

# Recovery International



Abraham Low  
SELF-HELP  
SYSTEMS

## Recovery International Group Meeting Evaluation Final Report

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The RI Group Meeting Final Report is dedicated to Kathy Garcia. Kathy believed in RI, this evaluation, and the importance of empirically documenting the benefits of RI participation. Without her, this evaluation would not have been conducted. Although she is no longer with us in body, she is with us in spirit. Peace to her memory.

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## **Introduction: The Recovery Method**

Cognitive-behavioral interventions teach participants a sequential strategy for (1) recognizing stimuli or events that usually produce anxiety or distress; (2) resisting the automaticity of usual responses; and (3) identifying and implementing an alternative strategy that is more socially and emotionally appropriate. These interventions often include exercises in which participants envision or discuss a response to a stimuli or event, describe usual responses and problem-solve new, alternative responses. Cognitive-behavioral programs have been used for decades to successfully treat numerous emotional and physical disorders, including depression, anxiety, post-traumatic stress disorder, insomnia, and chronic fatigue syndrome.

The Recovery International (RI) Method is a cognitive-behavioral, peer-to-peer self-help training system developed in 1937 by Abraham Low, M.D. The premise of the program is that by practicing the cognitive-behavioral techniques detailed in the RI Method, participants learn to change their thoughts and behaviors, and changes in attitudes and beliefs follow. Participants train themselves to identify and monitor negative or damaging thoughts and behaviors, and to change the way that they would typically respond to these daily challenges. RI is intended as an adjunct to professional health care, and has been used by participants to help them cope with a range of mental health and physical health symptoms. RI also can be used with other self-help programs.

RI is provided by ALSHS via trained peer facilitators. The peer-to-peer component of RI is perhaps one of its most unique features: group leaders are not professionals, but individuals who are successfully using RI to cope with their own emotional problems. These trained peer facilitators lead weekly RI meetings, the majority of which are held in the community. Anyone in need of help is welcome to attend an RI meeting. Phone and on-line RI meetings also are available. With groups meeting weekly throughout the United States, Canada, Ireland, and other countries, RI is perhaps one of the largest peer-led programs for persons struggling with emotional and mental health problems.

### **RI Key Concepts**

In RI, everyday events happen in either our inner or outer environment. Events that happen in the inner environment are those things that happen inside of us, and include feelings or emotions; physical sensations that automatically occur in response to an event, such as blushing when one is embarrassed; thoughts; and impulses or initial reactions. Feelings and sensations cannot be controlled; for example, we cannot automatically stop sweating when we are anxious. Thoughts and impulses—“I’m so angry at the person who just cut in front of me in line at the grocery store that I could reach out and slap her!”—can be controlled. Everyday events that occur in the outer environment happen outside of ourselves, such as actual events (e.g, a car accident or bad weather), other people’s behaviors, and the past. Outer environment events cannot be controlled, but we can learn to influence them by how we behave.

When a stressful or upsetting event occurs, we react with temper: a judgment of right or wrong. When we react with angry temper, we make the judgment that someone else is wrong, or has wronged us. As a result, we feel anger, resentment, impatience, hatred, indignation and disgust. When we react with fearful temper, we are making the judgment that we are wrong or have done something wrong. Feeling responses to fearful temper include self-blame, worry, discouragement, embarrassment, hopelessness, shame and despair.

RI teaches participants to recognize or spot their responses and temper. Quite simply, spotting is learning to recognize the physical symptoms or responses (sensations and impulses) and mental symptoms or responses (thoughts and temper) of getting upset. For example, participants learn to spot or identify that, when someone cut them off in line at the grocery store, they gripped the cart handle very tightly, their breathing became more rapid, and they became angry.

RI participants also learn that they have will: the power to decide how to act in response to an event, and what to think. This involves responsibility and self-control. Participants learn to become more aware of their symptoms, to move away from subjective judgments, and to own whatever decisions are made in regard to their reactions. We can learn to control our behavior by teaching our muscles to relax, and replacing our angry or fearful thoughts.

Self-endorsement is a mental pat on the back that RI participants learn to give themselves for any effort to spot symptoms and temper and control their behavior, regardless of whether that effort was successful. It can be as simple as saying “good for me!” Learning to identify negative symptoms and behaviors, and changing our responses is hard work, and doesn’t happen in one attempt. Self-endorsement recognizes this, and encourages participants to keep trying.

RI tools are short statements that give insight into the nature of anger and fear. Participants use RI tools to help them recognize that they have the power to choose how they will react to an event. Examples of tools include: “People do things that annoy us, not to annoy us;” “Comfort is a want, not a need;” “Feelings are not facts;” and “Calm begets calm, temper begets temper”.

#### **Four (4)-Part Example**

The 4-Part Example helps participants use the RI Method in their daily lives. It is a structured approach to describing experiences that helps participants develop a habit of objective observations of events and responses, manage thoughts and impulses, and increase their self-control and respect. In Part 1 of the Example, participants are asked to describe an everyday event that upset them. Using the grocery store incident where someone cut in line, a participant might say for Part 1, “I was in the checkout line at the grocery store, and this woman pushed my cart aside, and cut in line ahead of me”. In Part 2, participants are asked to describe both their physical and mental responses to the event. Our grocery store participant might say, “I felt my heart race and felt my hands grip the handle of my cart really tight. I thought that I would really like to push her back or ram my cart into her!” In Part 3, participants “spot” or state what tools they used

to deal with the situation. For example: “I said to myself, ‘people do things that annoy us, not to annoy us’ and ‘calm begets calm, and temper begets temper’.” In Part 4, participants are asked to describe how they would have responded to the event before their RI training. Our participant might say, “Before my RI training, I would have pushed my cart into her or said something nasty to her”. After going through all four parts, participants are asked to conclude by describing what they actually did, and to endorse themselves for the effort. “I relaxed my grip on the cart, I took a deep breath and realized that she didn’t do this to me on purpose. I continued to wait in line, and endorsed myself”.

As described below, all RI group meetings involve participants giving 4-Part Examples. One participant will volunteer to give an Example. Other group members do not speak or interrupt while the participant is giving his or her Example. When the participant finishes giving his/her Example, the RI group leader will invite other members to make comments using RI tools. Comments are not criticisms, and are directed at the entire group, not the individual participant who gave the Example. The RI group leader reminds participants to only use RI tools when making comments, and not their personal experiences. In other words, group members are not allowed to say things such as “You should have yelled at her for cutting you off in line, she deserved it” or, “When that happened to me, I just got into another line and didn’t even get upset”. These guidelines help RI participants learn to listen and give constructive feedback to their fellow group members. Time limits also are used to help participants learn not to become preoccupied with events or the use—or non-use—of tools. Five minutes are allotted to give an Example, and ten minutes are allotted to group comment.

Using the 4-Part structure repeatedly to describe events helps RI participants develop a habit of objectively observing daily challenges and their responses to those challenges. The Example helps participants learn to manage their thoughts and impulses, and increase their self-control and self-respect as they change their negative behaviors.

### **RI Group Meeting Format**

RI meetings are 1 ½ to 2 hours long, and are held at the same day, time and location each week. Groups typically vary in size from 4-20 adults. As noted above, the groups are open to anyone in need of help, and all are welcome to attend.

During group meetings, participants either read aloud from one of Dr. Low’s books, or listen to one of his audio-taped lectures. Group members may share what parts of the readings or lectures were particularly meaningful for them. Introductions and announcements are made. Group members then take turns giving an Example. At the end of the meeting, the group leader asks for a voluntary monetary contribution to assist with program expenses. The group leader also answers questions, and helps with further spotting. The groups end with Mutual Aid, a less structured portion of the meeting that provides participants with opportunities to talk one-on-one, share an Example with one or two other group members, and socialize with one another.

## **UIC 2008-2011 Recovery International Group Meeting Evaluation**

Although hundreds of thousands of people have used the RI Method over several decades, not much is known about the reasons why individuals initially decide to go to RI meetings, and why some decide to stop attending meetings. Additionally, little research has examined how participation in group meetings helps individuals better manage their everyday problems. To address this knowledge gap, ALSHS contracted with Susan Pickett, Ph.D., an Associate Professor in the Department of Psychiatry at the University of Illinois at Chicago (UIC), to evaluate RI participation and participation benefits. Conducted from February 2008-January 2011, the RI Group Meeting Evaluation had two goals: (1) collect information on RI group participation and satisfaction; and (2) examine the extent to which RI participation helps individuals cope with daily life challenges. These combined data are important scientific evidence ALSHS needs to document RI participation benefits to policy makers and program administrators who make decisions about what services to offer to people living with serious emotional problems. Due to budget and time constraints, we chose to focus our evaluation only on RI meetings held in the United States. Thus, we did not examine phone or on-line meetings, or meetings held in other countries.

