# Rehabilitation for Homeless Adolescent Substance Abusers at a Halfway House in Korea

Myungsun Hyun, RN, PhD<sup>1</sup>, Mia Seo, RN, PhD<sup>2</sup>

- *Purpose.* The purpose of this study was to examine the effects of a rehabilitation program on hope and self-efficacy in a sample of homeless adolescent substance abusers at a halfway house in Seoul, Korea.
- *Methods.* Five residents of a halfway house were provided with a 16-week rehabilitation program based on a cognitive-behavioral approach. To evaluate the effectiveness of the program, this study used a single-case experimental design with the variables hope and self-efficacy being measured at pre-, post-, and follow-up tests.
- *Results.* While three participants showed considerable positive changes in hope and self-efficacy after the program, two participants did not show any positive changes. Despite this lack of consistent patterns in the effectiveness of the rehabilitation program, there was a qualitative change in social status (such as academic and work status) for the participants at the follow-up test.
- *Conclusion.* A rehabilitation program based on a cognitive-behavioral approach may improve the hope and selfefficacy of homeless adolescent substance abusers at a halfway house and help them to reintegrate into society.

Key Words: Rehabilitation program; Homeless adolescent substance abusers

## **INTRODUCTION**

Homeless youth are vulnerable to serious health and social problems (Greenblatt & Robertson, 1993), with substance abuse being recognized as one of the major problems (Robertson, Koegel, & Ferguson, 1989) affecting large numbers in this group (Greene, Ennett, & Ringwalt, 1997; Kipke, Montgomery, & MacKenzie, 1991). Substance abuse has also been recognized as exacerbating other problems experienced by youth as a result of leaving home, such as depression, suicide, and illegal activities (Greenblatt & Robertson, 1993). people experience a self-perpetuating cycle of hopelessness, low self-efficacy, low self-esteem, and depression because of the effects of their behavior on relationships, material possessions, and the esteem they receive from society. Hopelessness is a particularly serious problem in homeless youth, in that they experience an inability to seek or receive assistance while working toward breaking out of their homeless state and setting goals in their life (Tollett & Thomas, 1995).

Botvin, Baker, Dusenbury, Tortu, and Botvin (1990) reported that substance-abuse behavior was mediated by intrapersonal factors such as cognition, attitudes, and expectation. They also suggested that self-efficacy was an important cognitive factor for substance abusers because

Tollett and Thomas (1995) reported that homeless

Corresponding author: Myungsun Hyun, RN, PhD, Division of Nursing Science, School of Medicine, Ajou University,

San 5, Wonchon-dong, Paldal-gu, Suwon 442-721, Korea.

<sup>1.</sup> Assistant professor, Division of Nursing Science, School of Medicine, Ajou university

<sup>2.</sup> Instructor, Seoul Cyber University

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Tel: 82-31-219-5156 Fax: 82-31-219-5094

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it might determine the general susceptibility to stressful situations and coping behavior in a variety of life situations. Nyamathi (1991) claimed that self-efficacy strongly influenced stress in the daily lives of homeless youth. Accordingly, improving self-efficacy should be recognized as an important psychological resource for reintegrating homeless youth into society.

Several investigators have attempted to develop intervention programs for homeless people, but most of these have focused on homeless veterans rather than homeless youth. Conrad et al. (1998) developed a case-managed residential-care program for homeless chemically dependent veterans, and Tollett and Thomas (1995) developed a program targeted at instilling hope in homeless veterans.

Jenson, Howard, and Yaffe (1995) reported that socialskill training has been widely used for adolescent substance abusers. Recently, the cognitive-behavioral (CB) approach has been considered effective (Ouimette, Finney, & Moos, 1997) for these youth. Timko, Lesar, Engelbrekt, and Moos (2000) suggested that community residential facilities were assuming a larger role in the care for substance abusers. Also, Dusenbury, Khuri, and Millman (1992) indicated that the drug-free environment provided by community residential facilities, such as halfway houses could teach substance abusers how to live in a healthy way.

