



WRAP®

Wellness Recovery
Action Plan
For Adolescents



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PhD

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Special Thanks to:

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What is WRAP?

WRAP is a simple, safe, self-determined process for assessing personal resources and using those resources to:

1. Feel better
2. Stay well
3. Make your life the way you want it to be
4. Do the things you want to do

WRAP Includes:

- Wellness Toolbox
- Daily Maintenance Plan
- Triggers and Action Plan
- Early Warning Signs and Action Plan
- When Things are Breaking Down and Action Plan
- Crisis Plan or Advance Directive
- Post Crisis Planning





Why WRAP for Adolescents

1. Time of change and difficult transitions
 - New responsibilities and experiences
 - Diminished family supervision and support
 - Strategies that used to work no longer work
2. Opportunity to develop self awareness
3. Teaches personal responsibility and self advocacy
4. Build new habits and life strategies
5. Helps discover interests and opportunities



People often develop mental health challenges like psychosis, anxiety, depression, suicidality, mania at this time.

WRAP is a safe, common sense way to address or deal with these issues.

Use WRAP to Address **Issues like:**



Going away to school

Leaving home, friends, jobs, or community

Finding a new home space, new friends, a
new community

Beginning or ending a relationship

Trying out new experiences

Starting new jobs



- Feeling "burned out"
- Not getting any pleasure out of living
- Irritable and annoyed much of the time
- Constantly tired
- Lacking motivation
- Working too much
- Addictions
- Weight related issues
- New situations and experiences



WRAP

There is only one person who can write a WRAP

The person who will be using it'

Only they can decide:

- If they want a WRAP
- How much time they take to develop it
- When they do it
- Which parts they want to do





WRAP

They decide:

- If they want anyone to help with it
- If they want to attend a WRAP group
- How they use it
- Who they show it to
- Where they keep it
- Who, if anyone, has copies of their Crisis Plan

WRAP



Most adolescents will choose to develop their WRAP on a computer using The “WRAP for Your Computer” Or the “Build Your Own WRAP” programs.

In several months we will have a WRAP APP. and a book WRAP for Youth.





Begin a WRAP by:

They begin by developing a list of their Wellness Tools.

These are the things they do to keep themselves well, to find satisfaction in living and to enjoy life, and the things they do to help them self feel better when they don't feel well or are having difficulty coping.



Developing a Wellness Toolbox

They may have discovered their own wellness tools or learned about them from others.

Most of them are simple, safe, and free.
They will use these tools to develop their WRAP.



Wellness Tool Ideas

- Doing things that divert their attention/things they enjoy
- Journal writing
- Eating or avoiding certain foods
- Exercise
- Being outdoors





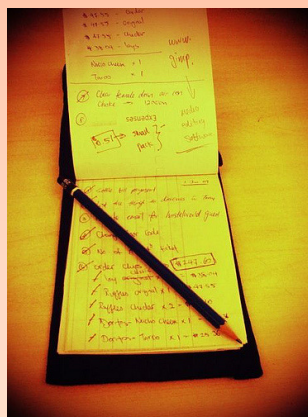
Wellness Tool Ideas

- Listening to or playing music
- Going to a concert or movie with friends
- “Hanging out” with friends
- Playing sports or watching sports
- Doing a creative art project
- Taking a shower
- Painting my nails



Wellness Tools

They will be able to think of many other Wellness Tools that are helpful to them.



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Daily Maintenance List



The first section is Daily Maintenance Plan.

On the first page, they describe what they are like when they are feeling great.





Daily Maintenance List

Some words that others have used are:

Bright

Happy

Outgoing

Optimistic

Humorous

Competent

Athletic

Industrious

Content

Responsible

Reasonable

Withdrawn



Daily Maintenance List

They may want to include on this page specific things they want to work on in their WRAP like:

Building Self-Esteem

Improving a relationship or ending a relationship

Getting a Different Job

Enjoying life



Daily Maintenance List

Then they make a list of things they feel they need to do every day to keep feeling well, things like:

- Getting up at a specific time

- Eating breakfast

- Going to school or work

- Taking a shower

- Spending time with friends

- Avoiding alcohol

Daily Maintenance List



Then they make a reminder list of things they might choose or need to do on any specific day.

Reading through this list daily and doing those things that need to be done reduces stress and helps them stay on track.

Daily Maintenance List



- Getting more sleep
- Seeing a vocational counselor
- Arranging a job interview
- Working on a special project
- Buying groceries
- Personal time
- Planning something fun for the weekend





Identifying **Triggers**

Triggers are upsetting events or circumstances that make them feel awful.

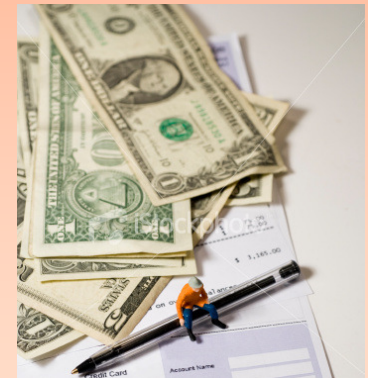
These are normal reactions to life events - but if they don't address them, they may make them feel worse and worse over time.

Triggers



Examples:

- Arguments with friends
- Work or school stress
- Family Friction
- Breaking up with a partner
- Sexual harassment
- Teasing, bullying
- Being treated badly
- Physical illness
- Feeling left out
- Parents nagging





Triggers Action Plan

They list choices of Wellness Tools they can use to help themselves feel better if a trigger happens.

Vent with a supporter

Play with my dog

Watch a funny video

Play my guitar

Punch a pillow

Vigorous exercise

Surround myself with people who understand me

Advocate for myself

Do some deep breathing

Do an art project

Early Warning Signs



Early Warning Signs are internal and may be unrelated to reactions to stressful situations.

They are subtle signs of change that indicate they may need to take some further action.



Early Warning Signs

- Not able to sleep
- Making bad decisions
- Feeling like I am no good
- Feel like I am walking on eggshells
- Feeling ugly
- Feeling like nobody likes me



Early Warning Signs

- Forgetfulness
- Anxiety or Nervousness
- Inability to Experience Pleasure
- Lack of Motivation
- Feeling Slowed Down or Speeded Up
- Loss of appetite—or eating “a lot”

Early Warning Signs **Action Plan**



They develop a plan of Wellness Tools to use every day until they feel better – a plan they feel will keep them from feeling worse and help them to feel better if they notice Early Warning Signs.

Early Warning Signs Action Plan



Sample Plan:

- Do three 10 minute relaxation exercises
- Spend at least 1 hour involved in an activity I enjoy
- Ask others to take over my responsibilities
- Play my drums for at least ½ hour
- Avoid junk food and caffeine
- Get to bed by 11 each night and get up by 8:30
- Ask for extensions on my homework



Early Warning Signs **Action Plan**



- Spend extra time with good friends
- Take a day off from school or work
- Make a list of things that make me laugh
- Work on a favorite art project for at least ½ hour
- Read a good book
- Exercise for at least ½ hour
- Go to an uplifting event
- Get a check-up with my doctor

When Things are Breaking Down or Getting Worse



They may begin to feel much worse, like the situation is serious – and even dangerous – but they are still able to take some action in their own behalf.

