The Impact of Health Realization Training on Feelings of Self-Esteem and
Psychological Distress in Mentally Ill Clients

Alliance for Community Care
Santa Clara County Department of Alcohol and Drug Services

Penny Fidler, Ph.D.
Celestine McMahan, M.A.

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Abstract

Participants were 89 adult clients who had a diagnosis of a serious mental illness and were receiving services from the Alliance for Community Care. Alliance for community care is a private, public benefit mental health agency based in the County of Santa Clara. The purpose of this research was to examine the magnitude of the treatment effect of HR training (Cohen, 1988; Kirk, 1996; Thompson, 2000) in a population of clients diagnosed with schizophrenia and major depression. Health Realization training has been used with the following at-risk populations: Residents of low-income urban housing projects and high-risk school children in the Miami-Dade School District. This study employed experimental methodology to assess the impact of HR training, whereas previous studies reported mostly anecdotal information. Mixed-methodology was employed in this research using both quantitative and qualitative data. The design was a repeated-measures, control-group design. The population was selected using convenience sampling, however random assignment to conditions was employed where possible. Participants were tested before and after the training program. The assessments included measures of anxiety, depression, positive affect, self-efficacy, and an assessment of HR principles of self-esteem and emotional control. The posttest was given three months after the Health Realization training ended. The results indicate that the treatment group had significant increases in positive affect and self-efficacy, and significant decreases in anxiety and depression from pretest to posttest. The effect size findings showed that the HR treatment was fairly effective in these populations. The control group had an increase in self-efficacy and a slight increase in positive affect, but there were no significant changes in any other measures from pretest to posttest. The qualitative data consisted of interviews of clients, staff, and HR trainers. The results of the quantitative analysis were supported by the contextual information provided by the interviews.

Health Realization as a model for prevention, intervention and treatment in the mental health field evolved out of research and work begun in the mid 1970's by Dr. Roger Mills and George Pransky. It started as part of a National Institute of Mental Health five-year demonstration grant on primary prevention at the University of Oregon. Dr. Mills was the primary investigator. The model has evolved from numerous clinical, prevention and community empowerment applications. One of the early interventions was implemented in the Modello and homestead housing projects in Miami, Florida in 1987. These programs were successful in empowering individuals and communities to access their innate sense of self-efficacy/self-esteem. The HR training program appeared to be important in evoking the intrinsic motivation of each residents to solve their own personal and community problems. The results of the research indicated that the training program improved the residents' self-esteem and made them more positive about life (Mills, 1995). The HR approach is based on the theoretical principles, which explain how one can utilize their natural inner resources to attain feelings of physical and mental well-being (Mills, 1995).

The study was designed to measure the impact of Health Realization training on clients who were receiving mental health services in the County of Santa Clara. In order to be considered for the study, the participants were required to be classified, according to <u>DSM-IV</u> criteria, into one of the two following categories of mental disorders: Schizophrenia and Major Depression. The participants were recruited from three programs operated by Alliance for Community Care in Santa Clara County, California. As a result of the HR intervention, it was expected that the clients in the treatment group, would have an increased positive affect, decreased anxiety, decreased depression, an increased sense of self-esteem, and stay employed longer. It was anticipated that the clients in the control group, might experience slight changes in some of the study variables, due to the

"Hawthorne" effect. However, it seemed unlikely that the participants in the control group would attain significant or sustained changes.

Pransky, Mills, Blevens, and Sedgeman (1996) have asserted that more rigorous, controlled research is needed to illustrate the positive outcomes of HR model prevention programs. The results of recent research (Borg, 1997) has provided empirical support using a repeated measures, control group design for HR training programs in inner city housing projects. The current study, which expanded upon past research, employed a matched control group design. Stratified random sampling was used to assign clients to experimental and control conditions. This procedure should help to enable reliable assessment of the effects of the HR treatment program on emotional distress and perceived personal experience of well-being in mentally ill clients.

Model prevention programs that address mental health and community problems are critically needed (Price, Cowen, Lorion, & Ramos-McKay, 1988). Empowerment has been identified as a basic ingredient in prevention (Albee, 1981). The primary objective of the HR program involves drawing out clients' innate self-esteem and self-efficacy. When individuals understand they can access their innate self-esteem, they are able to free themselves from conditioned habits of thinking and become better equipped to address adverse conditions. The underlying principles of HR are thought to be universal, thus they can be applied across a variety of demographic and implementation settings (Mills, 1995). Based upon the three principles, Mind, Thought and Consciousness of HR, a variety of successful interventions have been demonstrated, such as: Community empowerment projects, school-based drug and alcohol programs, corrections - based drug and alcohol, training for teachers, social workers, nurses, counselors, and other programs as well as the effects of HR on its own trainers. Therefore, it was of interest to examine the applicability of the HR theory in intervention and prevention in mentally-ill populations. Because of it's potential, as gleaned from the literature, the Health Realization model may serve as

a practical and effective prevention and treatment program that is easily implemented across a variety of populations.