Runaway and homeless youth as well as adolescent substance abusers represent a growing social problem in Korea; therefore, several investigators have attempted to develop programs for this group in Korea. Most of them have focused on school-based prevention programs, with few reports targeting high-risk adolescents such as homeless adolescent substance abusers. Homeless adolescent substance abusers are in desperate need of health-care services (Rosenheck & Gallup, 1991). Rehabilitation programs for adolescent substance abusers who reside in community facilities such as halfway houses are needed urgently in Korea. Therefore, the purpose of this study was to develop a rehabilitation program for homeless adolescent substance abusers at a halfway house, and to examine the effectiveness of the program on a case-by-case basis. The present study also acted as a pilot study to determine the feasibility of providing a 16week long-term rehabilitation program at a halfway house.

## **METHODS**

#### Design

This study used a single-case experimental design with pre-, post-, and follow-up tests to evaluate the effectiveness of the rehabilitation program.

#### Setting

The study was conducted at an urban halfway house in Seoul (New Fountain Healing Community) - this facility is the only halfway house for adolescent substance abusers in Korea. Only adolescents who are runaway males and have a problem with substance abuse are eligible for residence at the facility, and those with multiple diagnostic problems are referred to other facilities. Residents in the facility are referred from counseling centers, shelters, or the YMCA. The length of residence is not limited - residents can stay as long as they want. There are two staff members (not health-care professionals), and the facility is homelike and informal. The ultimate goal of the facility is to help adolescents rehabilitate, but the facility does not yet have organized and systematic rehabilitation programs.

#### Sample

All adolescents who resided at this halfway house were eligible to participate in the study. The researcher described the study to the director of the facility (a priest), who then gave his permission for it to take place. After the researcher explained the study to the adolescents, written informed consent for research participation was obtained from each of them. The participants were informed that their privacy would be protected and their anonymity maintained.

All of the adolescents (seven) residing at the halfway house were included in the study. Two of these participants did not complete the program: one was referred to a mental health hospital because of a psychiatric problem and the other could not participate because of a personal scheduling problem.

## Instruments

Self-efficacy was measured on the Korean version of the Self-Efficacy Scale (Oh, 1993). This scale is a self-report inventory designed to measure the perceived capacity to perform successfully. The scale has 17 items rated on a five-point Likert scale from 5 (strongly agree) to 1 (strongly disagree); hence the total score ranges from 17 to 85. The scale has been used in previous research with several populations, and its reliability and validity have been verified (Oh, 1993; Tollett & Thomas, 1995). The Cronbach's alpha coefficient of the scale when used in the present study was 0.85 (at pretest).

Hope was measured on the Korean version of the Miller Hope Scale (Lee, 1992), which comprises 40 self-reported items rated on a five-point Likert scale from 5 (strongly agree) to 1 (strongly disagree); hence the total score ranges from 40 to 200. The reliability and validity of the scale have been verified in several clinical and community populations (Holdcraft & Williamson, 1991; Lee, 1992). The Cronbach's alpha coefficient of the scale when used in the present study was 0.90 (at pretest).

## Data collection and data analysis

To examine the effect of the program, pre-, post-, and follow-up tests on self-efficacy and hope were conducted by the staff working in the halfway house. This arrangement was to control for the Hawthorne effect, in that those providing the program were different from those who collected the data (Burns & Grove, 1997). The rehabilitation program was conducted by one of the researchers from March to July 2001. A total of 16 sessions, one session per week, followed the pretest. A posttest was performed immediately after the last session, and a follow-up test was performed at 6 months after the posttest. Following each session through the program, the investigator's personal impressions of the participant and each participant's response were written in a journal. In addition to the journal, the materials provided on which participants wrote during each session were used as data. For the data analysis, the changes in mean scores of hope and self-efficacy and the meaningful qualitative changes between the pre-, post-, and follow-up tests are presented on a case-by-case basis.

# **REHABILITATION PROGRAM**

The rehabilitation program was developed based on a CB approach for addictive behavior developed from a social learning theory and clinical research. An underlying assumption of the CB model is that substance abuse is a learned maladaptive behavior. The main purpose of the program was to teach ways of healthy living, with a particular emphasis on increasing the self-efficacy and hope of homeless adolescent substance abusers.

