

CHAPTER 3

Methodology

This descriptive correlational study design aimed to explore attitudes, subjective norm, perceived behavioral control, and intention, as well as the relationship between attitudes, subjective norm, perceived behavioral control, and intention towards breastfeeding.

Population and Sample

Population

The population in this study consisted of primiparous pregnant women who visited the antenatal care unit, outpatient department at the Comilla Medical College Hospital, Bangladesh.

Sample

The sample in this study comprised primiparous pregnant women who visited the antenatal care unit, outpatient department at the Comilla Medical College Hospital. The inclusion criteria for selecting the participants were:

1. Aged 20 years old and over.
2. In the third trimester of pregnancy.
3. Able to read and write Bengali language.
4. Willing to participate in the study.

Sample Size

Power analysis was used to determine the sample size in this study with a significance level of .05, a power of .90, and medium effect size of .30 (Polit & Hungler, 1999). This study required a sample of 112 participants. For the suitability of correlation calculation, data were collected from up to 120 participants.

Research Instrument

Research instruments used in this study included two parts: the demographic data form, and the BAPT questionnaire by Janke (2008). The BAPT questionnaire included four sections: attitudes, perceived behavioral control, subjective norm, and intention. The details of each part are as follows:

Part 1: Demographic Data Form (DDF)

The demographic data profile was used to collect data among the primiparous pregnant women and family information. It consisted of seven items: age, religion, material status, educational level, occupation, type of family, and family's monthly income.

Part 2: BAPT Questionnaire

Section 1: Attitudes.

The attitudes scale of the BAPT consisted of 58 items, the positive breastfeeding sentiments (PBS) subscales with 14 pair items. The questions of this scale were answered by 6-point Likert scale from 1 to 6. Number 1 means *strongly disagree* or *not important to me*, and 6 is *strongly agree* or *important to me*. The calculations of the obtained scores were as follows:

Positive breastfeeding sentiment (PBS) attitudinal scale

I. Multiply each belief score by its corresponding outcome evaluation. The items to be multiplied were as follows: 1, 43; 4, 46; 5, 47; 8, 50; 9, 51; 12, 54; 13, 55; 16, 58; 17, 59; 20, 62; 23, 65; 24, 66; 25, 67; and 28, 70.

Example: a person scores a 2 for item 5 “Breast milk is healthy for the baby is...”. These scores are multiplied for an item attitudinal score of 12.

The higher the score, the greater the positive breastfeeding sentiment.

Based on the suggestion by Janke (2008), in this study, mean scores of the obtained PBS were calculated. Then the raw scores of PBS higher than the mean scores were counted in frequency and calculated to percentage.

Section 2: Subjective Norm Scale.

The original BAPT had 13 items of subjective norm. The questions of this scale were answered by 6-point Likert scale from 1 to 6 and 0 for *not applicable*; participants selected only one number as follows:

Score	6	means	Care very much
Score	5	means	Care much
Score	4	means	Care moderately
Score	3	means	Care
Score	2	means	Care slightly
Score	1	means	Do not care at all
Score	0	means	Not applicable

Section 3: Perceived Behavior Control Scale.

There were ten items of perceived behavior control. It was measured by a 6-point Likert scale from number 1 was *strongly disagree* and number 6 was *strongly agree*. The samples would select only one number as follows:

Score	6	means	Strongly agree
Score	5	means	Moderately agree
Score	4	means	Agree
Score	3	means	Slightly Agree
Score	2	means	Slightly disagree
Score	1	means	Strongly disagree

In order to interpret the perceived behavior control, the calculation used the highest score of 60 and the lowest score of 10 to obtain the score range. Then the range of score was categorized into three levels based on Best and Kahn (2005) as follows: 60 (highest score) – 10 (lowest score) = 50 (total possible scores) / 3 (number of levels) = 17 (range for each level).

Score range	Level
10 – 27	Low perceived behavior control
28 – 45	Moderate perceived behavior control

Section 4: Intention Scale.