This report presents the results of the RI Group Meeting Evaluation. We begin with a description of our study procedures. Next, we describe our evaluation participants' demographic and psychiatric illness characteristics. RI participation, satisfaction, and knowledge results are presented. We then present the results related to RI participation benefits, and factors related to changes in these outcomes. Next, we examine the relationship between participant characteristics, RI attendance, knowledge, and participation benefits. We conclude this report by summarizing our evaluation results and their implications for RI. Note: While major findings have been highlighted in our January 2011 Executive Summary, the final report describes these results in greater detail.

### **Study Methods**

#### **Participant Recruitment and Enrollment Procedures**

Although many RI participants have attended groups for several years, and have much to share with us about how RI has helped them, our evaluation focused on newcomers. We chose newcomers—individuals who have attended five or fewer RI meetings—in order to better understand the reasons why someone initially decides to go to RI; the factors involved in why they continue to go to groups (or stop going to groups); and when participation benefits may first occur. We can think of this process as being akin to a drug study: in order to see if a drug works, we want to test it on someone who has never had the drug before.

Our original goal was to enroll 120 newcomers in the evaluation. When we began the evaluation in 2008, we initially focused on RI Areas that had several large groups meeting on a regular basis, such as California and Michigan. However, initial enrollment was much slower than we anticipated, so, together with ALSHS, we invited all RI group leaders nationwide to take part in the evaluation.

A total of 97 group leaders joined us in the evaluation. Each of these group leaders participated in mandatory conference calls led by Dr. Pickett. During these calls, they learned participant recruitment procedures, reviewed recruitment materials, and discussed specific scenarios (for example, what to do if someone who wasn't a newcomer wanted to be in the evaluation). Group leaders then received a shipment from UIC that contained flyers and evaluation introduction packets. The flyer listed basic information about the evaluation and the 800# for newcomers to call if they were interested in being in the study. The evaluation introduction packets contained a welcome letter from Dr. Pickett, a 2-page fact sheet, and a flyer. During Mutual Aid, group leaders gave evaluation introduction packets to newcomers. Group leaders read a short script prepared by Dr. Pickett that was approved by the UIC Institutional Review Board (IRB)<sup>1</sup>. The script explained that RI was doing an evaluation, and instructed newcomers to read their packet materials and call the number on the flyer if they were interested in being in the study. Since some newcomers might leave before Mutual Aid, we asked group leaders to make flyers available at the beginning of meetings so that everyone would have some information about the evaluation.

Newcomers who were interested in participating in the evaluation called the project's toll-free 800 number. UIC evaluation staff screened all callers for eligibility. In order to be in the evaluation, individuals were required to: (1) be age 18 years or older; (2) be an RI newcomer; (3) express interest in the study; and (4) provide informed consent. UIC evaluation staff also explained all study procedures to these callers, and answered their questions. Callers who met eligibility criteria and who agreed over the phone to be in the evaluation were sent a consent form packet. UIC evaluation staff instructed callers to read and sign the consent form, and use the self-addressed stamped envelope to return the signed consent form to us. No newcomers were officially enrolled in the evaluation until we received their signed consent documents.

A total of 126 newcomers nationwide enrolled in the evaluation. All newcomers were asked to tell us the city and state where they were attending RI groups. As shown in Table 1, the majority of evaluation participants were attending groups in California. Note: This table does not list all of the states in which we had RI group leaders distributing evaluation materials. It was up to newcomers—not group leaders—to decide whether to call and enroll in the evaluation. RI groups in some states, such as Iowa, participated in the project, but no newcomers from any RI groups in Iowa chose to call us and enroll in the evaluation.

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<sup>1</sup> The UIC IRB oversees all research conducted by UIC faculty and staff, and ensures that studies meet federal regulations designed to protect participants' confidentiality and safety. Before we could begin our RI evaluation, we were required to obtain UIC IRB approval. We obtained this approval in June 2008.

Table 1: Evaluation Enrollment by State (N=126)		
State	N	%
California	N=57	(45%)
Ohio	N=20	(16%)
Oregon	N=11	( 9%)
New Jersey	N= 8	( 6%)
Pennsylvania	N= 6	( 5%)
Illinois	N= 5	( 4%)
Michigan	N= 5	( 4%)
Florida	N= 4	( 3%)
Minnesota	N= 3	( 2%)
New York	N= 3	( 2%)
Georgia	N= 1	(.5%)
Texas	N= 1	(.5%)
Utah	N= 1	(.5%)
Washington	N= 1	(.5%)

### Interview Procedures and Follow-Up Rates

Evaluation participants were asked to do four telephone interviews. Each interview was conducted by a UIC evaluation team member. The first interview—also referred to as baseline or Time 1—was conducted within 2-4 weeks after newcomers enrolled in the evaluation. We could not and did not do any interviews with participants until *after* we received their signed consent document. The second interview—Time 2—was conducted 3 months after the first baseline interview. Time 3 interviews were conducted 6 months post-baseline, and Time 4 interviews were conducted 12 months post-baseline. Interviews were conducted on days and times convenient for participants, including evenings and weekends. Participants received a \$15 money order for each interview they completed.

During each interview, we asked participants about their participation in RI (whether and why they were attending group meetings); satisfaction with RI; RI knowledge; mental health symptoms; personal recovery; feelings of empowerment, hope, and emotional well-being; social support; self-stigma; and their use and need of mental health and social services. Participant demographic characteristics (i.e., age, gender and race), and mental health characteristics (i.e. age when symptoms first began, lifetime inpatient admissions) were assessed during the baseline interview. The interview protocol was jointly developed by Dr. Pickett and Ms. Garcia. With the exception of RI-specific outcomes (i.e., knowledge of RI methods and tools), questionnaires with established psychometric properties were selected to assess RI participation and participation benefits. The interview protocol was pilot-tested by UIC and ALSHS staff, and reviewed by several ALSHS staff and Board members prior to our first interviews with evaluation participants.

Of the 126 newcomers who enrolled in the evaluation, two individuals were found to be ineligible and were removed from the study before we did their Time 1 interviews.



One of these individuals had attended more than five groups and was not a newcomer; another individual had never attended an RI group and called to enroll after finding a study flyer. Another five participants told us that they had changed their minds, and withdrew from the evaluation shortly after they enrolled. Of the remaining 119 participants, 114 (96%) completed Time 1 interviews. Eight of these individuals dropped out of the study before their Time 2 interview (some told us that they changed their minds and didn't want to be in the study; others told us that they weren't going to RI anymore and didn't want to do any more interviews). This left us with a sample of 106 participants; 95 (91%) completed Time 2 interviews and 83 (76%) completed Time 3 interviews. One more person withdrew prior to his/her Time 4 interview. Of the 105 participants eligible to complete Time 4 interviews, 79 (75%) completed Time 4 interviews.

The evaluation team made many efforts to locate participants for their follow-up interviews. We made numerous phone calls to participants, calling on different days and at different times of the day in order to reach them. We sent interview reminder letters and email messages. When newcomers enrolled in the evaluation, we asked them to provide the name and contact information for a family member or friend who would always know their whereabouts, and who, with newcomers' permission, we could call in case we had trouble finding newcomers for their interviews. We called these secondary contacts, and many were able to help us find missing participants. Overall, these methods to locate participants were successful. However, as documented by our follow-up rates, we were not able to find and complete follow-up interviews with all of our participants. We suspect that some of the participants who were lost to follow-up may have stopped attending RI groups. Despite our messages reminding them that we would like to interview them regardless of their RI participation, it is possible that some of these individuals simply decided that they did not want to be interviewed, and chose not to return our calls.

### **Participant Demographic and Mental Health Characteristics**

We collected demographic information (age, gender, race, etc.) from participants during their Time 1 interview. As shown in Table 2, most of the evaluation participants were female (74%) and Caucasian (86%). Participants ranged in age from 25 to 73 years, and had an average age of 50 years. On average, participants attended 15 years of school (high school + 3 years of college). Most (66%) earned \$20,000 per year or less. Slightly less than a third of participants (27%) were married. The majority of participants lived in their own home or apartment (85%). Only 34% of participants were employed either full-time or part-time. Very few of our participants (4%) had ever served in the military.

