# Empowering Preadolescents With ADHD Demons or Delights

Kathleen Frame, RN, DNSc

This study tested the clinical utility of the Frame Model of Preadolescent Empowerment as a means of enhancing the self-perception of children diagnosed with attention-deficit hyperactivity disorder (ADHD). The intervention, which has theoretical roots in Roy's Adaptation Model, Harter's Developmental Perspective, and Murrell-Armstrong's Empowerment Matrix, was administered to children with ADHD in a pretest/posttest design. Findings indicate that this model significantly increased the perceptions of self-worth in preadolescents with ADHD. **Key words:** *adaptation, attention-deficit hyperactivity disorder, empowerment, perceptions, preadolescents* 

CCORDING to the National Institutes of Health, there has been a dramatic increase in the number of children diagnosed with ADHD in the last several years. The number of children and adults diagnosed with ADHD has risen from approximately 900 000 in 1990 to almost 5 million by 1998.2 Approximately 70% to 80% of children diagnosed with ADHD in the United States take some form of stimulant medication.3 ADHD is characterized by a level of inattention, with or without impulsivity, and overactivity that occurs across settings, causes functional impairment, and cannot be attributed primarily to another disorder. 4,5 The functional impairment occurs across multiple settings and includes home, school, and peer relationships. Also, ADHD is generally characterized by poor problemsolving skills, inaccurate coding of information into memory, low frustration tolerance, and organizational difficulties. <sup>6</sup> Behaviors and symptoms vary with age. Children, preadole-

scents, and adolescents react in a variety of ways. The outcome of this dysfunction often has long-term effects on academic performance, vocational success, and social-emotional development.<sup>1</sup> Interpersonal relationships are also difficult for preadolescents with ADHD.<sup>5,7</sup>

Although the Federal Drug Administration approved stimulant medication for children with ADHD aged 8 to 18, opinions differ as to the safety of these medications. At this time, there are no reliable long-term studies that have been carried out to support the safety of this type of medication.<sup>1,2,8</sup> While the importance of behavioral and cognitive interventions for children with ADHD cannot be emphasized enough,9 costs and availability of clinical services often hinder intensive behavioral interventions for many children with ADHD. 10 Children with ADHD can clearly benefit from interventions that teach them how to interact with more effectiveness and that promote adaptive selfevaluation, especially for those who have already painted an unfavorable self-portrait.<sup>11</sup>

Self-concept is multifaceted and is influenced by scholastic competence, social acceptance, athletic competence, physical appearance, and family approval and love.<sup>12</sup>

From Rutgers, The State University of New Jersey, Camden. NI.

Corresponding author: Kathleen Frame, RN, DNSc, Rutgers, The State University of New Jersey, 311 N Fifth St, Camden, NJ 08102 (e-mail: bunkyframe@aol.com).

Dumas and Pelletier<sup>13</sup> found that preadolescents with ADHD have lower perception of self-concept than do their non-ADHD peers, specifically in the areas of scholastic competence, social acceptance, and behavioral conduct. Perceived scholastic competence concerns children's perceptions of their competence or ability within the realm of scholastic performance.14 Perceived social acceptance is the degree to which preadolescents perceive they have friends, feel they are popular, and think that most children like them. 14 Perceived behavioral conduct examines the degree to which children are satisfied with their behavior, do the right thing, avoid getting into trouble, and do the things they are supposed to do. 14

Lower perceptions of scholastic competence, social acceptance, and behavioral conduct have direct impact on preadolescents' self-esteem and feelings of self-worth. 11 It is possible that these children could become empowered to use strategies that will enable them to act in a different manner through a nursing intervention for preadolescents with ADHD that results in an increase in their perception of scholastic competence, social acceptance, and behavioral conduct. It is possible that such an intervention may enable them to feel and be more successful in the school setting.

The curriculum for this nursing intervention was written based on a synthesis of developmental, adaptation, and empowerment theories. The vehicle for this intervention is a nurse-facilitated support group conducted in a school setting.

