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CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter discusses various methodological choices made in the research process. The basic purpose is to justify various choices related to research approach and design, data collection and analysis methods, and sampling strategy among others. The readers can use this chapter to assess overall validity and reliability of the conclusions drawn in this study.

3.2 Research Paradigm

Research paradigm can be defined as the philosophical assumptions of researcher undertaken to gain acceptable knowledge about social phenomena. There are two epistemological positions, namely, positivism (methods and ethos of natural sciences are applicable to pursue acceptable knowledge related to social phenomena); and interpretivism (researchers must develop separate research strategy to conduct research related to social phenomena to pursue knowledge) (Bryman, 2015).

This study is based on interpretivism because the researcher believes that there should be a separate research strategy to understand the perception of pharmacy professionals regarding value of leadership training programmes.

3.3 Research Approach

According to Bernard and Bernard, (2012) Social researchers can either use inductive or deductive approach to study phenomenon under consideration. Following an inductive approach, the study needs to collect specific observations and identify patterns and then continue to broaden the scope of approach and ultimately design a generally applicable theory. In contrast, deductive approach based study sets out to test general theories within specific circumstances by collecting general observations and then continuing to develop specific hypothesis to test the theories within chosen circumstances.

This study is based on inductive approach. Therefore the study begins with collecting and analysing specific observations and patterns from pharmacy trainees and aims to develop generalised conclusions regarding all pharmacy professionals.

3.4 Type of Investigation

According to Taylor, Bogdan, and DeVault, (2015) Social researchers may choose to conduct descriptive or explanatory, or exploratory investigation. Descriptive investigation is followed to describe a phenomenon providing in-depth details about research phenomenon.

Explanatory study is conducted to explain how a social phenomenon exists. Exploratory investigation is conducted to find new avenues by conducting detailed investigation into an existing phenomenon within specific circumstances.

This study is based on descriptive approach through which the main aim of the study i.e. to understand and report the perception about leadership training programmes among pharmacy professionals is to be described and explored.

3.5 Research Design

According to Ritchie, et al. (2013) research designs are categorised as qualitative, quantitative, and mixed. The most commonly cited advantage of quantitative research in social research is that quantitative results are highly verifiable because underlying data is numeric and objective and are derived from ethos and methods of natural sciences. In contrast, qualitative design is considered to have relatively low verifiability because underlying data is subjective and non-numeric. Qualitative design are particularly useful and effective when the aim is to study experiences, feelings, and opinions of participants.

This study is based on mixed design, in which both qualitative and quantitative data has been triangulated to overcome weaknesses in mono-design. The aim is to increase reliability and validity of the results and conclusions drawn in this study. Mixed design allows this study to have both qualitative and quantitative evidence to support conclusions.

3.6 Research Strategy

Matthews and Ross, (2014) argue that researchers have used numerous research strategies to conduct research in social phenomena. One of the most popular strategies is survey strategy, along with case study strategy, ethnographic studies, etc. in this study the research strategy is survey. Researchers use survey strategy because of the fact that survey is known for high level of cost and time efficiency when compared to ethnographic studies or case studies. In addition, survey strategy also is more beneficial as compared to case study because the results of the former are more generalizable as compared to the results of the later. Typically surveys are conducted by obtaining a sample from target population and conduct entire research process using data from sample, assuming that it is applicable on entire population.

For both qualitative and quantitative data collection, this study has used survey strategy. Since this study is using questionnaire survey and interviews as data collection

method, therefore it is important to have a time efficient research strategy. Thus, survey is the most suitable strategy for this strategy.

3.7 Data Collection Method

Rubin and Babbie, (2016) argue that data collection are categorised as primary data collection methods and secondary data collection methods. In this study, both secondary and primary data has been used. The main source of secondary data collection is digital libraries and search engines that have been used to collect literature. In this study, the most relevant sources of information are considered to be articles published in academic journal and academic books.

The study also collected primary data. Primary data is also further categorised into quantitative and qualitative data. This study has collected both qualitative and quantitative design therefore qualitative. Research instrument used to collect data is explained in the next section.