Table 2: Participant Demographic Characteristics (N=114)		N	%
Participant Characteristics			
Gender			
	Male	30	26%
	Female	84	74%
Race			
	African American	7	6%
	Asian American	1	1%
	Caucasian	97	86%
	Native American	1	1%
	Other	7	6%
Ethnicity			
	Hispanic/Latino	10	9%
	Not Hispanic/Latino	104	91%
Age, in years (range, mean)		25-73	50
Education, in years (range, mean)		10-22	15
Income			
	Less than \$10,000 per year	30	27%
	\$10,000 to \$20,000 per year	33	30%
	\$20,000 to \$30,000 per year	13	12%
	\$30,000 to \$40,000 per year	8	7%
	\$40,000 to \$50,000 per year	7	7%
	More than \$50,000 per year	19	17%
Marital Status			
	Married	30	27%
	Living as married	1	1%
	Divorced	39	34%
	Separated	3	3%
	Never been married	40	35%
Residential Status			
	Own apartment or house	97	85%
	Lives with family other than significant other	11	10%
	A friend's house or apartment	2	2%
	Housing provided by a service provider agency	1	1%
	Hospital or alcohol/drug treatment program	2	2%
Employment Status			
	Employed full-time (35+ hours per week)	20	18%
	Employed part-time (<35 hours per week)	19	16%
	Unemployed, looking for work	19	16%
	Unemployed, disabled or currently unable to work	34	30%
	Unemployed, volunteer work	3	3%
	Unemployed, retired	10	9%
	Unemployed, not looking for work	8	7%
	Leave of absence from work	1	1%
Ever served in military			
	Yes	4	4%
	No	107	96%

Participants' mental health history information also was collected during the Time 1 interview. As shown in Table 3, nearly all of the evaluation participants (94%) had seen a professional about mental health problem, and 82% had been formally diagnosed with a mental illness. Most participants (47%) had a primary diagnosis of depression; 25% had a diagnosis of bipolar disorder; and 15% had a diagnosis of anxiety disorder. On average, participants had been coping with their mental health symptoms for 24 years. Slightly more than half (53%) had been hospitalized for a mental health problem. A third (30%) reported co-occurring physical problems. Nearly 20% had been treated for a drug or alcohol problem at some point in their lives.

Table 3: Participant Mental Health Characteristics (N=114)		
Participant Characteristics	N	%
Ever see professional about a mental health issue		
Yes	107	94%
No	7	6%
Age, in years, of first encounter with mental health services (range, mean)	7-61	26
Ever diagnosed with a mental illness		
Yes	93	82%
No	21	18%
Most recent primary diagnosis		
Schizophrenia	2	2%
Schizoaffective disorder	4	4%
Bipolar disorder/manic depression	23	25%
Depression	43	47%
Anxiety disorder	14	15%
Obsessive-compulsive disorder	4	4%
PTSD	1	1%
Other	2	2%
Number of years ill, in years (range, mean)	<1-49	24
Ever hospitalized		
Yes	59	53%
No	53	47%
Number of hospitalizations over lifetime (range, mean)	1-20	4
Age, in years, of first hospitalization (range, mean)	9-62	31
Physical health problem		
Yes	34	30%
No	80	70%
Ever treated for a drug/alcohol problem		
Yes	21	19%
No	91	81%
Number of times treated for drug/alcohol problem (range, mean)	1-20	4
Currently being treated for a drug/alcohol problem		
Yes	4	4%
No	110	96%
Has attended Alcoholics Anonymous or Narcotics Anonymous		
Yes	39	35%
No	73	65%

**Summary of participant characteristics.** The majority of our evaluation participants were Caucasian women in their 50s who suffered from depression, and who had been coping with their symptoms for over two decades. Most of our

participants were economically disadvantaged, earning \$20,000 or less per year, and were unemployed. Many were unmarried, and, we suspect, lived alone. Having few financial and/or social support resources, many participants may have been drawn to the inexpensive, community-based mental health help and support that RI provides.

## **RI Participation Results**

During each interview, we asked participants about their participation in RI. We asked them how they heard about RI; their reasons for initially going to an RI group meeting; and whether they were currently attending RI groups. If participants reported that they no longer attended RI groups, we asked them to tell us why they had decided to stop going to their RI groups. Participants were asked to describe group features, such as the number of people who usually attended their RI meetings, and their involvement in group activities. We asked participants what they liked, and did not like, about RI. We also assessed participants' knowledge of RI tools, and their ability to give a 4-Part Example. Finally, we asked participants to rate features of their group support and structure.

This section presents results related to RI participation. We begin by describing RI referral sources and participants' reasons for seeking out an RI group. Next, we provide detailed results regarding attendance of RI groups throughout individuals' participation in the evaluation. We then describe participants' involvement in specific group activities. This is followed by an in-depth examination of participants' satisfaction with RI. We conclude this section by discussing results related to participants' knowledge of RI tools and the 4-Part Example, and their appraisal of RI group support and structure.

### **Referrals to RI and Reasons for Attending RI Meetings**

At baseline—the first interview—we asked participants to tell us how they first heard about RI, and why they decided to go to an RI meeting. The most common referral source was a family member or friend (40%), followed by a mental health professional (34%). Other referral sources included another RI group member (18%); the RI website (17%); and another advocacy organization's website, support group or newsletter (12%)<sup>2</sup>. In regard to their reasons for attending RI, 77 participants (68%) told us that they first went to an RI meeting for help with a specific problem. Of this group, 25% reported that they first attended RI for help with depression; 21% went for help with anxiety; 12% sought help for other emotional problems (e.g., help coping with guilty feelings, help dealing with symptoms of bipolar disorder); 11% went for help with both anxiety and depression; 10% sought help with anger management; and the remainder reported that they went to their first RI meeting for general support, help with substance use issues, or because they thought the program was interesting.

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<sup>2</sup> Participants were asked to list all referral sources; therefore, total percentages exceed 100%.  
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## RI Attendance

RI attendance was assessed in several ways. At each interview time point, *current attendance* was coded as “yes” if participants told us that they were currently going to RI group meetings, and coded as “no” if participants told us that they were not attending meetings. At each follow-up interview, *any RI attendance since the last interview* was coded as “yes” if participants told us that they had attended at least one RI meeting since their last interview, even if they currently were not going to RI groups, and coded as “no” if participants told us that they had not attended any RI meetings since their last interview. *RI non-attendees* were participants who reported during an interview that they were not currently attending RI and had not attended any group meetings since their last interview.

**Current RI attendance.** At Time 1, 109 (96%) of the 114 participants who completed a baseline interview reported that they were currently attending an RI group. At Time 2, 70 (74%) of the 95 participants who completed the 3 month follow-up interview were attending RI meetings. At Time 3, 47 (57%) of the 83 participants who completed the 6 month follow-up interview were attending RI meetings. Finally, at Time 4, 42 (53%) of the 79 participants who completed the 12 month follow-up interview told us that they were still attending RI groups. At each interview, on average, participants who were attending RI meetings went to groups once a week.

**Any RI attendance since the last interview.** If participants told us that they had stopped going to RI, we asked them if they had gone to any meetings at all since their last interview. We asked this question since we knew it was very possible that someone might tell us during their Time 3 interview that they were no longer going to RI meetings, but had perhaps gone to a few meetings in the 3 month interval between their Time 2 and Time 3 interviews. And, our results show that this indeed did happen. At Time 2, 80 (84%) of the 95 participants who completed the 3 month follow-up interview had gone to at least one RI meeting in between their Time 1 and Time 2 interview. At Time 3, 61 (74%) of the 83 participants who did a 6 month follow-up interview had attended at least one RI meeting in between their Time 2 and Time 3 interview. At Time 4, 50 (63%) of the 79 participants who did a 12 month follow-up interview had attended at least one RI meeting in between their Time 3 and Time 4 interview.

**RI non-attendance.** Participants who were no longer attending RI are those individuals who told us during an interview that they were not currently attending RI meetings, *and* had not attended any RI meetings since their last interview<sup>3</sup>. At Time 1, 5 (4%) of the 114 participants who completed the baseline interview stopped going to RI meetings. At Time 2, a total of 15 (16%) of the 95 participants who completed 3 month follow-up interviews had stopped attending RI. At Time 3, a total of 22 (26%) of the 83 participants who completed 6 month follow-up interviews were no longer attending RI meetings. Finally, at Time 4, 29 (37%) of the 79 participants who completed 12 month follow-up interviews were no longer attending RI.

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<sup>3</sup> These data for participants who were no longer attending RI at Times 2-4 were miscalculated in the January 2011 Executive Summary. We apologize for this error.

**Attendance by interview time point.** The following chart presents a break down of each of the attendance categories by interview time point, summarizing the information described above.

**Time 1: 114 participants completed a Time 1 interview**

- 109 participants currently attend an RI group
- 5 participants no longer attend an RI group

**Time 2: 95 participants completed a Time 2 interview**

- 70 participants currently attend an RI group
- 25 participants currently do not attend an RI group
  - 15 of these 25 participants attended no meetings since their last interview
    - 4 of these 15 non-attendees stopped going to RI at Time 1
    - 11 of these 15 non-attendees stopped going to RI at Time 2
  - 10 of these 25 participants had attended at least one meeting since their last interview
- A total of 80 participants (70 “currently attend” + 10 “attended at least one meeting”) went to one or more RI meetings since their Time 1 interview.