# THEORETICAL FRAMEWORK

The theoretical framework for the intervention examined in this study was synthesized from the Roy Adaptation Model, 15 Murrell-Armstrong's Empowerment Matrix, 16-18 and Harter's Developmental Perspective. 11

# The Roy adaptation model

Children with ADHD need to learn to adapt. One year, they may have a teacher who understands their needs, but the following year they may experience a teacher who not only does not understand them, but also dislikes them. Children with ADHD may be part of a loving, caring family that understands their special needs. However, this is not always the case. The challenges faced by having a family member with ADHD are often overwhelming and may cause many family disruptions.<sup>7</sup> Children must learn to adapt in order to maintain a sense of self-esteem.<sup>15</sup>

The Roy Adaptation Model<sup>15</sup> addresses the problem areas of perceived scholastic competence, perceived social acceptance, and perceived behavioral conduct so prevalent in preadolescents with ADHD. Roy defines the nursing assessment as a review of the child's behaviors with a focus on identifying internal and external stimuli related to the problem behaviors, and interventions as the manipulation of parts of the system or the environment in order to manage these stimuli. 15 Therefore, an intervention is a proactive and appropriate response aimed toward making positive behavioral change. When developing interventions for children with ADHD, the child's interaction with the environment is a key factor in the development of more adaptive behavior. The nurse's role in interacting directly with the patient<sup>15</sup> is to assess the child and environment, develop an appropriate intervention, and then, implement and evaluate the outcome.19

Success with nursing interventions, according to the Roy Adaptation Model, involves the recipient making positive responses to ongoing stimuli. This, in turn, frees energy for responses to other stimuli. 15 Preadolescents with ADHD may respond impulsively when other children hit them. This is one potential example of an opportunity to teach new skills or to reinforce and practice previously learned skills in such students. Although children without ADHD may also wish to respond by hitting, they may be able to pause and consider the consequences of their actions. A positive response would be to walk away, which will then free physical and emotional energy for responses to other stimuli. Roy relates the sense of

powerlessness to a problem in perception, which is a perceived lack of internal or personal control over events.<sup>15</sup> This lack of control is a problem experienced by preadolescents with ADHD, 20 which suggests a potential impact opportunity for a nursing intervention—one of helping the children increase their sense of empowerment.

### **Empowerment**

As stated above, preadolescents with ADHD have lower perceived scholastic competence, perceived social acceptance, and perceived behavioral conduct than do their non-ADHD peers. Focusing on a greater sense of empowerment may enable change by causing one to experience a sense of hope, excitement, and direction.<sup>21</sup> During the process of empowerment, individuals may discover the cause of their problems and may become motivated to change their behavior and take action.<sup>22</sup> Empowerment can help these children avoid the long-term effects of untreated ADHD, which includes poor self-esteem, depression, higher incidence of teen pregnancy, and early drug use.<sup>9</sup>

Empowerment will not occur unless these individuals begin to take responsibility for their actions.<sup>23</sup> Awareness of how their behavior contributes to their poor peer relations must be addressed in order for preadolescents to feel good about themselves. For example, instead of feeling like a victim who is being picked on by others, awareness can lead to behavioral changes that increase personal empowerment.<sup>9</sup> In this process, it is critical for preadolescents to examine their behavior and be willing to make changes. In this manner, preadolescents can begin to take responsibility for learning new skills, and modifying their perceptions and, ultimately, their behaviors.

Empowerment may be more about perceptions than about action.<sup>24</sup> Self-awareness can lead to a change in perceptions, which in turn leads to empowerment. The true value of empowerment is in its collective action, which is action that seeks to unite people in a common cause, derived from common needs.<sup>25</sup> Preadolescents with ADHD have common needs and concerns, perhaps the greatest of which is their need to gain control of their lives.<sup>25</sup> Greater control will then lead to greater perceptions of self-worth. The goals of the nursing intervention examined in this study are to help preadolescents with ADHD have positive, creative, constructive, and encouraging school experiences, in order to gain greater control, and to ultimately develop a greater self-worth.