This is a very important time. It is necessary for them to take immediate, assertive action to prevent a crisis.

When Things are Breaking Down or Getting Worse



They make a list of the feelings and behaviors which mean that things have worsened and are close to the crisis.



When Things are Breaking Down or Getting Worse



- Can't concentrate at school or work
- Losing track of what I'm doing
- Feeling very oversensitive and fragile
- Irrational responses to others

When Things are Breaking Down or Getting Worse



- Feeling very needy
- Unable to sleep for (how long?)
- Sleeping all the time
- Avoiding eating
- Racing thoughts
- Not wanting to be with anyone



When Things are Breaking Down or Getting Worse



They then develop an action plan to use each day they experience the signs “When Things are Breaking Down” until they no longer experience these signs.

The plan now needs to be clear and directive with many Wellness Tools they “must” use and fewer choices. As with the rest of the plan, they decide what they will do.



When Things are Breaking Down or Getting Worse Action Plan

Things I must do each do until I no longer have these signs:

- Stay home from school or work
- Do all the things on my Daily Maintenance List
- Exercise vigorously for at least ½ hour
- Spend at least 1 hour playing or listening to music
- Spend at least 1 hour working on a creative art project
- Check in with my counselor or doctor
- Talk to a supporter for at least 15 minutes



When Things are Breaking Down or Getting Worse Action Plan

Things I might choose do:

- Work on scrapbooking
- Take pictures of things I love
- Make a list of my accomplishments
- Text with my friends
- Order a pepperoni pizza and share it with a friend
- Anything on my list of Wellness Tools



Crisis Planning/Advance Directive

They write their Crisis Plan when they are feeling OK. The plan will instruct others about how to care for them when they cannot take care of themselves.

It keeps them in control even when it seems like things are out of control.



Crisis Planning

Others will know what to do, saving everyone time and frustration, while insuring that their needs will be met.

They need to develop this plan slowly when they are feeling OK.





Crisis **Planning/Advance** **Directive**

This part of WRAP is different from other parts of the plan because they will give it to those people they want to support them in advance so they have it when needed.

Advance Directive/Crisis Planning



1. What you are like when you are well
2. Indicators that others need to “take over”
3. Who “takes over” and who doesn’t
4. Information on health care contacts and medications
5. Acceptable and unacceptable treatments
6. Home/Community Care/Respite Plan

Advance Directive/Crisis Planning



7. Things others can do that would help
8. Things other might do that would make you feel worse
9. A list of chores and tasks for others
10. Indicators that the plan is no longer needed
11. Signatures of key people

Post Crisis Planning



The time when they are healing from a crisis can be very important.

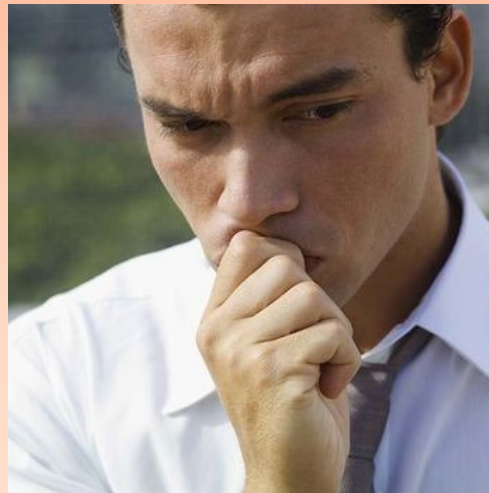
Although they feel ready to begin taking care of them self again, they may still be dealing with difficult feelings and behaviors as well as the aftermath of the crisis.

They may find that they are starting to feel worse – like they are heading for another crisis.

Post Crisis Planning



Thinking about this time before they even have a crisis, and perhaps giving it more attention when they are starting to feel better after a crisis, may help them have an easier time recovering and moving on.



WRAP



They can begin using their Wellness Recovery Action Plan as their guide to daily living whenever they want to. They don't have to complete it to use it.

WRAP



At first they may want to review their plan every day, following their Daily Maintenance Plan, and taking other action as needed.



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WRAP



After a while they will notice that they remember their plan and only need to refer to it from time to time, unless they are having a difficult time.

WRAP



They may want to revise their plan when they discover new Wellness Tools and find that some things work better for them than others.



KEY CONCEPTS

- ✓ Hope
- ✓ Personal Responsibility
- ✓ Education
- ✓ Self Advocacy
- ✓ Support

VALUES AND ETHICS of WRAP

1. It is understood that there is hope, that people can get well, stay well for long periods of time, and do the things they want to do with their lives.

2. Self determination, personal responsibility, empowerment, and self-advocacy are stressed.

VALUES and ETHICS (cont.)

3. They are encouraged to make their own decisions, or when applicable make decisions with the group, and personal sharing is encouraged.
4. They must be treated with dignity, compassion, mutual respect, and unconditional high regard at all times, and as equal to all others.
5. They are accepted unconditionally as a unique and special person, including acceptance of diversity of culture, ethnicity, language, religion, race, gender, age, disability, sexual identity, and ability.

VALUES and ETHICS (cont.)

6. It is understood that there are "no limits" to recovery.

7. They are always given the opportunity to explore choices and options, and are not expected to easily find simple, final answers.

8. All participation is voluntary.

9. It is understood that they are the expert on them self.

VALUES and ETHICS (cont.)

10. The focus is on individual strengths, and away from perceived deficits.

11. Clinical, medical, and diagnostic language is avoided.

13. Recommended strategies are simple and safe for anyone. Strategies that may have harmful effects, or are potentially dangerous are not suggested or recommended.

VALUES and ETHICS (cont.)

14. Difficult feelings and behaviors are seen as normal responses to traumatic circumstances and in the context of what is happening, and not as “symptoms” or as confirmation of a diagnosis.



Avoid

Nagging

Threats, coercion, shouting

Putting your expectations on them

Encouraging or telling them they have to do specific things before they are ready



Do

Be kind, warm, gentle, loving and understanding even when it is hard

Listen, Listen, Listen
without interrupting with stories of your own

WRAP Around the World Conference

- SAVE THE DATE
- January 25-27, 2013
- Oakland City Center Marriott
- Please join us for the second international conference!