**Time 3: 83 participants completed a Time 3 interview**

- 47 participants currently attend an RI group
- 36 participants currently do not attend an RI group
  - 22 of these 36 participants attended no meetings since their last interview
    - 2 of these 22 non-attendees stopped going to RI at Time 1
    - 9 of these 22 non-attendees stopped going to RI at Time 2
    - 11 of these 22 non-attendees stopped going to RI at Time 3
  - 14 of these 36 participants had attended at least one meeting since their last interview
- A total of 61 participants (47 “currently attend” + 14 “attended at least one meeting”) went to one or more RI meetings since their Time 2 interview.

**Time 4: 79 participants completed a Time 3 interview**

- 42 participants currently attend an RI group
- 37 participants currently do not attend an RI group
  - 29 of these 37 participants attended no meetings since their last interview
    - 2 of these 29 non-attendees stopped going to RI at Time 1
    - 9 of these 29 non-attendees stopped going to RI at Time 2
    - 7 of these 29 non-attendees stopped going to RI at Time 3
    - 11 of these 29 non-attendees stopped going to RI at Time 4
  - 8 of these 37 participants had attended at least one meeting since their last interview
- A total of 50 participants (42 “currently attend” + 8 “attended at least one meeting”) went to one or more RI meetings since their Time 3 interview.

**Reasons why participants stopped attending RI meetings.** When developing the interview protocol, Dr. Pickett and Ms. Garcia created a list of 21 reasons why participants may stop attending RI. This list is presented in Table 4. Reasons for non-attendance can be clustered into two categories: personal factors and RI program

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factors. Personal factors include reasons related to participants themselves: schedule conflicts; transportation problems; child care problems; family problems; physical health problems; mental health problems; vacations/business trips; and moving to an area where RI does not exist. RI program factors include reasons related to RI group format and features. These include: RI group no longer exists; RI meetings were too long, boring or short; problems with group leaders or group members; feeling that the group did not understand one's situation; limited opportunities to participate in the group; difficulty understanding Dr. Low's books; disliking group materials; disliking being asked for a monetary contribution; meeting materials were too hard to understand; and disliking the meeting format.

During each interview, this list was read to all participants who told us that they currently were not attending an RI meeting. Participants were asked to simply tell us "yes" if an item was a reason why they stopped attending RI meetings and "no" if it was not a reason why they were no longer going to meetings. Table 4 lists the number of "yes" responses for each of the 21 reasons why participants stopped attending RI. For example, at Time 1, 5 participants were not going to RI meetings; 2 of these participants (40%) reported that they were no longer attending meetings due to schedule conflicts. At Time 2, 25 participants reported that they currently were not going to RI groups, and 14 of these participants (56%) did not attend meetings due to schedule conflicts. Note: Participants were asked to list all of the reasons why they stopped attending RI meetings; therefore, percentages exceed 100.

Table 4: Reasons why participants stopped attending RI meetings								
Reason	T1 (N=5)		T2 (N=25)		T3 (N=36)		T4 (N=37)	
	N	%	N	%	N	%	N	%
Schedule conflicts	2	40%	14	56%	15	42%	14	49%
Transportation problems	2	40%	5	20%	8	22%	2	5%
Child care problems	- - -	- - -	1	4%	1	3%	1	3%
Family problems	1	20%	3	12%	1	3%	3	8%
Physical health problems	- - -	- - -	3	12%	8	22%	6	16%
Mental health problems	2	40%	10	40%	11	31%	9	24%
Vacations/business trips	- - -	- - -	1	4%	3	8%	- - -	- - -
Moved to an area where RI does not exist	- - -	- - -	- - -	- - -	- - -	- - -	2	5%
Group stopped meeting or no longer exists	- - -	- - -	- - -	- - -	- - -	- - -	1	3%
RI meetings were too long	- - -	- - -	5	20%	4	11%	7	19%
RI meetings were too boring	- - -	- - -	5	20%	10	28%	8	22%
RI meetings were too short	- - -	- - -	- - -	- - -	1	3%	1	3%
Problems with group leaders	- - -	- - -	- - -	- - -	1	3%	1	3%
Problems with group members	- - -	- - -	3	12%	5	14%	2	5%
Group didn't understand my situation	- - -	- - -	2	8%	4	11%	5	13%
Limited opportunities to participate in group	- - -	- - -	4	16%	1	3%	2	18%
Dr. Low's books were hard to understand	- - -	- - -	1	4%	5	14%	4	13%
Didn't like other group materials	- - -	- - -	3	12%	6	17%	5	13%
Meeting materials were hard to understand	- - -	- - -	1	4%	1	3%	- - -	- - -

Reason	T1 (N=5)		T2 (N=25)		T3 (N=36)		T4 (N=37)	
	N	%	N	%	N	%	N	%
Didn't like being asked for a monetary contribution	- - -	- - -	3	12%	2	6%	2	5%
Didn't like meeting format	- - -	- - -	6	24%	7	19%	5	13%

\*Participants could report more than one reason why they stopped attending RI; therefore, percentages exceed 100.

As Table 4 illustrates, overall, reasons for quitting RI are nearly evenly split between personal factors and RI program factors. Slightly more personal factors than RI program factors were cited as reasons for no longer attending RI meetings. At all interview time points, the most frequent reason for quitting RI was schedule conflicts. Participants stated that they were no longer attending RI groups because meeting times conflicted with their work or school schedules, or other activities. Mental health problems was the second most frequent reason why they stopped attending RI meetings: at all interview time points, more than a quarter of participants reported that emotional or mental health problems prevented them from going to RI meetings. The third most common reason for quitting RI was because participants felt that meetings were boring. To briefly summarize, the primary reasons for not attending RI meetings were: schedule conflicts, mental health problems, meetings are too boring, dislike meeting format, transportation problems (i.e., didn't have transportation to get to RI meetings and/or RI meetings were held at a place that was not accessible by public transportation) and physical health problems.

**Total RI attendance.** At Time 1, we asked participants to tell us the total number of groups they had attended since enrolling in the evaluation. At Time 2, Time 3 and Time 4, we asked participants to tell us the total number of RI meetings they had attended since their last interview. Total attendance to date for each time point was calculated by summing prior and current attendance. For example, total attendance at Time 3=number of meetings attended at Time 1 + number of meetings attended at Time 2 + number of meetings attended at Time 3. Total overall attendance was calculated by summing meeting attendance across all four interview time points. This calculation allows us to examine total attendance for all participants over time, including those who stopped going to meetings at particular time point. For example, let's say that Ms. Smith went to RI meetings for most of the year that she participated in the study. At Time 1, she had gone to 2 meetings. At Time 2, she had gone to 10 meetings in the months in between first interview to her second interview. At Time 3, she had attended 12 meetings in the months in between her second and third interviews. At Time 4, she had stopped attending RI and had not gone to any meetings in the months in between her third and last interviews—in other words, she went to 0 meetings. Summing meetings across each interview time point, Ms. Smith's total RI attendance was 24 meetings.

At Time 1, participants attended a total of 1-15 RI meetings; on average, they had gone to 4.5 group meetings. At Time 2, participants' total attendance ranged from 1-50 RI meetings, with an average total attendance rate of 11.7 meetings. At Time 3, participants' total attendance ranged from 1-68 RI meetings, with an average total attendance rate of 16.6 meetings. Participants' overall total attendance—all meetings attended by Time 4—ranged from 1-142 RI meetings, with an average total attendance



rate of 27.5 meetings. At all interview time points, on average, participants attended RI group meetings once a week.

**Comparison of total RI group meeting attendance by current group attendance and non-attendance.** We conducted t-tests to examine whether differences occurred in total group meeting attendance for participants who told us that they were currently attending RI groups, and those who were not. At Time 1, participants who were currently going to RI groups had attended an average of 2.4 meetings, and those who were no longer going to meetings had attended an average of 3.6 meetings. The difference in meeting attendance between the two groups was not significant ( $t_{112}=-.042$ ,  $p=.068$ ). However, at each follow-up interview, the difference in meeting attendance between participants who were going to RI group meetings and those who were not was significant, with current attendees reporting a greater number of total RI groups attended compared to those who had quit RI. At Time 2, participants who were attending RI groups had attended, on average, a total of 16.5 meetings; non-attendees had gone to an average of 3.9 meeting ( $t_{93}=6.67$ ,  $p < .001$ ). At Time 3, current attendees' average total RI group attendance was 29.1 meetings; non-attendees' average total RI group attendance was 7.7 meetings ( $t_{81}=8.53$ ,  $p < .001$ ). At Time 4, participants who were currently attending RI meetings had an average total RI attendance of 51.9 meetings; non-attendees had an average total RI attendance of 10.1 meetings ( $t_{77}=8.74$ ,  $p < .001$ ).

**Participant demographic and mental health characteristics associated with RI attendance.** To better understand who may be more likely to attend RI group meetings over time, we conducted a series of zero-order correlation analyses that examined whether any participant demographic and/or mental health characteristics were associated with RI attendance at each interview time point.