# The Murrell-Armstrong Empowerment Matrix

The Murrell-Armstrong Empowerment Matrix (Table 1) is based on a concept of power that can be shared and created but that cannot be controlled by others.<sup>16</sup> Empowerment leads to the creation of power and the decrease of powerlessness. Although self-empowerment may initially be dependent on an outside helping force (such as the school nurse), eventually individuals are able

**Table 1.** The Murrell-Armstrong Empowerment Matrix<sup>16</sup>

	Self	Dyad	Small group	Organization	Community	Society
Educating	E-S	E-D	E-SG	E-O	E-C	E-So
Leading	L-S	L-D	L-SG	L-O	L-C	L-So
Structuring	S-S	S-D	S-SG	S-O	S-C	S-So
Providing	P-S	P-D	P-SG	P-O	P-C	P-So
Mentoring	M-S	M-D	M-SG	M-O	М-С	M-So
Actualization	A-S	A-D	A-SG	A-O	A-C	A-So

to empower themselves. 16 The 6 empowerment settings include Self (S), Dyad (D), Small Group (SG), Organization (O), Community (C), and Society (S). According to Murrell, <sup>16</sup> methods of empowerment also fall into 6 distinct categories. These include Educating (E), Leading (L), Structuring (S), Providing (P), Mentoring (M), and Actualizing (A). For example, under the category of education, the school nurse may direct the child with ADHD to examine an ADHD Web site that discusses the positive characteristics of individuals with ADHD (E-S). This is an example of applying the method of education (E) to one's self (S). Two children with ADHD working together (E-D) in order to identify each other's creative talents and sharing their findings with the entire group is an example of applying education (E) in a dyad (D). Alternatively, role-playing may help students understand appropriate school behavior and appreciate the consequences for violating the school's disciplinary code (E-SG: educating, small group). Strategies developed to learn skills in order to regain composure in the classroom may be learned within the context of the organization (E-O: educating, organization). The school nurse may provide education regarding organizational skills to be used at home that will contribute to school success (E-C: educating, community). And finally, social skills in relation to peer companionship can be learned. These skills may afford children with the ability to make and keep friends (E-SO: educating, society). As visualized in this research and shown in Table 1, the settings and categories make the process of empowerment flexible and easy to understand. In this manner, the matrix helps determine the framework for the optimal intervention.

# Explanation of the matrix

Empowerment is an interactive process in the matrix and is appropriate when examining interventions for preadolescents with ADHD. As stated above, Murrell describes 6 categories of empowering methods. 16 The following is a brief explanation of

Education is paramount in helping the student with ADHD improve communication and social skills. Students may share already known information as well as help each other to create new information—ie, innovative ways of viewing situations and creative problem-solving. Leading is the act of inspiring, rewarding, and directing, which results in the generation of more power than initially existed. In this study, the school nurse filled this role as support group facilitator. Structuring includes examining the school organization that allows or limits activities. For example, students with ADHD may creatively role-play several examples of breaking the school's disciplinary code with appropriate consequences. Schools often devise elaborate disciplinary codes, but do not describe actions and consequences to the students unless the student actually violates a code. Allowing the students to understand the disciplinary code and offering strategies to adhere to this code will empower them to make the proper choices.

Providing is the act of examining and supplying resources for success. For example, if preadolescents with ADHD consistently lose items, they may be paired up with other ADHD peers and, together, they can clean their lockers and desks once a week to facilitate order in their lives. Mentoring/ supporting occurs as the school nurse guides the students toward achieving their goals within the group setting.

Actualizing builds upon previous knowledge and involves individuals as they perform what they are prepared to do at the highest level. Murrell states, "to be empowered is just as active a process as empowering." 16(p36) For example, preadolescents were encouraged to write a story about a time they acted impulsively and in a manner in which they did not feel good about themselves. They were then asked to highlight in yellow the section in which they felt they could have made a different choice. At that time, alternative strategies were offered by peers to

help individuals make new choices in the future.

