CHAPTER III

PROCEDURE AND METHOD OF STUDY
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3.1 POPULATION AND SAMPLE:

There are eight teachers colleges in the Northeast Group of Thailand which formed the basis of the study.

For selecting our sample, the first issue was to choose the schools where the student teachers go for their student teaching experience. A sample of 6 schools each from the first seven colleges on the list and 8 from the 8th college on the list was drawn randomly. Thus we have 50 schools with us.

From each school two cooperating teachers and four student teachers were randomly drawn besides the principal. The details of our sample were as follows:

- School principals = 50
- Cooperating Teachers = 100
- Student Teachers = 200

The detailed college-wise distribution of the subjects was as follows:

<table>
<thead>
<tr>
<th>TEACHERS COLLEGES</th>
<th>BURIAM</th>
<th>LOEI</th>
<th>MAHARAKAM</th>
<th>NAOKORN</th>
<th>RACHASIMA</th>
<th>SURIN</th>
<th>SAKONNAKORN</th>
<th>UDORNTHANI</th>
<th>UbonraCHATANI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINCIPALS</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>COOPERATING</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>16</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>STUDENT</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>32</td>
<td>32</td>
<td>200</td>
</tr>
<tr>
<td>TEACHERS COLLEGES</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>56</td>
<td>56</td>
<td>350</td>
</tr>
</tbody>
</table>
3.2 Construction of Tool Used:

Following Sarbin and Jones' suggestion on the role assessment (110:465), the role expectations and the role performance can be assessed by an inventory composed chiefly of action sentences or by an instrument which taps qualitative aspects, the investigator decided to use action sentences of the function of college supervisors as items of the Role Expectation Instrument for this study.

For the development of items, the investigator began with determining the nature of supervisory functions of the college supervisor on student teaching. For this, the opinions of ten experts (3 college supervisors, 2 student teaching committee members, 2 principals, and 1 director of research and development section) were collected. The common agreement of experts was on the following areas:

a) Academic

Supervisory functions suggested by experts were:
- holding individual and group conferences with co-workers
- interpreting the student teaching programme to schools
- conducting seminars
- orienting student teachers and the co-workers with the philosophy, objectives, organization, content, duties, and responsibilities on student teaching
- helping the participants to improve their performance on student teaching activities
- creating an atmosphere in which all participants can freely interact professionally
- writing articles on student teaching

b) Skill Development

Supervisory functions suggested by experts were:
- helping student teachers to develop self-confidence, self-directiveness, and the teaching competency
- providing such opportunities for the student teacher to use his/her special interests and abilities in his/her student teaching
- instructing student teachers in the use of teaching aids

etc.
c) Guidance

Supervisory functions suggested by experts were:

- helping student teachers see more clearly in the problems and needs of the young pupils
- assisting student teachers in diagnosing the learning difficulties of pupils
- giving suggestions on how to use curriculum guides and professional materials as sources of ideas in making lesson plans
- giving suggestions on how to initiate or carry through an instructional unit for student teachers
  etc.

d) Evaluation

Experts recommended the tasks like the following:

- giving sufficient feedback to student teachers
- selecting appropriate criteria for assessment
- frequently visits and evaluating
  etc.

After carefully studying philosophy, objectives and functions of student teaching programmes; functions of college supervisors on student teaching; tasks of student teachers while at student teaching; and the suggestions of experts, the first set of 80 statements in terms of the college supervisor's functions was drafted and formulated in the Role Expectation Instrument. The items were arranged in four different groups: Academic, Skill Development, Guidance, and Evaluation in accordance with the nature of supervisory functions of college supervisors suggested by experts. The numbers of items in these groups were 41, 9, 15, and 15 respectively. The first draft of the instrument was then sent to the experts contacted earlier, to judge each item of the list on two grounds; (a) whether the item conveyed the function of the college supervisors, and (b) whether the item was placed under proper role. Hundred percent consensus (for both the grounds) was obtained on 52 items. These 52 items formed the second draft of the instrument. The numbers of items in the second draft were 26, 5, 10, and 11 respectively for the Academic, Skill Development, Guidance, and Evaluation.
To examine whether these items are measuring something in common, the instrument was administered to a pilot sample of 37 subjects (7 school principals, 10 cooperating teachers, and 20 student teachers). They were required to express their expectations freely on each item on a five-point scale, indicating how well they expected the college supervisors to perform various functions. The scale values attached to these items were as follows:

| SCALE VALUE | A - perform to a great extent | 5 |
| A - perform to a great extent | 5 |
| B - perform frequently | 4 |
| C - perform in some extent | 3 |
| D - seldom perform | 2 |
| E - never perform | 1 |

Based on responses, correlations were run between the scores obtained by each person on each item and the scores obtained by each person across the whole scale. The r values were obtained between +.43 and +.61 for 50 items whereas the r values of the remaining 2 items were +.59 and +.37 (for 35 d.f., the 1% value of significant r is +.418). These two items were dropped from the final draft and the investigator was left 50 items that formed the final scale.

Reliability and Validity

Reliability refers to the accuracy (consistency and stability) of measurement by a test. "Reliability is typically defined as the degree of consistency between two measures of the same thing". (77:33)

There are several different ways of estimating the degree of consistency. Estimates of reliability based on the average correlation among items within a test are said to concern "internal consistency". This size of the reliability coefficient is based on both the average correlation among items (the internal consistency) and the number of
items. Coefficient alpha is the basic formula for determining the reliability based on internal consistency. But, internal consistency can also be computed by Hoyt's Analysis of Variance Procedure. (42:383)

For this study, the final draft of the instrument was administered to a sample of 40 subjects (10 school principals, 15 cooperating teachers, and 15 student teachers) and item analysis was employed through Hoyt's Analysis of Variance Procedure to test reliability. The statistical value of reliability was established at 0.936.

**Validity**: The commonest definition of validity is epitomized by the question: Are we measuring what we think we are measuring? Validity is frequently defined as the degree to which a test is capable to achieve certain aims. (77:33)

According to Best (10:179), "Basic to the validity of a questionnaire are the right questions phrased in the least ambiguous way.... The panel of experts may rate the instrument in terms of how effectively it samples significant aspects of its purpose, providing estimates of content validity".

Since the items of the Role Expectation Instrument had been selected on the basis of 100% consensus of the judges, therefore, they support the content validity of the instrument.

Construct validity is another kind of validity of the tool. "Construct validity is the degree to which the test scores can be accounted for by certain explanatory constructs in a psychological theory". (77:34) "Construct validity can also examine in terms of discrimination validity by the help of testing of significant differences between individual scores along with Hoyt's Analysis of Variance Procedure". (55:68)

The F value obtained from the try out of final draft was 15.53. It was significant at the .01 level with 39, 1911 degree of freedom. (0.01 $F(39, 1911) = 1.84$) This result indicated that the Role Expectation Instrument has a power of discrimination.
The final draft of the scale had 50 items and was used with the respondents for collecting the data. The distribution of the items on the final form of the scale is as follows:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NO. OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Academic</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 16, 17, 18, 20, 21, 23, 26, 27, 29, 35, 36, 37, 39, and 44 (total 25 items)</td>
</tr>
<tr>
<td>2) Skill Development</td>
<td>10, 13, 14, 31, and 33 (total 5 items)</td>
</tr>
<tr>
<td>3) Guidance</td>
<td>9, 15, 25, 28, 30, 32, 34, 40, 41, and 42 (total 10 items)</td>
</tr>
<tr>
<td>4) Evaluation</td>
<td>19, 22, 24, 43, 45, 46, 47, 48, 49, and 50 (total 10 items)</td>
</tr>
</tbody>
</table>

3.3 COLLECTION OF DATA:

The Role Expectation Instrument was administered to the selected sample of school principals, cooperating teachers, and student teachers. The school principals and cooperating teachers were given the freedom to check the rating scale in their free time, then were collected back within one week.