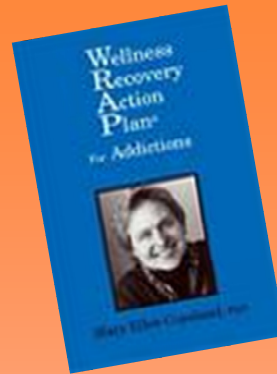


Copeland Center
FOR WELLNESS AND RECOVERY



For information on WRAP training,
WRAP groups and WRAP for
Adolescents Programs

Visit www.copelandcenter.com



Many, many WRAP resources

- The WRAP Story
- WRAP Plus
- Winning Against Relapse
- The Depression Workbook
- WRAP books



WRAP Includes:

- Wellness Toolbox
- Daily Maintenance Plan
- Triggers and Action Plan
- Early Warning Signs and Action Plan
- When Things are Breaking Down and Action Plan
- Crisis Plan or Advance Directive
- Post Crisis Planning



Wellness Recovery Action Plan (WRAP)

Wellness Recovery Action Plan (WRAP) is a manualized group intervention for adults with mental illness. WRAP guides participants through the process of identifying and understanding their personal wellness resources ("wellness tools") and then helps them develop an individualized plan to use these resources on a daily basis to manage their mental illness. WRAP has the following goals:

- Teach participants how to implement the key concepts of recovery (hope, personal responsibility, education, self-advocacy, and support) in their day-to-day lives
- Help participants organize a list of their wellness tools--activities they can use to help themselves feel better when they are experiencing mental health difficulties and to prevent these difficulties from arising
- Assist each participant in creating an advance directive that guides the involvement of family members or supporters when he or she can no longer take appropriate actions on his or her own behalf
- Help each participant develop an individualized postcrisis plan for use as the mental health difficulty subsides, to promote a return to wellness

WRAP groups typically range in size from 8 to 12 participants and are led by two trained cofacilitators. Information is imparted through lectures, discussions, and individual and group exercises, and key WRAP concepts are illustrated through examples from the lives of the cofacilitators and participants. The intervention is typically delivered over eight weekly 2-hour sessions, but it can be adapted for shorter or longer times to more effectively meet the needs of participants. Participants often choose to continue meeting after the formal 8-week period to support each other in using and continually revising their WRAP plans.

Although a sponsoring agency or organization may have its own criteria for an individual's entry into WRAP, the intervention's only formal criterion is that the person must want to participate. WRAP is generally offered in mental health outpatient programs, residential facilities, and peer-run programs. Referrals to WRAP are usually made by mental health care providers, self-help organizations, and other WRAP participants. Although the intervention is used primarily by and for people with mental illnesses of varying severity, WRAP also has been used with people coping with other health issues (e.g., arthritis, diabetes) and life issues (e.g., decisionmaking, interpersonal relationships) as well as with military personnel and veterans.

Descriptive Information

Areas of Interest	Mental health treatment
Outcomes	Review Date: September 2010 1: Symptoms of mental illness 2: Hopefulness 3: Recovery from mental illness 4: Self-advocacy 5: Physical and mental health
Outcome Categories	Mental health Quality of life Social functioning Treatment/recovery
Ages	26-55 (Adult)
Genders	Male Female
Races/Ethnicities	American Indian or Alaska Native Asian Black or African American Hispanic or Latino White Race/ethnicity unspecified

Settings	Residential Outpatient Other community settings
Geographic Locations	Urban Suburban Rural and/or frontier
Implementation History	In 1997, WRAP was first implemented, and the first edition of the book "Wellness Recovery Action Plan" was published. Since then, more than a million WRAP books and related resources have been distributed worldwide, and millions of people have benefited from the WRAP intervention. Formal training for WRAP facilitators was first offered in 1997, and the first edition of the structured WRAP facilitator training manual, "Mental Health Recovery Including Wellness Recovery Action Plan Curriculum," was published in 1998. The not-for-profit Copeland Center for Wellness and Recovery was established in 2005 with a mission to implement and network the WRAP training model, nationally and internationally. As of February 2010, more than 2,000 people had been trained as a WRAP facilitator, and 120 of these individuals had been trained as an advanced-level facilitator. Trainings have been conducted in Australia, Canada, England, Hong Kong, Ireland, Japan, New Zealand, Scotland, and the United States, and WRAP groups, which are conducted by trained facilitators, exist in these countries. In the United States, local and regional WRAP programs sponsored by mental health agencies and peer-run centers exist in every State, and over 25 States have integrated statewide WRAP initiatives. There have been at least six evaluations of this intervention in the United States, as well as one in New Zealand and one in Scotland.
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: Yes Evaluated in comparative effectiveness research studies: No
Adaptations	The book "Wellness Recovery Action Plan" and other WRAP implementation materials have been translated into many languages, including Chinese, French, Japanese, Polish, and Spanish. In addition, many international trainings and presentations have been adapted to accommodate unique cultural perspectives on mental health, language differences, and cultural norms.
Adverse Effects	Preliminary data analysis conducted for a study published in 2009 by Cook et al. (see Study 2) indicated that participation in WRAP may have had negative effects on empowerment. However, this finding has not been replicated in subsequent evaluations and analyses with larger samples. To date, no additional accounts of adverse effects of WRAP have been published.
IOM Prevention Categories	IOM prevention categories are not applicable.

Quality of Research

Review Date: September 2010

Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Cook, J. A., Copeland, M. E., Jonikas, J. A., Hamilton, M. M., Razzano, L. A., Grey, D. D., et al. (2010). Results of a randomized controlled trial of mental illness self-management using Wellness Recovery Action Planning. Manuscript submitted for publication.

Study 2

[Cook, J. A., Copeland, M. E., Hamilton, M. M., Jonikas, J. A., Razzano, L. A., Floyd, C. B., et al. \(2009\). Initial outcomes of a mental illness self-management program based on Wellness Recovery Action Planning. *Psychiatric Services*, 60\(2\), 246-249. !\[\]\(2b376d1a92330ab09dad2665d2f89bf5_img.jpg\)](#)

Supplementary Materials

University of Illinois at Chicago (UIC) National Research and Training Center (NRTC) Ohio (OH) WRAP Study: Fidelity Scale

Outcomes

Outcome 1: Symptoms of mental illness

Description of Measures

Symptoms of mental illness were assessed using the Brief Symptom Inventory (BSI), a 53-item

	self-report instrument. The BSI yields scores on the Global Severity Index (an overall measure of psychological distress), the Positive Symptom Total (a measure of the number of symptoms), and nine symptom subscales: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Using a 5-point scale ranging from "not at all" to "extremely," participants rate each item for how much the symptom bothered them in the past week.
Key Findings	Participants were randomly assigned to an intervention group that received WRAP or to a wait-list control group that received services as usual. The BSI was administered to participants 6 weeks before (baseline) and 6 weeks after (posttest) they received the intervention and at a 6-month follow-up. WRAP participants had a significantly greater reduction in the severity and number of symptoms across time (from baseline to posttest to 6-month follow-up) relative to control group participants, as indicated by scores on the BSI Global Severity Index ($p = .023$); Positive Symptom Total ($p = .027$); and subscales measuring interpersonal sensitivity ($p = .023$), depression ($p = .022$), anxiety ($p = .022$), phobic anxiety ($p = .034$), and paranoid ideation ($p = .009$). No statistically significant differences were found between the two groups across time on somatization, obsessive-compulsive, hostility, and psychoticism subscales.
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating	3.9 (0.0-4.0 scale)