The program consisted of six parts (16 sessions): opening, raising self-consciousness, identifying high-risk situations, developing coping strategies, education, and closing (Table 1). The sessions were conducted weekly and were provided by one of the investigators: a psychiatric nursing professor with experience counseling adolescent substance abusers and working in a psychiatric unit. Each session lasted approximately 50 minutes and was conducted in a quiet room allocated to the program. To facilitate each participant's participation, during the session the researcher prepared the material according to each session's theme. Each session was structured into

Table 1	Rehabilitation	Program
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	Session theme	Content of session
Ι	Opening	<ol> <li>General orientation</li> <li>Self-introduction</li> </ol>
II	Raising self-consciousness	<ol> <li>Drawing a lifeline</li> <li>Reviewing and reflecting on oneself</li> <li>Writing an autobiography</li> </ol>
III	Identifying high-risk situations	<ol> <li>Journal I of high-risk intrapersonal situations (negative emotional states)</li> <li>Journal II of high-risk intrapersonal situations (cognitive distortions)</li> <li>Journal III of high-risk interpersonal situations</li> </ol>
IV	Developing coping strategies	<ul><li>9. Management of negative emotional state</li><li>10. Management of stress</li><li>11. Cognitive reframing</li><li>12. Developing a supportive network</li></ul>
V	Education	13. Drugs 14. Sexuality
VI	Closing	15. Planning for the future life 16. Writing a letter to a significant other

five parts: starting with a warm up, explaining the objectives of the current session, filling out the material, presenting and sharing information with each other, and ending with a summary.

The opening part of the program consisted of two sessions: in session 1, the leader provided general orientation to the program such as the purpose of the program, meeting time and frequency, maintenance of confidentiality; and session 2 focused on introducing oneself to the other members to help understand each other. Each participant described their character, strengths, and things they liked and disliked. By self-identifying strengths or assets, they were directed to search for a reason to hope (Tollett & Thomas, 1995). When each member talked about themselves, other members listened carefully and gave their opinion.

The theme of part II was raising self-consciousness, and it consisted of three sessions. Participants were guided towards enhancing hope and self-efficacy through recalling something in their life of which they felt proud and successful, recognizing their good characteristics in a social context, and having a time to confront unpleasantness or trauma in their life (Miller, 1985; Sherer et al., 1982). Session 3 was aimed toward recalling the past life and roughly drawing a lifeline. This session directed them to recall the most satisfying times and successful experiences of their lives. Through this activity the participants can see and think about their lives at one time and experience both positive and negative feelings regarding the past and present. It is also helpful to think about where the life-line can be placed in the future and future orientation. Session 4 focused on reviewing their characteristics recognized by others in a social context. In this session, all members were asked to list on the material provided other member's good and bad characteristics in turn, and then they read it. Session 5 involved writing an autobiography. This session allowed participants to review their past lives and to think about their relationships with their families and friends, and the reasons why they used drugs and ran away from home.

The theme of part III was identifying high-risk situations, and it also consisted of three sessions. The focus of this part was to identify intra- and interpersonal situations that could affect the participants negatively and lead them to problem behaviors. Session 6 and 7 were aimed at identifying thought distortions associated with negative emotional states. Thus, session 6 focused on identifying negative emotional states. In this session each participant was asked to describe a time when they were angry with themselves or others during the previous week. Session 7 focused on identifying distorted thoughts that led them to negative emotions and unhealthy behaviors. Session 8 focused on identifying high-risk interpersonal situations that also affected them.

The theme of part IV was developing coping strategies, and it consisted of four sessions. Session 9 focused on the management of negative emotions. The participants were guided to write down on the worksheet how they had dealt with anger in the past and how effective it was for them. They also were encouraged to discuss more effective and adaptive individual strategies they could use in the future. Session 10 was intended to teach healthier strategies for stress management. Physical activity was planned, and the participants spent time playing outdoor sports. In session 11, involving cognitive reframing, they were given time to reframe negative thoughts identified during the previous session into more healthy positive thoughts. Session 12 focused on developing a supportive network, so they were guided to list their friends or significant others who could provide them with support. In addition, they were asked to discuss the importance of a supportive network in their lives. Developing coping strategies and maintaining supportive relationships would inspire hope and help to develop self-efficacy (Botvin et al., 1990; Miller, 1985).