Research Questions

This section lists the research questions that were proposed for this study. Will the participants in the HR training program report feeling less depressed and less anxious on the posttest (3 months after the training program)? Will the treatment group show a difference in the their subjective experience of behavioral/emotional control after the HR training program? Will the participants report increased positive affect, increased self-esteem three months after the end of the HR training program?

Applications of the principles of the Health Realization approach in prevention, early intervention, and community empowerment, have been widely employed; however, the HR model has not been studied in a scientifically rigorous manner, using control group methodology, over a variety of settings (Mills, 1995). The review of the literature focuses on research leading to the development of practical applications of the HR model and provides support for its use in mentally ill populations.

The Development of Psychological Thought

Trends in clinical practice are influenced by psychological research. For example, Bandura and other researchers recognized that behavioral responses to the environment were mediated by thought (Burger & Luckman, 1986; Bandura, 1990). Furthermore, they believed that emotional disturbances were caused by self-defeating beliefs (Bandura, 1982, Neisser, 1976). The process of thought mediation was applied to at-risk youth to enable them to engage in healthy learning processes (Garmezy, 1987a; McCoombs, 1991; Ryan, 1991). These studies linked states of intrinsic motivation to higher order thought processes (Ryan & Deci, 1985). The field was starting to look

toward resiliency, the individuals' capacity to deal positively with the stresses of life (Mills, 1995, 1996). Intervention strategies were designed with the understanding that a person's innate resources for health were perhaps stronger than their past or their pathology (Hawkins, Catalona, & Miller, 1992; Garmezy, 1991, Mills, 1991, 1993; Segal, 1986).

Health Realization Model

Health Realization, as a model for prevention and treatment, is based on the understanding that (a) every human being has the innate capacity for healthy thinking, (b) the capacity is accessible by the individual moment to moment, and (c) deeper in the psychological make-up as human beings, there is a strong, innate drive toward psychological health (Mills, 1998).

The approach of Health Realization is to connect each person to his/her innate health. The connection to innate health is made via "understanding" the role and function of thought. The intervention provided is to teach individuals how we each create our own experience via the function of thought and the operation of the three principles of Mind, Thought and Consciousness.

The Health Realization (HR) model does not focus on the content of what people think. Rather HR emphasizes the understanding of the thought process itself and how variations in this understanding cause the varying degrees to which individuals become victims of their own thought content. As the level of understanding increases people feel calmer, more secure and experience fewer negative thoughts and feelings. It becomes sufficient to understand how the moment to moment experience is created. This understanding is the intervention. This understanding allows people to relax and to experience a greater psychological perspective from which they can "drop" negative thinking and engage their innate health. From this greater psychological perspective people begin to see beyond learned, insecure thoughts.

The Health Realization model proposes that it is easier to teach people how their thinking works rather than trying to change their thinking. Once they understand how their thinking works,

they are empowered to change, to re-engage their natural healthy model of thought. Self-regulation is the natural response to the individual's understanding of his/her role as the thinker and the generator of the experience.

The Three Principles of Health Realization Model

Health Realization model is based on three principles - Mind, Thought and Conscious – that serve to explain all psychological experience. The principles underlie every individual's psychological existence. They represent the fundamental building blocks for psychology (Pransky & Mills, 1994).

(1.) The Principle of Mind. Mind is the pure life force and the source of power behind life itself. Mind is the source of consciousness (Banks, 1989). It is the universal energy behind all things.

(2.) Principle of Thought. Thought is the creative tool on uses to direct them through life. The power of thought is not self-created but comes from Mind. We are given the powers to free thought and free will, which gives the individual the stamp of individuality, enabling one to see life as they wish. Thought can be used in an infinite number of ways. Thought produces such things as ones feelings, mood and overall perception of life. Thought produces such things as ones feelings, moods and overall perception of life. Thought creates a personal picture of the reality one lives in (Banks, 1998). The flow of the thought process is the source of our change experience of life moment to moment (Pransky & Mills, 1994).

(3.) The Principle of Consciousness. Consciousness is the gift of awareness that allows the recognition of form, form being the expression of Thought (Banks, 1998)

Understanding these three principles leads to an increased ability to access our self-efficacy/self esteem through our innate wisdom and natural state of well-being. This understanding involves realizing the connection between thoughts, feelings, and behaviors. The evolution of

understanding is accompanied by feelings of compassion, lack of judgment or blame, and common sense (Mills, 1995). Self-efficacy, within the HR model, refers to an innate sense of self-respect that can be brought into awareness at any time. Mills (1995) believes that self-efficacy/self-esteem is always present within people and appears when they are feeling secure and good about themselves. The HR training teaches the client to tap into and actualize their innate sense of self-efficacy.