Outcome 2: Hopefulness	
Description of Measures	Hopefulness was assessed using the Hope Scale (HS), a 12-item self-report instrument with two subscales: one that measures belief in one's capacity to initiate and sustain actions and another that measures ability to generate routes by which goals may be reached. Participants rate each item on a 4-point scale ranging from "definitely false" to "definitely true," and scores for each item are summed to produce a total score.
Key Findings	<p>In one study, participants were randomly assigned to an intervention group that received WRAP or to a wait-list control group that received services as usual. The HS was administered to participants 6 weeks before (baseline) and 6 weeks after (posttest) they received the intervention and at a 6-month follow-up. WRAP participants had a significantly greater improvement in hopefulness across time (from baseline to posttest to 6-month follow-up) relative to control group participants, as indicated by total HS scores ($p = .018$) and the subscale for belief in one's capacity to initiate and sustain actions ($p = .020$). No statistically significant difference was found between the two groups across time on the subscale for ability to generate routes by which goals may be reached.</p> <p>In another study, the HS was administered to participants before (pretest) and 1 month after (posttest) they received the intervention. From pre- to posttest, participants who received WRAP had a significant increase in feelings of hopefulness, as indicated by scores on the two HS subscales ($p < .01$ for each subscale).</p>
Studies Measuring Outcome	Study 1, Study 2
Study Designs	Experimental, Preexperimental
Quality of Research Rating	3.7 (0.0-4.0 scale)

Outcome 3: Recovery from mental illness	
Description of Measures	Recovery from mental illness was assessed using the Recovery Assessment Scale (RAS), a 41-item self-report instrument with five subscales: personal confidence, willingness to ask for help, goal orientation, reliance on others, and freedom from symptom domination. Participants rate each item on a 5-point scale ranging from "strongly agree" to "strongly disagree," and scores for each item are summed to produce a score for overall recovery.
Key Findings	The RAS was administered to participants before (pretest) and 1 month after (posttest) they received the intervention. From pre- to posttest, WRAP participants had a significant improvement in RAS scores for overall recovery ($p < .001$) and in the five subscales: personal confidence (p

	< .001), willingness to ask for help (p < .05), goal orientation (p < .05), reliance on others (p < .05), and freedom from symptom domination (p < .05).
Studies Measuring Outcome	Study 2
Study Designs	Preexperimental
Quality of Research Rating	3.3 (0.0-4.0 scale)

Outcome 4: Self-advocacy	
Description of Measures	Self-advocacy was assessed using the Patient Self-Advocacy Scale (PSAS), a 12-item self-report instrument that measures three dimensions: patient knowledge, assertiveness, and potential for nonadherence to treatment. Participants rate each item on a 5-point scale ranging from "strongly agree" to "strongly disagree."
Key Findings	The PSAS was administered to participants before (pretest) and 1 month after (posttest) they received the intervention. From pre- to posttest, WRAP participants had a significant improvement in self-advocacy, as indicated by scores in all three dimensions (p < .01 for each dimension).
Studies Measuring Outcome	Study 2
Study Designs	Preexperimental
Quality of Research Rating	3.3 (0.0-4.0 scale)

Outcome 5: Physical and mental health	
Description of Measures	Physical and mental health was assessed using the Medical Outcomes Study 12-Item Short Form Survey (SF-12), a self-report instrument that evaluates health indicators, allowing for examination of the presence and seriousness of physical and mental conditions, acute symptoms, age and aging, changes in health, and recovery from depression.
Key Findings	The SF-12 was administered to participants before (pretest) and 1 month after (posttest) they received the intervention. From pre- to posttest, WRAP participants had a significant improvement in physical and mental health (p < .01).
Studies Measuring Outcome	Study 2
Study Designs	Preexperimental
Quality of Research Rating	3.3 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

Study	Age	Gender	Race/Ethnicity
Study 1	26-55 (Adult)	66% Female 34% Male	63% White 28% Black or African American 5% Hispanic or Latino 3% American Indian or Alaska Native 1% Asian
Study 2	26-55 (Adult)	64% Female 36% Male	66% White 25% Black or African American 5% Race/ethnicity unspecified 4% Hispanic or Latino

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Symptoms of mental illness	4.0	4.0	4.0	4.0	3.5	4.0	3.9
2: Hopefulness	4.0	4.0	3.6	3.4	3.0	4.0	3.7
3: Recovery from mental illness	4.0	4.0	2.8	2.8	2.0	4.0	3.3
4: Self-advocacy	4.0	4.0	2.8	2.8	2.0	4.0	3.3
5: Physical and mental health	4.0	4.0	2.8	2.8	2.0	4.0	3.3

Study Strengths

All outcome measures used in both studies have strong, well-established psychometric properties. Both studies assessed fidelity through multiple methods, including a checklist that documented adherence to prescribed topics, timeframes, and instructional modalities; weekly teleconference calls by the research team and the study's local WRAP coordinators to discuss each site's attendance and fidelity scores; and the use of trained, experienced facilitators. One study used random assignment and found no significant baseline differences between the intervention and control groups in regard to demographics, clinical status, and employment status. Attrition in both groups for this study was relatively low and was addressed appropriately in the analyses. The same study used a strong experimental design to minimize potential bias owing to confounding variables. Both studies' analytic strategy for data was thorough and appropriate.

Study Weaknesses

The instrument used in both studies to assess intervention fidelity has unknown psychometric properties. One study used a preexperimental design and had high attrition. The other study did not provide adequate information on the services received by the control group, such as exposure to peer-led support groups and medications, which raises concerns about potential confounds.

Readiness for Dissemination

Review Date: September 2010

Materials Reviewed

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.

Copeland, M. E. (1999). *Winning against relapse: A workbook of action plans for recurring health and emotional problems*. Dummerston, VT: Peach Press.

Copeland, M. E. (2001). *The depression workbook: A guide for living with depression and manic depression* (2nd ed.). Oakland, CA: New Harbinger Publications.

Copeland, M. E. (2006). *Wellness Recovery Action Planning (WRAP) project: WRAP group facilitator's kit*.

Copeland, M. E. (2009). *Facilitator training manual: Mental health recovery including Wellness Recovery Action Plan curriculum*. Dummerston, VT: Peach Press.

Copeland, M. E. (2010). *WRAP facilitator manual*.

Copeland, M. E., & Mead, S. (2004). *Wellness Recovery Action Plan and peer support: Personal, group, and program development*. Dummerston, VT: Peach Press.