To the student teachers the instrument was administered twice in a scheduled setting: first, one week before the commencement of student teaching experience and second, one week after completing the student teaching experience. It took about an hour and it was administered in small group of 24 student teachers in each college except for the Ubon Teachers College, where it was a group of 32.

The procedures of data collection mentioned above began in May 1983 and was completed in September 1983.
3.4 PROCEDURES FOR TREATING THE DATA:

After the collection of data, it was checked and scored on the basis of the scale value mentioned on page 43. Scoring was done both itemwise and subjectwise.

Since, the purposes of this study were to examine the perceptions and to study the differences between the perceptions of the respondent groups regarding the role expectations and the role performance of college supervisors on student teaching, the following statistical procedures were carried out:

3.4.1 Computation of the mean, mode, and standard deviation of each item on the role expectations, separately for each group of respondents as well as for the total sample.

3.4.2 Computation of the mean, mode, and standard deviation of each item on the role performance, separately for each group of respondents as well as for the total sample.

3.4.3 Group - by - trials analysis of variance (which one trial was involved) followed by t - test where necessary was employed to test the differences between the perceptions of respondent groups regarding the role expectations of college supervisors viz., to test Hypothesis I.

3.4.4 Group - by - trials analysis of variance (which one trial was involved) followed by t - test where necessary was employed to test the differences between the perceptions of respondent groups regarding the role performance of college supervisors viz., to test Hypothesis II.

3.4.5 A single group of subjects in a repeated-measures design followed by Tukey’s Honestly Significant Difference Method where necessary were employed to test the differences of the perceptions of each group of respondents on different categories of the role expectation of college supervisors viz., to test the third, fourth, and fifth hypotheses. It was also known as subjects - by - trials analysis of variance. It was one-factor experiment
with repeated measurements where the presentation of data was the same as that for the two-way classification with one observation per cell. The model was the mixed model for \( n = 1 \): subjects constituted a random variable and responses on each role were viewed as fixed. This was purposed to examine the significant differences between roles while individual differences between subjects were of limited interest.

3.4.6 A single group of subjects in a repeated-measured designed followed by Tukey's Honestly Significant Difference Method where necessary, (the same procedure as used in 3.4.5) were employed to test the differences of the perceptions of each group of respondents on different categories of the role performance of college supervisors viz., to test the sixth, seventh, and eighth hypotheses.

3.4.7 Direct-Difference Method for the t - Test to test the differences between the role expectations and the role performance of college supervisors as perceived by each respondent group viz., to test the ninth, tenth, and eleventh hypotheses.

3.5 THE CRITERIA FOR INTERPRETING ITEM MEANS:

A criterion for interpreting the mean of each item of the role expectations and the role performance obtained from 3.4.1 and 3.4.2 was set up by the investigator on the basis of the Rounded Percentages Based upon Normal Probability Table Values (11:240). This was stated in terms of the mean range and the degree of intensity as follows:

<table>
<thead>
<tr>
<th>MEAN RANGE</th>
<th>DEGREE OF INTENSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.50 - 5.00</td>
<td>Great Extent, Extremely Pleasant, or Highest</td>
</tr>
<tr>
<td>3.50 - 4.49</td>
<td>Frequently, More Than Average, or High</td>
</tr>
<tr>
<td>2.50 - 3.49</td>
<td>Some Extent, Moderately, or Average</td>
</tr>
<tr>
<td>1.50 - 2.49</td>
<td>Seldom, Below Average, or Poor</td>
</tr>
<tr>
<td>1.00 - 1.49</td>
<td>Least, Extremely Unpleasant, Never, or Very Poor</td>
</tr>
</tbody>
</table>