An Analysis of Wellness Recovery Action Planning (WRAP)

Social Research Methods

HSP-2218

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Abstract

This paper introduces, analyzes and promotes mental health wellness and recovery methods facilitated by peers called Wellness Recovery Action Planning (WRAP) introduced by Mary Ellen Copeland, PhD. in 1989 which is now "one of the most widely used recovery programs for mental health consumers" (Sterling et al., 2009 p. 134). The paper will discuss the elements of WRAP and interpret data from experimental and non-experimental studies showing that self-management of symptoms improves mental health outcomes, resulting in greater self-advocacy, improved quality of life and better mental health outcomes for the individual participating in a WRAP Plan.

Introduction

This paper introduces, discusses and advocates the use of the Wellness Recovery Action Plan (WRAP) which, according to SAMHSA's National Registry of Evidence-based programs and Practices (NREPP) is as follows:

> Wellness Recovery Action Plan (WRAP) is a group intervention for adults with mental illness. The group guides participants through the process of identifying and understanding their personal resources known as wellness tools and then helps them develop an individualized plan to use these resources on a daily basis to manage their mental illness (http://nrepp.samhsa.gov/View Intervention.aspx?id=208 p. 1)

WRAP is now known as an "Evidence-Based Practice". In other words, several studies have been completed and repeated nationwide and overseas to prove that WRAP is very effective. As you will see as you read the hypothesis and approach, literature review, data analysis and interpretation of numerous case studies, articles and reports, you will find that WRAP has a positive impact in that it produces better self-awareness, greater self-advocacy and a more positive attitude toward coping with mental illness among those who have participated in WRAP than those who have not. When WRAP is taught by mental health consumers it improves positive outcomes for both facilitators and the consumers of mental health including improved quality of life and reduction of mental health symptoms.

Until recently, the United States' healthcare system has been geared towards treating disease rather than promoting wellness. Gradually, there has been a shift in emphasis from treating mental disorders as a disease to encouraging mental health consumers to manage their own health. Mary Ellen Copeland is a mental health consumer who was frustrated with the lack of support she received from mental health professionals. She worked with several consumers

over the course of many years to learn how to live better with bi-polar disorder. She finally came up with five key concepts of recovery which are the foundation of WRAP. These are as follows:

1. Hope
2. Personal Responsibility
3. Education
4. Self-Advocacy
5. Support

Most WRAP groups last about 8 to 12 weeks, are taught by trained peer facilitators, and are organized around these five key steps of recovery

The WRAP plan consists of a wellness "tool box" which is an inexpensive resource for managing wellness.

1. Daily Maintenance: Things you do to keep yourself well
2. Triggers: External events that upset you
3. Early warning signs: Internal feelings that cause you to feel uncomfortable.
4. When things are breaking down: Your symptoms are noticeable by others and are becoming more severe.
5. Crisis Plan: Like an advanced directive for mental health which gives others directions for when you can no longer take care of yourself.
6. Post-Crisis Plan: A review after a crisis of changes you might want to make to your crisis plan, ie., when you can return to work, take care of daily activities etc.

WRAP is utilized in many states and other countries and has proven to be a successful method of helping mental health consumers manage and improve their quality of lives.

Hypothesis and Approach

This paper is based on a series of national and international studies that have proven that WRAP improves the quality of life, helps mental health consumers manage their symptoms, improve their skills to self-advocate and, in doing so, lead healthier and happier lives. In addition, WRAP improves the quality of life of the peer facilitators and helps them manage their mental illness. The peer facilitators, due to their lived experiences dealing with mental illness, also act as role models for the participants by giving them hope and by also being more accessible than professional clinicians in general.

The approach is based on experimental and non-experimental research both in the United States and overseas. Statewide research includes a control blind study with follow-up after six months in Ohio, and other studies in Minnesota, Vermont and Kansas. International studies include research from the United Kingdom and Asia.

