

Effectiveness of Reality Therapy Program for Schizophrenic Patients

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Purpose. The present study aims to verify the effectiveness of the reality therapy for patients with schizophrenia.

Methods. It is designed as a quasi-experimental study by which a nonequivalent control group pretest-posttest is conducted. The test was conducted with 30 patients with schizophrenia who were hospitalized at a mental hospital in South Korea. Fifteen of the patients participated in the reality therapy program while another 15 in the control group. The effects are measured by marking scores in the areas of the locus of control, self-esteem, and problem-focused stress coping of each participant.

Results. The general characteristics and dependent variables related to outcome variables were controlled to be equal between the two groups. It turns out that the internal locus of control, self-esteem, and problem-focused stress coping are statistically significant.

Conclusion. Findings show that the reality therapy caused positive changes in terms of the internal locus of control, self-esteem, and problem-focused stress coping of the observed schizophrenic patients.

Key Words : Reality therapy, Locus of control, Self-esteem, Stress coping

INTRODUCTION

While pharmacological treatment of schizophrenia is necessary for alleviation of psychotic symptoms and prevention of relapse, it is not enough in itself for effective treatment of a majority of patients. It is now generally recognized that effective treatment of schizophrenia requires both biological and psychosocial intervention (Lehman, 1999; Malla et al., 1998). In recent years there have been definite advances in accumulating evidence for the effectiveness of psychosocial interventions (Ross M.G. Norman et al., 2002). Despite the advances that have been made, there is still much work to be done in developing and disseminating interventions to further improve treatment outcome.

Reality Therapy is an effective psychiatric treatment

and it is applicable to all people with psychiatric problems (Glasser, 2003). William Glasser MD, an American Psychiatrist, developed Reality Therapy in the mid-sixties and his techniques, theory and wider applications continue to evolve. Reality Therapy is a method of counseling which teaches people how to manage their own lives, make more effective choices, and how to develop the strength to cope with the stresses and problems of life (Glasser, 1998). The practice of Reality Therapy is an ongoing process made up of two major components: Creating a trusting environment; and using techniques which help a person discover what they really want, reflect on what they are doing now, and create a new plan for fulfilling that 'need' more effectively in the future.

According to Reality Therapy, psychotic symptoms which schizophrenic patients present are thought to be a result of choice to satisfy their needs. Reality Therapy

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puts emphasis on patients' training in self-control and a sense of responsibility to gain more effective control, which satisfies their needs (Kim, 2001). To enhance self-control and responsibility, schizophrenic patients should believe their behaviors are an outcome of their own choice, which controls their life. The power depends on the level of the internal locus of control (Glasser, 1981). It is assumed that a higher internal locus of control might lead to a more effective and constructive behavior.

In the case of schizophrenic patients, despite their desires to have a happy life, they tend to lead a passive and dependent one. They are unable to make decisions even in their own lives, and they believe their rights and privileges are not given, thus they feel helpless and isolated from society. As a consequence of the above perception, most of the patients have continuous reduction of self-esteem and negative self-image (Carpenito, 1995). They finally have reduced capability to adapt to society and tend to withdraw from it. Established research indicates the close relationship between mental illness and self-esteem, and the positive relationship between recovered self-esteem and its treatment (Cheong, 2001; Kim, 2001). In a similar vein, enhanced self-esteem is reported to have a positive impact on the whole treatment procedure (Lee et al, 2004).

In aspects of social adjustment of psychiatric patients, a problem-focused coping strategy is said to be effective in managing symptoms in chronic patients (Mynors-Wallis, 1996). The vulnerability-stress model of schizophrenia has emphasized protective factors, such as personal coping skills and positive appraisal of stress (Ventura and Liberman, 2000). Problem-focused coping entails defining a problem, generating possible solutions, weighing the alternatives, and then taking active steps toward reducing the level of stress.

The purpose of this study was to test the effectiveness of this program for internal locus of control, self-esteem and problem-focused coping skills. It also aimed to present the program as another useful psychiatric rehabilitation method for schizophrenia patients in Korea.

METHODS

Design

A nonequivalent control quasi-experimental design with a pretest and posttest was used.