The History of Health Realization

The underlying ideas for the principles of this new model were first described in 1976. This model of how Mind, Thought and Consciousness produces our day-to-day experience of reality has been refined and tested across a wide range of settings and populations (Mills, Pransky, & Sedgeman, 1994; Mills, 1995, 1995a, 1996; Pransky, et al., 1996). Previous research using the HR model includes the following types of studies: Several clinical studies using repeated measures; Two control group studies, one in a community setting, and one in a school setting; One six-year longitudinal clinical and community study; Five external evaluations from independent researchers; and Four doctoral dissertations.

In the last ten years, programs for prevention and early intervention have resulted in sustained outcomes showing promise for improving the ability to reach alienated youth and adults (Bernard, 1991, 1996; Linquati, 1992; Mills, 1993, 1995, 1995a, 1996; Pransky et al., 1996; Mills & Bailey, 1996; Pransky, 1996).

The evidence underlying the function of the principles of this model are supported by longitudinal studies of resiliency (Mills, 1995). These studies have indicated that even the most disadvantaged, at-risk youth; people addicted to drugs and alcohol; and those with severe, chronic emotional distress have self-righting capacities, which are enhanced by exposure to this model (Bernard, 1996; Mills, 1995, 1996; Mills & Bailey, 1996).

Empowerment

Empowerment, from the HR perspective, is the ability of humans to free themselves from conditioned habits of thinking (Mills, 1995). The feeling of powerlessness and insecurity is hidden in the form of "unrecognized thought". The understanding of the source of our fear eliminates or greatly reduces the intensity of the feeling. Therefore, empowerment is "understanding" how experience is created moment to moment through the operation of the three principles. Empowerment is realizing the direct connection between thinking and problems, behavior and feelings. It is the realization that one is never "stuck". It is seeing that the experience can/will change with the very next thought. Empowerment comes from people understanding their own psychological freedom to live in well-being or not (Pransky, 1999).

By learning about the three principles and the role of thought people are empowered to change their perspective and see situations clearer, naturally engaging their innate healthy thinking. This happens from the simple realization that all one's experiences of life come from -inside-them.

Swift (1992) concludes that empowerment enables people to make decisions about their lives. This model assumes that gaining power in one's life leads to improved mental health, because powerlessness is a major source of psychopathology (Albee, 1997, 1983, 1981).

Many studies have reported successful applications of the principles of HR in a variety of settings. These studies indicate that having the ability to understand the natural state of health provides a psychological vantage point that is independent of a person's prior experiences, and is uncontaminated by learned beliefs (Mills, 1991; Pransky, 1990; Stewart, 1985; Bailey, 1990; Shuford, 1986).

Model prevention programs are critically needed in order to address a wide variety of community problems. Empowerment is considered an important factor in model prevention programs (Johnson, 1988; Price et al, 1988; Mills, 1995). Because the HR model meets the criteria set forth by the American Psychological Association (APA) task force on model prevention

programs, HR seems to be aligned with the expectations of the task force guidelines. However, there is not much information with regard to the clinical efficacy of the treatment program. Despite the lack of empirical evidence, clinicians report the functioning of the underlying principles of the HR model to be an effective treatment approach in clients who present with a variety of DSM-IV psychological disorders (Pransky, Mills, Blevens, & Sedgeman; 1996)

Affective States

Psychological or affective states pertain to feelings of distress (negative affect) and well-being (positive affect). Clinical assessments have been traditionally used to assess the presence or absence of anxiety and depression, which are quite common in the general public (Stewart, Ware, Sherbourne, & Welks, 1992). Anxiety and depression in this study are defined by criteria in the DSM-IV (APA, 1994). Just because a person does not meet the criteria to be diagnosed as depressed and/or anxious, does not mean that the person is feeling happy (well-being). Alternatively, a negative diagnosis for anxiety and/or depression does not imply that the person is feeling badly or distressed.

Measures of Affective States

The Mental Health Survey (MHS) was originally developed by the Rand Corporation to measure positive and negative affect, as well as anxiety and depression in the general population. The MHS measures psychological distress and well-being not as mental health, but rather as indicators of mental health (Stewart & Ware, 1992).

The MHS (Appendix A; Borg, 1997) was derived from the Mental Health Inventory (MHI) included within the Patient Assessment Questionnaire (Stewart & Ware, 1992). This survey was developed for the Health Insurance Experiment administrated by the Rand Corporation during the early 1970's. The MHS is based on the General Well-Being Schedule given in the 1971 Health and Nutrition Examination Survey (Dupuy, 1973) and on items described by Costello and Comrey

(1967), the Social Psychiatry Unit (1977), Dohwrend, Shrout, and Egri (1980), Beck (1967a, 1967b), and Zung (1965). The MHS includes measures of anxiety, depression, positive affect, negative affect, behavioral/emotional control, loneliness, and belonging.