# Harter's developmental perspective of self

Harter's Developmental Perspective of Preadolescence (ages 10-13) stresses the "newfound cognitive ability to form higher-order concepts which allow the child to construct a more global evaluation of the Self as a person." As children develop toward adolescence they become aware that they have positive and negative attributes, which contribute to their feelings of self-worth. During this period, "cognitive acquisitions that facilitate perspective taking allow the child to appreciate the opinions that others hold toward the Self, opinions that become internalized as domain-specific as well as global self-representations." 11(p55)

Preadolescents with ADHD also begin to compare themselves at this time, but often with more negative than positive views. They often experience peer rejection and are criticized by teachers.1 The degree of independent work during the preadolescent period increases substantially in the school setting, which presents difficulties for the child with ADHD who often needs the continuous motivation and presence of an adult.<sup>20</sup> Furthermore, students in large classrooms are often expected to work in small groups, another arena where students with ADHD often have difficulty.<sup>7</sup> New vulnerabilities typically arise during this period as children continue to compare themselves with their peers.

Harter's Self-Perception Profile for Children includes 6 domains, which encompass perceptions of scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth. <sup>14</sup> As previously discussed, Dumas and Pelletier <sup>13</sup> found that perceived scholastic competence, perceived social acceptance, and perceived behavioral conduct are lower in preadolescents with ADHD than in their non-ADHD peers.

Children in this preadolescent age group use social comparison to gauge their own sense of value, worth, and competence. According to Harter, "if the child is indeed deficient in areas that are eroding his/her sense of competence as well as overall self-worth, then direct interventions to enhance the child's skill level may be appropriate." <sup>11(p55)</sup>

As preadolescents with ADHD begin to understand the causes and consequences of their behavior, they will realize that they are not bad, wrong, or inferior, but that they merely require review and practice of skills to adapt to their environment. A nursing intervention based on the Roy Adaptation Model, Harter's Developmental Perspective, and Murrell-Armstrong's Empowerment Matrix was implemented to assist children with ADHD in learning skills and developing resources to improve areas of perceived scholastic competence, perceived behavioral conduct, and perceived social acceptance.

# SYNTHESIS OF THE MODELS

Using nursing terminology, concepts that can be identified for intervention in the preadolescent populations include persons, health, environment, and nursing. The *persons* are the preadolescents themselves, *health* relates to the preadolescents need to adapt to various stimuli, the *environment* is the school setting, and *nursing* involves the assessment of various relevant stimuli and interventions aimed at mediating them.

# **Persons**

Harter's Development Perspective<sup>11</sup> identifies persons as children in late childhood, which is an age when preadolescents begin to become aware of their environment and interaction with others, approximately 10 to 13 years old. Preadolescents with ADHD often have negative perceptions of themselves in relation to perceived scholastic competence, perceived social acceptance, and perceived behavioral conduct.<sup>13</sup> According

to Roy and Andrews (1999), energy must be conserved as various stimuli are handled. For preadolescents with ADHD, this energy must be channeled into appropriate actions. The Roy Adaptation Model can provide clarity to help understand how stimuli affect the self-concept. Intervention can occur before powerlessness interferes with adolescent development.26 An appropriate nursing intervention consists of using the structure of the empowerment matrix, which focuses on self-awareness and change. 16 The goal is to enable the person, in this case the preadolescent, to adapt to changes in handling various stimuli. The concept of empowerment is what enables this adaptation to occur.

#### Health

Health, according to Roy and Andrews is "a state and process of being and becoming integrated and whole" 15(p31) Specifically, health is having energy that is available to adapt to stimuli. Illness is the inability of the person to positively handle stimuli, which results in a feeling of powerlessness. 15 Harter's sense of health/illness11 relies on preadolescents' ability to examine their own positive and negative attributes and impact on others, based on perception of outside stimuli and interactions with others. Although individual abilities do play a part in the capacity to adapt, perceptions of self-worth often result from the ability to adjust to such interactions. Vogt and Murrell<sup>18</sup> believe empowerment allows individuals to reexamine situations and actions and ultimately change behaviors through new behavioral strategies. Health, then, for the purpose of this research project, may be defined as the ability to examine stimuli, attributes, and interactions and adapt accordingly in order to increase one's perception of self-worth.