Subject

The study was conducted in a mental hospital in South Korea. The subjects were people with schizophrenia from inpatient rehabilitation units. The criteria for selecting the patients were as follows: (a) those psychiatric patients with schizophrenia aged between 20 to 45 (b) patients whose acute psychotic symptoms such as hallucination, delusion, withdrawal, emotional inappropriateness etc. were not present (c) those who had no behavioral disorder (violence, self-injury, harm to others etc.) (d) those who were able to communicate and form relationships with others while capable of understanding and giving answers to a battery of tests. The 32 patients who understood the purpose of the study participated. Seventeen were classified in the experimental group, and 15 were placed in the control group. The experimental and control groups had been hospitalized in a different rehabilitation unit. The grouping was based on the criteria of age, sex, marital status and duration of their illness. While the experiment was being undertaken, two patients in the experiment group were discharged from hospital. With those two patients excluded, the final total was 15 in the experiment group.

Instruments

Internal locus of control

Internal locus of control was measured by Inter-External Locus of Control Scale developed by Rotter (1966) and was revised to accommodate Koreans by Cha, Hong, and Kim (1973). It consists of 21 questions, using a forced-choice format, plus six filler questions. Internal statements are paired with external statements. One point is given for each internal statement selected. Scores range from zero (most external) to 15 (most internal). Cronbach's alpha in the study was 0.73.

Self-esteem

Self-esteem was measured by Self-Esteem Questionnaire (SEQ) developed by Rosenberg (1965) and translated by Jon (1974). The inventory consists of 11 items on a 5-point Likert-type scale. Total scores range from 11 to 55 and a higher score indicates a higher self-esteem. Cronbach's alpha in the study was 0.78.

Problem-focused stress coping

Problem-focused stress coping was measured by The Way of Stress Coping Scale developed by Folkman and

Lazarus (1984) and revised appropriately for Koreans by Kim and Lee (1985). The inventory consists of 21 items on a 4-point Likert-type scale. The score ranges from 0 to 63 and a higher score means a higher problem-focused stress coping. Cronbach's alpha in the study was 0.82.

Data collection

The program ran from November 25, 2004 to March 22, 2005. Locus of control, self-esteem, and problem-focused stress coping were tested in both groups, experimental and control, as a pre-test. After the pre-test, the program was conducted exclusively for the experimental group while no treatment was provided for the control group. After finishing all programs, locus of control, self-esteem, and problem-focused stress coping were tested in both of the groups this time as a post-test.

Data analysis

Data collected was analyzed using SPSS/PC 12.0. The Chi-square test and t-test analysis were used to identify the general characteristics and homogeneity of the experimental and control groups. Independent t-test was also used to examine the differences in internal locus of control, self-esteem, and problem-focused stress coping between the two groups.

Group Procedure

The program was provided three times a week for seven weeks. Meetings for the program were held in the group counseling room in hospital and each session ran for 60 minutes. The experimental group was divided into two small groups of people who participated in the program. The researcher led each group. The researcher was a Reality Therapy supervisor who had a specialty in Reality Therapy certificated by The William Glasser Institute and Korea Counseling Center.

This program was run to manage issues like low cognitive capability, poor concentration and attention deficit on the part of the participating patients with schizophrenia. Programs were undertaken using workbooks, and activities such as playing games, drawing, etc. A workbook, which was made by the researchers according to the session process, was given to each participant.

Reality Therapy Program

The Reality Therapy program developed by Kim (2001) is based on the psychiatric rehabilitation program

to focus on coping with real situations. To run this program effectively, Kim (2001) adapted the program to the needs of schizophrenic patients in Korea. The program consisted of 4 different sequential parts: Basic needs, gaps between Quality World and the real world, Total Behavior, and the choice of effective behavior, for a total of twenty-one sessions (Table 1). Mainly, it is a training course to teach an effective behavior choice through Reality Therapy Program.

1) Part I : Basic Needs and Choice of Behavior

This part was to explain Glasser's Five Basic Needs, which are love or belonging, achievement, freedom, fun, and survival of the participants. The main purpose of this part was to make participants find out how, when, and where they feel satisfied with the five basic needs. Reality Therapy specialist advised them plan on how they could become more satisfied with the five basic needs.

2) Part II : The differences between Quality World and Perceived World, and Choice of Behavior

The part II was designed to help the participants understand the differences between a quality world and perceived world. Quality world is made up of specific pictures that portray, more than anything else we know, the best ways to satisfy one or more of our basic needs (Glasser, 1998).