Literature Review

Vermont/Minnesota Study

Between July 1st, 1997 through January 31st 2000, two statewide initiatives in Vermont and Minnesota were completed in which management of mental illness was taught by peers to people in mental health recovery using WRAP. Pre-post comparisons were made of reports from 381 participants (147 in Vermont and 234 in Minnesota) on a survey instrument that assessed three dimensions of self-management as follows:

1. Attitude – hope and accountability for one's mental health
2. Knowledge of triggers to look for that upset one's mental health
3. Skills – such as self-advocacy and being able to access social support systems

Researchers from the National Research Center on Psychiatric Disability, located at the University of Illinois at Chicago (UIC) teamed up with Dr. Mary Ellen Copeland who is the co-creator of WRAP, and the leadership of two statewide consumer organizations, (Vermont Psychiatric Survivors and the Minnesota Consumer/Survivor Network), along with the Vermont Department of Mental Health (DMH) and the graduate program in Social Work at the University of Vermont. The study's hypothesis was that, compared to their self-reported attitudes before participating in WRAP, those who completed WRAP education would show significant increases in knowledge, behavior, and attitudes related to recovery, self-management of symptoms and advance crisis planning (Cook et al. 2010).

Data were gathered from 147 participants in the Vermont study who were "consumers or survivors of psychiatric services" who took a pre-test and a post-test. The response rate was 44%. About 73% were between the age of 19 and 81. Forty hours of WRAP education was delivered to groups of 15-20 individuals in twenty-one separate cycles from July 1997 through

January 2000. The 40 hours were held for two hours per week for forty weeks or for one hour a week for twenty weeks or one six-hour day per week for seven weeks. Of the two teachers of the WRAP sessions, one was also a mental health consumer. In Vermont, participants were recruited by clinician and peer referral, word of mouth and advertisements, support group leaders and by peers. They came from suburban, urban and rural counties of Vermont and northern Massachusetts and were not screened (Cook et al. 2010).

Data was also gathered from 305 participants in the Minnesota study who were also mental health consumers. The participants in the Minnesota study had a similar response rate of 77%. The WRAP education in Minnesota involved a total of sixteen hours in eight, two-hour classes to 4-15 participants. A total of 42 eight-week classes were held from May 2002 through June 2003. In the Minnesota study, both teachers were certified trainers as well as mental health consumers themselves. Minnesota participants included consumers, family members, social workers, psychiatrists, hospital staff, policy makers and advocates. Minnesota participants also came from urban, suburban and rural communities including an Indian reservation (Cook et al. 2010).

In Vermont, a pre-test and post-test survey was introduced to the participants. The questions were focused on respondents' recovery management attitudes including attitudes including hopefulness, identifying early warning signs of negative systems (triggers), using coping skills, developing a crisis plan, taking medications, identifying support services, self-advocacy and using wellness tools. A Likert-scale response format with answers ranging from strongly agree to strongly disagree were used. The Minnesota study also used a pre-test and post-test questionnaire with 13 repeated items asking about the following recovery skills and attitudes, sense of hopefulness, knowledge of symptom triggers, awareness of early warning signs, use of

support systems, developing a crisis plan, ability to be accountable for one's mental health and living a lifestyle that maintains recovery. The format used was "Yes/no" answers.

Midwest Study

A Midwest study by the Kansas Research Center began in October 2004 and ended in June 2006. Participants were individuals who voluntarily joined a WRAP group offered at one of the three mental health center sites in a central Midwest state. All the participants were adults and severe mental illness and were receiving community support services at the time of the study. The study consisted of 45 participants. The WRAP group program consisted of 8 to 12 weekly sessions with each lasting from 1 ½ hours to 2 hours. The groups were taught by two facilitators of whom had received training from a certified Copeland Center WRAP trainer (Starnino et al. 2010).

Ohio Study

Still, another study was conducted in the state of Ohio from October 2006 through April 2008. This study was a randomized, controlled trial to determine WRAP's impact on varying recovery attitudes and behaviors. In a previous study, WRAP was peer-delivered, reduced psychiatric symptoms, increased clients' hopefulness and, in general, improved quality of life for the participants. Research for the current study was in the form of peer led mental health self-management education tools that would engage clients in increased self-advocacy and show whether there is a relationship between patient self-advocacy and recovery outcomes. The researchers hypothesized that patient self-advocacy would be positively and significantly associated with other indicators of recovery such as lower symptoms, greater hopefulness, and higher self-perceived environmental quality of life (J. A. Jonikas et al., 2011).