Self-Efficacy

Self-efficacy theory posits that both psychotherapy and behavioral change operate through the alteration of an individual's expectations or thoughts about personal mastery and success (Bandura, 1977, 1982). This theory suggests outcome expectations, that one's belief will lead to certain behavioral outcomes; and self-efficacy expectancy, that one's belief can actually accomplish the behavior in question (Maddux, Sherer, & Rogers, 1982).

Bandura and his colleagues (Bandura, 1977; Bandura, Adams, & Beyer, 1977; Bandura, Adams, Hardy, & Howels, 1980) have empirically demonstrated a positive relationship between therapeutic changes in behavior and changes in self-efficacy. Bandura (1982) concluded that this relationship generalizes over a variety of behaviors and treatment procedures.

Bandura (1977) has defined self-efficacy as a person's judgment of his/her capabilities to organize and execute courses of action. He further states that expectations of self-efficacy are the most powerful determinants of behavioral change. Bandura (1977) conceptualized self-efficacy as innate health actualized by the individual. Once actualized, the feeling of self-efficacy can be used to organize and execute courses of action (Bandura, 1982). The HR training program was designed to tap into and make available a person's inner strength and wisdom, thereby increasing their self-efficacy (Mills, 1996). Self-efficacy is different from self-concept in that self-efficacy is actualized by the individual, whereas, self-concept is imposed by family and society. Self-efficacy emerges naturally from our inner strength and positive thoughts (Mills, 1995). The term self-efficacy will be used interchangeably with self-esteem to mean a general, natural feeling of self-worth and well-being (Woodruff & Cashman, 1993).

Measures of Self-Efficacy

There are several measures of self-efficacy (SEF) that are based on the work of Albert Bandura. One self-efficacy scale, which contains 27 items, was developed by Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, and Rogers (1982). Woodruff & Cashman (1993) subsequently assessed its dimensionality. The SEF scale was found to have two factors, general self-efficacy and social self-efficacy. The resulting scores that have been obtained from the use of this scale have illustrated excellent reliability (.91) and are highly correlated to other measures of self-efficacy (Woodruff & Cashman, 1993).

Self Esteem

Self-esteem increases when people are able to progress from a state of mind, or level of consciousness, in which they are motivated by their self-image, and move into another state of understanding. When there is the possibility for the source of their motivation to change, individuals can be in an effortless state of high self-esteem. In this state, they are not motivated by a need to prove or to gain something; to satisfy their ego needs; or even to assure survival (Mills, 1992). The participants in the Modello and Homestead Housing Projects in Florida, scored significantly higher in self-esteem (Cherry, 1994) from pretest to posttest. The HR training program seemed to enable individuals and members of the communities to access their innate self-efficacy/self-esteem.

Research Hypotheses

1.   There will be a statistically significant difference from pretest to posttest in the training group's subjective experience of anxiety as assessed by the MHS anxiety subscale scores.

2.   There will be a statistically significant difference from pretest to posttest in the training group's subjective experience of depression, as assessed by the MHS depression subscale scores.

3. There will be a statistically significant difference from pretest to posttest in the training group's subjective experience of behavioral/emotional control, as assessed by the MHS behavioral/emotional control subscale.

4. There will be a statistically significant difference from pretest to posttest in the training group's subjective experience of positive affect and negative affect, as assessed by the MHS positive affect subscale.

5. There will be a statistically significant difference from pretest to posttest in the training group's subjective experience of self-efficacy, as assessed by the Self-Efficacy scale.

6. There will be a statistically significant difference from pretest to posttest in the training group's subjective experience of self-esteem, as assessed by the HR Self-Esteem scale.

The following section describes the participants who volunteered for this study; the instrumentation used to assess the participants; and, the procedure and design employed in this research study.

Method

In this study, convenience sampling and random assignment was used to measure the impact of HR training on eighty-nine mental health clients of the Alliance for Community Care Program. The DSM-IV diagnoses of the clients receiving services were primarily major depression, and schizophrenia. Each participant confirmed voluntary participation and agreement to the study processes through signature on a consent form. The participants were debriefed as to the intent of the research. They were advised that the overall results of the study would be available if they were interested.

At a vocational training facility, clients were randomly assigned either to an HR training group (n = 29) or a comparison group (n = 27) made up of clients who did not receive HR training. A smaller number of clients living in residential facilities were also recruited for the study. Because it would be difficult to keep clients in the HR training condition from sharing information with the comparison group (and visa versa), two residential sites were used with one being the HR training site (n = 15) and the other being the comparison site (n = 18). Clients who participated in the HR training received 30 hours of training over a six-month time period. The comparison group clients continued with their individualized vocational training program and training at the vocational site, and their general education programs in social skills, behavior management, and communications at the residential site. All participants completed a pretest and a follow-up assessment (posttest) 60 days later that examined anxiety, depression, behavioral/emotional control, positive affect, negative affect general self-efficacy, and the Health Realization subscales, HR emotional and HR self-esteem.