#### Time 1

- **Diagnosis:** Participants who had a diagnosis of *depression* were more likely than those who did not have diagnoses of depression to be *currently attending RI meetings* ( $r=.22$ ,  $p=.033$ ).
- **Number of lifetime inpatient psychiatric hospitalizations:** Participants who had a *fewer number of lifetime inpatient admissions for psychiatric problems* were more likely than those who had a greater number of hospitalizations to be *currently attending RI* ( $r=-.29$ ,  $p=.028$ ).
- **Substance use:** Participants who *did not have alcohol and/or drug problems* were more likely to be *currently attending RI meetings* ( $r=-.22$ ,  $p=.019$ ) than participants who reported substance use problems.

#### Time 2

- **Age:** *Older participants* were more likely than younger participants to be *currently attending RI meetings* ( $r=.22$ ,  $p=.032$ ).
- **Diagnosis:** Participants who had a diagnosis of *depression* were more likely than those who did not have diagnoses of depression to be *currently attending RI meetings* ( $r=.26$ ,  $p=.019$ ).

#### Time 3

- **Minority status:** Participants who were *racial minorities* were more likely than Caucasian participants to be *currently attending RI meetings* ( $r=.23$ ,  $p=.039$ )  $p=.006$ ).

#### Time 4

- **Age:** Older participants were more likely than younger participants to be *currently attending RI meetings* ( $r=.27$ ,  $p=.018$ ).
- **Minority status:** Participants who were *racial minorities* were more likely than Caucasian participants to be *currently attending RI meetings* ( $r=.30$ ,  $p=.006$ ).
- **Marital status:** Married participants were more likely than single participants to be *currently attending RI* and/or have *attended at least one RI meeting since their Time 3 interview* ( $r=.26$ ,  $p=.022$ ).
- **Substance use:** Participants who *did not have alcohol and/or drug problems* were more likely to be *currently attending RI meetings* and/or *attended at least one meeting since their Time 3 interview* ( $r=-.38$ ,  $p=.001$ ).

### RI Group Features and Participation in RI Group Activities

**RI group size.** Group size refers to the number of people who usually attended participants' RI meetings. At Time 1, participants' RI groups ranged in size from 3 to 35 members, with an average group size of 11 members. At Time 2, participants' RI groups ranged in size from 3 to 30 members, with an average group size of 11 members. At Time 3, RI group size ranged from 2 to 27 members, with an average group size of 10 members. At Time 4, participants' groups included 3-18 members, with an average group size of 9 members. Taken together, across all interview time points, participants' RI groups contained 9-11 members.

**Type of group attended.** At all interview time points, nearly all participants who were going to RI were attending in-person meetings only. At Time 2 and Time 3, only one participant attended a phone meeting, and at Time 4, two individuals participated in phone meetings. At Time 2, four participants attended both in-person and phone meetings. At Time 3, five participants took part in both in-person and phone meetings; and at Time 4, eight participants attended both in-person and phone meetings.

**Involvement in RI leadership activities.** Participants were asked at each follow-up interview whether they were involved in any RI leadership activities, such as leading a group, serving as an assistant group leader or treasurer, and leading an Example. At Time 2, 9 participants (9%) were involved in leadership activities; however, none of these individuals were leading an RI group. At Time 3, 7 participants (8%) were involved in leadership activities; two of these participants were leading RI groups. At Time 4, 17 participants (21%) were involved in leadership activities, and three of these participants were leading RI groups.

### Summary of RI Attendance and Group Activity Data

The primary reasons why individuals decide to initially attend an RI meeting are for help coping with depression and anxiety. Over the course of a year, our data suggest that close to half of all newcomers stop going to RI meetings. Most of the newcomers who stop attending meetings do so within the first six months of initial RI participation. Their reasons for quitting RI are varied, but nearly evenly split between personal factors—things in the participant's personal life that cannot be easily

controlled, such as schedule conflicts or illness—and factors related to RI meeting structure and materials.

Our attendance data also indicate that those newcomers who *do* decide to continue to participate in RI do so consistently; that is, they attend meetings on a weekly basis. Participants primarily chose to attend in-person meetings, with only a few trying phone meetings. Very few participants were involved in leadership activities. However, it appears that after six months of initial RI participation, some newcomers begin to move into these roles. Finally, our results suggest that, over time, older participants, and those who are racial minorities were more likely than younger participants and Caucasians to attend RI meetings on a regular basis.

## **RI Satisfaction**

We assessed participants' satisfaction with RI in three key ways. First, we used the Client Satisfaction Questionnaire (CSQ), a satisfaction assessment that is used in nearly all evaluations of mental health programs, to measure general elements of RI satisfaction. Second, we asked them to rate their RI group leader's skills. Third, we asked participants to tell us, in their own words, what they liked and disliked about the RI program. We asked participants who were attending RI, as well as those who were no longer attending RI, these satisfaction questions. These satisfaction measures were administered to participants during each interview. In analyzing the satisfaction data for each interview time point, we first examined satisfaction reported for all participants. We then compared satisfaction reported by RI attendees (participants who were currently attending RI or had attended at least one group meeting since their last interview) to satisfaction reported by non-attendees (participants who were not attending RI and had not gone to any meetings since their last interview). Satisfaction results are presented below.

## **Overall Satisfaction with RI**

The CSQ (Attkisson et al., 1978) contains eight items that ask participants whether they felt that RI is helpful, provided them with the information and help they wanted, and met their needs. Participants rated their agreement or satisfaction with each item along a 4-point Likert scale, with 1=very dissatisfied to 4=very satisfied. Responses to each item are summed together to create a total overall satisfaction score. Higher responses indicate greater satisfaction with RI. Table 5<sup>4</sup> lists CSQ scores for all participants at each interview time point. The mean (average) scores for each interview time point indicate that participants reported moderate to high levels of overall satisfaction with RI meetings. They felt that the meetings were helpful, met their needs, and that they would recommend RI to a friend who was experiencing similar problems.

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<sup>4</sup> Tables that list satisfaction, RI knowledge and RI participation benefit scores include the following information for each interview time point. N=the sample size or number of participants who completed interviews for that time point; for example, at Time 1, 114 people completed interview so the N=114. Mean=average score for all participants. SD=standard deviation. Range of scores=lowest and highest scores reported. Reliability alpha=internal consistency of scale items.

Table 5. RI Satisfaction Scores					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Overall Satisfaction with RI Group Meeting Scores					
Time 1	114	26.64	4.57	7-32	0.91
Time 2	94	26.60	4.45	13-32	0.91
Time 3	78	26.50	4.96	11-32	0.95
Time 4	68	27.77	3.82	16-32	0.88
Satisfaction with RI Group Leaders					
Time 1	113	3.59	.62	1-4	N/A
Time 2	94	3.56	.61	1-4	N/A
Time 3	77	3.56	.73	1-4	N/A
Time 4	68	3.56	5.58	1-4	N/A

**Satisfaction with RI group leaders.** Participants' satisfaction with their RI group leader was assessed by a single item: "How would you rate the group leader's skills in running Recovery meetings"? Participants rated group leaders skills along a 4-point Likert scale, with 1=poor, 2=fair, 3=good, and 4=excellent. As shown in Table 5, at each interview time point, the mean score for this item suggests that participants felt that their leaders were quite skilled, and did a very good job leading their RI groups.

**Participant demographic and mental health characteristics associated with RI satisfaction.** We conducted a series of zero-order correlation analyses that examined whether any participant demographic and/or mental health characteristics were associated with RI satisfaction at each interview time point. Very few participant characteristics were significantly associated with overall satisfaction; no participant characteristics were significantly associated with satisfaction with RI group leaders.

#### Time 1

- **Minority status:** Participants who were *racial minorities* reported *greater overall satisfaction with RI* ( $r=.19, p=.046$ ).

#### Time 2

- **Minority status:** Participants who were *racial minorities* reported *greater overall satisfaction with RI* ( $r=.26, p=.011$ ) than Caucasian participants.