The intervention consisted of eight complementary 2.5 hour sessions of WRAP delivered by two experienced WRAP instructors trained by the Copeland Center for Wellness and Recovery who were also mental health consumers. Classes of 5-12 participants met locally each week for two months. For this Ohio study, the class format was made up of lectures, individual/group exercises, experiences from the lives of the peer instructors and students, and homework that was voluntary to developing a WRAP plan outside of class. (J. A. Jonikas et al., 2011).

Classes were structured as follows:

Class #	Class Topic/Activity
1	WRAP/Recovery key concepts
2	Review of personal ways to maintain wellness and self-management of one's disability
3	Same as class 2
4	Help in developing one's own daily maintenance plans from instructors. Emphasis on advance planning to recognize and respond to "triggers"
5	Instructors discuss early warning signs that a crisis might be starting-up and advance planning for extra services and supports
6	Advance crisis planning, i.e., including preference for a medication, treatments, supporters, facilities when one is unable to self-advocate.
7	Same as class 6
8	Instructors discuss post-crisis planning strategies. Instructors/students Reflection of personal growth resulting from this 2 month class

Table 1 – OHIO Study WRAP Class Structure

In addition, participants acquired knowledge about activities that would give them more hope, such as taking accountability for and self-managing their mental health symptoms. More specifically, participants discussed and acquired knowledge about their civil and patient rights, accessing credible treatment information and how to self-advocate. ((J. A. Jonikas et al., 2011).

In order to be prepared for the WRAP classes the instructors were trained according to research fidelity standards. The researchers also attended a weekly teleconference with the instructors

to discuss and review each site's attendance and fidelity, challenges that came up in the classes and discuss the upcoming week's course materials and topics. According to an original paper in the Community Mental Health Journal, "At all sites, one or both of the instructors remained the same across all WRAP classes offered during the study period. The intervention was delivered simultaneously across study sites, with five waves of classes taught over a 3-year period."(J. A. Jonikas et al. p.2)

The initial size of the study was 276 participants in the experimental condition and 279 in the control condition who were "eligible, willing to participate, and available for the 9-month study period." (J. A. Jonikas et al., p.3). The experimental subjects were to attend WRAP while the control subjects relied only received medication management, therapy and Case Management and did not attend WRAP. Eighty-four (84%) of the experimental and about 90% of the control subjects participated in the study. Eleven control subjects and 25 experimental subjects were lost to follow-up due to death, ill health, relocation or formal withdrawal from the study. (See Table 2 on the next page).

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Table 1 Baseline characteristics of research participants by study condition and total sample