The part II asked the participants to draw mental picture albums and to consider whether those were attainable or not. Reality Therapy specialist helped them plan how they could become more satisfied in good balance between quality world and perceived world.

3) Part III : Total Behavior & Choice of Behavior

This part was to learn Glasser's 'Total behavior car'. Total behavior consists of the four components: acting, thinking, feeling, and the physiology associated with all our actions, thoughts, and feelings. The participants identify total behavior that they like/dislike. The goal of this part was to help participants learn to take more effective control of their life through choosing total behavior.

4) Part IV : Choice of Effective Behavior

The Part IV taught the participants how to plan through WDEP (Want, Doing, Evaluation, and Planning). It was emphasized that they should plan ways in which they do not interfere with others' desires. In the closing period, all participants expressed the positive behavior choice, what they had learned, and how they perceived their future.

Limitation of study

With the test conducted among small numbers of patients, the results cannot be generalized. The environment and settings were also restricted to set up plans and to carry out tasks, since they were in-patients.

Additionally, during the experimental period, antipsychotic and anticholinergic drugs, which might affect cognitive functioning in schizophrenic patients, could not be controlled

Table 1. Reality Therapy Program

Part (Session)	Subject
Part I : Basic Needs and Choice of Behavior	
	(1) How are we all alike and how are we different? (Orientation)
	(2) What needs do we have?
	(3) How do we meet the basic needs?
	(4) Which needs could be met in a day?
	(5) What can we do to meet such needs?
Part II : The Differences between Quality World and Perceived World, and Choice of Behavior	
	(6) Who do I want to be?
	(7) What do my loved ones want me to be?
	(8) What makes me happy?
	(9) Is the picture in your quality world a realistic one?
Part III : Total Behavior and Choice of Behavior	
	(10) What consist of all the behaviors?
	(11) Signs to be shown when I am happy/ unhappy.
	(12) Behaviors that I like/dislike.
	(13) Best choice of behavior.
	(14) Who is in the driver's seat of your total behavior car?
Part IV : Choice of Effective Behavior	
	(15) Things I would like to discard, Things I would like to change about myself.
	(16) Have you ever tried to excuse yourself?
	(17) Obstacles to my life.
	(18) Negative choice is the beginning of misery.
	(19) Go towards the better world.
	(20) Positive choice is the beginning of happiness
	(21) Completion.

Table 2. General Characteristics of the Subjects

	Exp. (n = 15)	Cont. (n = 15)	χ^2/t	p
Age (years)	32.87 \pm 4.64	32.40 \pm 4.34	.283	.779
Gender				
Male	9 (60.0)	8 (53.3)	.136	.713
Female	6 (40.0)	7 (46.7)		
Religion				
Have	10 (66.7)	9 (60.0)	.144	.705
Have not	5 (33.3)	6 (40.0)		
Education level				
Above college	8 (53.3)	7 (46.7)	.133	.715
Below high school	7 (46.7)	8 (53.3)		
Marital status				
Married	3 (20.0)	5 (33.3)	.682	.409
Unmarried	12 (80.0)	10 (66.7)		
Onset age of disorder	21.07 \pm 4.06	20.80 \pm 4.39	.173	.864
Prevalence period	10.20 \pm 6.33	10.27 \pm 3.99	-.035	.973
Number of hospitalization	5.40 \pm 3.04	5.93 \pm 2.69	-.509	.615
Locus of control	8.07 \pm 2.19	7.87 \pm 2.90	.213	.833
Self-esteem	26.80 \pm 6.98	27.53 \pm 6.57	-.296	.769
Stress coping	22.80 \pm 12.24	23.07 \pm 9.57	.369	.715

Exp.: Experimental group, Cont.: Control group, Values are mean \pm SD or N (%)

RESULTS

General characteristics of the subjects

The general characteristics of the experimental and the control groups are shown in Table 1. The mean age of the experimental group was 32.87 years and that of the control group was 32.40 years. The male participants accounted for 60.0% of the experimental group and 53.3% of the control group. The mean prevalence period was 10.20 years in the experimental group and 10.27 years in the control group. The equivalency of both groups was tested. There were no significant differences ($p>0.05$) between the two groups in terms of variables such as general characteristic, internal locus of control, self-esteem, and problem-focused stress coping. Therefore, the two groups appeared to be homogenous before the experiment.