#### Time 3

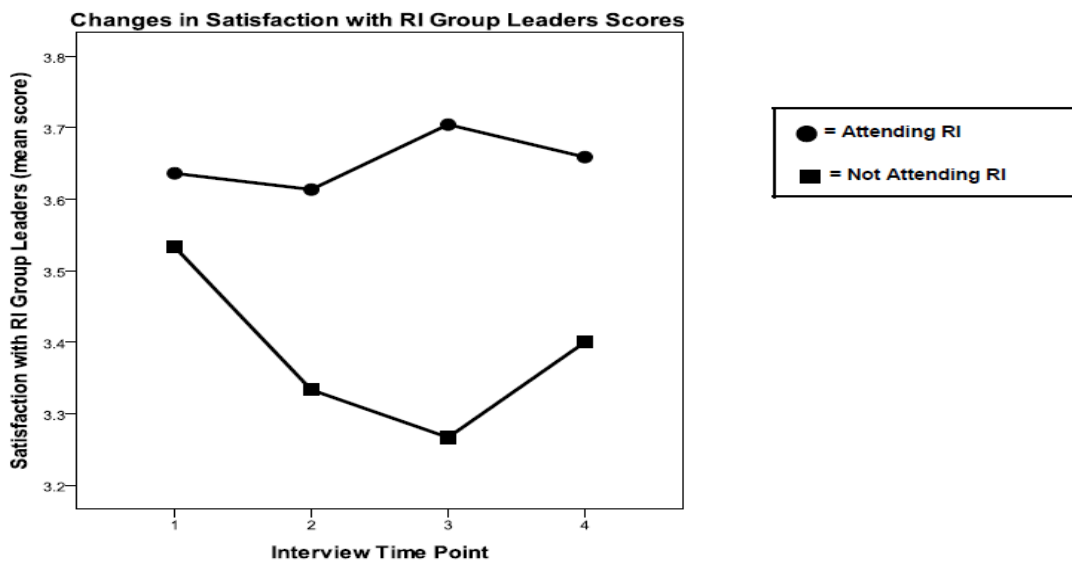
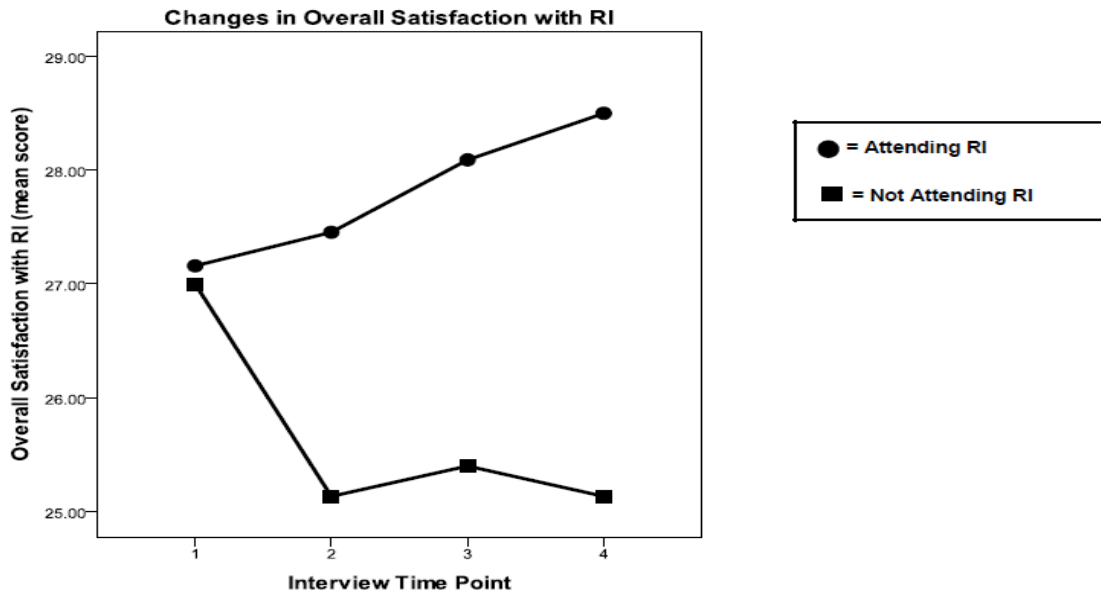
- **Illness length:** Participants who had *longer lengths of psychiatric illness* (i.e., had been ill for several years) were *more likely to be satisfied with RI* than participants who had shorter illness lengths ( $r=.25, p=.034$ ).

#### Time 4

- **Minority status:** Participants who were *racial minorities* reported *greater overall satisfaction with RI* ( $r=.27, p=.026$ ) than Caucasian participants.

**Comparison of satisfaction by RI attendance.** We conducted General Linear Model (GLM) repeated-measures analysis of variance (RM-ANOVA) to determine whether significant differences in satisfaction occurred between RI attendees and non-attendees across each interview time point. GLM results are presented in the graphs below. Lines with circles represent RI attendees, and each circle shows the mean (average) score for attendees at each interview time point. Lines with squares represent

RI non-attendees; each square indicates the mean (average) score for attendees at each interview time point. As illustrated in the graphs, attendees' satisfaction with RI increased over time. Non-attendees' satisfaction decreased dramatically at Time 2, increased slightly at Time 3, and decreased again at Time 4. The difference between the attendees' and non-attendees' satisfaction with RI is statistically significant ( $F_{3,171}=4.613, p=.004$ ). In other words, over time, attendees' increases in overall satisfaction with RI were greater than non-attendees' decreases in satisfaction. However, there were no significant changes in participants' ratings of RI group leader skills ( $F_{3,171}=.65, p=.58$ ). Both groups' scores remained fairly constant over time, increasing or decreasing incrementally. For example, at Time 1, attendees' mean score was 3.64 and non-attendees' mean score was 3.53. At Time 2, attendees' mean score was 3.61, and non-attendees' mean score was 3.33. Similarly, there were no significant differences between attendees' and non-attendees' ratings of their group leaders' skills ( $F_{3,170}=1.21, p=.31$ ).



## RI Satisfaction Qualitative Data

We used four open-ended items to assess what participants liked the most and least about RI, and what facets of the program they found to be helpful. Specifically, during each interview, participants were asked to list three things that they liked most about RI; three things they disliked about RI; how RI was helpful to them; and how RI was unhelpful to them. All participants were asked these questions at each time point, regardless of whether they were attending RI, or not. Participants' responses to these items were independently coded by two research team members. Each rater identified the core themes for each response. The raters then discussed their themes or codes with each other, and common themes or categories were created for each item. All categories were reviewed with Dr. Pickett before the final coding of responses was completed. This section presents the results for each of the four open-ended satisfaction items at each interview time point. We first summarize the responses for all participants, and then compare responses made by RI attendees to those given by non-attendees.

### What 3 Things Do or Did You Like the Most About RI Group Meetings?

To assess what participants liked about RI, they were asked, "What three things do or did you like the most about RI group meetings?" Across all four interview time points, responses were coded into 14 categories. Responses per interview time point and RI attendance are summarized below.

#### **Time 1: Responses Provided by All Participants**

The 114 participants who completed Time 1 interviews gave a total of 329 responses for this question. The three most frequently reported "likes" categories for all participants were:

- (1) RI structure and methods (97 responses): Participants liked the actual RI Methods, such as RI tools, spots and the 4-Part Example, and the meeting format.
- (2) RI group (49 responses): Participants liked their RI group itself, stating that they liked their fellow group members and the open, friendly atmosphere of group meetings.
- (3) Peer support (46 responses): Participants valued being in a group with individuals who are facing similar challenges, and liked that their RI group leader was a peer, "someone just like me".

#### **Time 1: Responses Made by RI Attendees**

At Time 1, 109 participants were attending RI meetings. These participants gave a total of 316 responses for this question. Their most frequently reported "likes" included:

- (1) RI structure and methods (90 responses)
- (2) RI group (46 responses)
- (3) Peer support (45 responses)

### **Time 1: Responses Made by RI Non-Attendees**

At Time 1, 5 participants were no longer attending RI meetings. These participants gave a total of 13 responses for this question. Their most frequently reported “likes” included:

- (1) RI structure and methods (7 responses)
- (2) RI group (3 responses)
- (3) Peer support (1 response)

**Time 1 “Like Most” Summary:** At baseline, participants reported that they liked RI structure and methods, their RI group, and the program’s peer support. There were no differences between attendees and non-attendees for this item.

### **Time 2: Responses Made by All Participants**

A total of 95 participants completed Time 2 interviews, and gave a total of 309 responses for this question. Their three most frequently reported “likes” include:

- (1) RI structure and methods (82 responses)
- (2) RI group (62 responses)
- (3) Peer support (43 responses)

### **Time 2: Responses Made by RI Attendees**

Eighty participants were currently attending RI meetings or had gone to at least one meeting since their Time 1 interview. These participants gave a total of 267 responses for this question. Their three most frequently reported “likes” include:

- (1) RI structure and methods (77 responses)
- (2) RI group (46 responses)
- (3) Peer support (36 responses)

### **Time 2: Responses Made by RI Non-Attendees**

Fifteen participants were no longer attending RI meetings at Time 2. These participants gave a total of 42 responses to this item. Their three most frequently reported “likes” include:

- (1) RI group (16 responses)
- (2a) Peer support (7 responses)
- (2b) Group leader (7 responses): Participants felt that their group leaders were skilled and did a good job leading their RI groups.
- (3) RI structure and method (5 responses)

**Time 2 “Like Most” Summary:** Similar to Time 1, participants reported that they liked RI’s structure and methods, their group, and the peer support features of the program. Non-attendees also listed their group leader as an element that they liked most about RI.