The intention scale included three questions. The first question was “what is the primary method of infant feeding are you going to use with your new baby?” the answer to this question was a selection of one choice from either *breastfeeding* or *formula feeding*. The second question was “how long do you intend to do the breastfeeding as you select in question number 1?”; the answer to this question was a selection of one choice from either *less than 6 months* or *more than 6 months*. The last question was “what will be the main reasons you chose to breastfeed? The answer to this question was a narrative form based on the view of the subjects.

Validity and Reliability of the Instruments

Validity of Instruments

The instrument has been previously used with a report of acceptable validity value. Therefore, the validity of the instrument was not tested in this study. The researcher performed the back translation of the BAPT questionnaire.

The back translation process used the method of Sperber (2004). The instrument of the BAPT was translated from English to Bengali language by the researcher. The researcher translated the original instrument into Bengali version. One nursing instructor with high proficiency in English back-translated the Bengali version into English. There was no significant discrepancy between the two English versions, the Bengali version of the BAPT questionnaires was appropriate to use for data collection.

Reliability of the Instruments

The total reliability of the instrument covering attitudes, subjective norm, and perceived behavior control was tested with 15 primiparous pregnant women with the same inclusion criteria of the sample from the Comilla Medical College Hospital. The Cronbach’s alpha was used to calculate the overall reliability, except intention, with the value of .79. For the new instrument, the acceptable level reliability value was .70 (Polit & Beck, 2004). For the intention part, the reliability is omitted because it is

empirical that infant feeding is either breastfeeding or formula feeding. Another reason is the fact that the duration of breastfeeding is at least 6 months to gain its benefits as recommended by WHO (2014).

Ethical Consideration/Protection of Human Subjects

Prior to data collection, the research process was approved by the Research Ethics Committee, Faculty of Nursing, Chiang Mai University, Thailand, study code FULL-011-2558. The request of permission for data collection and approval of the research ethics committee were delivered to the director of the Comilla Medical College Hospital. Then the primiparous pregnant women with the inclusion criteria were recruited. The investigator explained in Bengali language about the purpose and procedure of the study to the primiparous pregnant women with their rights. They were informed that it was voluntary to participate in the study. They were also assured that they had rights to cancel their participation at any time during the process of the research without any harm to their health care service. Their given information would be kept confidential, and any disclosure of data would be done in the form of coding. After explaining the information, the investigator provided 10 – 15 minutes for them to ask any questions related to the study. Then the investigators asked their willingness to participate in the study. For those who were willing to participate in the study, the informed consent was obtained.

Data Collection Procedures

The researcher collected data through self-report questionnaires. The following steps were performed for the collection of data:

1. Following approval from the Research Ethics Review Committee at the Faculty of Nursing Chiang Mai University. An official letter requesting for permission of data collection was proposed to the director of the Comilla Medical College Hospital. The attached documents with the letter were approval from the Research Ethics Review Committee, the Faculty of Nursing Chiang Mai University, the research proposal, and the copy of the questionnaire.

2. After the permission was obtained, the researcher then sought appointments with the nursing superintendent of the hospital and their deputies to explain the purpose and the process of the study. Then the investigator met the head nurse of the ANC unit to inform her about the study.

3. The researcher selected the women in the sample based on the inclusion criteria by checking the information during their visit to the ANC unit. Then the investigator would inform the samples about the study and asked for their willingness to participate in the study.

4. The investigator took the sample to the private room near the ANC unit to answer the questionnaire, which was a self-administered type. The researcher explained about how to answer the questionnaire in terms of instructions and time to answer, which lasted about 30 minutes, as well as their rights.

5. After receiving the questionnaire from the participant, the investigator checked it for completion. All of the participants completely filled out the questionnaire.

Then the researcher used a computerized program, SPSS, to analyze the data from all questionnaires.

Data Analysis

Data were analyzed using the statistical computerized program. The details of analysis were as follows:

1. The demographic data, attitudes, subjective norm, perceived behavioral control, and intention were analyzed using descriptive statistics analysis including frequency, percentage, mean, and standard deviation.

2. The relationship between attitudes, subjective norm, perceived behavioral control, and intention were not analyzed data due to homogenous selection of the dependent variable (intention to breastfeed).

3. Open-ended questions, in intention, were analyzed using content analysis by grouping the same answers and computing the frequency and percentage.