	Total (N = 519)	Experimental (n = 251)[a]	Control (n = 268)[a]
Sex			
Male	177 (34.1)	83 (33.1)	94 (35.1)
Female	342 (65.9)	168 (66.9)	174 (64.9)
Ethnicity			
Caucasian	328 (63.2)	156 (62.2)	172 (64.2)
Black	146 (28.1)	76 (30.3)	70 (26.1)
Hispanic/Latino	25 (4.8)	11 (4.4)	14 (5.2)
Asian/Pacific Islander	3 (0.6)	2 (0.8)	1 (0.4)
American Indian/Alaskan	15 (2.9)	6 (2.4)	9 (3.4)
Other race	2 (0.4)	–	2 (0.7)
Education			
<High school	95 (18.3)	44 (17.5)	51 (19.0)
High school/GED	182 (35.1)	95 (37.8)	87 (32.5)
Some college or greater	242 (46.6)	112 (44.6)	130 (48.5)
Marital status			
Married or cohabiting	62 (12.0)	26 (10.4)	36 (13.5)
All other	455 (88.0)	224 (89.6)	231 (86.5)
Lives in own home/Apt.	346 (66.7)	167 (66.5)	179 (66.8)
Employed	76 (14.7)	44 (17.6)	32 (11.9)
Ever Psychiatric Inpatient Tx	392 (75.8)	195 (78.0)	197 (73.8)
Mean (SD) # in household	2.3 (2.32)	2.3 (2.28)	2.4 (2.36)
Mean (SD) age (years)	45.8 (9.88)	45.7 (9.80)	45.8 (9.97)
DSM-IV diagnosis			
Schizophrenia	58 (11.7)	29 (11.9)	29 (11.6)
Schizoaffective	47 (9.5)	26 (10.7)	21 (8.4)
Bipolar	188 (38.1)	95 (38.9)	93 (37.2)
Depressive	125 (25.3)	60 (24.6)	65 (26.0)
Other	62 (12.6)	28 (11.5)	34 (13.6)
Services received			
Case management	397 (76.5)	195 (77.7)	202 (75.4)
Medication management	417 (80.3)	201 (80.1)	216 (80.6)
Individual therapy	413 (79.7)	195 (77.7)	218 (81.3)
Group psychotherapy	141 (27.2)	76 (30.3)	65 (24.3)
Employment services	124 (23.9)	62 (24.7)	62 (23.1)
Residential services	154 (29.7)	79 (31.5)	75 (28.0)
Substance abuse treatment	48 (9.2)	25 (10.0)	23 (8.6)
Study site			
Canton	81 (15.6)	38 (15.1)	43 (16.0)
Cleveland	98 (18.9)	51 (20.3)	47 (17.5)
Columbus	107 (20.6)	52 (20.7)	55 (20.5)
Dayton	26 (5.0)	12 (4.8)	14 (5.2)
Lorain	110 (21.2)	53 (21.1)	57 (21.3)
Toledo	97 (18.7)	45 (17.9)	52 (19.4)

* $P < .05$, ** $P < .01$, variation in n due to missing data

[a] Chi-square and t tests indicated no significant differences by study condition

Table 2 – OHIO Study WRAP Participant Characteristics (Jonikas et al. p. 6)

Data Analysis

Vermont/Minnesota Study

In Vermont, the data were analyzed using SPSS software by staff of the Research and Statistics Unit of the state's Department of Developmental and Mental Health Services. The Vermont surveys were linked by an identification code allowing a two-tailed, paired t-tests of difference. The Minnesota pretest and posttests lacked a unique ID number and therefore, couldn't be linked and so used two-tailed t-test of differences in proportions between pre-tests and post-tests (See Table 3).

TABLE 1–*T*-TESTS OF PRE-POST CHANGES IN WELLNESS RECOVERY ACTION PLANNING (WRAP) PARTICIPANTS' SELF-REPORTED ATTITUDES, BEHAVIORS, AND SKILLS REGARDING MENTAL ILLNESS SELF-MANAGEMENT IN VERMONT AND MINNESOTA STATEWIDE WRAP INITIATIVES