#### **Environment**

Environment, according to Roy and Andrews, is "all conditions, circumstances and influences that surround and affect the development and behavior of humans as adaptive systems" 15(p31) Environment is interactive with the person adapting to stimuli. Harter<sup>11</sup> intimates that self-perception in the preadolescent arises from his or her interaction with the environment. Vogt and Murrell<sup>18</sup> describe empowerment as an interactive process between the individual, others, and systems. The environment clearly impacts preadolescents with ADHD as their responses to the environment determine either health or disease. Preadolescents who learn to respond effectively and adapt to their environment may develop an appropriate sense of self-worth that is theorized to improve health and that generates energy and the motivation to grow and change.<sup>15</sup>

#### Nurse

According to Hawks, 27 there must be a willingness to participate in experiences, which lead to self-awareness and change. The school nurse is in an ideal position to assess this willingness and intervene as necessary. The role of the nurse is further delineated in the Roy Adaptation Model. The nurse's role is to identify, promote, and support patient adaptation.<sup>15</sup> The goal of nursing is to "promote adaptation for individuals and groups, thus contributing to health and quality of life by assessing behavior and factors that influence adaptive abilities and by intervening to expand those abilities."15(p31) Although Harter's Perspective<sup>11</sup> is not a nursing model, the role of one who intervenes with a preadolescent must focus on the child's developmental level and understand that many preadolescents are for the first time beginning to critically examine and compare their behavior and relationships with others in their environment. Although it was beyond the scope of this particular study, it is clear that a child's ability to adapt is often compromised by overwhelming comorbid problems at home such as family stressors, depression, and family addictions (like alcohol, drugs, and gambling). The fact that preadolescents experience many different family situations, teachers, and classmates points to the potential utility of the Roy Adaptation Model being utilized as a

component of a synthesizing framework when developing interventions for preadolescents with ADHD in the school setting.

Vogt and Murrell<sup>18</sup> specifically list the attributes of empowerment, which includes educating, leading, mentoring, providing, structuring, and actualizing. The nursing intervention in this study focused on the first 5 of the 6 attributes: educating, leading, mentoring, providing, and structuring. Clearly, these are roles appropriate for the school nurse to assume. Integrating the Roy Adaptation Model, Harter's Developmental Perspective, and Murrell-Armstrong's Empowerment Matrix contributes to the development of a new and unique framework by which a nursing intervention can be developed, implemented, and evaluated.

The intervention developed through this synthesis and evaluated in this study is the Frame "Social Skills Training And Responsibilities for Students with ADHD" (STARS) support group curriculum. The curriculum covers eight 1-hour sessions held after school, over a 4-week period. The content covered in these sessions include the following: Session 1: Introduction: What is ADHD?; Session 2: Gifts of having ADHD; Session 3: Powerlessness vs Empowerment; Session 4: Empowerment with your feelings; Session 5: Empowerment with teachers; Session 6: Empowerment at home; Session 7: Empowerment with classmates; Session 8: School success-learn to relax.

The purpose of this study is to empirically examine the Frame Model of Preadolescent Empowerment (Fig 1) and the effectiveness of a novel nursing intervention for preadolescents diagnosed with ADHD. The hypothesis of this study is that preadolescents diagnosed with ADHD who participate in the Frame "STARS" support group will display significant

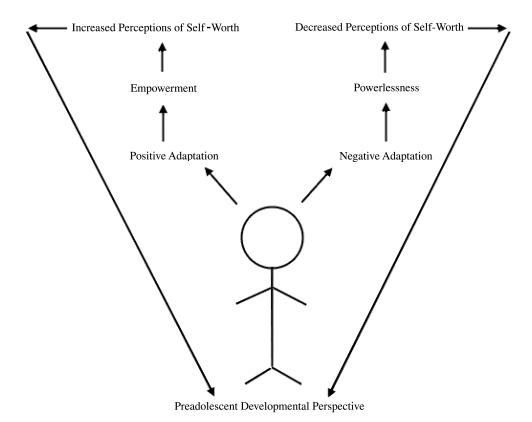


Fig 1. Frame Model of Preadolescent Empowerment.

increases in perceptions of self-worth when compared to untreated study participants.

