

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

In previous chapters, research background, statement of problem, research aims and objectives and various other important aspects of the research are discussed. The protests held by the Jordanians at capital Amman of Jordan against the rising poverty, rampant corruption in the government, unemployment and inflation (Amos & Bulos, 2013; El-Shamayleh, 2012; Central Intelligence Agency, 2012) is indication of damaged reputation and public image of the ministries of Jordan. Jordanians at one hand are demanding political reforms to end injustices and at the same time, ministries are required to rectify this distorted public image and reputation. Positive image and reputation would boost the performance of the ministries and enhance their effectiveness in addressing issues that affect the country. The research methodology chapter is designed to find out the image of government ministries among internal publics and possibilities where this image can be improved through the efforts of public relations departments.

This chapter outlines the methodology followed for this research. The method followed in this study is mixed research method with triangulation of data. Researcher has collected qualitative and quantitative data in order to answer research questions and objectives of the study.

3.1 Mixed Research Method

This is an applied research in which mixed research method is used. A mixed method design allows researcher to examine issues of research critically (Kumar, 2005). Mixed method design exploits the “complementary strengths” of qualitative and quantitative research methods, as data is “collected that will provide all of the information that is potentially relevant to the purpose(s) of the study” (Johnson et al, 2007, p.127).

Bowen, Rowlinson and Martin (2010) observed that public relations researchers should adopt mixed methods to ensure that both the public and the issue under concern are properly understood. Researchers have agreed that use of mixed methods provides the most reliable research results (Bowen, Rowlinson & Martin, 2010). The choice of this design is informed by comprehensive literature review that indicates that the best model to adopt if reliable results are to be obtained is the mixed methods approach.

In particular, the current study used qualitative research interviews together with questionnaire method. The first phase (qualitative phase) sought to identify attributes that make image while the second phase (quantitative phase) was concerned with the extent to which participants perceive such attributes as important and the degree to which the participants are satisfied with such attributes.

3.2 Research Design

Research design allows developing a research plan for the data collection and analysis in order to answer research question without ambiguity. It is very important

for a researcher to have a proper research plan to deal with the logical problems of research (Yin, 2006). Research design allows a researcher to understand and decide on series of factors to source the right data for a particular study and provides a base to develop work plan for the study, also can be a longitudinal design, cross-sectional design, case study, descriptive, exploratory or experimental research design. Based on the research design, research chooses research methods to obtain the data or information relevant to answer the research question. Research design helps in minimizing the chances of collecting wrong data and inferring incorrect information in a study.

The research design of this study is Exploratory-Descriptive method. In the descriptive research method, more information on a particular phenomenon is collected and at the same time in exploratory study in-depth information on a particular single process is collected. Descriptive research allows one to collect descriptive information regarding a phenomenon or problem and helps in providing explanation of the reasons for a research. Exploratory study helps in exploring an area where information regarding the phenomenon is limited or very less. The research design for this study is shown in Figure 2.

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Figure 2: *Research Design*

The research design starts with identification and selection of research problem then research questions and objectives. Researcher has adopted mixed method of data collection. This questionnaire is tested with a small sample under pilot test. The changes are incorporated accordingly in the questionnaire. The final questionnaire is circulated among the target population to collect the data after the sampling process. Once the data is collected the filled questionnaires are reviewed for the completeness before the data is entered into database. The complete questionnaires are segregated from the incomplete questionnaires and the database is prepared on MS Excel. This database is exported to SPSS software for data analysis.

3.3 Organization of Study

Researcher divided the study in two parts qualitative research and quantitative research. The literature review section provided the details on different aspects of the public relations and image building for organizations. The literature survey indicated

towards various factors that contribute to image building of an organization. This helped in building a foundation for the study. Researcher on the basis of the knowledge base created from the literature review, and the available resources and specific time frame developed the research strategy for the study. The study was divided in two phases with specific goals and purpose for each phase.

3.4 Phase 1 Qualitative Research

In order to conduct such a study to address the research question, more specific variables pertaining to the research objectives were required. Therefore the need arose for a qualitative measure that would provide organization specific variables for the study. Researcher planned an interview with selected participants with open-ended questions. This provided data in the form of content, which was analyzed by the researcher using content analysis. Content analysis helped researcher in identifying the variables for the image survey for the organization among the internal publics.

