CHAPTER 3

METHODOLOGY

Research design

A correlational descriptive design was used in this study.

Population and sample

The target population of this study was school-age children with epilepsy who attended the outpatient departments in the Second Teaching Hospital of Xi'an Medical University and the Children's Hospital in Xi'an, China during November 1999 and January 2000. The sample of this study was 80 Chinese school-age children with epilepsy who attended the two major children's hospitals in Xi'an City. A purposive sampling method was used in this study.

Subjects were selected by the following inclusion criteria:

(1) Boys and girls aged between 8 to 12 years old.;

(2) Being diagnosed with grand mal epilepsy for at least 3 months.;

(3) Being able to communicate.;

(4) Consent given by both children and their parents.;

(5) Attending school.

Instruments

The instruments used for data collection in this study consist of two parts: Demographic Data Recording Form and Self-perception Profile for Children.

Demographic Data Recording Form

The Demographic Data Recording Form measured the characteristics of the children's age, sex, education level, duration of illness (months), and frequency of seizures in the last month.

Self-Perception Profile for Children

The original Self-perception Scale was "Self-perception Profile for Children" (SPPC) developed by Harter (1985). The SPPC contained 36 items. The instrument included six components: scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth. Each component included six items. Each item had two different sentences. Each sentence had two degrees "sort of true for me" and "really true for me". So, each item included four answers. Some items were negative, others were positive. For the negative items, the scores were given reversibly. The higher the score, the higher the self-perception .

For example,

really true for me	sort of true for me	sort of true for me	really true for me
1	2	3	4

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9. (Positive item)

Some kids wish they could be a lot better at sports.	BUT	Other kids feel they are good enough at sports.
1	2	3 4

10. (Negative item)

Some kids are happy with their height and weight.	BUT	Other kids wish their height or weight were different.
4	3	2 1

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The possible range of the total score was 36.00-144.00 points, the middle point of the score was 90.00=[(144-36)/2+36]. The self-perception score was classified into two levels: negative level (36.00-90.00), and positive level (90.01-144.00). For the 6 components, the middle point of the score was 15.00=[6+(24-6)/2]. So, the negative level was 6.00-15.00 and the positive level was 15.01-24.00.

Validity and reliability of the instrument

Validity and reliability of the Self-Perception Scale was tested before collecting the data.

For construct validity of SPPC, Harter (1989) obtained correlation between the competence/importance discrepancy score and self-worth in the range of -0.72 to -0.55 across several samples of children between eight and fifteen. In addition, Dumas and Pelletier (1999) assessed that the Cronbach coefficient of the different dimensions was between 0.68 and 0.74 and was 0.90 overall.

Two bilingual experts from Xi'an Medical University translated the Chinese version of the Self-perception Scale from the English version. The Chinese version of the instrument was used in the back translation method. The investigator and translators clarified the discrepancies between the two versions.

Reliability of the Chinese version of the Self-Perception Scale was tested for internal consistency among 10 epileptic school-age children who met the eligible criteria of sampling in this study. The test was conducted at another two hospitals, not the two major Pediatric Hospitals of Xi'an. Cronbach's coefficient of the different dimensions (scholastic competence, social acceptance, athletic competence, physical appearance, and global self-worth) was between 0.70 and 0.73 (0.72, 0.73, 0.70, 0.73, 0.70, and 0.72) and was 0.87(>0.8) overall (Burns & Grove, 1997).

Data collection procedure

Using the method of self-administered questionnaire, the subjects' personal data was collected and their self-perceptions was measured. The procedures of data collection were as follows:

1. Asked for permission for data collection from the two hospitals' administrators, physicians, and nurses in the outpatient pediatric departments.

2. Identified the school-age children with epilepsy who met the eligible criteria by reviewing their medical records and interviewed them.

3. Asked for permission to collect data from the children in the outpatient departments. The research began with the investigator's self-introduction, followed by explaining the purpose of the study and the procedure, that the children would be asked to complete the questionnaire independently. After that, the parents and children were asked to sign consent forms if they agreed to participate in this study. The demographic form was then filled in by the children and reviewed by their parents.

4. As for the SPPC, the researcher read the first item as an example: first, in the item, the researcher read the two main sentences to the child and asked the child to select only one sentence that was as close as his/her situation; second, the researcher read two of the subsentences under the main sentence: "really true for me" and "sort of true for me", and then asked the child to decide whether that was only sort of true for him or really

true for him. If it was only sort of true for him, the researcher put an X in the box under sort of true; if it was really true for him, the researcher put an X in the box under really true. Regarding the other 35 items, the researcher asked the child to complete the answers by him/herself.

5. Processed the data to be ready for data analysis.

Protection of human rights

Prior to data collection, an inform consent (children and parents) was performed in order to assure the protection of the human rights.

1. The proposed subjects and their parents were asked for their willingness to participate in this study.

2. Subjects were informed of the confidentiality, assurance, and the purpose of the study.

3. Data was secured during the study.

4. Subjects were free to participate and/or withdraw from the study at any time.

Analysis of data

The data was calculated using the Statistical Package for Social Science (SPSS) computer software. The analysis was divided into two parts:

1. Demographic data: frequency and percentage were used to analyze age, sex, education level, frequency of seizure, and duration of illness.

2. Frequency and percentage were used to analyze the overall self-perception; mean, standard deviation, and range were used to analyze the overall and each component scores of the Self-Perception Profile for Children.

3. Logistic regression analyses were used to analyze whether age, sex, education level, frequency of seizures, and duration of illness had relationships with overall self-perception and its components. Before running the logistic regression analysis, dummy variables coding was done to transform qualitative variables, gender was transformed into quantitative variables, and the score of self-perception and six components were transformed to dichotomous variables (negative and positive). In addition, residual analyses were conducted to test the assumptions of logistic regression: normality, linearity, hemoscedasticity, and independence of residuals. Level of significance of this study was set at 0.05.