Instrumentation

Mental Health Survey. The MHS is a general population mental health survey and was modeled on the MHI (Stewart & Ware, 1992) and the HAQ used by Borg (1997). All questions on the MHS were scored on a scale from 1 (never) to 6 (Always). The subscales of the MHS that were used in this study included the following items:

1.   Anxiety (sum of items 8, 10, 20, 24, 26, 27, 29). Total possible score = 42.

(4.)   Depression (sum of items 2, 9, 12, 15, 16, 18, 22, 23, 25, 30, 32). Total Score=66.

3.   Behavioral/Emotional Control (sum of items 5, 11, 14). Total score = 18.

4.   General Positive Affect (sum of items 1, 4, 6, 13, 19, 21,28,31). Total score = 48.

5.   Loneliness (sum of items 17, 33). Total score = 12

6.   Belonging (sum of items 3, 7). Total score = 12

The reliability and validity of the original MHI scores were (.92) AND (.88). Borg reported (.78) & (.77) for the HAQ scores.

Self-Efficacy Scale. The self-efficacy scale was developed by Sherer and his colleagues (1982) based on work done by Bandura (1977) to measure domain-linked and global self-efficacy. This research employed 17-items that were identified by Sherer et al. (1982) to measure global self-efficacy and 6-items that measured domain-linked self-efficacy. The reliability of the 17-item scale scores were reported as alpha = .86 (Sherer et al., 1982) and alpha = .84 (Woodruff & Cashman, 1993). The 6-item scale scores have reported reliabilities of alpha = .78 and alpha = .77.

HR Survey. The HR Survey was designed by Cherry (1994). This scale has been reported to have excellent score reliability (.92). The authors revised Cherry's scale for the population being studied. This scale had been used with school-aged children with great success.

Interview Procedures

After the intervention and surveys were completed, five people from the experimental group and five people from the control group were interviewed. The interview consisted of questions derived from the surveys, in order to further clarify the statistical results. Additionally, five staff members and five trainers were interviewed to add contextual information to the quantitative results.

Results

The participants were combined across sites, leaving one treatment group and one control group. There were 89 participants in this study. After cases with greater than 10% missing data were eliminated, 72 cases remained to be analyzed. Dependent t-tests were used to test for changes from pretest to posttest within each group, treatment and control. Between-group effects were highly variable due to the population being tested and due to the small number of participants; therefore, effect sizes were used to assess the importance of the treatment between groups. Descriptive statistics are reported in Table 1.

In order to properly analyze the data so that conclusions could be inferred, an effect size analysis (importance) of the treatment (Cohen, 1988) was conducted. Effect size (ES) indicates the sensitivity of the instruments to detect true differences in the data. The indices for effect size (Cohen's d) are .2, .5, and .8 (small, medium, and large), respectively. Because of the small sample sizes, the magnitude of the effect size is more important than significance level (p-value). This was the first study that reported effect sizes in HR research. In a meta-analysis of clinical research, Smith and Glass (1977) reported that clients improved between one-quarter to just over one-half of a standard deviation because of psychotherapy.

In general, the clients who completed the Health Realization (HR) program improved more than those who did not (see Table 1). Further, the HR treatment group had more statistically

significant gains and *larger effect sizes* than the gains of the control group. Increased scores (gains) indicate outcomes that are more positive.

Table 1
Results of Dependent t-tests Within Each Group

Measure	Treatment Group (n = 43[a])					Control Group (n = 29)				
	Pre	Post	Diff[b]	SD	ES	Pre	Post	Diff	SD	ES
Anxiety	4.12	3.59	-.33*	1.14	-.29	4.01	3.76	-.25	1.32	-.19
Depression	4.22	3.83	-.39***	.87	-.45	4.02	3.81	-.21	1.28	-.17
Behavioral Control	3.28	3.74	.44*	1.47	.30	3.29	3.40	.11	1.44	.16
Positive Affect	3.30	3.76	.46***	1.12	.41	3.40	3.78	.38**	.97	.39
Neg. Affect	4.13	3.87	-.26*	1.30	-.20	4.02	3.85	-.17	.90	-.19
HR Emotional	3.82	4.03	.21*	.72	.29	3.75	3.87	.12	.71	.17
HR Self-Esteem	3.61	4.13	.52***	1.06	.49	3.77	3.78	.01	.50	.02
General Self-Efficacy	3.64	3.71	.07	.78	.09	3.88	4.16	.28*	.93	.26

*p< .10 - Practical Significance (Kirk, 1995)
**p< .05
***p< .01

The treatment group improved significantly on depression, $\underline{t}$ (42) = -2.90, $\underline{p}$ < .01 (d =.45), positive affect, $\underline{t}$ (42) = 3.22, $\underline{p}$ < .01 (d =.41), and behavioral control, $\underline{t}$ (43) = 2.05, $\underline{p}$ < .05 (d =.30). For example, an effect size of .45 means that the experimental group improved almost one-half of a standard deviation due to the treatment. Additionally, the HR treatment group showed practical significance (Kirk, 1995) on anxiety, $\underline{t}$ (42) = -2.00, $\underline{p}$ < .06 (d =.29); and negative affect,

$\underline{t}$ (43) = -1.82, $\underline{p}$ < .08 ($\underline{d}$ =.20).