Internal locus of control

The experiment showed that scores of the internal locus of control increased significantly in the experimental group after intervention compared to the pre-test score. By contrast, the control group showed a slight reduction of scores after intervention, compared to the pre-test. The difference was not statistically significant. In addition, significant differences were observed between the two groups ($p= .000$). This confirmed that the Reality Therapy program improved the internal locus of control

of patients with schizophrenia (Table 3).

Self-esteem

The scores of self-esteem went up significantly in the experimental group after intervention compared to the pre-test score. However, the control group showed lower scores after intervention in comparison to the pre-test while the differences were not major. In general, significant differences were observed between the experimental and the control groups ($p= .012$). It can be taken as evidence to argue that the Reality Therapy Program for patients with schizophrenia will be effective to improve their self-esteem (Table 4).

Problem-focused stress coping

Scores of the problem-focused stress coping increased significantly in the experimental group after intervention, compared to the pre-test score. The control group showed a slight reduction of scores after intervention, compared to the pre-test. In addition, significant differences were observed between the two groups ($p= .004$). This suggests the possibility that the reality therapy program improved the problem-focused stress coping of schizophrenic patients (Table 5).

DISCUSSION

It is estimated that reality therapy has some proven effects for enhancing the locus of control, self-esteem and

Table 3. Comparison of Internal Locus of Control between Two Groups

Group	Pre-test	Post-test	Difference*	t	p
Exp.	8.07 ±2.19	11.47 ±1.46	3.40 ±1.40	5.442	.000
Cont.	7.87 ±2.90	7.47 ±2.45	-.40 ±2.16		

Exp.: Experimental group (n = 15), Cont.: Control group (n = 15), *Difference: posttest-pretest, Values are mean ±SD

Table 4. Comparison of Self-esteem between Two Groups

Group	Pre-test	Post-test	Difference*	t	p
Exp.	26.80 ±6.98	33.67 ±7.47	6.87 ±3.31	2.673	.012
Cont.	27.53 ±6.57	26.93 ±6.27	-.60 ±1.24		

Exp.: Experimental group (n = 15), Cont.: Control group (n = 15), *Difference: posttest-pretest, Values are mean ±SD

Table 5. Comparison of Problem-focused Stress Coping between Two Groups

Group	Pre-test	Post-test	Difference*	t	p
Exp.	22.80 ±12.24	31.33 ±11.10	8.53 ±14.22	3.181	.004
Cont.	23.07 ±9.57	20.73 ±6.58	-2.33 ±6.60		

Exp.: Experimental group (n = 15), Cont.: Control group (n = 15), *Difference: posttest-pretest, Values are mean ±SD

problem-focused coping skills.

The internal locus of control is positively related to the self-actualization, supporting personal skills and managing stress (Koo, 1998). A high internal locus of control will lead patients to make decisions according to their inner belief and principles, and with a heightened sense of responsibility (Glasser, 1981). Closely related to patients' exploration of inner desires, effective behavior choice and a high sense of responsibility, Reality Therapy will improve the internal locus of control of patients and then will be conducive to symptom management of schizophrenic patients. Results from the current experiment also correspond to the findings of a study conducted by Kim in that a rehabilitation program focused on the reality therapy proved its effects in improving the internal locus of control and leading to more effective behavioral choice (Kim 2001). The findings coincide with other research outcomes concerned with the internal locus of control (Kim, 1996; Kim & Hwang, 2001; Kim, 2002; Yun, 2000). Thus, Reality Therapy could be considered to gain more effective control of schizophrenic patients' life by improving their internal locus of control.

Under therapy, patients can learn how to explore and satisfy their inner needs and desires while receiving reciprocal assistance from the members of a self-help group (Kim, 2001). This study demonstrates the positive effects of self-esteem in schizophrenic patients having participated in an Reality Therapy program. In this respect, the present study shares some similar results with other research - although conducted over different groups of patients at different times - that examined the interconnection between reality therapy and self-esteem (Kim, 2001; Lee, 1997). It also relates to studies on the relationship between a good appearance training and high self-esteem (Yang & Choi, 2000) and connection between therapy recreation and self-esteem (Lee et al, 2004).

These studies indicate, Reality Therapy responds to patients' needs of having the senses of belonging and achievement, and it can be inferred that implementation of the reality therapy will help patients satisfy their needs and have a heightened self-esteem, which in turn will assist them readjust to society. Reality Therapy can enable people feel a stronger sense of achievement with a better control over their life that will subsequently bring about positive changes both in terms of behaviors, emotions and feelings.