The theme of part V was education about drugs and adolescent sexuality, and it consisted of two sessions. Session 13 addressed why people use drugs and the effects and consequences of drug abuse. For session 14 the participants watched the videotape - adolescent sexuality, involving sexual maturity, sexual need, and healthy ways to satisfy sexual need.

Part VI consisted of two closing sessions. Session 15 focused on planning for the future life. The participants were directed to imagine a future-life picture and to present their vision to the class. Imagining a future-life picture allowed them to think about and set goals for their lives, and thereby helped them to have hope in their future lives. Session 16 involved writing a letter to oneself or a significant other, which helped them to think deeply about themselves and their life. The work helped them to enhance their self-competence for resolving problems and created hope for a better future.

## **RESULTS**

The age of the participants ranged from 16 to 19 years, with a mean of 17.4 years. The substances they had used were cigarettes, alcohol, ether, glue, or Romilar. None of the participants exhibited dependency on the substances used. Three of them had graduated from elementary school, one had dropped out of middle school, and one had graduated from middle school. The age at the onset of substance abuse ranged from 8 to 12 years, and the age at the time they first ran away ranged from 7 to 13 years. The participants' backgrounds and histories are listed in Table 2. The changes in mean scores on hope and self-efficacy between the pre, post, and follow-up tests for the total participants are shown in Figure 1 and 2. In addition, a description of how the program affected and assisted the participants is given below, on a caseby-case basis.

## Participant A

Participant A was 17 years old and had been at the halfway house for 21 months. Before entering this facility he had stayed at a shelter, and was referred to the halfway house by shelter staff. His parents divorced when he was 10 years old, and after his father remarried

his stepmother physically abused him; moreover, she refused to live with him. He repeatedly ran away from home from the age of 10 years, and used cigarettes, ether, and glue. The staff at the halfway house described him as affectionate and sociable.

He became engaged in the program from the beginning of the first session. When he was asked to identify his strengths during the opening sessions, he described his sociable and affectionate character. As with self-identifying his strengths in the beginning session, he was directed to search for a reason to hope. When he was guided to recall something in his life of which he felt proud and successful, he stated he felt proud of 'himself' because he thought he had grown well in spite of adversity. When he was then asked to confront unpleasantness and trauma in his life, he was agreeable and described openly his parents' divorce and his stepmother's abuse. With these sessions he reported he became aware of his situation, that is, life at home was intolerable and he should find another chance for survival if he could not live with his parents. In the session involving the identification of high-risk situations, he could identify his negative emotions and describe them in detail. He stated, "I'm very upset at myself when I feel confused with myself and I lose trust in myself." He also stated, "I'm upset with others when I feel others do not understand and accept

Participant	Age	Education	Age at onset of substance abuse	Substances used	Age at first runaway
А	17 years	Graduated from Elementary school	10 years	Ether, glue, Cigarettes	10 years
В	19 years	Graduated from Elementary school	10 years	Ether, glue, Romilar, Cigarettes	12 years
С	18 years	Graduated from middle school	12 years	Alcohol, Cigarettes	13 years
D	16 years	Graduated from Elementary school	11 years	Glue, Cigarettes	7 years
Е	17 years	Dropped out of middle school	8 years	Alcohol, Cigarettes	8 years

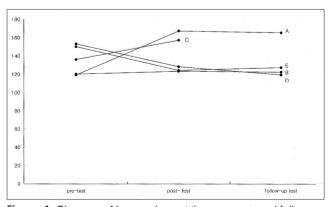


Figure 1. Changes of hope values at the pre, post, and follow-up tests.

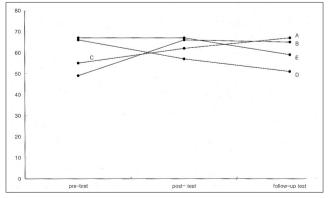


Figure 2. Changes of self-efficacy at the pre, post, and follow-up tests.

me." This session was directed at helping him to reframe such negative thoughts more positively and expanding the coping repertoire. In the final part of the program, when he was guided to write down plans for the future, he realistically listed his expectations and plans for his future life. Such future orientation reflects hopefulness for the life (Herth, 1998).