### **Time 3: Responses Made by All Participants**

A total of 83 participants completed Time 3 interviews. These participants provided a total of 256 responses to this item. Their top three “likes” were:

- (1) RI structure and methods (53 responses)
- (2) RI group (45 responses)
- (3) Peer support (44 responses)

### **Time 3: Responses Made by RI Attendees**

Sixty-one participants were currently attending RI or had attended at least one meeting since their Time 2 interview. They provided a total of 204 responses to this question. Their most frequently reported “likes” were:

- (1) RI structure and methods (48 responses)
- (2) Peer support (35 responses)
- (3) RI group (33 responses)

### **Time 3: Responses Made by RI Non-Attendees**

Twenty-two participants had quit RI by Time 3. They provided a total of 52 responses for this item. Their top 3 responses include:

- (1) RI group (12 responses)
- (2) Peer support (9 responses)
- (3a) RI structure and methods (5 responses)
- (3b) RI materials (5 responses): Participants liked Dr. Low’s books and other RI program materials

**Time 3 “Like Most” Summary:** Participants continue to report that they most liked RI structure and methods, their RI group, and the program’s peer support. Non-attendees told us that they also liked the program’s materials, including Dr. Low’s books.

### **Time 4: Responses Made by All Participants**

A total of 79 participants completed Time 4 interviews; however, nine non-attendees chose not to answer this question. The 70 participants who did answer this question gave a total of 250 responses for this question. Their top three “likes” were:

- (1) RI structure and methods (59 responses)
- (2) RI group (57 responses)
- (3) Peer support (36 responses)

### **Time 4: Responses Made by RI Attendees**

Fifty participants were currently attending RI or had gone to at least one meeting since their Time 3 interview. They gave a total of 184 responses for this item. Their top three “likes” were:

- (1) RI structure and methods (46 responses)
- (2) Group (40 responses)
- (3) Peer support (29 responses)

### **Time 4: Responses Made by RI Non-Attendees**

Twenty-nine participants had stopped going to RI by Time 4. However, as noted above, 9 non-attendees refused to answer this item. Of the 20 non-attendees who answered this question, the top three “likes” were:

- (1) RI group (17 responses)
- (2) RI structure and methods (13 responses)
- (3) Peer support (7 responses)

**Time 4 “Like Most” Responses:** Once again, participants reported that they most liked RI structure and methods, their RI group, and the program’s peer support features.

**Summary of “like most” responses.** At each interview time point, participants reported that they most liked RI structure and methods, their RI group, and the peer



support element of the program. These factors varied little between RI attendees and non-attendees. The only difference between these groups was that, over time, attendees most often ranked RI structure and methods as their top “most like” while non-attendees ranked their RI group as their top “like most”. This suggests that, among attendees, the RI Method itself—the tools, the 4-Part Example, spots and meeting format—are what they enjoy the most about the program, and may be the components that bring them back to meetings each week. Non-attendees appear to most like their group and fellow RI members, and the acceptance the group offered them. However, this ranking by non-attendees suggests an interest in mutual support—that is, a desire to share their problems with other group members. It is possible that they stopped going to RI because it is not a mutual support group program—that is, RI is not a group in which individuals share their problems with one another and offer solutions based on personal experiences.

### **What 3 Things Do or Did You Like the Least About RI Group Meetings?**

To assess what participants disliked about RI, they were asked, “What three things do or did you like the least about RI group meetings?” Across all four interview time points, responses were coded into 11 categories. Responses per interview time point and RI attendance are summarized below.

#### **Time 1: Responses Provided by All Participants**

Of the 114 participants who completed Time 1 interviews, one attendee refused to answer this question. The 113 participants who did answer this question gave a total of 200 responses. The top three “most dislikes” were:

- (1) Meeting format (46 responses): Participants felt that meetings were too structured, provided them with limited opportunities to participate, and/or were too long.
- (2) Other group members (38 responses): Participants had various issues with or about other people in their group. This includes feeling uncomfortable with and/or annoyed by others’ mental health symptoms, poor reading skills, and people who complained during meetings; feelings that others are cold and unfriendly; and being upset by others’ poor attendance of RI meetings.
- (3) RI materials (34 responses): Participants reported that RI materials—including Dr. Low’s books and the language used in materials—are outdated and difficult to understand.

#### **Time 1: Responses Made by RI Attendees**

The 108 Time 1 RI attendees who answered this question gave a total of 189 responses. Their top three “most dislikes” were:

- (1) Meeting format (44 responses)
- (2) Other group members (36 responses)
- (3) Materials (33 responses)

#### **Time 1: Responses Made by Non-Attendees**

The 5 Time 1 non-attendees gave a total of 11 responses for this item. Their top three “most dislikes” were:

- (1a) Other group members (2 responses)
- (1b) Meeting format (2 responses)

(1c) RI is not for me (2 responses): Participants reported that they did not like RI because they found it unhelpful, and stated that “it’s not for me”.

**Time 1 “Like Least” Summary:** Both attendees and non-attendees had issues with other group members and did not like RI group meeting format. Attendees also disliked RI materials.

### **Time 2: Responses Made by All Participants**

At Time 2, 94 of the 95 participants who completed interviews answered this question, and gave a total of 195 responses. Their top three “most dislikes” included:

- (1) Meeting format (60 responses)
- (2) Other group members (39 responses)
- (3) Meeting logistics (28 responses): Participants told us that RI meetings times and locations were inconvenient, and they didn’t like the meeting space itself.

### **Time 2: Responses Made by RI Attendees**

Of the 80 participants who were RI attendees at Time 2, 79 chose to answer this item (one attendee refused). These participants gave a total of 158 responses to this question. Their top three “most dislikes” were:

- (1) Meeting format (45 responses)
- (2) Other group members (32 responses)
- (3) Meeting logistics (24 responses)

### **Time 2: Responses Made by Non-Attendees**

The 15 participants who were no longer attending RI at Time 2 gave a total of 37 responses for this item. Their top 3 “most dislikes” included:

- (1) Meeting format (15 responses)
- (2) Other group members (7 responses)
- (3a) Meeting logistics (4 responses)
- (3b) Group leader (4 responses): Participants felt that their group leader was incompetent, did not keep other members focused on RI methods, and/or was unfriendly.

**Time 2 “Like Least” Summary:** Similar to Time 1, participants reported that their dislikes included meeting format and other group members. Attendees disliked certain meeting logistics, noting that meeting times and locations were inconvenient for them. Non-attendees disliked group leaders whom they felt were unskilled and unfriendly.

### **Time 3: Responses Made by All Participants**

Of the 83 participants who completed Time 3 interviews, 79 chose to answer this question, and gave a total of 163 responses. Their top three “most dislikes” included:

- (1a) Meeting format (35 responses)
- (1b) Other group members (35 responses)
- (2) RI materials (23 responses)
- (3) Meeting logistics (20 responses)

### **Time 3: Responses Made by RI Attendees**

The 61 participants who were RI attendees at Time 3 gave a total of 124 responses to this question. The top three “most dislikes” included:

- (1) Other group members (29 responses)

- (2) Meeting format (22 responses)
- (3) RI materials (19 responses)

### **Time 3: Responses Made by Non-Attendees**

Four of the 22 participants who were no longer going to RI meetings at Time 3 refused to answer this item. The 19 non-attendees who answered this question provided a total of 39 responses for this item. Their top three “most dislikes” were:

- (1) Meeting format (13 responses)
- (2a) Meeting logistics (7 responses)
- (2b) RI is not for me (7 responses)
- (3) Other group members

**Time 3 “Like Least” Summary:** There was a notable difference in the dislikes reported by attendees and non-attendees. While both groups stated that they disliked the meeting format and had issues with other group members, attendees disliked RI materials, and non-attendees disliked meeting logistics and felt that RI was not helpful to them.

### **Time 4: Responses Made by All Participants**

Of the 79 participants who completed Time 4 interviews, 70 chose to answer this question, and gave a total of 156 responses. Their top three “most dislikes” included:

- (1) Other group members (45 responses)
- (2) Meeting format (33 responses)
- (3) RI materials (26 responses)

### **Time 4: Responses Made by RI Attendees**

The 50 RI attendees provided a total of 109 responses for this item. Their top three “most dislikes” were:

- (1) Other group members (30 responses)
- (2) Meeting format (21 responses)
- (3) RI materials (20 responses)

### **Time 4: Responses Made by Non-Attendees**

Nine of the 29 non-attendees refused to answer this question. The 20 non-attendees who chose to answer this item gave a total of 47 responses. Their top three “most dislikes” included:

- (1) Other group members (15 responses)
- (2) Meeting format (12 responses)
- (3) RI materials (6 responses)

**Summary of Time 4 “Like Least” Responses:** At Time 4, there were no differences between RI attendees and non-attendees in the ranking of what they disliked about RI. All participants reported that the factors they did not like about RI were other group members, the meeting format, and RI materials.

