

CHAPTER 4

FINDINGS AND DISCUSSION

A correlational descriptive study was conducted to describe the self-perception of school-age children with epilepsy and the relationship between the self-perception of school-age children with epilepsy and personal factors including age, gender, education level, frequency of seizures, and duration of illness. This chapter includes:

1. Description of the sample,
2. Self-perception of school-age children,
3. Discussion of findings relevant to research questions and hypothesis.

Part I Description of the sample

The sample of this study was composed of 80 school-age children with epilepsy (tonic-clonic seizure).

Characteristics of the sample are described in Table 1.

Table 1

Frequencies and percentages of subjects' gender, age, grade, duration of illness, and frequency of seizures. (N=80)

Variable	Frequency	Percentage (%)
Gender		
Boy	48	60.0
Girl	32	40.0
Age (year old)		
<9	20	25.0
9-10	27	33.7
11-12	33	41.3
Grade		
1	11	13.8
2	6	7.5
3	17	21.3
4	20	25.0
5	11	13.8
6	8	10.0
7	7	8.6
Duration of illness (Month)		
3-12	25	32.5
13-24	8	9.0
25-36	33	41.3
37-48	12	15.0
49-72	2	2.2
Frequency of seizures in the latest month		
0	9	11.3
1- 15	28	35.0
16-30	38	47.5
>30	5	6.2

It can be seen from Table 1, that most of the subjects were boys (60%) and their age ranged from 8-12 years old with a mean of 10.05 years old. Regarding schooling, these children were in various levels with 25% of them in grade 4 and 21.3% of them in grade 3. The majority of the subjects had 25-36 months duration of illness and (47.5%) of them had 16-30 seizures in the last month.

Part II self-perception of school-age children

To describe overall self-perception and its six components of epileptic school-age children, the results from the statistical analysis were presented in Table 3-10.

Table 2

Mean, standard deviation, and range of overall self-perception and it's six components (N=80)

Variables	Mean	S.D.	Range	level
Scholastic competence	15.52	3.52	8-23	positive
Social acceptance	13.94	2.92	6-20	negative
Athletic competence	15.20	4.47	7-34	positive
Physical appearance	16.72	4.06	7-24	positive
Behavior conduct	15.27	3.06	3-22	positive
Self-worth	16.21	3.03	11-23	positive
Total self-perception	93.09	12.21	58-123	positive

Table 2 displays the total self-perception scores and scores of each component of self-perception. The scores of overall self-perception ranged from 58 to 123 with a mean of 93.09 and standard deviation 12.21, which was at a positive level. The scores of social acceptance showed a negative level ($\bar{X}=13.94$ $SD=2.92$). The other 5 components had positive levels; scholastic competence ($\bar{X}=15.52$ $SD=3.52$), athletic competence ($\bar{X}=15.20$ $SD=4.47$), physical appearance ($\bar{X}=16.72$ $SD=4.06$), behavior conduct ($\bar{X}=15.27$ $SD=3.06$), and self-worth ($\bar{X}=16.21$ $SD=3.03$).

Table 3

Frequencies and percentages of the subjects' overall self-perception.

Self-perception score	Frequency	Percentage (%)
Negative (36.00-90.00)	35	43.80
Positive (90.01-144.00)	45	56.20

It is shown in Table 3 that, 56.3% of the subjects had positive levels of self-perception, whereas 43.8% of the subjects had negative levels of self-perception.

Table 4

Logistic regression of independent variables on overall self-perception of school-age children with epilepsy.

Variables	B	Sig	R	Exp (B)
Duration of Illness	-.60	.03*	-.15	.55
Frequency of Seizures in the Last month	-2.5	.00**	-.38	.08
-2LOGlikelihood=97.50		Sigx2=.00**		
P< .05*		P<0.01**		

Table 4 showed that there were significant negative relationships between duration of the illness and overall self-perception; and frequency of seizures and overall self-perception ($R_1 = -.15$ $P = 0.03$; $R_2 = -.38$ $P = 0.00$).