Sample size and distribution for qualitative study

1. Ministry of Interior - 7 interviews
2. Ministry of Youth and Sport - 7 interviews

Given that this is an exploratory study, a sample size of 14 is deemed sufficient in lieu of the research objectives and research strategy. The participants were obtained through purposive sampling. The purpose of interviews was to identify the image attributes for Jordanian Ministries and to provide items for the questionnaire.

3.5 Phase 2 Quantitative Research

Qualitative research of phase 1 provided the variables for the study. Taking account of these variables, the researcher prepared an image survey tool that is a structured questionnaire for the study. This questionnaire was tested in pilot study for its reliability and usability.

3.6 Sampling of Research Participants

The study employed purposive sampling to select 14 participants for the qualitative phase of the study (Schuler, 2004). According to Austin and Pinkleton (2006) purposive sampling allows researchers to select study participants who meet the needs of the study as judged by the researcher. All the participants are ministry employees from the two ministries, Ministry of Youth & Sport and Ministry of Interior. The inclusion criteria included employment of participant in the ministry; be aged 26 years old and above; and at least four years working in the ministry. It was mandatory criteria for the respondent to be working in the ministries but it was not required that they need to work in public relations departments. Ministries provided permission to carry out survey in their departments. After obtaining permissions, researcher put notices for creating awareness about survey. Researcher stopped the study when he received the adequate number of responses as needed for this study. The researcher has chosen internal publics from the ministries in Jordan as opposed to external publics who would have to be obtained from all parts of the country for the purpose of this study. The response from internal publics was within reach and access

to the researcher. It was preferred over the external public due to financial aspects and purpose of this study.

3.7 Data Collection in Phase 1

This study uses the Organizational Image Configuration Method reported by Schuler (2004). This is a model that has undergone initial testing and recommended for use in achieving, maintaining, and improving image. Since literature has strongly demonstrated that image is created through communication, this is an appropriate tool to use because its aim is to be used as “a permanent tool to evaluate organizational communication actions towards the generation of the best possible image” (Schuler, 2004, p. 37). It consists of the following steps:

First is the identification of the organization's public. This step involves identification of various types of publics that may have different images about the organization. This is because a given public would have similar characteristics following its contact with the organization, and hence will have similar images. It is better to treat each public individually because this would provide more precise and simpler image. The publics of this study were government employees.

The second step is the selection of the target public. This study used internal publics (government employees working in ministries). This can be done by having a sequential approach to the public's, at a time, as opposed including all publics because that would not be practically manageable. Third, a representative sample is selected. This involved selection of 14 participants were interviewed. These 14 participants were from the selected ministries. The fourth step involved conducting a qualitative

research. This process involved identifying the attributes of the organizational image that obtained from the target public (Schuler, 2004).

The interviewing process involved choosing a mental model attribute or element connected to the organization and then finding what that element (hereafter “inductor term”) represents or suggests to them. Inductor terms can be the organization’s logo, name, just to mention. The interviewer uses the inductor term as stimulus to get what occurs in the minds of the interviewees when the inductor term is mentioned; or when they see it. The interviewer establishes what the interviewee likes and dislikes about the inductor term. Moreover, the interviewer asked questions expecting the interviewee to compare the organization with its main competitors. Furthermore, the interviewer established where the interviewee got information about the inductor term. The inductor terms act as stimulus that help in generating the attributes of an organizational image (Schuler, 2004).

There are two stages after this data collection process for data analysis. The first stage involved content analysis of the interviews. This stage required researcher’s capability and knowledge to interview respondents and derive attributes from their responses. Content analysis was performed systematically, objectively, and quantitatively. In essence, the content analysis combined both qualitative and quantitative research aspects. The qualitative aspect sets in the coding of the interview responses into attributes. The quantitative aspect comes in the calculating the total values of the attributes. There was no prior coding scheme in which the interviews were coded against. Instead, an inductive approach was used to analyze the interviews

and determine, from the participants' words, the attribute they might be alluding to. For instance, one participant said: "for me, what is important is that we have stable government that can prevent instabilities we hear about in Tunisia and Egypt." This was coded as "ability to maintain political stability." Another participant said, "every person should be able to get a government job if he wants" while another said "there should be good guidelines for recruiting new people whenever there is a vacancy." These were both coded as "employment."