3.8 Research Instrument

According to Smith, (2015) Research instrument is defined as the tool used by researcher to gather data from sample members. There are several instruments to collect qualitative data which include interviews, focused groups, observations, etc. This study used individual interviews to collect data because there is high level of confidentiality and anonymity as compared to other methods such as focus group. Confidentiality and anonymity is important in this study.

According to De Vaus, (2013), individual interviews can be classified into structured, unstructured, and semi-structured interviews. This study conducted semi-structured interviews as they overcome weaknesses of both structured (inflexible no follow up questions) and unstructured (time consuming) and exploit strengths of both structured (time efficiency) and unstructured (high flexibility).

The researcher developed a set of themes based on secondary research conducted in this study. Using these themes, a number of interview questions were designed so that the researcher can gather opinions and experience of participants relevant to research aims and objectives while providing flexibility as well as controlling the focus of discussion towards research phenomenon.

For quantitative data, this study has used questionnaires. The main benefit of using questionnaire in this study is that they are the most time and cost efficient method for data

collection. However, questionnaires are considered to be inefficient in case researcher wants to understand feeling, experience, and perception of participants. This weakness has been overcome by using individual interviews described above.

The study used a self-administered questionnaire containing closed ended questions with Likert scale. The main benefit of using this questionnaire is that it collects most relevant data such specifically tailored to meet the aims and objectives of this study. Since questionnaires are able to collect large amount of data in relatively less time, therefore it is extremely important that the data collected through questionnaire is specifically relevant to research aims and objectives otherwise the results will fail to meet research objectives. All questions in the questionnaire are based on themes and variables identified in literature review.

3.9 Sampling Method and Sample Size

According to Clarke and Charmaz, (2014) a sampling technique is either probability based or non-probability based technique. This study used non-probability sampling technique called convenience sampling. Convenience sampling enables investigator to recruit participants in research sample on ease of proximity i.e. nearest accessible participant as well as on personal convenience to recruit participants. Since, there is only limited budget and time available for this study therefore, the researcher used convenience sampling.

This study started sampling process by recruiting participants in the nearest vicinity of researcher. The researcher approach managers and workers in nearest pharmacy and invited them to participate in the study. The researcher approached a total of ten pharmacies, having a total of 13 managers and 80 workers. For questionnaire survey, researcher asked pharmacy professionals at non-managerial level to fill in questionnaires. Total number of questionnaires distributed was 80. The researcher received 76 completely filled questionnaires along with signed consent form. Only complete questionnaires were used in this study. The researcher conducted interviews of managerial staff in pharmacies. Due to limited time only ten interviews were conducted.

3.10 Data Analysis Technique

According to Eriksson and Kovalainen, (2015) Data analysis techniques refer to methods that convert raw data collected to through primary data collection instrument into meaningful results and information which is further used to draw conclusions of the study.

For data collected through interviews there are various data analysis techniques that can be used to analyse text(s) for example, grounded theory, thematic analysis, and content analysis, among others.

This study used thematic analysis to analyse interview transcripts. The main benefit of thematic analysis is that it examines large pieces of text and identifies patterns and categories called themes. These themes are then used to examine information about the research phenomena and to achieve aims and objectives of the study. The analysis begins with searching texts to identify themes, followed by critical review of themes within the context of research phenomena. Finally the themes are finalised and presented in the final result.

For questionnaire surveys, this study used statistical analyses. The main benefit of using statistical analyses is that they are considered to be most authentic and verifiable techniques, however, they are not efficient in analysing texts. This study used correlation, regression and descriptive techniques to analyse quantitative data and derive meaningful results.

3.11 Accessibility Issues

The main accessibility issue during the course of research emerged due to limited time and budget available for the study. The researcher could not afford extensive and costly travelling as well as could not conduct more interviews. Furthermore, the researcher could not access those research studies are require purchasing.