	Vermont				Minnesota			
Self-Reported Attitudes, Skills, and Behaviors	Pretest Mean (*SD*)	Posttest Mean (*SD*)	*t* value & significance	*n*	Pretest Mean (*SD*)	Posttest Mean (*SD*)	*t* value & significance	*n*
Hopefulness for own recovery	5.10 (1.62)	5.71 (1.37)	4.37***	126	0.69 (0.46)	0.98 (.14)	3.40***	234
Awareness of own early warning signs	2.19 (0.76)	2.42 (0.56)	3.07***	119	0.56 (0.50)	0.94 (0.24)	5.25***	234
Use of wellness tools in daily routine	4.29 (1.48)	4.88 (1.26)	4.92***	125	0.58 (0.49)	0.98 (0.14)	4.97***	234
Awareness of own symptom triggers	1.99 (0.73)	2.33 (0.67)	4.19**	120	0.60 (0.49)	0.85 (0.36)	3.14**	234
Having a crisis plan in place	0.36 (0.48)	0.65 (0.48)	5.81***	147	0.61 (0.49)	0.99 (0.10)	4.55***	234
Having crisis plan for symptoms when triggered	0.35 (0.48)	0.67 (0.47)	6.26***	147	0.68 (0.47)	0.94 (0.24)	3.18***	234
Having a social support system	0.44 (.050)	0.73 (0.44)	5.72***	147	0.74 (0.44)	0.95 (0.22)	2.45**	234
Take responsibility for own wellness/advocacy	1.90 (0.88)	2.17 (0.72)	3.87***	147	0.74 (0.44)	0.98 (0.14)	2.79**	234
Decreased difficulty with crisis plan creation	0.39 (0.49)	0.12 (0.32)	5.69***	121		Not Asked		234
Preference for support from friends/neighbors	2.23 (0.64)	2.40 (0.57)	2.48*	119		Not Asked		234
Preference for using support from consumers	2.10 (0.66)	2.31 (0.61)	2.90**	111		Not Asked		234
Use of support groups	2.04 (0.90)	2.31 (0.67)	3.90***	114		Not Asked		234
Comfort obtaining information about services	2.02 (0.90)	2.40 (0.72)	4.61***	124		Not Asked		234
Managing medications well		Not Asked			0.72 (0.45)	0.88 (0.32)	1.96*	234
Having a lifestyle that promotes recovery		Not Asked			0.55 (0.50)	0.96 (0.20)	5.11***	234
Difficulty engaging in recovery activities		Not Asked			0.68 (0.47)	0.09 (0.08)	10.27***	234

*$p<.05$, **$p<.01$, ***$p<.001$

Table 3– Vermont/Minnesota changes in hope and recovery (Cook et al. p. 4)

Midwest Study

Again, similar to the Vermont and Minnesota studies, a pre-test and post-test questionnaire was administered. In addition, three dependent measures were used face-to-face by trained researchers at the pre-test and post-test. These include the

"State Hope Scale (Snyder et al., 1996), the Modified Colorado Symptom Index (Conrad et al., 2001) and the Recovery Markers Questionnaire (Ridgway et al., 2003). The following table summarizes what these measures are and what they are used for:

Measure Used	Function in the Study
State Hope Scale	A six-item scale used to measure hope as it shifts overtime and according to life situations.
Modified Colorado Symptom Index (MCSI)	A 14-item index brief self-report that measures psychological symptoms.
Recovery Markers Questionnaire (RMQ)	A 28-item self-report checklist in which respondents are asked to place a checkmark beside each statement that applies to their life "right now". It is scored by adding up the total number of affirmed statements.

Table 4 – Three Measures Used in Midwest Study and Functions in WRAP

The participants also allowed researchers to "obtain demographic information-age, gender, race, educational level, and diagnosis-from a statewide database used to monitor Community Mental Health Centers activities" (Starnino et al., p. 58).

A similar protocol was used as in previous studies using "an individualized plan to assist them in recognizing the progression of symptoms and then planning in advance how to manage these symptoms." (Starnino et al., p. 58).

Again the WRAP group included the following sections:

1. Identifying "wellness tools"
2. Creation of a list for maintaining good daily mental health.
3. "Triggers" that cause mental and emotional decompensation
4. Looking for "early warning signs" of mental and emotional decompensation
5. Develop a plan for "when things are break down". This is when more severe symptoms are beginning to surface and mental/emotional decompensation is setting in.

6. Develop a crisis plan – Having a list or resources/people who can take care of you and your needs when you can no longer take care of yourself.

7. Develop a post-crisis plan. This is a review after your crisis. Examples would be when you begin to resume your personal responsibilities.

In addition, groups were introduced to exposure to self-help techniques such as" trauma recovery, general health care, medications and suicide prevention." (Starnino et al, p.58).

Fifteen (15%) of the 45 participants dropped out of the study and all the participants who had participated in the WRAP group had attended at least 75% of the WRAP program. The results were as follows: (see Table 5).