Another participant felt that there were "no good strategies for preventing corruption and promoting transparency. Some people do not explain how money in the ministry is spent." This was coded as "ability to generate good fiscal and monetary policies" attribute. Moreover, one participant felt that it was imperative for the government ministries to ensure they "perform excellently", which was coded as "ministries performance." Moreover, another employee in the interview observed that "superiors ... explain to the new employees about the goals in their departments so that everyone understands what should be done so... everyone can work well." This phrase was coded as "clarity of goals" attribute. Further, an employee remarked that "our boss gives us chance to ask questions and say what we think can be done...when...in briefs...most of time." This phrase was coded as "openness to suggestions and ideas." For the other attributes, a similar approach was followed.

For data accuracy, two researchers were involved in the interviewing and data collection process. Once the interview process was over the data collected by each interviewer were compared.

The second stage in the data analysis process involved determining the frequency and order of appearance of each of the attributes derived from the interviews. A list of such attributes is prepared with the help of responses received from the interview process. Numerical values are assigned to the event attributes. In the event that an attribute is mentioned first, it is assigned the value of 5 while that which is mentioned the fifth receives a value of 1. Any attribute mentioned after the fifth does not receive any value. High citation frequency value and high order value constitute the most important attributes of the image (Schuler, 2004).

3.8 Data Collection in Phase 2

The quantitative data collection phase followed the qualitative data collection and analysis phase. In this phase Image survey is conducted using self-constructed survey instrument. In quantitative data collection, researcher followed the steps in Figure 3. The quantitative research process followed by researcher started with composing a questionnaire about the importance and satisfaction related to the attributes generated in the qualitative phase. Once the questionnaire is prepared and tested in pilot test, researcher administered that to the selected sample for the study. Once data was collected, it underwent data treatment and analysis. The conclusions were drawn based on the outcomes of the data analysis (Schuler, 2004). An image survey studies publics' opinion and perceptions about an organization. The primary objective of this study is to find out publics opinion about Jordanian ministries. This is the reason researcher found image survey suitable for the present study.