Table 5

Logistic regression of independent variables on scholastic competence of school-age children with epilepsy.

variables	B	Sig	R	Exp (B)
Duration Of illness	-.59	.02*	-.17	.55
Frequency of seizures in the last month	-.91	.02*	-.18	.40
Gender	2.25	.00**	.30	.67
Boy				
Girl				
-2LOGlikelihood=84.57		Sigx2=.00**		
P< .05*		p<0.01**		

Table 5 indicated that there were significant negative relationships between the duration of illness and scholastic competence; and frequency of seizures and scholastic competence ($R_1 = -.17$ $P = 0.02$; $R_2 = -.18$ $P = 0.02$). Gender and scholastic competence had a significant positive relationship ($R_3 = .30$; $p = 0.00$).

Table 7

Logistic regression of independent variables on athletic competence of school-age children with epilepsy.

variables	B	Sig	R	Exp (B)
Duration of illness	-.75	.01*	-.22	.47
Frequency of seizures	-1.10	.01*	-.23	.33
-2LOGlikelihood=84.78		Sigx2=.00**		
P<.05*		P<0.01**		

Table 7 showed that there were significant negative relationships between duration of illness and athletic competence; and frequency of seizures and athletic competence ($R_1 = -.22$ $P = 0.01$, $R_2 = -.23$ $P = 0.01$).

Table 8

Logistic regression of independent variables on physical appearance of school-age children with epilepsy.

variables	B	Sig	R	Exp (B)
Gender	-1.07	.03*	-.15	.34
Boy				
Girls				
-2LOGlikelihood=108.44		Sigx2=.03		
P<.05*				

Table 8 indicated that there was a significant negative relationship between gender and physical appearance (R=-.15 P=0.03).

Table 9

Logistic regression of independent variables on behavior conduct of school-age children with epilepsy.

variables	B	Sig	R	Exp (B)
Gender	1.67	.00**	.27	5.29
Boy				
Girl				
-2LOGlikelihood=95.69		Sigx2=.01*		
P<.05*		P<0.01**		

Table 9 showed that there was a significant positive relationship between gender and behavior conduct (R=.27 P=0.00).

Table 10

Logistic regression of independent variables on global self-worth of school-age children with epilepsy.

Variables	B	Sig	R	Exp (B)
Frequency Of seizures	-1.83	.00**	-.33	.16
-2LOGlikelihood=80.89		Sigx2=.00**		
P<.05*		P<0.01**		

Table 10 showed that there was a significant negative relationship between global self-worth and frequency of seizures (R=-.33 P=0.00).

Discussion

Relationship of the findings to research question 1
Research question 2 : What is the levels of self-perception of school-age children with epilapsy

The majority of the study subjects (56.3%) had a positive level of overall self-perception (Table 3). With respect to each score of the components, scholastic competence, athletic competence, physical appearance, behavior conduct, and self-worth were at positive levels (Table 2). Only the score of social acceptance was at a negative level (Table 2). There are two possible explanations for this finding. One is that epileptic

children might respond to items of the questionnaire in terms of their ideal-ego rather than their realistic present self-concept (Burns & Zweig, 1980; Molla, 1981). That means the children had a negative self-perception. At the same time they have an unrealistic positive self-perception in their mind. They hope they can be like this, so they might fill in the questionnaire as if their hopes were reality. School-age children become increasingly sensitive to the social norms and pressures of peer groups. They learn to dress, talk and behave in a manner acceptable to the group (Whaley & Wong, 1995). The self-perception development of these epileptic children might be affected by multiple factors, including different athletic competence due to disease and treatment, attitude of peers and teachers, and support of family. Therefore, these epileptic children's attempt to be similar to other children, and to behave and respond as they see other children doing may be a bit unrealistic, but it may be a method of coping with epilepsy.

Another possible explanation for this finding may be due to the school-age children using denial as a defence mechanism for themselves against facing the full meaning of impaired functioning and disability (Burns & Zweig, 1980; Molla, 1981). These children might worry about the interference of their illness and the difference with their peer group. Therefore, they might use denial to allay their awareness of the seriousness of the illness and possibilities for their fate, and to keep them functioning well as needed (Perrin & Gerrity, 1984).