His scores for hope and self-efficacy at the pre-, post-, and follow-up tests are listed in Table 3. At the posttest these scores were greatly improved, and at the 6-month follow-up they were approximately maintained. During the program he seemed to enjoy the program and he participated actively in each session. The part of selfidentifying, developing coping strategies, and raising self-consciousness in the program helped the participant promote hope and self-efficacy. Particularly, increasing self-efficacy was expressed as the tendency to trust his own judgment and actions taken on his own behalf, and increasing hope was reflected as having something to accomplish. Therefore, he reported that he began to study for the certificate examination for middle school graduation at an educational institution. He reported that he recognized that he should study more for a better future life and that he felt satisfaction when studying. He said, "I feel that I'm taking care of myself now better than I ever have in my life."

#### Participant B

Participant B was 19 years old and had been at the halfway house for 29 months. He began running away repeatedly when he was 12 years old because of his parents' physical abuse, and was brought to the Child Counseling Center during one of these episodes. He was referred from there to the halfway house because of his problem with substance abuse. He began smoking cigarettes at the age of 10 years, and had a history of sniffing glue, ether, and Romilar. His parents were still alive but he did not know where they lived. The staff at the halfway house described him as a flexible and cooperative person.

During the opening session he showed concern about the program. While he identified his strength as an amicable and affable character in the opening part, in the part involving the raising of self-consciousness he was reluctant to confront the unpleasantness and trauma in his life. He said, "This is the first time to talk about that bad thing in my life." In the part on identifying high-risk situations, he described honestly his negative emotions and thoughts. He expressed fear of being negatively judged by others. He stated, "I'm very upset and I feel frustrated when I am compared with others." During the session on planning for the future, he expressed that he had a more positive view (i.e., "I want to go to school and then work to earn money to live without other's help").

Table 3 shows that at the posttest his scores for hope and self-efficacy were somewhat improved, and at the 6month follow-up these scores were approximately maintained. Although he was a little defensive about self-disclosure in the self-awareness session, this chance to confront reality helped him to promote his self-efficacy and hope. Such promoting self-efficacy and hope led him to engage in his life with future orientation, so he began to study for the certificate examination for middle school graduation at an educational institute. He reported that he felt happiness when studying, although he found it difficult to concentrate.

#### Participant C

Participant C was 18 years old and had been at the halfway house for 2 months. He was brought to the Child Counseling Center when wandering the street after running away from home. He was referred from there to the halfway house because he had a problem with substance abuse. His mother ran away from home when he was 5 years old, and after his father remarried

Table 3. Hope and Self-efficacy \	Values at the Pre	. Post-, and Follow-up T	ests
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		Participant A	Participant B	Participant C	Participant D	Participant E
Hope	Pretest	119	120	136	153	150
	Posttest	167	123	157	128	124
	Follow-up	165	122	*	119	127
Self-efficacy	Pretest	55	49	55	66	67
	Posttest	62	66	62	57	67
	Follow-up	67	65	*	51	59

\* The participant was not available at the time of follow-up test because he left the halfway house after the program.

he had lived in his uncle's home. Since the age of 13 years he repeatedly ran away due to his uncle's physical abuse. He began smoking cigarettes and drinking alcohol at the age of 12 years. He appeared a cheerful and lively person.

During the opening session, he described an optimistic and cheerful character as his main strength. When he was guided to confront unpleasantness in his life, he described openly the trauma of his mother leaving home. He stated, "When my mom disappeared from home, I was fearful and I felt my mom left me alone." and "I thought my mom's running away meant rejection of me." As with confronting trauma in his life, he was guided to enhancing hope and self-efficacy (Miller, 1985; Sherer et al., 1982). In the part on developing strategies, he listed healthier strategies that could be used in the future. He participated actively in physical activity outside and also enjoyed the education sessions, especially that on adolescent sexuality. When he was asked to list a supportive network for himself, he listed close friends who would support him. He said, "I have many people who can help me, for example a priest, counselor, and friends etc. During the session on planning for the future, he envisioned expectations, hopes, and dreams about a future with a sincere attitude, and stated that he would work towards his future goals.