My WRAP [Participant binder]

Program Web site for facilitators, <http://www.copelandcenter.com>

Program Web site for participants, <http://www.mentalhealthrecovery.com>

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

- 1. Availability of implementation materials
- 2. Availability of training and support resources
- 3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see [Readiness for Dissemination](#).

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
3.8	4.0	3.0	3.6

Dissemination Strengths

An extensive array of well-developed implementation materials is available. All materials are consistent in content and approach, and they include guidance for adapting the program for use with specific populations. Extensive opportunities are available for facilitator trainings. The facilitator training manual is well organized and includes a comprehensive curriculum. The trainings cover all aspects of organizing, preparing, and conducting group sessions, with training activities and discussions closely following the content of the manuals. Online training options make this program accessible to those who cannot attend an in-person facilitator training session. Extensive support materials (e.g., handouts, worksheets) are available for participants and facilitators, and many of these materials are accessible at the participant and facilitator resource Web sites. A certification program for facilitators helps to ensure fidelity to the model. The fidelity tool includes both content and process questions, and information derived from use of the fidelity tool can be discussed with a local program coordinator.

Dissemination Weaknesses

Use of some self-help tools may require peer or facilitator support because of the these tools' complex and dense language. The use of the fidelity tool is not emphasized in program materials. The role and expectations of the local program coordinator, who provides fidelity monitoring support, are not fully discussed.

Costs

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

Item Description	Cost	Required by Developer
Facilitator Training Manual: Mental Health Recovery Including Wellness Recovery Action Plan Curriculum	\$129 each	Yes, one source of implementation guidance is required
Wellness Recovery Action Plan [book]	\$10 each	Yes, one source of implementation guidance is required
Assorted books and videos for facilitators and participants	\$2-\$60 each	Yes, one source of implementation guidance is required
Online participant materials	Free	No
Wellness Recovery Action Plan and Peer Support: Personal, Group, and Program Development	\$24.95 each	No
Winning Against Relapse: A Workbook of Action Plans for Recurring Health and Emotional Problems	\$16.95 each	No
The Depression Workbook: A Guide for Living With Depression and Manic Depression	\$24.95 each	No
5-day, off-site facilitator training at various locations across the United States	\$1,200 per participant	No

5-day, off-site advanced facilitator training at various locations across the United States	\$1,400 per participant	No
Correspondence course	\$299 per participant	No
On-site consultation	Cost varies depending on site needs	No

Replications

Selected citations are presented below. An asterisk indicates that the document was reviewed for Quality of Research.

[Cook, J. A., Copeland, M. E., Corey, L., Buffington, E., Jonikas, J. A., Curtis, L. C., et al. \(2010\). Developing the evidence base for peer-led services: Changes among participants following Wellness Recovery Action Planning \(WRAP\) education in two statewide initiatives. Psychiatric Rehabilitation Journal, 34\(2\), 113-120. !\[\]\(dfbd6b3763a6d1d9afaa974f64e2e4b5_img.jpg\)](#)

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[Sterling, E. W., von Esenwein, S. A., Tucker, S., Fricks, L., & Druss, B. G. \(2010\). Integrating wellness, recovery, and self-management for mental health consumers. Community Mental Health Journal, 46\(2\), 130-138. !\[\]\(758ebdf4629c903da74c2e079717ae32_img.jpg\)](#)

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Consider these [Questions to Ask](#) (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):

- <http://www.mentalhealthrecovery.com>
- <http://www.copelandcenter.com>

Improving Propensity for Patient Self-Advocacy Through Wellness Recovery Action Planning: Results of a Randomized Controlled Trial

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Abstract A fundamental aspect of successful illness self-management for people with serious mental illnesses is the ability to advocate for themselves in health and rehabilitation settings. This study reports findings from a randomized controlled trial comparing propensity for patient self-advocacy among those who received a peer-led mental illness self-management intervention called Wellness Recovery Action Planning (WRAP) and those who received usual care. Outcomes were self-reported engagement in self-advocacy with service providers, and the relationship between patient self-advocacy and other key recovery outcomes. In a multivariable analysis, at immediate post-intervention and 6-month follow-up, WRAP participants were significantly more likely than controls to report engaging in self-advocacy with their service providers. Higher self-advocacy also was associated with greater hopefulness, better environmental quality of life, and fewer psychiatric symptoms among the intervention group. These findings provide additional support for the positive impact of peer-led illness self-management on mental health recovery.

Keywords Mental illness self-management · Patient self-advocacy · Mental health recovery outcomes

Introduction

Effective self-care has long been viewed as fundamental for coping with long-term illnesses (Baker and Stern 1993; Kennedy et al. 2007). As a form of self-care education, illness self-management programs convey information, provide symptom management and health communication skills, enhance hope and empowerment, offer emotional support, and improve self-advocacy skills (Bodenheimer et al. 2002; Lorig et al. 2001; Mueser et al. 2002; Sterling et al. 2010; Von Korff et al. 1998). One popular illness self-management program, called Wellness Recovery Action Planning (WRAP), helps participants to identify and access personal resources and natural supports to facilitate recovery from mental illness (Copeland 2001). WRAP participants develop an individualized plan for managing mental health difficulties and creating a meaningful life, while acquiring skills to become self-advocates by increasing their knowledge, making choices, and expressing personal preferences (Copeland 2002). Recent research indicates that WRAP has a positive impact on key recovery outcomes including hopefulness, environmental quality of life, and psychiatric symptoms (Cook et al. 2011). WRAP additionally has been found to improve mental health recovery attitudes (such as hope and personal responsibility) and skills (such as recognizing symptom triggers and engaging in daily self-care) (Cook et al. 2010; Doughty et al. 2008; Fukui et al. 2011).

A fundamental aspect of successful illness self-management is the ability to be a self-advocate within health and rehabilitation settings, in order to receive services and treatments of choice (Bastian 1998; Onken et al. 2002; Walsh-Burke and Marcusen 1999). Studies demonstrate that the more comfortable patients are interacting with their medical providers, the more information they gain and the

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better their contributions to decision-making (Auerbach 2001; Brashers et al. 1999; Hamann et al. 2006), which in turn improves their health outcomes (Lambert and Loiselle 2007). Studies generally find that patients who actively seek health information, openly communicate with health care providers, and express treatment preferences have better information to inform their decision-making, greater desire to engage in services/treatment, and fewer symptoms (Adams and Drake 2006; Charles et al. 1997; Loh et al. 2007; Stewart 1995). Yet, research also shows that there are many barriers to effective patient self-advocacy, including feeling hopeless, having high levels of emotional distress or symptoms, perceiving a power imbalance, and fear of challenging a provider or wasting her/his time (Brashers et al. 1999; Ciechanowski et al. 2003).

