CHAPTER 3

Methodology

This chapter describes the methodology in this study. It includes the research design, population and sample, setting, research instrument, protection of human subjects, as well as data collection and analysis procedures.

Research Design

This was a descriptive correlation study that aimed at describing the level of intent to stay in nursing colleges of Malawi. In addition, the relationships between intent to stay and its related factors including organizational commitment, pay satisfaction, faculty-administrator relationship and job opportunity as perceived by nursing faculty members in the nursing colleges of Malawi, were explored.

Population and Sample

Population

In this study, the targeted population was 195 faculty members from 13 nursing colleges of Malawi. Nursing faculty members only were targeted for the study.

Sample Size

Based on Yamane (1967) formula, the calculated sample size was 131 faculty members. Considering the possible loss of subjects, 20% was added (Israel, 1992) to get 157 faculty members (Appendix A).

Sampling

The sampling technique followed proportional random sampling. Proportionally, number of nursing faculty members per college population was calculated for each of the

13 nursing colleges (Appendix A), while subjects were selected by simple random sampling from a sample frame (code list) in each college.

Inclusion Criteria

The study recruited only nursing faculty members who had worked in these colleges for at least six months, and were willing to participate.

Research Setting

The study was conducted in 13 nursing colleges in Malawi namely:- Ekwendeni, St.Johns, Daeyang, Nkhoma, MCHS (Lilongwe), Holy Family, Malamulo, MCHS (Zomba), MCHS (Blantyre), Mulanje , St. Joseph, St. Luke's, and Trinity. These colleges offered NMT qualifications and followed the same curriculum during period of data collection.

Research Instruments

A structured questionnaire that was in English language, with six parts (Appendix B) was used. It was distributed for data collection in the order that follows;

Part 1: The Demographic Data Form

Demographic data included name of college, type of department and number of faculty members in that department, gender, marital status, academic position, educational level, years of working as a faculty member, years spent at current institution, age, and present monthly salary.

Part 2: The Leader-member Exchange Instrument (LMX-7)

Faculty-administrator relationship was measured by the Leader-member Exchange Version 7 (LMX-7) Instrument by Makorwitz (2012). It was a seven-item instrument measured on a five point Likert-type scale. The scale had a range of 1 (negative response) to 5 (strong response) with a total point range of 7-35. A higher score meant faculty member's perception of higher quality faculty-administrator relationship.

Part 3: The Measure of Organizational Commitment (MOC)

Organizational commitment was assessed by the Measure of Organizational Commitment (MOC) by Makorwitz (2012). It was a seven-item measure with second, sixth and seventh items scored in reverse. Items were measured on a five point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Total sum of score ranged from 7 - 35. High organizational commitment meant faculty member's perception of strong attachment, identification and involvement with the college.

Part 4: The Pay Satisfaction Questionnaire (PSQ)

Pay satisfaction was measured by the Pay Satisfaction Questionnaire (PSQ) by Makorwitz (2012). It had three items measured on a five-point Likert scale from 1(strongly disagree) to 5 (strongly agree). As recommended by Heneman III and Schwab (1985), the components covered: 1) individual pay (employee compensation), 2) pay structure (internal consistency), and 3) pay level (external competitiveness). Scores ranged from 3-15. A higher score indicated faculty member's perception of satisfaction with pay.

Part 5: The Job Opportunity Scale (JOS)

Job opportunity was explored by the Job Opportunity Scale (JOS) by Al-Omari et.al (2008). It had six items measured on a five-point Likert scale ranging from 1(strongly disagree) to 5 (strongly agree). Third and fourth items were reverse scored. Scores ranged from 6-30. Higher score indicated faculty member's perception of availability of jobs in their environment (Al-Omari et al., 2008).

Part 6: The Intent to Stay Scale (ITSS)

In this study, intent to stay was measured by the Intent to Stay Scale (ITSS) by Makorwitz (2012). The scale had four items, which measured one's intentions to remain employed at the institution. The items were measured on a five point Likert scale that ranged from 1(strongly disagree) to 5 (strongly agree); with a total score ranging from 4 to 20. First item was reverse scored. A high level of intent to stay within this scale was

defined as scores greater than or equal to 14 (≥14.00); whereas a score less than 14 (<14.00) meant low perception of intent to stay.