As table 3 shows at the posttest his scores for hope and self-efficacy were improved, he expressed his developing self-awareness related to his dysfunctional family and trauma in his life through the program. With growing self-efficacy, he expressed, "Over time I came to understand what I have to do and how I'm supposed to deal with it." Also, hopefulness for him was energized by the expectations that are achievable in the future. After completing the program he left the halfway house and started working at a gas station. He reported that he felt satisfaction about this work because he could earn money.

## Participant D

Participant D was 16 years old and had been at the halfway house for 25 months. He had run away from home at the age of 7 years due to his parents' physical abuse and since has been homeless and has had no contact with his family. He was brought to the Child Counseling Center when he was begging on the street, and was referred from there to the halfway house. He began smoking cigarettes and inhaling glue at the age of 11 years. The long periods of his homelessness had made him very exhausted, impoverished, and powerless. He also seemed to have no base in reality and to be cognitively impaired. He appeared to have no interest in the program, being easily distracted and reluctant to respond. When he was asked to identify his strengths, he responded that he could not find any strengths in himself. He found it hard to identify something of which he felt proud and successful in his life. He also avoided confronting unpleasantness and trauma in his life. He stated, "I can't remember about my past time and I have nothing to tell you." In the part on identifying high-risk situations and developing coping strategies, he was not sincere and he did not respond to the guidance provided.

Table 3 shows that at the pretest his scores for hope and self-efficacy were the highest among participants, but this was possibly explained by his lack of a reality base. Because he had been abandoned to an environment that had not supported healthy growth and development for a long time, he was delayed in normal growth and development. Furthermore, he distrusted everyone because significant adults in his lives had violated his trust in the past, so it was hard to establish a relationship and communicate with him. Through the program, he seemed to grapple with self-awareness and a developing sense of self. At the post- and follow-up tests, these scores were lower than at the pretest, but it suggests that he could have a more realistic view where he was going in his life.

At the 6-month follow-up test, he began going to an educational institute for the certification examination for middle school graduation. The participants could have a close relationship with the researcher as well as the other participants through the program, so this experience could help the participant gain hope realistically (Miller, 1985). This change in academic status reflects he could have future orientation and future goals - hope. Although he was initially anxious about learning, he reported that he had adjusted to studying.

#### Participant E

Participant E was 17 years old and had been at the halfway house for 2 months since being referred there by the Child Counseling Center. His mother died when he was 5 years old, and his father remarried, but his stepmother ran away from home. He ran away from home at the age of 8 years because of his father's physical abuse and since then he has had no contact with his family. He had often worked in a factory or been homeless. He began smoking cigarettes and drinking alcohol at the age of 8 years. He appeared shy and passive, and occasionally angry.

During the session on self-introduction, he stated that he liked to dance and could dance very well. This asset constitutes a simple thing - the ability to dance - and did not represent an internal asset. This suggests that the program was limited in promoting self-efficacy and hope for him. In the part on identifying high-risk situations, he found it hard to describe his negative emotional states and thoughts. He stated that he had no significant friends and no supportive network. In the part on planning for the future, he responded that he was not interested in his future. He stated, "Even though I have something to do and I have some vision, what can I do for that now?" and " It is of no use for me to have some vision in this situation."

Table 3 shows that at the posttest his scores of self-efficacy had not changed and his scores for hope had decreased. The finding can be explained by the fact that he was defensive about self-awareness and he was not responsive to the program. At the 6-month follow-up test, the scores for hope had increased slightly and the scores of self-efficacy had decreased slightly. This finding suggests that more time is required in order to identify the effect of the program. He had begun going to an educational institute for finishing a middle school course, although he was initially against learning.

## DISCUSSION

While the changes in these case studies were not consistent, the findings are suggestive of the effectiveness of a program based on a CB approach in promoting hope and self-efficacy for homeless adolescent substance abusers at a halfway house. In addition, the effect of the program differed in individual cases.

At the pretest, hope (mean=135.6) for the participants of the present study were lower than those of the chemically dependent adult patients (mean=145.3) in the study of Holdcraft and Williamson (1991) and the homeless veterans (mean=138.55) in the study of Tollett and Thomas (1995), suggesting that our participants were in a state of hopelessness. However, hope for the participants was higher than the patients with hemodialysis (mean=101.8) in the study of Kim (2001), and stroke survivors (mean=117.02) in the study of Kim (2001). This finding suggests that although the homeless participants in this study were in a worse state (Tollett & Thomas, 1995), they were struggling with their adversity and their worse state does not have to be long lasting.