This analysis presents findings from a randomized controlled trial to determine the impact of WRAP on varying dimensions of recovery attitudes and behaviors. In an earlier study, we demonstrated that peer-delivered WRAP reduces psychiatric symptoms, enhances participants' hopefulness, and improves environmental quality of life over time (Cook et al. 2011). Based on the important role that patient self-advocacy may play in mental health recovery, as well as the multifaceted nature of recovery (Jacobson and Curtis 2000), our research questions for the current study were whether peer-led mental illness self-management education leads to increased propensity to engage in patient self-advocacy, and whether there is a relationship between patient self-advocacy and other important recovery outcomes. Specifically, we hypothesized that WRAP participants would report higher levels of patient self-advocacy than controls, and that this difference would be maintained over time. We also 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.

Methods

Study Intervention

The intervention consisted of eight, 2.5-h sessions of WRAP, delivered free of charge by two instructors who were in recovery from a mental illness, with one or more trained back-up instructors available in case of illness or emergency. All instructors were certified by the Copeland Center for Wellness and Recovery and had experience teaching WRAP.

Classes of 5–12 participants met in accessible community settings each week for 2 months. For this study, class format consisted of lectures, individual and group

exercises, personal examples from the lives of the peer instructors and students, and voluntary homework to continue developing one's personalized WRAP plan outside of class. During the first class, instructors presented the key concepts of WRAP and recovery. For the next two classes, they reviewed personal strategies to maintain wellness and self-manage one's disability. For the fourth class, instructors helped participants to develop their own daily maintenance plans, for which each student identified feasible and affordable strategies to facilitate mental and physical wellness each day. This class also included emphasis on advance planning for students to recognize and proactively respond to their self-defined symptom triggers. During class five, instructors introduced the concept of early warning signs that a crisis might be impending and advance planning for extra services/supports when this occurs. The next two classes focused on advance crisis planning, including identification of preferred medications, treatments, supporters, facilities, and helpful strategies others can employ when participants experience crisis and are unable to advocate for themselves. During the last class, instructors discussed the value of post-crisis planning, strategies to revise one's WRAP plan after a crisis, and a graduation that allowed instructors and students to reflect upon personal growth as a result of the 2-month class.

Throughout all 8 classes, participants were exposed to information and activities designed to increase their hopefulness, as well as enhance their skills in taking personal responsibility for their wellness and education. Specifically, participants discussed: (1) their civil and patient rights; (2) how to access credible, personally meaningful treatment information; and (3) how to advocate for themselves with providers and other supporters. They also practiced making choices and expressing preferences, based on their personal knowledge of successful illness self-management strategies and their personal beliefs and values.

Prior to implementing the intervention, all instructors received comprehensive training on how to teach WRAP in accordance with its research fidelity standards. The researchers also convened a weekly teleconference with the local study coordinators and instructors to conduct refresher training, review each site's attendance and fidelity, problem-solve challenges that arose during classes, and discuss the coming week's course materials and modalities. 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. WRAP classes were offered five times in four of the six study sites, four times at a fifth site, and one time at the sixth site when the fifth site's facilitators were unavailable. While in the WRAP class, all participants also

received their usual services, receipt of which was measured at each assessment point.

Intervention Fidelity

As recommended by the NIH Behavior Change Consortium (Bellg et al. 2004), study personnel monitored fidelity throughout the entire period of service delivery, reviewed fidelity findings weekly with instructors, and made plans to ensure that missed material was covered in subsequent sessions. Intervention fidelity was monitored in several ways. First, as lead developer of the WRAP model, one of our co-authors (Copeland) worked with UIC research personnel (JC, JJ) to design a comprehensive checklist that was used weekly to track adherence to the prescribed topics, time frames, and instructional modalities in the intervention manual from which all instructors taught. During each class, a score of 1 was given for every requisite intervention component that was delivered as intended; any missed components during that same class were scored as 0. Additionally, the local study coordinators observed each instructor delivering the intervention on multiple occasions and offered detailed feedback to ensure continued adherence to fidelity standards.

Control Condition

Study participants in the control group were placed on a waiting list guaranteeing them the opportunity to receive the 8-week WRAP class after each person in the cohort completed their final interview. While on the waiting list, control group participants received all of their usual services, including psychotropic medications and medication management, individual and group outpatient therapy, vocational services, residential services, substance abuse treatment, and inpatient care. Because no other WRAP classes were taught at any of the sites throughout the study period, we were able to maintain the integrity of the no-treatment condition.

Participants

The sample included people aged 18 or older who met the federal definition of having a serious mental illness other than substance use disorder for at least 12 months that resulted in serious functional impairment (Epstein et al. 2002). Subjects were receiving publicly-funded outpatient mental health services and/or peer support in six Ohio communities: Canton, Cleveland, Columbus, Dayton, Lorain, and Toledo. These cities were chosen because they had an adequate number of certified WRAP peer instructors, but had not yet widely offered WRAP. Enrolled study participants also were willing and able to provide informed

consent, were able to communicate orally in English, and had never developed their own WRAP plan.

Recruitment and Consent Procedures

The majority of the sample was recruited from outpatient settings (including community mental health centers, clinics, residential programs) and self-help and peer-run programs (drop-in centers, consumer-run recovery centers) from October 2006 through April 2008. Individuals also were recruited via clinician and peer referral, self-referral, newspaper advertisement, county mental health board web sites and meetings, and word-of-mouth. Research personnel located in Ohio visited programs to make presentations about WRAP and the study, encouraging all interested persons to use a toll-free number to call staff at the University of Illinois at Chicago (UIC) to enroll. Recruitment procedures are more fully described elsewhere (Cook et al. 2011). All participants provided written informed consent to participate using procedures approved by the UIC Institutional Review Board. The study was registered at ClinicalTrials.gov under identifier NCT01024569. There are no known conflicts of interest for any author and all authors certify responsibility.

The initial sample size was 555 adults (276 in the experimental condition and 279 in the control condition) who were eligible, willing to participate, and available for the 9-month study period. Of the 276 experimental subjects, 233 (84%) received the intervention and 43 (16%) did not. Eleven control subjects and 25 intervention subjects were lost to follow-up because of death or ill health, moving away from the area, or formal withdrawal from the study. No other subjects were excluded from the analysis for any other reason given the “intent-to-treat” design (Gross and Fogg 2004). Thus, the analyzed sample consisted of 251 in the experimental and 268 in the control condition, for a total of 519 individuals.

Interviewing and Randomization Procedures

Trained UIC Survey Research Laboratory (SRL) personnel administered 1-h structured telephone interviews at three time points: Time 1 (T1) or 6 weeks before the start of WRAP classes; Time 2 (T2) or 6 weeks following the end of WRAP classes; and Time 3 (T3) or 6 months post-T2. The protocol consisted of valid and reliable scales to measure symptoms (Derogatis 1993), self-advocacy (Brashers et al. 1999), recovery (Giffort et al. 1995), hopefulness (Snyder et al. 1991), empowerment (Rogers et al. 1997), environmental quality of life (Skevington et al. 2004), social support (Sherbourne and Stewart 1991), and physical health (Ware et al. 1996). Study subjects were provided with an incentive of \$20 for the first interview,

\$25 for the second, and \$30 for the third, with a \$10 bonus for completing all three. Interviews were conducted via computer-assisted personal interviewing (CAPI) software, with data downloaded into SPSS Inc. and analyzed using MIXREG software version 1.2 (Hedeker and Gibbons 1996).