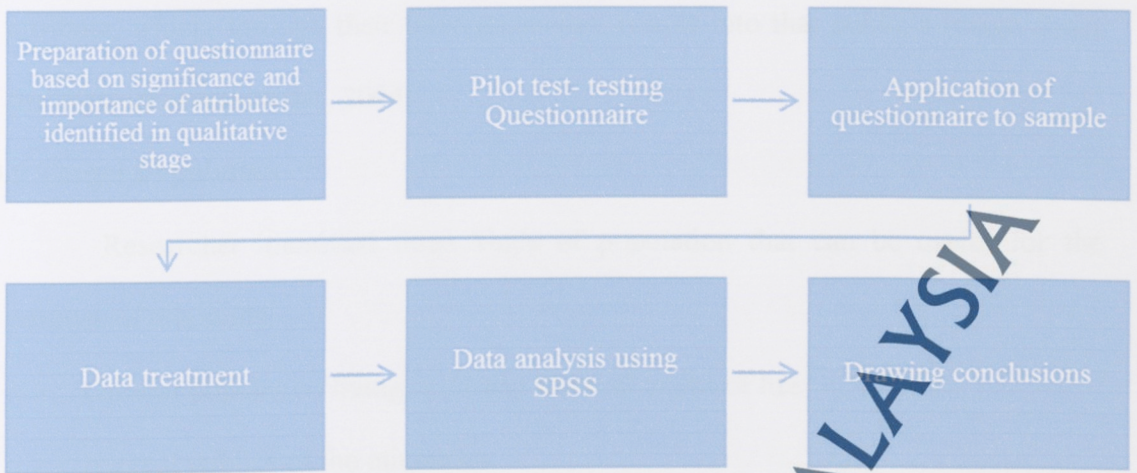


Figure 3: *Quantitative Research Steps*

According to Zhao (1999), the primary purpose of image survey is "to find out what the public is thinking and may think about organizations, allowing organizations to achieve their strategic goals more efficiently" (p. 27). The primary purpose of this phase is to measure the importance and satisfaction perceived in the image attributes. The attributes identified in the qualitative phase are gathered into importance and satisfaction factors. To measure the perceived importance in the attributes is a way of getting additional information concerning the data making up the image of the organization. Important factors assist the organization in identifying meaning networks created within the mental model of the organization in the group studied. Measuring the interviewee satisfaction with each image attribute helps the public relations practitioner to get an idea about the gap between the ideal image the organization wishes this public to have, and the actual image that the public has about the organization. The public relations manager is able to understand networks of the

attribute, which, through their interconnection, results into that public's image about the organization (Schuler, 2004).

3.9 Target Population

Researcher identified three kinds of population that can be useful for the purpose of this study.

- General population living in Jordan from all walks of life
- Internal publics of the ministries
- Foreigners and non-citizens

Further evaluation for the available population, researcher chose internal publics of the ministry as its target population due to following reasons:

- The population size was limited as compared to the entire population of Jordan.
- Researcher had access to the target population and adequate sample size was feasible to obtain.

The third category of the identified population was limited and not complete in terms of fulfilling all the objectives of the study.

3.10 Data Collection: Research Instrument

As the survey instrument is one of the most important aspects of this study, researcher has taken care of all the aspects of the questionnaire development and testing process. The features important for a public relation process were identified by the in depth study of existing literature. This was further expanded and specific attributes specific to this study were identified and ascertained in qualitative research process with the help of unstructured interviews of 14 respondents.

Development of research questionnaire. The questionnaire was developed focusing on each attribute identified in the qualitative research. Researcher used various scales and parameters for the collection of different types of data with different values (nominal or ordinal). In order to measure the level of satisfaction and dissatisfaction, researcher has used psychometric scale i.e. Likert scale which is used commonly by the social researchers to measure attitude. The binary response questions are also part of the questionnaire.

Structure of Questionnaire. The first 8 questions are demographic questions which served two purposes. The first purpose is to provide information on demographic background of the researcher such as gender, marital status, educational background, ministry in which he/she is serving, job title and salary range. The second purpose served by this section is familiarizing the respondent with the research instrument to get information on research specific sections. The second part is concerned with the importance of the 52 attributes while the third is on the satisfaction with the 52 attributes.

3.11 Validity and Reliability

The questionnaire tool used to collect data was valid and reliable. By looking at the questionnaire, it can be observed that the items give a clear impression that they measure importance and satisfaction with each attribute. Pilot study results allowed researcher to improve face reliability by rephrasing items, re-arranging them and making grammatical changes. For content validity, researcher reviewed literature in public relations, and interviewed employees of the ministries to identify attributes of

organizational image that would be used to develop the questionnaire. Findings from the qualitative interviews and review of public relations (organizational image) were used to form the list of 52 attributes in the questionnaire. Public relations practitioners and scholars known to the researcher were consulted to review the questionnaire, and they all concluded that it captured all known attributes of organizational image.

Pilot study was used to assess the reliability of the tool. A small sample size of 30 participants equally obtained from the two ministries was used in the pilot study. See Table 1 for other participant characteristics. It allowed testing of the survey tool with the real population and modified it as per the findings (Fink, 2006). In the pilot study, the reliability test for the 52 attributes showed that the Cronbach's Alpha for the importance of the attributes was .985; while the Cronbach's Alpha for satisfaction was .967. In the actual study, the reliability test for the 52 attributes showed that the Cronbach's Alpha for the importance of the attributes was .928; while the Cronbach's Alpha for satisfaction was .969. The significance level for this study was at 0.05 ($P=0.05$).