The control group also increased on all MHS subscale scores, but not significantly. However, there was an important increase in positive affect, $\underline{t}$ (27) = 2.45, $\underline{p}$ < .10 ($\underline{d}$ =.32)**.** The results of the dependent $\underline{t}$-tests within the treatment group from pretest to posttest on the HR

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[a] **Pairwise deletion used with $\underline{t}$-tests.**
[b] **Statistical significance of change scores**

subscales: emotional control, and self-esteem showed that the treatment group improved significantly on self-esteem, $\underline{t}$ (42) = 3.26, $\underline{p}$ <.01 ($\underline{d}$ =.49). They also improved in emotional control, $\underline{t}$ (42) = 1.97, $\underline{p}$ < .10 ($\underline{d}$ =.29). The control group had slightly increased posttest scores on the HR subscales of emotional control and self-esteem, but they did not differ significantly from pretest to posttest, $\underline{p}$ > .05. Both groups showed an increase in the SE subscales from pretest to posttest. However, the control group's gain scores improved to a greater degree than did those of the treatment group, $\underline{t}$ (27) = 2.56, p < .05.

The findings of between-groups analysis indicate that the treatment group out-performed the control group on anxiety (-.29 vs. -.19 $\underline{SD}$), behavioral control (-.30 vs. -.16 $\underline{SD}$), HR emotional control (-.29 vs. -.17 $\underline{SD}$), and HR self-esteem (-.49 vs. -.02 $\underline{SD}$). Unexpectedly, the control group had a significant improvement in general self-efficacy ($\underline{d}$ = .26 SD) as compared to the treatment group ($\underline{d}$ = .07 SD).

Discussion

The results of this study indicate that there was significant improvement among HR participants. The greatest improvements were reflected on the self-esteem depression, and positive affect scales. Similar results for self-esteem were found in community settings (Mills, 1996). Evidence on the use of HR training in residential and clinical settings, indicates that clients score significantly higher in self-esteem (Bailey et al., 1988) and higher in positive affect (Borg, 1997) after HR training.

Surprisingly, the control group had a significant increase in positive affect. It is possible that the clients' daily programs took on more interest and importance for them because of their participation (being tested, seeing new people) in a research study (Hawthorne Effect). Feldman and Lynch (1988) referred to this phenomenon as a self-generated validity. The term means that the

measurement process can sometime generate the very thing it is supposed to assess (Sudman, Bradburn, & Schwartz, 1996).

The clients in the experimental group showed a significant improvement in depression. Other HR outpatient research with 53 depressive disorder patients showed significant reduction in levels of distress in depressive disorders (Blevens et al., 1992). The HR treatment group showed a significant increase in behavioral control scores. Although HR research has not found any significant change in behavioral control in the past, studies with children have shown improved attendance records in schools (Mills, 1996).

The results for the anxiety, behavioral control, and HR emotional subscale scores indicate a "practical" improvement in scores. Decreased anxiety, as shown in this study, is supported by Blevens et al. (1992) HR outpatient study. Similarly, Borg (1997) found significant decreases in negative affective states in participants from low-income housing developments in Fresno and Los Angeles.

There were no significant differences on the two general SEF subscales for the treatment group; however, there was significant improvement in general SEF in the control group. This might be due to methodological difficulties that occurred in matching the Health Realization group with the control group across three sites, especially with such small samples. In this very variable population, a larger sample size in one location, or a more sensitive SEF instrument might have detected more subtle differences between the two groups. Another limitation of this study was in the delay in the final assessments for these clients. A timelier posttest may have yielded less variable results with larger effect sizes.

Future studies should employee a self-efficacy scale specifically designed for this population. To clarify the relationship between exposure to a Health Realization program and self-efficacy, it would also be worthwhile to replicate such studies using stratified random sampling with

random assignment to groups. Also, the use of larger sample sizes would increase the power of the study.