TABLE 1—WRAP PARTICIPANT CHARACTERISTICS	*N*=30	
Age / mean (sd)	41.6	(10.9)
Gender, women / no. (%)	18	(60%)
Race / no. (%)		
White	28	(93.3%)
Black	1	(3.3%)
Other	1	(3.3%)
Educational Level / no. (%) *		
‹high school graduate	9	(33.3%)
=high school graduate	9	(33.3%)
›high school graduate	9	(33.3%)
Diagnosis /no. (%)		
Psychotic disorder		
Schizophrenia	7	(23.3%)
Psychotic disorder NOS	2	(6.7 %)
Schizophreniform disorder	1	(3.3%)
Major depressive disorder	9	(30%)
Bipolar disorder	4	(13.3%)
Substance abuse/dependence	2	(6.7%)
Other	5	(16.7%)

*N= 27 due to missing responses.

Table 5 –Midwest Study- WRAP Characteristics (Starnino et al. p. 59).

As you can see in table 5, the participants' average age was 42, race was 93.3% white, gender was 60% female and one-third had a psychotic disorder as a primary diagnosis. Thirty (30%) of the participants had Major Depressive Disorder followed by 13% having

Bipolar Disorder, 6.7% had substance abuse and five participants had diagnoses such as post-traumatic stress disorder, personality disorder, and anxiety disorder. The percentage of participants that had not finished high school, completed high school, or educated beyond high school was 33 1/3% for all three groups of participants.

Three paired-sample t-tests were conducted before and after the WRAP interventions.

Ohio Study

Trained UIC Survey Research Laboratory (SRL) personnel interviewed study subjects by phone for 1 hour. SRL personnel conducted these interviews 6 weeks (T1) before the start of a WRAP class, 6 weeks (T2) following the end of WRAP classes and about then again, 6 months after the T2 interviews. According to the Community Mental Health Journal, 2011, "interviews were conducted via computer-assisted personal interviewing (CAPI) software". (Jonikas et al. p. 4) The data was then downloaded and analyzed. Each interviewer recorded whether he or she noticed or if the subjects had revealed their actual study condition during the interview. The blind study was compromised in only 4% of all second and third interviews. Measures taken during the study included using an 18-point instrument in which statements were based on a 5-point response scale ranging from strongly agree to strongly disagree. Hopefulness was also measured with the Hope Scale. Twelve items were rated on a 4-point scale ranging from "definitely false" to "definitely true" and were added to produce a total score. (Jonikas et al. 2011)

Data Interpretation

Vermont/Minnesota Study

Results of this data analysis resulted in the following outcomes:

> Significant positive changes in recovery attitudes were observed on 76% items completed by Vermont consumers (thirteen of the seventeen survey items) and, 85% of items completed by Minnesota consumers (eleven of the thirteen survey questions). As shown in table one, both groups of WRAP participants reported significant increases in: 1) their hopefulness for their own recovery; 2) awareness of their early warning signs of decompensation; 3)use of wellness tools in their daily routine; 4) awareness of their own symptom triggers; 5) having a crisis plan in place; 6) having a plan for dealing with symptoms; 7) having a social support system; and 8) ability to take responsibility for their own wellness, (Cook et al., 2010).

In addition, participants in both the Vermont and Minnesota studies reported a preference for being instructed in WRAP by mental health peers rather than from psychiatric professionals.

One participant from Vermont stated the following:

> This course has helped me see that there are opinions for me in how I live my life with my problems, and that recovery and health happen by degrees, with steady effort; that supporting and being supported by friends, etc. is really just one of the most integral parts of anyone's life. (Cook et al., p. 118, 2010).

In addition, a participant from Minnesota stated the following:

> I feel different about life and I know what I need to work on to stay healthy, so I can live on my own, and now my team listens to me (Cook et al., p. 118).

Common themes of the surveys were the ability to manage stressors and symptoms. Other themes were strategies and skills in everyday life such as self-advocacy and self-management of symptoms.

Participants now view that wellness is attainable and an on-going process that was influenced by the support of others such as other peers as is shown in the following quote:

Finally, participants noted that having WRAP educators who were also consumers was especially powerful in instilling hope. As a Vermont participant stated, "no one can tell it like someone who's been through it" (Cook et al., p. 118).

Midwest Study

As you can see in Table 6, participants showed improvements in all three measures after completing a WRAP group. There was a significant increase in both "hope" and "recovery" skills. There was an overall decrease in symptoms for the MCSI measure, but these scores didn't reach significance.