These findings were inconsistent with the study of Matthews, Barabas, & Ferrari, (1986)'s that school-age children with epilepsy had significantly lower self-concept scores compared with groups of children with diabetes or healthy children.

Relationship of the findings to research question 2 and the hypothesis

Research question 2: Is there a relationship between self-perception of school-age children with epilepsy and personal factors such as age, gender, education level, frequency of seizures and duration of illness?

The hypothesis: There is a relationship between self-perception of school-age children with epilepsy and personal factors including age, gender, education level, frequency of seizures, and duration of illness.

The hypothesis that there is a relationship between self-perception of school-age children with epilepsy and personal factors including age, sex, education level, frequency of seizures, and duration of illness was partially accepted. However, the relationship were quite low (R ranged from 0.15 to 0.38), probably because only personal factors were studied while other factors may influence the self-perception of epileptic children.

There were significant negative relationships between duration of illness and overall self-perception and its two components including scholastic competence and athletic competence (Table 4, Table 5 and Table 7). The

children with a short duration of illness had more positive scholastic competence and athletic competence. These findings are supported by the study of Hoare and Mann's (1994) and Turner-Henson (1994) that a long duration of illness was the most consistent illness variable associated with lower self-concept. These findings can be explained by intellectual inadequacy associated with epilepsy (Bakwin & Bakwin, 1974). The long duration of illness may interfere with their schooling and prevent them from playing sports, thus affect scholastic competence and athletic competence. So, the longer duration of illness, the worse they feel at school and sports.

There were negative relationships between the frequency of seizures and overall self-perception and its four components including scholastic competence, social acceptance, athletic competence and self-worth (Table 1, Table 4, Table 5, Table 6, Table 7, and Table 10). The children with more frequent seizures had a less positive perception of scholastic competence, social acceptance, athletic competence and self-worth. These findings are consistent with Hu's (1996) and Turner-Henson's (1994) studies. Self-perception of school-age children could be influenced by disease severity (Hu, 1996). The more severe the disease, the more limited activities would be. Turner-Henson (1994) suggested that among children who had chronic illness more discrimination was reported in children with activity limiting problems. Epilepsy has always been considered taboo, with prejudice and rejection (Somoza,

Forlenza, Brusino, & Lincciardi, 1993). If the children cannot accomplish what is expected, the result will be a sense of inferiority (Erikson, 1963). The more serious disease may cause interference with their schooling and thus affect scholastic competence. Also, the convulsions may prevent them from playing sports, especially strenuous ones, so the higher frequency of the seizures the worse they feel at sports. At the same time, the more frequent the seizures the more the children may be isolated from their peer groups, and their socialization might be influenced. However, there was no relationship between frequency of seizures and physical appearance and behavioral conduct (Table 8 and Table 9). This might be because the peer group established standards for acceptance and rejection, and children might be willing to modify their dress and behavior in order to be accepted by the group (Whaley & Wong, 1995).

It is not surprising to find that there was a significant positive relationship between gender and scholastic competence and behavior conduct (Table 9), but there was a negative relationship with physical appearance (Table 5 and Table 8). Girls appeared to have more positive scholastic competence and behavior conduct than boys, but they perceived that they had more negative physical appearance than boys. These findings are consistent with the findings of Watkins, Dong, & Xia's (1997) study that boys had more positive self-perceptions on most nonacademic self-scales, so the girls had more positive scholastic competence than boys. Normally, girls are concerned more about their

figures, so boys could have more positive physical appearance than girls. In Harter's (1985) study, girls were reported to be more sensitive about their behavior. Roff's (1993) study also found that girls saw themselves as better behaved than boys. As for Chinese, culturally girls care for others and keep quiet in public situations. According to Li's (1987) study, school-age girls were more sensitive, more tender-minded, and more mature in socialization and more developed than boys at the same age, thus they had a more positive perception of behavior conduct.

In this study, there was no relationship between the two personal factors of age and education level and overall self-perception and all its components. Some children with epilepsy were mentally retarded (Lennox, 1971, cited in Bankwin & Bakwin, 1974). For this reason, even at the same age, children might have different levels of intelligence, cognitive abilities and might enter different educational levels. So, age and education level might not have a relationship with their real ability to perceive themselves.