#### **METHODS**

Letters describing the study were mailed to the households of 92 fifth-grade and sixthgrade students attending a suburban elementary school. All 92 students had previously been diagnosed with ADHD either by a physician or a nurse practitioner. Sixtyfive of the preadolescents responded to the letter and consented to participate in the study. Study participants were randomly assigned to either a treatment or a nontreatment control condition. Students in both conditions attended an orientation session where they completed the demographic questionnaire and Harter's Self-Perception Profile for Children. 14 Harter's Self-Perception Profile for Children measures 6 subscales including perceived scholastic competence, perceived social acceptance, perceived physical appearance, perceived athletic competence, perceived behavioral conduct, and perceived global self-worth. These 6 subscales, which were readministered to all subjects at the conclusion of the intervention, were used as the dependent variables for this study. This assessment took approximately 30 minutes to complete. The treatment group attended an 8-session (twice a week for 4 weeks,  $1-1^{1}/_{2}$ hours each session) support group facilitated by the school nurse. Students assigned to the nontreatment control condition received no intervention. In order to keep support group sizes at manageable levels, the 65 preadolescents (44 males and 21 females) were divided into 3 cycles as follows: cycle 1: (N = 24; treatment: n = 11, control: n = 13); cycle 2 (N =23; treatment: n = 11, control: n = 12); and cycle 3 (N = 18; treatment: n = 8, control: n= 10). The age of participants ranged from 10to 13.5 years (mean = 11.4 years). All participants received a \$10 gift certificate to a local bookstore for participating in the study. One student from each of the 3 cycles was also randomly selected to receive a \$100 gift certificate to the bookstore.

#### **RESULTS**

Data were analyzed using SPSS 10.0 for ANCOVA, with the pretest scores as the covariates. Results indicated significant differences on 4 of the 6 subscales including perceived social acceptance, F(1, 65) = 14.33, p = .000, perceived athletic competence, F(1,(65) = 5.27, p = .025, perceived physical appearance, F(1, 65) = 12.45, p = .001, and perceived global self-worth, F(1, 65) = 26.61, p = .000 with a power of .999, when comparing the treatment and control groups. While not significant, the mean scores of perceived scholastic competence and perceived behavioral conduct were higher in the treatment group than in the control group.

#### **DISCUSSION**

The number of children being diagnosed with ADHD continues to increase. With the uncertainty of the effects of long-term medication usage and the paucity of evaluated school nursing interventions to help children with ADHD, innovative nursing interventions must be developed, implemented, and evaluated. The results of this study indicate that the Frame "STARS" support group curriculum<sup>28</sup> significantly increased perceptions of social acceptance, physical appearance, athletic competence, and global selfworth in preadolescents with ADHD. The curriculum was easy to use, inexpensive, and targeted the perceived areas of weakness as described by Dumas and Pelletier.<sup>13</sup> The support group concept, with children helping children, initiated dynamic conversation as the participants creatively problemsolved and developed solutions to their difficulties. The role of the school nurse, as facilitator of the group, is consistent with the Roy Adaptation Model. The nurse's role is one of interaction directly with the patient. 15 One limitation of this study is its lack of a placebo control group, to control for the possible effect of attention and group involvement. Other limitations include the lack of a more representative sample, multiple sites, and the

examination of other potential mediating factors (eg, anxiety and depression).

Char Count= 0

#### **CONCLUSION**

Because of the increasing number of children being diagnosed with ADHD, school nursing interventions for these children need to be developed, implemented, and evaluated. This study examined the effectiveness of the Frame STARS support group curriculum.28 This curriculum was found to significantly increase perceptions of selfworth in children diagnosed with ADHD. These findings appear to support the Frame model of Preadolescent Empowerment from which the curriculum was developed. The use of this Model may have a positive, life-long impact on children with ADHD.