TABLE 2—PAIRED-SAMPLES *T*-TEST BETWEEN PRE-TEST AND POST-TEST SCORES FOR PARTICIPANTS OF WRAP GROUP.

	Pre-test scores			Post-test scores		Paired differences		Test statistics		
	N	*M*	*SD*	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*
1. State Hope Scale [a]	30	31.27	9.43	37.33	7.96	-6.07	8.60	29	-3.86	.001
2. Recovery Markers Questionnaire [b]	29	16.14	6.04	19.96	4.62	-3.82	5.00	28	-4.11	<.001
3. Modified Colorado Symptom Index [c]	28	19.94	15.13	16.39	14.20	3.54	9.38	27	2.00	.056

[a] Scores range from 6 to 48, with higher scores indicating more hope.
[b] Scores range from 0 to 28, with higher scores indicating the presence of more recovery markers.
[c] Scores range from 0 to 56, with higher scores indicating more self-reported psychological symptoms.

Table 6 – Midwest Study (Starnino et al. p. 59**).**

To conclude the assessment of this study, the Psychiatric Journal ends with the following note:

> While future research using randomized control trials and longer term follow-up are needed, this study offers preliminary evidence that WRAP, a consumer-led self-management program, can play a role in supplementing current mental health care approaches. (Starnino et al, p.60).

This Midwestern study also shows a strong relationship between "hope" and "recovery". In all WRAP groups, the individual must define his/her concept of hope and hope can mean many different things to different participants. However, in general, hope can mean light at the end of a tunnel. Things will get better and this, too, shall pass. Hope is an essential part of recovery and it is one of the five key concepts which WRAP is based upon. Many consumers come from a place of hopelessness and learned helplessness. WRAP often turns these individuals into those who become personally responsible for their mental health, cultivate hope in their lives, develop future goals of self-fulfillment and happiness, and in turn, begin a journey of recovery.

Ohio Study

The results were as follows: Among the experimental participants, there were no significant differences in attendance by study wave, but there were significant differences in attendance by site. As a result, the site was not used as a control variable in the next analysis. Total course fidelity averaged 91.3%, thus, there were no significant differences in course fidelity by wave or by study site. Overall, results indicated excellent intervention fidelity. Of the 519 subjects who completed T1 assessments, 88.2% completed the T2 interviews and 86.3% completed the

T3 interviews. Thus, there were no significant differences in follow-up rates between experimental and control participants.

Regarding participant outcomes, experimental condition participants reported significantly greater improvement over time than controls in self-advocacy. The experimental participants, after receiving WRAP, also reported significantly greater improvement than the controls in willingness to disregard a provider's recommendation based on personal health knowledge, health needs and personal beliefs. Those who had attended the WRAP class also reported significantly greater ability to self-advocate than the control subjects (See Table 7).

Community Ment Health J

Table 2 Unadjusted mean scores and SD for patient self-advocacy

Measure by time point	Intervention		Control	
	Mean (SD)	No.	Mean (SD)	No.
PSA—total				
Baseline	3.47 (0.50)	251	3.46 (0.53)	268
Postintervention 1	3.61 (0.52)	224	3.53 (0.53)	234
Postintervention 2	3.65 (0.52)	220	3.55 (0.49)	227
PSA—mindful non-adherence				
Baseline	3.09 (0.74)	251	3.15 (0.76)	267
Postintervention 1	3.28 (0.74)	224	3.19 (0.74)	232
Postintervention 2	3.32 (0.78)	220	3.15 (0.76)	227
PSA—education				
Baseline	3.65 (0.67)	251	3.59 (0.67)	268
Postintervention 1	3.76 (0.74)	224	3.66 (0.71)	234
Postintervention 2	3.80 (0.75)	220	3.70 (0.67)	227
PSA—assertiveness				
Baseline	3.67 (0.72)	251	3.63 (0.76)	268
Postintervention 1	3.81 (0.76)	224	3.73 (0.73)	234
Postintervention 2	3.84 (0.75)	220	3.77 (0.65)	227