Interviews and Triangulation of the Quantitative and Qualitative Data

In the interview process, it was evident that the participants were very different from each other in their level of cognitive functioning. Some clients had a higher level of awareness of their own cognitive functioning than did others. Some examples of this phenomenon occurred during the client interviews. Some clients who said they were still anxious, but not as anxious as they used to be, were at the same time finding jobs, taking classes and moving out on their own. In contrast, other clients who stated that they were less anxious evidenced no behavioral changes. It is possible that one person's interpretation of anxiety in their life may be radically different than another person's interpretation of anxiety. Therefore, it is important to obtain several convergent measures of a behavior such as anxiety or depression. In this study, the participants' responses on the paper and pencil tests were supplemented with responses to interview questions. A follow-up study may show more clear-cut results by including notes from behavioral observations. For some tests, it was difficult to conclude much about the results without the added benefit of interviews of the clients, teachers and staff to further clarify the phenomenon being studied. The interviews provided a rich dialogue, which was used to provide the contextual information for the quantitative results. The interviews clarified the way the clients understood terminology used in the training and helped to expose the different perspectives of the clients.

In the interview of the control group, clients recognized the ideas and questions asked in the interview, but with the exception of one person, they were not able to communicate their experience or expound on the concepts with examples. On the other hand, several persons interviewed in the HR group were able to reply to the interview with detailed responses. It appeared that the clients in the HR group had an in-depth understanding of the questions, and were able to share their

experiences. In some cases the HR participants were able to respond to the questions with humor, as well as to distance themselves from experiences that were not pleasant to remember. The HR participants showed a sense of trust of the interviewer, which allowed in-depth descriptions of traumatic events. This trust did not appear to occur in the control group interviewees.

There were several clients in the HR training group who identified a reduction in delusions, attempted suicides, depression, and anxiety. One of the interviewees said, "I was suicidal and paranoid and haven't been afraid in an unhealthy way since the class. I am a different person." With regard to anxiety, one client said; " I used to hide, I'd just stay in the house, now I am not hiding." While another client said, "I may be anxious, but I am not as anxious as I used to be." An unanticipated outcome of the interviews was that the clients reported a reduced sense of isolation, with a stronger connection to themselves and others. The control group also reported subtle shifts in anxiety and depression, however, they were not able to tell stories or give examples of these shifts.

Moods are included in the construct of emotional control. Several clients in the HR group reported ability to notice positive and negative affect in the form of moods. An HR training participant said that "moods are like a pendulum or a figure 8, I hang on to them for a little while and then let them go." Another HR-trained client said, " I handle moods differently when its dark and I am tired. I notice my moods. I don't make any final decisions, unless I am extremely calm and content. I give myself the opportunity to see my moods for what they are." Another interviewee said they let go of upsetting thoughts and have more emotional control, "thoughts are just thoughts, they don't make you do things, it is what you do with the thought that matters." Another HR-trained client said, "I catch myself in the thinking process. I now have a new way of thinking and applying myself. I haven't gone back to where I was before the class. My thoughts don't overtake me like they used to." Finally, another client said, "whatever it is I am thinking is all right, sometimes it is a lot of garbage." The clients interviewed from the control group said that thought made a difference,

as an abstract idea, but were not able to give examples of how that might apply in their lives. In general, in the HR-trained group, according to the teachers and staff, the clients understood their moods and thoughts. When they had an episode in class, they were able to move through their moods faster. Additionally the HR clients were able to "stop their mood before it escalated into a behavior." Again the control group did not expound on the concept of thoughts and relate it to their lives.

When asked about guilt, the HR-trained group said, " I am not putting much of the guilt-trip on myself. I am less guilty. It's more remorse now. I feel like I might have made some mistakes in the past, but now I have to live the rest of my life knowing that if the past comes back to haunt me, I can control myself."

One of the teachers expressed that the HR model had a positive effect on their clients. For example, "It frees them from the past and allows them to live with the past without guilt." "Their perspective was that guilt doesn't necessarily have to affect them in the present or in the future." Some of the interviewees saw their situation in a larger context. "They were able to see that they were more than their identified diagnosis. One client said "even though I have been labeled, I see myself as whole and no one can take that away from me."

The HR training group articulated a sense of hope and self-efficacy. They imagined things might be different for them, and yet at the same time in many cases they were content with their lives, and expressed increased self-acceptance. These patterns were identified in the interviews when they spoke about their experience, re-employment, and new living arrangements. The following text reveals the clients' thoughts and feelings, "I am the most powerful person in my life. I can make choices and then I can think about my reaction to each choice. It is up to me to create my own life. It is about knowing myself, what I've done. I don't want to go back. I have the goal of owning my own coffee cart or coffee house." "The concept of choice only seems to occur after the

fact, but that is better than nothing, in my opinion." While a staff person said, "After each class, many of the participants started to think about their lives before they were ill."