Future research is needed to examine the long-term effects of this intervention, as well as to define the most effective parameters of this intervention including the number of facilitators, training, and cost/benefit ratios.

#### REFERENCES

- 1. National Institutes of Health. National Institute of Health Consensus Development Conference Statement: diagnosis and treatment of ADHD. J Am Acad Child Adolesc Psychiatry. 2000;9:182-193.
- 2. Diller L. Running on Ritalin: A Physician Reflects on Children, Society and Performance in a Pill. New York: Bantam: 1998.
- 3. Hoagwood H, Kelleher K, Feil M, Comer D. Treatment services for children with ADHD: a national perspective. J Am Acad Child Adolesc Psychiatry. 2000;39:198-206.
- 4. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed. Washington, DC: American Psychiatric Association;
- 5. Mercugliano M. What is ADHD? Pediatr Clin North Am. 1999;46:831-843.
- 6. Wagner B. Attention deficit hyperactivity disorder: current concepts and underlying mechanisms. J Child Adolesc Psychiatr Nurs. 2000;13:113-124.
- 7. Kendall J. Outlasting disruption: the process of reinvestment in families with ADHD children. Qual Health Res. 2000;8:839-857.
- 8. Breggin P. Reclaiming our Children: A Healing Plan for a Nation in Crisis. Cambridge, UK: Perseus; 1999.
- 9. Stein D. Ritalin is not the Answer. San Francisco, Calif: Jossey-Bass Publishers; 1999.
- 10. Long N, Rickert V, Ashcroft E. Bibliotherapy as an adjunct to stimulant medication in the treatment of ADHD. J Pediatr Health Care. 1993;7:82-88.
- 11. Harter S. The Construction of the Self: A Developmental Perspective. New York: Guilford; 1999.
- 12. Overbay J, Purath J. Self-concept and health status in elementary school-aged children. Issues compr Pediatr Nurs. 1997;20:89-101.
- 13. Dumas D, Pelletier L. Perceptions in hyperactive children. MCN. 1999;24:12-19.
- 14. Harter S. Manual for the Self-Perception for Children. Denver, Colo: University of Denver; 1985.

- 15. Roy C, Andrews H. The Roy Adaptation Model. 2nd ed. Stamford, Conn: Appleton & Lange; 1999
- 16. Murrell K. The development of a theory of empowerment: rethinking power for organization development. Org Dev J. 1985;3:34-38.
- 17. Murrell K, Meredith M. Empowering Employees. New York: McGraw Hill: 2000.
- 18. Vogt J, Murrell K. Empowerment in Organizations: How to Spark Exceptional Performance. San Diego: Pfeiffer: 1990.
- 19. Will S. IHP: attention deficit hyperactivity disorder. In: Haas et al, eds. The School Nurse's Book of Individualized Healthcare Plans. North Branch, Mn: Sunrise River Press; 2000.
- 20. Barkley R. Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment. New York: Guilford Press; 1990.
- 21. Mason D, Backer B, Georges C. Towards a feminist model for the political empowerment of nurses. Image J Nurs Scholarsh. 1991;23:72-77.
- 22. Tones B. Health education and the ideology of health promotion: a review of alternative approaches. Health Educ Res. 1986;1:3-12.
- 23. Rodwell C. An analysis of the concept of empowerment. J Adv Nurs. 1996;23:305-313.
- 24. McLean A. Empowerment and the psychiatric consumer/ex-patient movement in the United States: contradictions, crisis and change. Soc Sci Med. 1995:8:1053-1071.
- 25. Ryles S. A concept analysis of empowerment: its relationship to mental health nursing. J Adv Nurs. 1999;29:600-607.
- 26. Hennessy-Harstad E. Empowering adolescents with asthma to take control through adaptation. J Pediatr Health Care. 1999;13:273-277.
- 27. Hawks J. Empowerment in nursing education: concept analysis and application to philosophy, learning, and instruction. J Adv Nurs. 1992;17:609-618.
- 28. Frame K. The "STARS" manual. Unpublished. 2001.