The interviewers randomized subjects into one of the two study conditions at the conclusion of the first interview via a random allocation sequence programmed into the CAPI software allowing for complete allocation concealment up to the point of assignment (Gluud 2006). All respondents were reminded not to reveal their assigned study condition during subsequent interviews. At the conclusion of the two follow-up assessments (T2 and T3), each interviewer recorded whether s/he ascertained and/or the subjects had revealed their actual study condition at any point during the interview. The blind was found to be compromised in only 4% of all second and third interviews.

Measures

The current study's outcome was patient self-advocacy assessed with Brashers' Patient-Self-Advocacy Scale (PSAS), an instrument designed to measure a person's propensity to engage in self-activism during health care encounters (Brashers et al. 1999). The study employed the eighteen-item instrument in which statements are rated on a 5-point response scale ranging from strongly agree to strongly disagree, and averaged to produce a total score and three subscale scores. The first subscale, Education, measures the patient's belief in the benefits of acquiring information and his/her propensity to learn about the illness and treatment options. The second subscale, Assertiveness, measures the patient's willingness to be assertive during a health care encounter in order to gain more information and to appropriately challenge a provider's recommendations or expertise. The third subscale, Mindful Non-adherence, assesses the patient's inclination to disregard a provider's recommendations based on that patient's own medical knowledge, health care needs, and personal beliefs and values. The PSAS was found to correlate well with self-advocacy concepts such as the desire for autonomy in decision-making, the preference for receiving information, and desired level of behavioral involvement (including self-care and active treatment participation) in clinical encounters (Brashers et al. 1999). The education and assertiveness dimensions were found to be reciprocal but not necessarily synonymous, since individuals can educate themselves but still not follow-through with assertive behaviors during the clinical encounter and vice versa (Brashers et al. 1999). In our study, internal consistency was good ($\alpha = 0.77$) for the total score, as well as the education subscale ($\alpha = 0.76$), the assertiveness

subscale ($\alpha = 0.77$), and the mindful non-adherence subscale ($\alpha = 0.70$).

Also of interest was the relationship between PSAS scores and other recovery outcomes including hopefulness, environmental quality of life, and reduced symptom severity. Hopefulness was measured with the Hope Scale (HS) which assesses the presence of hope on two dimensions: determination to meet one's goals (agency) and perceived availability of means to meet one's goals (pathways) (Snyder et al. 1991). Twelve items are rated on a four-point scale ranging from "definitely false" to "definitely true" and summed to produce a total score. HS scores have been positively associated with goal-related activities and coping strategies in prior studies (Snyder et al. 1996). Quality of life was assessed with the World Health Organization Quality of Life Brief Instrument (WHOQOL-BREF) environment subscale (Skevington et al. 2004), which assesses respondents' feelings of security and freedom, access to needed skills and information, and participation in recreation and leisure activities. Finally, reduction of psychiatric symptom severity was measured using the Brief Symptom Inventory (BSI), a self-report research instrument showing high concordance with clinician symptom assessment (Derogatis 1993). The BSI assesses how much respondents are bothered in the past week by 53 symptoms with a 5-point scale ranging from "not at all" to "extremely." The BSI's Global Severity Index is designed to quantify a person's illness severity and provides a single composite score measuring the outcome of an intervention based on reducing symptom severity (Derogatis 1993). It is a validated self-report scale with strong test-retest and internal consistency reliabilities. Factor analytic studies of the internal structure of the scale have demonstrated its construct validity (Derogatis and Melisaratos 1983).

Given that randomization was successful (described below), the only control variable used in the analysis was study site (also described below). Indicator variables were created for each of the sites with the Lorain site used as the contrast. The other model variables were time and the interaction of study condition by time.

Data Analysis

After evaluating the success of randomization and variable inter-correlations, multivariate, longitudinal random-effects linear regression analysis was conducted to test for differences between experimental and control subjects' outcomes over time. A two-level random intercepts model was fitted to the data, controlling for study site as a fixed effect. This approach was chosen to address problems of serial correlations among repeated observations within individual participants, missing observations given that not all subjects

completed all assessments, and inclusion of both time-varying and fixed covariates (Gibbons et al. 1993).

Results

Subject Characteristics

Descriptive statistics of the sample are presented in Table 1. There were no statistically significant differences by study condition on any of the variables examined, including use of mental health services. Among the experimental participants, there were no significant differences in attendance by study wave ($F(4,271) = 1.12$, $P = .34$), but there were significant differences in attendance by site ($F = (5,270) = 3.30$, $P = .007$). Therefore, site was used as a control variable in the next phase of the analysis. Throughout the intervention period and 6-month follow-up, WRAP was not made locally available outside of the study to either experimental or control subjects. However, control subjects did participate in mental health self-help groups, with 41.9% ($n = 98$) of them reporting attending such groups between the first and second study interview, and 44.9% ($n = 97$) doing so between the second and third study interviews. Thus, all models also were re-run controlling for exposure to peer-led support groups.

Fidelity scores were computed as the proportion of prescribed elements present for that module. Across all modules taught in all waves, total course fidelity averaged 91.3% ($SD = 0.01$). 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, 458 subjects (88.2%) completed T2 interviews, and 448 (86.3%) completed T3 interviews, for a combined attrition rate of 6.6%. There were no statistically significant differences in follow-up rates between intervention and control conditions. Finally, there were no significant differences in completion of T2 or T3 interviews by study site.

Participant Outcomes

Table 2 presents the means and SD of outcome variables. Next, we examined the hypothesis that WRAP would lead to increased propensity to engage in patient self-advocacy behaviors. As shown in Table 3, compared to controls, experimental condition participants reported significantly greater improvement over time than controls in self-advocacy as measured by total PSAS score. Those who received WRAP also reported significantly greater improvement than controls in the mindful non-adherence subscale measuring self-expressed willingness to rationally disregard a provider's recommendation based on personal health

knowledge, health needs, and personal beliefs, but not in the other two subscales measuring propensity to self-educate about one's illness (education) or willingness to be assertive in health care encounters (assertiveness).

To address whether degree of exposure to the WRAP intervention was related to increased self-advocacy, we used ordinary least squares regression to predict patient self-advocacy at the final follow-up (T3). In an analysis restricted to experimental subjects, we examined the effect of number of WRAP sessions attended (ranging from 0 to 8) and intervention completion (defined as attending 6 or more sessions) by calculating β coefficients in models controlling for study site. Exposure was significant in both of these models, with $\beta = 0.05$ ($P < .001$) for number of classes and $\beta = 0.23$ ($P < .01$) for WRAP completion, indicating a .05 unit increase in self-advocacy for each class attended and a quarter of a point increase in self-advocacy for intervention completion.