PSA patient self-advocacy

Table 3 Effects of study condition (intervention vs. control) on patient self-advocacy, mixed effects random regression controlling for study site (n = 519)

	Estimate (SE)[a]	Z Score	*P* value
Patient self-advocacy—total			
Intercept	3.42 (0.05)	62.61	<.001
Intervention condition	−0.03 (0.06)	−0.51	.612
Time	0.04 (0.02)	2.85	.004
Intervention × time	0.05 (0.02)	2.19	.029
Patient self-advocacy—mindful non-adherence			
Intercept	3.09 (0.07)	44.74	<.001
Intervention condition	−0.15 (0.09)	−1.77	.077
Time	0.01 (0.02)	0.51	.609
Intervention × time	0.10 (0.04)	2.81	.005
Patient self-advocacy—education			
Intercept	3.58 (0.07)	49.10	<.001
Intervention condition	0.03 (0.07)	0.41	.682
Time	0.05 (0.02)	2.31	.021
Intervention × time	0.03 (0.03)	0.95	.341
Patient self-advocacy—assertiveness			
Intercept	3.56 (0.08)	45.80	<.001
Intervention condition	0.03 (0.08)	0.37	.712
Time	0.07 (0.03)	2.74	.006
Intervention × time	0.02 (0.03)	0.58	.577

[a] Estimates are unstandardized MIXREG coefficients and do not represent effect sizes; sign of coefficient indicates direction of effect

Table 7-Ohio Study Effects on Self-Advocacy (Jonikas et al. p. 6)

The Ohio study was the first randomized controlled trial to examine the impact of participating in WRAP on self-advocacy and other key recovery outcomes. According to the Community Mental Health Journal, "the more WRAP people received, the positive patient self-advocacy attitudes and behaviors they reported." Also, it was found that, of those who took a WRAP course "self-advocacy was related to having hope for the future, better environmental quality of life, and being less bothered by psychiatric symptoms." (Jonikas et al. p. 7) This provides considerable evidence for "offering peer-led mental illness self-management as part of a broad array of recovery-oriented services for public mental health clients" (Jonikas et al. P. 7). Finally, this study contributed to the growing evidence base for the role that peer-led mental illness self-management can play in fostering self-advocacy behaviors that can lead to recovery of mental illness and provide a healthier higher quality of life for the mental health consumer.

Conclusion

WRAP, developed by Mary Ellen Copeland, who established the Copeland Center, is a structured approach to developing the tools to maintain self-management in recovery. (Specifically, in this research paper, mental health recovery). According to the website, www.copelandcenter.com/whatiswrap, and quoted in the research report "An Evaluation of Wellness Planning in Self-help and Mutual Support Groups" written by the "Scottish Centre for Social Research" and "Rebekah Pratt" in the Scottish Primary Care Mental Health Research and Development Program at the University of Edinburgh, WRAP can be defined in the following quote:

> WRAP is a structured system to monitor uncomfortable and distressing symptoms that can help you reduce, modify or eliminate those symptoms by using planned responses. This includes plans for how you want others to respond when symptoms have made it impossible for you to continue to make decisions, take care of yourself or keep yourself safe. (Scottish Centre for Social Research/R. Pratt, p. 4)

As is already shown in this research paper, WRAP has significantly increased hopefulness, self-advocacy and self-management among those mental health consumers in the United States and has been approved as an "Evidence-based Practice". The WRAP approach is beginning to be used in Britain and even in Asia. In a publication by Zhang et al., (2007) "The effectiveness of the Mental Health Recovery including WRAP with Chinese Consumers", several family members of participants in a Chinese self-help group believed that"WRAP had taught consumers how to release their emotion so they could better control them when their moods were unstable." (Scottish Centre for Social Research/R. Pratt, p. P. 41)

The research, overwhelmingly points to positive outcomes in increased hopefulness, self-advocacy, increased self-esteem, reduced negative symptoms and increased ability to manage one's life.

WRAP empowers mental health consumers to take personal responsibility in directing their wellness and recovery leading to a better quality of life.

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