Schizophrenic patients with biopsychosocial vulnerability show psychiatric symptoms whenever they experience stressful life events or endure too much tension beyond their coping skill and competence. Occasionally, protective factors such as antipsychotics, proper coping skill and competence can alleviate stress and vulnerability that can cause impairment, functional disability and social handicap. Among these factors, antipsychotic medication is an effective treatment for symptom management but has limited effects for the recovery function (Shon, 2003). To solve this problem, it is considered necessary to develop a treatment that can raise the vulnerability/stress threshold and help to equip patients with better coping skills and competences.

According to the present study, Reality Therapy proved its effectiveness for developing patients' problem-focused coping skill which is an important factor in managing stress. This particular result is also in line with the findings of some other research including Woo's study on mothers with disabled children (Woo, 1994), and Yun's study on parent education program focused on the reality therapy (Yun, 2000). However, it is proved to be slightly different from that of Kim who conducted a rehabilitation program focused on Reality Therapy (Kim, 2001). The difference can be accounted for by the fact that the present research revised and adapted by Kim's program, which set out to deal with the situational factors. Problem-focused coping is designed in an effort to go to the roots of stress by changing patients' troublesome behaviors or troubling conditions. The method endeavors to deal with tensions between problem-solving efforts and environmental conditions (Han, 1996). It is likewise said to be effective for symptom management and prevention of relapse in the case of chronic patients (Mynors-Wallis, 1996).

It can be considered from the above findings that Reality Therapy could assist patients with schizophrenia to have a high internal locus of control and more effective behavior choice. At the same time, it could help those patients who suffer from social withdrawal due to low self-esteem, frustration and failure to recover self-esteem with an improved image and understanding of self. On the other hand, Reality Therapy could enable those patients who have led passive and dependent lives to explore their inner needs and desires. Reality Therapy can also enable people learn how to achieve self worth, cultivate trust in their ability and potential thus empowering them confidence to grow, and motivating them cope

with stress. During the research process, in spite of its effectiveness, some problems were highlighted for example the length of the research period and frequent treatment, which can cause high medical cost. Reality Therapy is self-empowering, and it does not delve into patients' past failures but looks forwards a change of behavior. This study also highlighted the need for further study to be undertaken.

CONCLUSION

This research used a quasi-experimental design with a nonequivalent control group pre-post test in running a Reality Therapy program. A total of 30 schizophrenic patients; 15 in the experimental group and 15 as control group, participated in the study. The results were compared before and after the program in terms of the internal locus of control, self-esteem and problem-focused stress coping factors. The findings of the study point towards the effectiveness of the reality therapy program, as previous studies did. The study demonstrates that those subjects who attended the therapy program reported significant improvement in terms of internal locus of control ($p=.000$), self-esteem ($p=.012$), and problem-focused stress coping ($p=.004$). This indicates that the Reality Therapy brought about positive changes in the experimentees in internal locus of control, self-esteem, and problem-focused stress coping. Therefore it can be said that that reality therapy for patients with schizophrenia works effectively to improve their internal locus of control, self-esteem and problem-focused stress coping. From these findings it can be argued that the Therapy should be further developed and included as a part of psychiatric rehabilitation program. It is all the more timely and opportune given that special emphasis is given to the importance of psychiatric rehabilitation.

In conclusion, I would like to make the following suggestions. With the effectiveness of the Reality Therapy proven for patients with schizophrenia, it would be necessary to move on to further develop the psychiatric rehabilitation program in order to provide it not only in the hospital setting but also in the community. At the same time, to evaluate its effectiveness and consistency, more research needs to be conducted with a larger group of subjects than covered in this study.