3.12 Ethical Considerations

According to Banks and Zeitlyn, (2015) ethical considerations can be defined as set of moral principles, norms, and values that are adopted by researchers in order to show integrity with research participants and research community. Firstly, it is important to pay credit and appreciation to authors of existing literature. This study provides in-text citations with corresponding list of references using Harvard referencing style with at the end of the study. Furthermore, in order to show integrity with the research participants, this study obtained consent oral from all participants before conducting the interview. The interviewees were clearly communicated that the participation in the study is voluntary, without any monetary benefits and for academic purpose only. The participants were informed that they may quit research process any time without any obligation. Furthermore, this study adhered to strict

confidentiality and anonymity of all participants. There is no data in this study that could lead to tracing the identity of participants.

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Appendix

Questionnaire

This questionnaire is specifically prepared for an academic research. For the purpose of this research, the researcher has to investigate how pharmacy professionals perceive the value of leadership training programmes. Kindly give your responses by (✓) an appropriate option for each of following question:

Name _____

Contact Number _____ Email id: _____

Gender: Male Female

Age: 21-30 31-40 41-50 51 and above

Organization: _____

Level of Education

- Bachelor Student
- Master Student
- Doctoral Student
- Post-Doctoral Training

Your occupational experience:

- Below 1 year
- 1 year – 3 years
- 3 – 8 years
- 9-12 years
- 12 years and above

Please rate your responses by ✓ the value that you think is more appropriate:

| <i>Strongly Agree</i> | <i>Agree</i> | <i>Neutral</i> | <i>Disagree</i> | <i>Strongly Disagree</i> |
|------------------------------|---------------------|-----------------------|------------------------|---------------------------------|
| 0 | 1 | 2 | 3 | 4 |

| Perceptions of pharmacy professionals | 1 | 2 | 3 | 4 | 5 |
|--|----------|----------|----------|----------|----------|
| <i>Student Leadership Development</i> | | | | | |
| Student leadership development is the main dimension of leadership training program in pharmacy. | | | | | |
| It is responsibility of pharmacy institutes to provide valuable experiences to its students in order to successfully integrate leadership development program. | | | | | |
| <i>Continuous Professional Development</i> | | | | | |
| Pharmacists are aware of the benefits of continuous professional development | | | | | |
| CPD helps pharmacist in developing new competencies which are related to leadership. | | | | | |
| Higher management support and access to the resources that facilitate the learning needs builds confidence and empower the pharmacy professionals, in the process of CPD | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| <i>Facilitating Self-awareness</i> | | | | | |
| Pharmacy leaders are willing to apply all their existing and new knowledge, abilities, talents and skills for addressing latent health care needs of patients. | | | | | |
| The experience based learning tactics enable the young pharmacists to become self-aware of their potential strengths and weaknesses | | | | | |
| <i>Intentional and Visible Institutional Commitment</i> | | | | | |
| Pharmacy institutions should have commitment to practice leadership skills for the students | | | | | |
| Faculty members and administrators can equally contribute and flourish the environment in pharmacy schools to foster leadership | | | | | |
| <i>Raising Profile of Pharmacists</i> | | | | | |
| The pharmacy leaders have been expressing their commitment towards the best pharmaceutical practices | | | | | |
| Future pharmacists with the vision of leadership and persistent commitment can lead change in the pharmaceutical industry | | | | | |
| Value of leadership training programs | | | | | |
| Leadership training programs are important for establishing leadership skills in pharmacist. | | | | | |
| It helps in providing personal reflection to the pharmacists. | | | | | |
| Pharmacy residents provide the incorporation of the leadership training program for helping the students and young professionals for meeting the needs to leadership in the profession. | | | | | |
| Leadership training programs provide value to the development of leadership mechanisms in the pharmacy students. | | | | | |

Thank You ☺

Interview Questions

- Q1. In your opinion, what is the significance of leadership programs for the pharmacists?
- Q2. To what extent, pharmacy trainees show interest in leadership training and understand the importance of developing leadership skills?
- Q3. Which leadership positions in a pharmacy organization you find effective for the student's learning?
- Q4. Do you think that the leading pharmacists are considered to be the influencers stewarding medication to the patients?
- Q5. What are your perception regarding Leadership Training Programmes in terms of continuous professional development and enhancing the pharmacist profiles?
- Q6. Please suggest some recommendations regarding leadership for the pharmacists.