At the pretest, participants D and E showed higher scores for hope than the other participants. Holdcraft and Williamson (1991) pointed out that an overly hopeful attitude at the early stage of treatment could be indicative of denial as a defense mechanism, which might obscure the true level of hope. Therefore, participants D and E may have been defending themselves and denying their realities, which is supported by their scores for hope decreasing at the posttest, possibly reflecting that the denial process was reduced by the sessions (Holdcraft & Williamson, 1991).

Participants A, B, and C showed considerable increases in hope and self-efficacy after the program. They were observed to follow the program actively and were less defensive than the other participants, which probably rendered them more responsive to the program. Participants D and E exhibited no positive changes after the program, there are several possible explanations for this. They had experienced longer periods of homelessness than the other participants, and hence might have been exposed to more high-risk situations. In particular, participant D had been a beggar. Their experiences of high-risk situations might have resulted in psychological trauma (Goodman, Saxe, & Harvey, 1991). In addition, it may be assumed that the longer period of homelessness removed them farther from reality, so that they would require more time to respond to the program than the other participants. These findings suggest that individual profiles are needed, especially since individualized and needs-based services are more efficient in providing rehabilitation programs (Weiner, Abraham, & Lyons, 2001).

Examination of the data at the 6-month follow-up test revealed inconsistency in the effectiveness of the program on hope and self-efficacy. Interestingly, although the effectiveness of the program was not maintained at the follow-up tests, qualitative changes in social status were observed in the participants - four of them had begun studying for the certificate examination for middle school graduation. This finding suggests that the program helped them to reintegrate into society by instilling hope and enhancing self-efficacy because this reflects such a positive change in academic status (DiClemente, Prochaska, & Gibertini, 1985). In addition, the finding that one of them had begun working and earning money after leaving the halfway house also suggests the program may have helped him to reintegrate into society.

Most participants reported that running away from home was due to a domestic factor such as family disruption or family abuse. This finding is consistent with a previous study linking running away to family discord, physical and emotional abuse, and rebellion (Greene, Ennett, & Ringwalt, 1997). A connection to family is important in the recovery of adolescent substance abusers (Show & Anderson, 2000), and the lack of such a connection in most of the participants in the present study might explain why they did not respond well during the program.

Another intention of this study was to determine the feasibility of providing a 16-week program at a halfway house. Kaas and Lewis (1999) pointed out that CB-group interventions should last for at least 10-12 weeks in order to effect changes in cognition and behavior. Even though the program in the present study did not affect all the participants positively, it is likely that the 16-week program was of sufficient duration. Moreover, practitioners should consider the possibility of attrition rates when providing such long-term programs at residential facilities, since in our study the dropout rate was almost 30%.

In the present program, the sessions on physical activity and education about adolescent sexuality were intended to create interest in the participants in the program. Scapillato and Manassis (2002) also suggested that developmental characteristics are important therapeutic factors in adolescent treatment.

There are some limitations to this study. The sample size was very small and there was no control group. This was unavoidable due to there being only one halfway house in Korea, and it makes it difficult to generalize the effect of the program. While the use of a therapeutic community (such as a halfway house) is becoming an increasingly popular modality in treating substance abuse and psychiatric disorders in other countries (DeLeon, 1995), this approach is still at a very early stage in Korea. Another limitation of the present study is that it only involved male adolescents, possibly limiting generalization of the findings to this population. Therefore, future research in this area needs to employ larger samples that include female adolescents and control groups. Future research also needs to involve adolescents with multiple diagnostic problems.

## CONCLUSION

The findings of this study suggest that rehabilitation programs can increase the hope and self-efficacy of homeless adolescent substance abusers at a halfway house. Practitioners are encouraged to consider the development processes of adolescents in developing and providing programs for such homeless substance abusers. The ongoing development and evaluation of rehabilitation programs remain an important challenge for nurses. In addition, from a practical point of view, it may be useful to replicate the rehabilitation program developed in this study in a clinical setting, because of the structured nature of its content.

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