market Research, and Surveying. SPSS was chosen because of its compatibility with most other software packages and its user-friendly use for Data Analysis. According to Ibrahim (2018), SPSS can handle large amounts of data and perform all the analyses covered in the text.

Confirmatory factor analysis aimed to investigate the construct validity and means the appropriateness of the scale to measure a trait that cannot be measured

directly and to know the construct structure of the questionnaire items and their saturation in their assumed factors to define the scale paragraphs and their representation to measure the trait to be measured. Furthermore, CFA was used to test the discriminant and convergent validity of the instrument before the items were combined in summated scale for the Structural Equation Modeling. Confirmatory Factor Analysis is also used to assess the ability of the factors model to express the actual data set and compare several models of factors with this field.

Concurrent Validity is one of the types of criterion validity, which requires a statistical test to determine its amount through the correlation between the test used and another standard measurement. Formative Validity means the appropriateness of a particular test in measuring a trait or a capacity that cannot be directly measured; the validity of the paragraphs of the scale to test the phenomenon in the study before using the analysis of the Structural Equation Modeling (SEM). Predictive validity in this type of Regression Analysis is used to obtain the predictive equation and validity coefficients.

Interestingly, Structural Equation Modeling was used to test the proposed model and establish causal relationships between different model components. It was increasingly used in educational, psychological, social, and behavioural sciences. The researcher has chosen Structural Equation Modelling for this study to examine the complex causal relationships between the variables. This statistical method has a distinct methodological ability to study the complex relationships between independent and dependent variables simultaneously. In addition, this statistical method has tremendous power to examine the role of the mediator or moderator variables in the model.

3.9 Conclusion:

This chapter focused on the method used to carry out this empirical study. The research design, population, sample size, instrument, validity, and reliability were fully discussed. The chapter also discussed the statistical methods used to analyze the data and the justification for being used. The pilot study was conducted to test the quality of the adopted instrument. The reliability findings via Cronbach's alpha suggested that the adopted instruments are highly reliable and could be used for academic exercises.

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