Next, we tested our second hypothesis that the propensity to endorse patient self-advocacy beliefs and behaviors would be associated with recovery outcomes of increased hopefulness, better environmental quality of life, and reduced psychiatric symptom severity. At the third study interview, WRAP participants reporting higher levels of patient self-advocacy also reported higher levels of hopefulness ($r = 0.45$, $P < .001$), better environmental quality of life ($r = 0.28$, $P < .001$), and lower symptom severity ($r = -0.23$, $P < .01$) than WRAP participants with lower levels of self-advocacy. Significant relationships in the same directions were also observed for scores on the PSAS assertiveness and education subscales. However, no significant relationships were found between scores on the PSAS mindful non-adherence subscale and the three recovery outcomes. Since all of these outcomes were self-assessed, and hopefulness and quality of life are known to be strongly correlated with mood state, it may be that these relationships are simply a byproduct of the severity of depressive symptoms. To test this possibility, we adjusted for depression level, using the BSI depression subscale, in OLS analyses testing relationships between self-advocacy and hopefulness as well as environmental quality of life. Controlling for depression did not change the significance of self-advocacy total or subscale scores for assertiveness or education. This suggests that relationships between self-advocacy and hopefulness as well as quality of life are independent of the severity of depressive symptoms.

Discussion

This is the first randomized controlled trial to examine the impact of peer-led mental illness self-management education on self-advocacy among people receiving public

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

mental health services, as well as explore relationships between self-advocacy and other key recovery outcomes. We found that receipt of WRAP led to significantly greater

propensity to engage in patient self-advocacy behaviors. This was the case even after controlling for the effects of time, demonstrating that higher levels of self-advocacy

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

persisted for at least 6 months after the intervention concluded. Results also were consistent across study sites, indicating that WRAP's beneficial impact on patient self-advocacy was stable across diverse communities. Findings also revealed that the more WRAP people received, the more positive patient self-advocacy attitudes and behaviors they reported. Taken together with a similar finding

regarding exposure from our earlier study of WRAP outcomes (Cook et al. 2011), 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.

Although the observed changes in patient self-advocacy scores among WRAP participants were relatively modest,

they compare favorably to findings from other studies of patient-self-advocacy. For example, at study baseline, the group means for our experimental and control groups (3.47 and 3.46, respectively) were slightly lower than the mean (3.48) for the general population as reported in Brashers et al. (1999) original PSA study. At final follow-up, however, the group mean (3.65) for people who received WRAP exceeded the mean reported for people with the chronic medical condition of HIV/AIDS (3.59) (Brashers et al. 1999) and approached the mean reported for individuals with disabilities (3.76) (Tschopp et al. 2009). Also of interest is the level of mindful non-adherence reported by our WRAP participants compared to subjects in other studies. For instance, at study baseline, mindful non-adherence means in our experimental and control groups (3.09 and 3.15, respectively) were highly similar to those in the general population (3.16) (Brashers et al. 1999). Yet, at final follow-up, the mean for WRAP participants (3.32) had risen higher than the mean for self-described “HIV activists” (3.30) (Brashers et al. 1999), and much higher than means of adult cancer survivors (2.40) (Hermansen-Kobulnicky 2008) and HIV-positive non-activists (2.93) (Brashers et al. 1999). That WRAP could help people develop skills for reasoned treatment decision-making that exceed those reported by people who self-identify as activists is a particularly noteworthy finding.

Regarding our first hypothesis, it bears noting that WRAP did not have an impact on participants’ acquisition of knowledge about their illness (Education Subscale), nor on their willingness to be assertive in treatment settings (Assertiveness Subscale). There are varied reasons why this may be so. Research has shown that, even with training prior to health visits, people rarely ask questions or offer opinions when interacting with providers, especially physicians (Cegala et al. 1996; Thompson et al. 1990). Additionally, studies have documented that people avoid health information if they find it distressing or feel that they cannot interpret it (Brashers et al. 1999), which may have been the case among the WRAP participants in our study. Finally, effective assertiveness within the provider-client relationship requires that providers be open to clients’ active involvement in decision-making (Bylund et al. 2010) and that providers interpret the request for more information as a positive sign of client engagement (Brashers et al. 1999). Perhaps the WRAP participants in our study did not perceive this mutuality within their client-provider relationships, and thus, were reluctant to exhibit assertive behaviors.

When considering findings related to our second hypothesis, among those who received WRAP, greater patient self-advocacy was related to having hope for the future, better environmental quality of life, and being less bothered by psychiatric symptoms. This finding reflects the

positive relationship between patient self-advocacy and improved service engagement and clinical outcomes. This correlational analysis also demonstrates the high level of convergent validity between scores on the PSAS and generally-accepted measures of recovery from mental illness, such as lower symptom levels, greater hopefulness, and enhanced quality of life. It is quite interesting that, even though WRAP did not appear to have a significant impact on the education or assertiveness dimensions of patient self-advocacy, we nonetheless found that people in the experimental condition who had higher assertiveness and education subscale scores also reported better outcomes on the three recovery dimensions assessed for this study. Again, this reflects prior research suggesting that receiving information about service/treatment options and actively participating in decisions pertaining to one’s illness leads to being better informed, more likely to engage in psychosocial treatment, and to have improved functioning (Cruz and Pincus 2002), regardless of participation in illness self-management training.

Limitations

Due to several study limitations, caution should be used when interpreting these findings. Foremost, generalizability of our results is limited by two factors: the study sample was not drawn from a national probability sample of individuals with serious mental illnesses; and all study participants came from a single Midwestern state. Additionally, the study is limited by the fact that we relied upon participant self-report of propensity to engage in patient self-advocacy behaviors rather than observing actual behaviors in mental health care settings, although it bears noting that people’s self-concept can be an important precursor to behavior change (Bandura 1997). We similarly relied upon respondents’ reports of their feelings of hope, quality of life, and psychiatric symptoms, which were not corroborated by clinicians or other objective observers. Another limitation is the lack of assessment of cultural barriers—such as perceived similarity between clients and their providers—which are known to have an impact on people’s willingness and ability to engage in patient self-advocacy behaviors (Brashers et al. 2002; Patel and Bakken 2010). Adding more specific measures to assess cultural facilitators and barriers to self-advocacy attitudes and behaviors among people with mental illnesses will bolster our understanding of whether and how illness self-management impacts upon patient self-advocacy across cultures.

As people seek to self-manage their psychiatric disabilities, interventions designed to improve their ability to function as self-advocates could help to improve their

engagement in services, willingness to follow through on self-chosen treatments, and overall mental health and quality of life. This study contributes to the growing evidence base for the role that peer-led mental illness self-management can play in fostering self-advocacy behaviors that can, in turn, facilitate recovery from mental illness and a higher quality of life.

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