In the interview transcripts of the HR experimental group, several clients reported an increased ability and interest in relating and seeing health in others. As one client expressed, " it improved my feeling of acceptability with other people". Another client expressed their ability to handle relationships better. " I can be irritated with someone and realize, I'm just turning it inwards, towards myself. I can do that, but I am not going to be happier and they don't really care." Another client said that, "I forgave my father for my being in this situation and I forgave myself for being mad at him. Then everything changed." Other persons in HR group expressed that "different people see the same color, and call it different names, that is why we don't understand each other." "I ignore people who stretch the truth." "Seeing the innocence in others tends to smooth the edges of the encounter. In the vernacular, cut some slack for people, be less critical, more compassionate and less demanding."

One of the staff members reported that in the HR-trained group, "relationships seem to be easier, the clients didn't have so much of a black and white response to other people." Communication was reported to have increased significantly, not only by the clients but also by the some of the instructors and staff involved in the study. Several clients shared that they are supporting and receiving support from others. One client said, "I listen to others, and they solve their own problems." The overall pattern of the relationships described by client interviews in the HR experimental group was increased communication with their estranged families. While the HR group reported better communications among relationships, the control group reported limited communications in their relationships.

The HR-trained group also reported an increased quality of life. Some reported being more content and enjoyed silence. One of the trainers said, "the training seemed to be reflected in the

clients affect, with more humor and a broader perspective." The increased positive affect was illustrated by one of the clients, "it has a lot to do with just relaxing and being happy where I am at." Another client said, "I am hopeful about the future. I am opening up more to people and by doing that I have learned to trust people." While some clients interviewed from the HR training where helped in their overall quality of life, others had dramatic life style changes.

In the interviews, clients in the HR training told the interviewer that, "they went off and/or reduced their medication, left or were preparing to leave 24 hour care, got jobs, and went back to school." One of the clients expressed that having the medications "turned over to her care was a big deal". While, another client said he went "off medications and quit his therapist." Four of the HR clients interviewed got jobs, and three had gone back to school, and four more were hoping to go back to school. The previous interviews indicated positive steps to higher functioning. Only one participant in the control group got a job. No one in the control group reported being in school or indicated that they wished to return to school. Additionally, no one in the control group went off medication. Finally, many of the clients taking the HR class showed unsolicited eagerness to continue a support group for what they had already learned in the HR classes. However, no one in the control group had an overwhelming desire to continue their usual classes.

The trainers reported that several of the clients paid attention and stayed in the room for the entire training session. There was an increased rapport and respect between the trainers and the clients. During the training sessions, the clients' incidents of "acting out" diminished. The apparent ease that the clients had in the training is exemplified in the following statement, "it is just like we're sitting on the back porch and swinging in a swing and having a talk with our neighbors." A teacher responded that, "we established a feeling that enormously contributed to a person having a sense of their own self-esteem. We were just being normal people, talking to normal people." It was also obvious to the teachers that the clients seemed to objectify their thought process. The

objectification was reflected in humor. Other clients were able to distance themselves from their thoughts. An example of this occurred with one client, who had previously presented with sexual fantasies and hallucinations. This client reported that, "I am less frightened in the meetings by my mental problems (delusions and phobias). She saw her mental processes differently and realized that, "my thoughts don't mean anything." Another client said, "no matter how crazy I am or whatever has happened to me, there is a self in me that's not touched by all of this." Another talked about having gotten really upset at somebody and was able to stop any negative thoughts or actions.

The HR training group showed significant improvement in many areas. However, the staff the HR in the training pointed out that, the training is not necessarily a panacea. Moment to moment, "awareness is many times lost, only to be regained at a later date, and then put into perspective." One of the staff members noted, as is typically the case in any training that, "there are a percentage of clients that were ready to learn the information and a percentage of clients that could not absorb it". One of the staff members suggested that, "the HR training might be more effective if the sessions were held in a retreat type of environment, where the clients are submerged in the model for three weeks. The trainers thought that HR-trained staff should be available for 24-hour support in the residential facilities and on call for the outpatient clients.

Conclusions and Limitations

The overall data analysis indicated that the Health Realization program played a large part in benefiting patients with major depression and schizophrenia, given the parameters of this study. The results of the assessment instruments for the treatment group showed a that there was a significant impact on positive affect, self-esteem, depression, behavioral control, and a practical impact on anxiety, negative affect and emotional control. These results were further clarified by the interview data, which highlighted positive effects on clients' self-efficacy, hope, relationships with self and family, interpersonal communication, medication compliance, and overall feelings of well-being.

Some of the limitations of this study include: 1) The variability in literacy among the clients; 2) The questionable accuracy of the clients' personal awareness; 3) Self-report bias on the surveys and interviews; 4) Lack of indicators of medication status; 5) Different types of Alliance programs; 6) Client access issues; and 7) The clients' psychiatric diagnoses.

It would be helpful in future studies that assess the impact of the Health Realization training on individuals with diagnoses of schizophrenia and depression, to have a larger, more homogeneous sample, and instruments that provide a more sensitive measure of HR treatment efficacy. Perhaps having a training environment immersed with HR-trained staff would help decrease some of the confounding environmental factors.

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