Table 1: *Pilot Study Participant Demographics*
(*N=30*)

		Frequency
Gender	Male	20
	Female	10
Marital Status	Married	19
	Single	10
	Widowed	1
Age	25 years or under	5
	26-35 years	10
	36-45 years	13
	46 years or older	2
Educational Background	Less than High School	1
	High School	4
	2 Years College Degree	5
	Bachelor's Degree	12
	Master's Degree	7
	Doctoral Degree	1
Job title	Employee	19
	Head of Department	7
	Manager	4
Salary per month	JD 250 or under	8
	JD 251 - 500	7
	JD 501 - 750	7
	JD 751 or above	5
Duration of employment	3 years or under	4
	4 - 7 years	4
	8 - 11 years	7
	12 years or above	14

3.12 Study Sample and Sampling

The total population for the study was 3200 employees which comprised of 1500 employees from the Ministry of Interior and 1700 employees from the Ministry of Youth and Sport. The general rule for calculating sample size for the population of 1000 or less is 30% of the total population, for the sample size larger to this number

and lesser to 100,000 the sample size of 10% is sufficient and for the population larger to this number sample size can be 1% of the total population, with larger samples having better results (Monette, Sullivan & Dejong, 2002; Neuman, 1997). However for the purpose of this research, considering the fact that the population size is 3200, if 10% of this size is taken the sample size would be 320. The sample size was also calculated using the formula in Figure 4 which is provided at www.surveysystem.com

$$ss = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Figure 4: Formula for Calculating Sample Size

Where:

Z = Z value (For 95% confidence level Z value is 1.96)

p = percentage sample picked up for choice

c = confidence interval

The value of p and c are used in decimal.

For the confidence level of 95%, confidence interval (or margin of error) of 5 and total population of 3200 the sample size as calculated was 343 for the purpose of this study. The confidence interval indicates that the probability of the population to have the similar answer is between $\pm 5\%$ of the answer of the majority of response of the survey to have similar response. The confidence interval indicates that the probability of the true percentage of population to answer within the confidence

interval. Therefore it can be safely said that sample size 320 to 343 or above this will be adequate for the purpose of this study.

Questionnaire distribution. Considering the possibilities of non-response and incomplete survey questionnaires, the researcher distributed 450 questionnaires. Questionnaires were distributed from April 25th 2013 to May 10th 2013. Questionnaires were distributed by placing them at the receptions of the ministries. Participants were asked to pick the questionnaires at their convenience and return them when complete. Questionnaires were self-administered. The average time taken to fill the questionnaire was 15 minute. Once participants completed the questionnaires, they contacted the researcher to collect the anonymous questionnaires in person from the participants. Participants were not allowed to return the anonymous questionnaires to receptionists of their sections because this could be a breach to the privacy of the participants. Participants stayed with the questionnaires after they had picked them for between one and seven days, after which they would ask the researcher to collect the completed questionnaires. However, most of the participants stayed with the questionnaires for four or five days before calling researcher and asking for the completed questionnaires to be collected.

Therefore, collection of questionnaires started April 26th 2013 and ended May 16th 2013. Out of the 450 employees who had picked the questionnaires, 417 filled the questionnaires and researcher collected them. Out of 417 questionnaires collected, only 383 questionnaires were completely filled and meeting the requirements of the study. Therefore respondents used in this study are 383 which are appropriate and

justified for the sample size of the given population. The ministries were helpful throughout the study. For instance, they allowed researcher to conduct the study with their employees. In addition, the ministries allowed section receptionists to distribute the questionnaires to participants. Further, ministry authorities allowed the researcher to publicize the study using their facilities such as notice boards.

3.13 Triangulation of Data

Triangulation of data refers to combination of qualitative and quantitative research methodology. This is based on a blend of structured and unstructured approach in which research uses quantitative and qualitative data. Collecting data from various methods and using the findings for study helps in minimizing the possibilities of inconsistency or error of collecting data from one particular source. This method helps in developing combinations of research methodologies, which help in overcoming the weakness of single research methodology in a particular study. For triangulation of data, researcher has used qualitative and quantitative research methodology in distinct phases of the study.

Quantitative approach allows the researcher to get the extent of problem by quantifying it in a structured manner. The quantitative research allows flexibility that helps exploring nature of problem in depth without quantifying it. The variation of the attitude or a phenomenon is measured.

This research started with identification of problem. The source of information for the identification of problem is the issues existing in the current political scenario. The two identified aspect of the research are population and subject area. The

population chosen for this study is the internal publics of selected ministries and subject area is to study their attitude and level of satisfaction for the image of the organization.