Validity and Reliability of the Research Instruments

Validity of all the constructs was proven as good in previous studies therefore not tested again in this study. Permission to use the instruments was sought from authors and granted (Appendix C). The instruments were tested for internal consistency among a convenient sample of 15 nursing faculty members. The Cronbach's alpha coefficient of ITSS, MOC, LMX-7, PSQ and JOS were 0.73, 0.84, 0.82, 0.81 and 0.71, respectively (Appendix D). All these constructs were used in English since it is the official language in Malawi.

Protection of Human Subjects

The consent form, information sheet, and questionnaire were written in simple English language, easily understood by faculty members and therefore there was no need to meet the participants or explain the questionnaire. Faculty members were assured of voluntary participation through a consent form (Appendix F). Respondents were also assured of their right to withdraw from the study anytime without losing any benefits or affecting their performance evaluation. Privacy, anonymity and confidentiality were ensured and details written in their information sheet (Appendix E). Through the information sheet, respondents were assured that results of this study shall not reflect an individual person but will be shared to the public as an overall result. No gifts that might have been interpreted as coercive were given.

Data Collection Procedure

Data collection was carried out in two months from 5 February to 5 April 2014. Data were collected in the following steps:

1. The researcher submitted the proposal to the Faculty of Nursing Chiang Mai University Institutional Research Board (IRB) for review of proposal and ethical approval.

2. After proposal approval from the IRB at the Faculty of Nursing Chiang Mai University (Appendix G), the package for research including full proposal, copy of structured questionnaire, consent form, information sheet, permission letter from CHAM (Appendix I) and cover letter requesting for review of proposal and permission for data collection were all forwarded to National Health Sciences Research Committee (NHSRC) in Malawi.

3. After approval and permission from NHSRC (Appendix H), the researcher then sought audience with the Campus Directors/ College Principals and their deputies in their respective colleges and explained the purpose and the benefits of the study. The College Principals were the ones that officially informed the Academic Deans and Heads of Departments about the study.

4. Principals and/or deans assigned research coordinators in their colleges; to assist in distributing the data collection package to the faculty members.

5) The researcher asked the coordinator from each respective college to prepare a coded name list, which the coordinator kept and used when distributing the questionnaires. The coordinator prepared another list of codes without names and gave to the researcher to use as a sampling frame.

6. The researcher randomly sampled the participants from the list of codes in each college, referring to the calculated sample size and ensuring the inclusion criteria

7. The coordinator distributed the data collection package that contained an information sheet, consent form and the questionnaire, with an envelope to the sampled faculty members. The subjects responded to the questionnaires within two weeks and returned it to the coordinator sealed in the given envelope.

8. The coordinator collected the sealed envelopes to the lockable agreed place. Wherever the researcher could not go back for collection, the coordinator sent the questionnaires to the researcher by post.

9. Following collection of questionnaires, the researcher checked for completeness and for any missing data, before entering data to computer for analysis.

At the end of it all, 157 questionnaires were distributed for data collection and 137 were returned, giving a valid response rate of 87.26%. Only 113 questionnaires (82.48%) were complete for data analysis and 17.52% had missing data.

Data Analysis Procedures

Data analysis was done after data collection, using Statistical Software package version 13.0. Both descriptive and inferential statistics were computed from completed questionnaires only; at 0.05 level of statistical significance. Analysis followed these steps:

1. Nominal and categorical demographic data were analyzed using frequency and percentages whereas continuous demographic data were analyzed using range, mean standard deviation, as well as frequency and percentages (Table 1).

2. The scores of intent to stay were analyzed using frequency, percentages, mean, range and standard deviation. In accordance with Makorwitz (2012) interpretation, scores for intent to stay were determined across two levels: - mean score ≥14 was interpreted as high level of intent to stay; whereas a mean score < 14 was interpreted as low level of intent to stay (Table 2).

3. The total sum of scores were first computed for each of the five variables (ITS, OC, LMX, PS and JO). All the variables were determined to be in interval scale. Kolmogorov Sminorv test for normal distribution as an assumption of correlation analysis was then computed for ITS, OC, LMX, PS and JO. Only PS violated the assumption of normality. Relationships between OC and ITS; LMX and ITS; and JO and ITS, were therefore explored using Pearson product moment statistical test (parametric) after the assumption for normality was met. Relationship between ITS and PS was explored using Spearman rank-order statistical test (non parametric) after the assumption for normality was violated. Direction and magnitude in the relationship was interpreted according to Burns and Grove (2005): correlation coefficient (r) value between .10 and <0.3 was considered as a weak relationship, (r) value of 0.3 to ≤ 0.5 was considered a moderate relationship and (r) value of >0.5 was regarded as a strong relationship. A negative sign denoted a negative relationship (Table 3).