References

- Carpenito, L. J. (1995). *Nursing Diagnosis, 6th ed.* Philadelphia: Lippincott Co.
- Cha, J. H., Kong, C. J., & Kim, C. S. (1973). Report on Construction of an Internal- External Scale. *Korean Institute for Research in the Behavior Science*, 263-271.
- Cheong, E. S. (2001). A Theoretical Study on the Application of Choice Theory and Reality Therapy in Korea. *International Journal of Reality Therapy*, 20(2), 8-11.
- Folkman, S., & Lazarus, R. S. (1984). *Stress appraisal and coping*. New York: Springer Pub. Co.
- Glasser, W. (1981). *Station of mind : New directions for reality therapy*. New York: Haper & Row.
- Glasser, W. (1998). *Choice theory*. New York: HaperCollins Publishers.
- Glasser, W. (2003). *Warning: Psychiatry can be hazardous to your mental health*. New York: HaperCollins Publishers.
- Han, K. S. (1996). *Effect of an Integrated Stress Management Program on the Stress Symptoms of Psychophysiological Patients*. Unpublished doctoral dissertation, Yonsei University of Korea, Seoul.
- Jon, B. J. (1974). Self-Esteem: A Test of Its Measurability. *Yonseinonchong*, 11(1), 107-130.
- Kim, J. S. (2001). *The Development and Effect of Psychiatric Rehabilitation Program focused on Reality Therapy for Patients with Schizophrenia*, Unpublished doctoral dissertation, Kyunghee University of Korea, Seoul.
- Kim, J. S. (2002). The Effect of Psychiatric Rehabilitation Program focused on Reality Therapy on the Locus of Control and Psychopathology in Patients with Schizophrenia. *J Korean Acad Psych Mental Health Nurs*, 11(4), 528-537
- Kim, K. S. (1996). *The Effect of Group Reality Therapy on the Self-Esteem and the Personality Traits of the Primary Students*. Unpublished master dissertation, Sogang University of Korea, Seoul.
- Kim, R. I., & Hwang, M. G. (2001). The effect of Internal Control and Achievement Motivation in Group Counseling Based on R.T. *International Journal of Reality Therapy*, 20(2), 12-15.
- Koo, M. O. (1998). The health promoting behaviors depending on the response patterns of HLOC in Korean adults. *J Korean Acad Nurs*, 28(3), 739-750.
- Lee, H. J., Sin, Y. J., Y, Y. J., J, S. H., Lee, J. M., & Han, S. S. (2004). The Effect of the Therapeutic Recreation Program on the Self-esteem, Interpersonal Relationship Change and the Negative Symptoms of Schizophrenic Patients. *Clinical Nursing Research*, 10(1), 160-171.
- Lehman, A. F. (1999). Improving treatment for persons with schizophrenia. *Psychiatr. Q.* 70, 259-272.
- Lee, M. R. (1997). Determinants of health promoting lifestyle of college students. *J Korean Acad Nurs*, 27(1), 156-168.
- Malla, A. K., Norman, R. M. G., McLean, T. S., Cheng, S., Rickwood, A., McIntosh, E., Cortese, L., Diaz, K., Voruganti, L. P. (1998). An integrated medical and psychosocial treatment program for psychotic disorders: Patient characteristics and outcome. *Can J Psychiatry*, 43, 698-705.
- Mynors-Wallis, L. (1996). Problem solving treatment: Evidence for effectiveness and feasibility in primary care. *International J Psychiatry in Medicine*, 26(3), 249-262.
- Rosenberg, M. (1965). *Society and Adolescent Self-Image*.

Princeton N.Y. : Princeton University.

- Ross M. G. Norman, Ashok K. Malla, Terry S. McLean, Elizabeth M. McIntosh, R.W.J. Neufeld, L. Panth Voruganti, L. Cortese (2002). An evaluation of a stress management program for individuals with schizophrenia. *Schizophrenia Research*, 58, 293-303.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), Whole No. 609.
- Shon, K. H. (2003). The effects of medication and symptom management education program based on self efficacy theory for the psychiatric patients. *J Korean Acad Nurs*, 33(8), 1145-52.
- Ventura, J., Liberman, R. P. (2000). Stress and psychosis. In George Fink, M.D. (Eds.), *Encyclopedia of Stress*, vol. III (pp. 316-325). San Diego: Academic Press.
- Woo, A. R. (1994). *Developmental Study of Group Social Work Program Using Reality Therapy*. Unpublished doctoral dissertation, Yonsei University of Korea, Seoul.
- Yang, S., & Choi, Y. S. (2000). Effects of Training Grooming Skills to Chronic Schizophrenic Inpatients on Improving Satisfaction on Self-appearance, Self-esteem and Interpersonal relationship. *J Korean Acad Psych Mental Health Nurs*, 9(3), 376.
- Yun, J. Y. (2000). *Effects of Parents Education Program Based on Reality Therapy on Increasing inter Control Scale and Active Stress-Dealing Style*. Unpublished master dissertation, Pusan University of Korea, Pusan.