3.14 Data Treatment and Analysis

There are two steps followed in this stage of research design. In the first stage, the values of the importance and satisfaction of each attribute as perceived are placed into a table. It shows the general average of all the attributes for their importance and satisfaction. The second stage is an exploratory factor analysis. This analysis exposed the strongest relationships between the image attributes. This made it possible to form sets of attributes (importance and satisfaction factors) (Schuler, 2004).

3.15 Graphic Display of Results

This provides a kind of a conceptual map showing the location of each analyzed attribute. The graphic representation makes it possible to differentiate with clarity and ease the attributes that make the nucleus of the image from those at the periphery. There can be several levels of periphery surrounding the inductor term (Schuler, 2004).

3.16 Supplying the Necessary Information to Create the Most Adequate Image

This step involves planning new forms of communication with the public's so as to sufficiently achieve, maintain, and improve the excellent image. It is discussed earlier that there is an assumption that the public relations departmental head and the team have the power and influence to cause appropriate changes in organizational activities to realize the attributes (Schuler, 2004). Generally, it is expected that upon

identifying the importance and satisfaction factors that constitute positive image, supplying information to create the most adequate image or reputation capital is done in light of the following suggestions by Sjovalld & Talk (2004). First, the corporate social responsibility should be highly salient. This would ensure that the public's can notice them easily. This may take form of interaction in community programs, media coverage, just to mention.

Second, care is taken to ensure that the first contacts that publics make with the organization are important. This is because the public's attribute the good impressions they form to the disposition of the organization thus enhancing its image and reputation. If the contact produces negative impression, then negative image is formed. Therefore, the organization should concentrate on strong and highly visible corporate responsibilities because these may cushion the organization against future negative publicities or image damaging situations (Decker, 2012; Sjovalld & Talk, 2004). Last, in carrying out benevolent works, the organization should be careful to adopt ways that influence the public's to attribute the benevolent works to the organization disposition rather than external forces (Sjovalld & Talk, 2004).

3.17 Trustworthiness of Data

Data is collected from the people working under two ministries. The trustworthiness of the data can be ascertained as the people participating in the research process has provided their identification number, department and designation. Respondents were assured for confidentiality of their responses. This helped in getting

accurate responses from the respondents. Respondents were requested to be available in case of any future need for this study.

3.18 Ethical Considerations

The research conforms to all conventions of standard research ethics (Stacks, 2011). The researcher obtained ethical clearance from relevant university ethics committee before proceeding with the study. The researcher, using a consent letter for each of the ministries, sought their permission. The researcher further prepared a combined letter of information and consent form for the prospective participants. The participants were fully informed about the research process before participating in survey. The participants were also informed about their right to withdraw at any stage of study before publishing of the result. The participants received explanations on the confidential and voluntary nature of the study. The researcher clarified doubts and concerns of the respondents prior to the survey and was available to any of their doubts during the data collection process. The consent has been taken in writing.

3.19 Summary of Chapter

This section has detailed the research method and strategies used to collect the data that is required to adequately answer the research questions. This is an applied research method that uses mixed method research wherein a qualitative study is first employed as part of the exploratory phase of the research and then an extensive quantitative study is then employed as part of the descriptive phase of the research. The study chose internal publics as the target owing to financial constraints, accessibility and appropriateness of this group for the study. In the qualitative study,

the researcher sampled 14 respondents from the Ministry of Interior, and Ministry of Youth and Sport for an in-depth interview process. Based on content analysis of the data collected, the researcher identified the key attributes that the internal publics associate with the ministry's image. The quantitative phase of the research tested the importance and satisfaction of each of their attributes from the same target population. However, the sample size for the quantitative study was 450 respondents as opposed to 14 respondents of the qualitative study. The sample size was substantially more for the descriptive phase of the research process to ensure high reliability and validity of the information collected and the inferences drawn therein. Prior to administering the questionnaire, the researcher carried out a pilot study with a draft questionnaire to assure the reliability and validity, as well as make any necessary corrections. The next section shall delve into the results of the qualitative and quantitative phase in detail.

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