**Summary of “like least” responses.** In general, across all interview time points, participants told us that what they liked least about RI was other group members, the meeting format, and RI materials. These dislikes were fairly consistent for both attendees and non-attendees. Both groups noted personal discomfort with other group members who appeared to have more severe psychiatric symptoms than their own, or who complained during meetings, or who were cold and unfriendly. They did not like

aspects of the meeting format that prevented their participation; for example, several participants reported that they didn't like that they couldn't talk in meetings and/or offer comments. Participants felt that Dr. Low's books and other RI materials were outdated, and that the language used in these materials was very difficult to understand. Meeting logistics was a complaint made by participants at Time 2 and Time 3. Participants told us that their RI meetings were held on days and times that were inconvenient (i.e., conflicted with work and home schedules). Others noted that some meetings were held at locations that were not easily accessible by public transportation. Meeting format was the top ranked dislike among non-attendees at Time 2 and Time 3, suggesting in part that their frustration over an inability to fully participate in meetings may have been a factor in quitting RI.

### **How are RI Meetings Helpful to You?**

To assess the ways in which RI was helpful to participants, at each interview, we asked them, "How are Recovery group meetings helpful to you?" Across all four interview time points, responses were coded into 11 categories. Responses per interview time point and RI attendance are summarized below.

#### **Time 1: Responses Made by All Participants**

At Time 1, 112 participants chose to answer the question, and gave a total of 266 responses. The three most frequently reported "most helpful" factors were:

(1) RI materials (96 responses): Participants reported that RI tools, Dr. Low's books, the 4-Part Example and spots were simple, common sense methods they could apply in their every day lives. Participants also were encouraged by RI materials' positive messages.

(2) Peer support (51 responses): Participants told us that they took comfort in knowing that there are others who face similar struggles, and that RI meetings helped them realize that they are not alone. Sharing with others and receiving feedback also were helpful peer support features of RI.

(3) Learned new skills (34 responses): Participants reported that RI taught them new skills that helped them better understand and express themselves, and helped them focus on their mental health recovery.

#### **Time 1: Responses Made by RI Attendees**

One attendee chose not to answer this question. The 108 RI attendees who answered this question provided a total of 259 responses. The top three "most helpful" factors included:

(1) RI materials (92 responses)

(2) Peer support (50 responses)

(3) Learned new skills (34 responses)

#### **Time 1: Responses Made by Non-Attendees**

One non-attendee refused to answer this question. The 4 non-attendees who answered this item provided a total of 7 responses. Their top three "most helpful" factors were:

(1) RI materials (4 responses)

(2) Peer support (1 response)

(3) Improved emotional well-being (1 response): Participants told us that RI meetings helped them feel less depressed, anxious and angry.

**Summary of Time 1 “Most Helpful” Responses:** At baseline, participants reported that RI materials themselves, the peer support features of the program, and the new skills they learned were the most helpful aspects of RI.

**Time 2: Responses Made by All Participants**

Ninety-four participants answered this question at Time 2, and gave a total of 227 responses. Their top three “most helpful” factors were:

- (1) RI materials (62 responses)
- (2) Improved emotional well-being (44 responses)
- (3) Peer support (43 responses)

**Time 2: Responses Made by RI Attendees**

The 80 RI attendees gave a total of 208 responses for this item. Their top three “most helpful” factors included:

- (1) RI materials (58 responses)
- (2) Improved emotional well-being (40 responses)
- (3) Peer support (37 responses)

**Time 2: Responses Made by Non-Attendees**

One non-attendee refused to answer this question at Time 2. The 14 non-attendees who answered this question gave a total of 19 responses. Their top three “most helpful” factors included:

- (1) Peer support (6 responses)
- (2a) RI materials (4 responses)
- (2b) Improved emotional well-being (4 responses)
- (2c) Learned new skills (4 responses)
- (3) Changed outlook (1 response): Participants reported that RI helped them change their views of themselves and others.

**Summary of Time 2 “Most Helpful” Responses:** At Time 2, both attendees and non-attendees reported that RI tools, peer support, and the fact that RI helped decrease their symptoms and enhance their emotional well-being were the most helpful aspects of the program. Non-attendees also listed the new skills they learned in RI as a helpful program feature.

**Time 3: Responses Made by All Participants**

At Time 3, 5 participants did not answer this item. The 78 participants who did answer this question provided a total of 182 responses. Their top three “most helpful” responses included:

- (1) RI materials (46 responses)
- (2a) Peer support (31 responses)
- (2b) Improved emotional well-being (31 responses)
- (3) Learned new skills (24 responses)

**Time 3: Responses Made by RI Attendees**

One attendee refused to answer this question at Time 3. The 60 attendees who answered the question gave a total of 141 responses. Their top three “most helpful” responses included:

- (1) RI materials (36 responses)
- (2) Improved emotional well-being (25 responses)
- (3) Peer support (22 responses)

### **Time 3: Responses Made by Non-Attendees**

Four non-attendees did not answer this item at Time 3. The 18 non-attendees who answered this question gave a total of 44 responses. Their top three “most helpful” responses were:

- (1) RI materials (10 responses)
- (2) Peer support (9 responses)
- (3a) Improved emotional well-being (6 responses)
- (3b) Changed outlook (6 responses)

**Summary of Time 3 “Most Helpful” Responses:** All participants reported that RI materials, peer support, and improved emotional well-being were positive, helpful aspects of the RI program. Similar to Time 2, non-attendees compared to attendees were more likely to rank a changed view of themselves and others as a helpful feature of the RI program.

### **Time 4: Responses Made by All Participants**

Nine participants chose not to answer this question at Time 4. The 70 participants who answered this question gave a total of 181 responses. Their top three “most helpful” factors included:

- (1) RI materials (43 responses)
- (2) Improved emotional well-being (37 responses)
- (3) Learned new skills (32 responses)

#### **Time 4: Responses Made by RI Attendees**

The 50 RI attendees gave a total of 137 responses to this item. Their top three “most helpful” factors included:

- (1) RI materials (37 responses)
- (2) Improved emotional well-being (31 responses)
- (3) Learned new skills (24 responses)

#### **Time 4: Responses Made by Non-Attendees**

Nine non-attendees refused to answer this item at Time 4. The 20 non-attendees who answered this question gave a total of 44 responses. Their top three “most helpful” responses included:

- (1) Changed outlook (10 responses)
- (2) Learned new skills (8 responses)
- (3) Peer support (7 responses)

**Summary of Time 4 “Most Helpful” Responses:** Interestingly, at Time 4, we see clear differences in what attendees and non-attendees found to be most helpful about RI meetings. Attendees ranked RI materials, their improved emotional well-being, and the skills they learned during meetings as the most helpful features of RI. While non-attendees also listed new skills as helpful, changed outlook was their top ranked “most helpful” feature, and non-attendees also mentioned peer support as a helpful RI program factor.

**Summary of “most helpful” responses.** Across all interview time points, participants ranked RI materials and improved emotional well-being as two of the most helpful features of the RI program. Participants reported that RI tools, the 4-Part Example and Dr. Low’s books were encouraging, gave them hope, and were common sense methods they could apply in their daily lives. RI also helped improve their mental health: participants told us that they felt less depressed, anxious and angry, and felt

more calm and happy. Peer support—no longer feeling alone, being with others facing similar struggles, and receiving peers’ feedback—also was consistently noted as a helpful aspect of RI. Participants learned new skills in their RI meetings that helped them better understand themselves and helped facilitate their mental health recovery. Most notably, *non-attendees*—and not attendees—reported that RI helped them change their view of themselves and others. Perhaps gaining a new outlook on life early on in their participation in the program may have led non-attendees to feel that they no longer needed RI, i.e., they felt better about themselves and no longer felt a need to continue participating in the program.

## **How Are Recovery Group Meetings Not Helpful to You?**

To assess the ways in which RI was unhelpful to participants, at each interview, we asked them, “How are Recovery group meetings not helpful to you?” Across all four interview time points, responses were coded into 11 categories. Responses per interview time point and RI attendance are summarized below.

### **Time 1: Responses Made by All Participants**

The 114 participants who completed Time 1 interviews gave a total of 121 responses for this item. Their top three “least helpful” features of RI included:

- (1) Nothing—everything is helpful (66 responses): Participants told us that there wasn’t anything about RI that they felt was unhelpful to them!
- (2) Meeting format (16 responses): Participants reported that they found the de-emphasis on mutual support within meetings to be unhelpful to them; and specific problems that occurred within group meetings, such as problems remembering RI tools and readings not being discussed, were unhelpful.
- (3) Other group members (14 responses): Participants told us that they found it difficult to relate to other group members who were older than they were, had more severe mental health symptoms, and who had been attending RI for many years. They also told us that they wanted closer relationship with group members.

### **Time 1: Responses Made by RI Attendees**

The 109 RI attendees gave a total of 116 responses to this item. Their top three “least helpful” factors were:

- (1) Nothing—everything is helpful (65 responses)
- (2) Meeting format (16 responses)
- (3) Other group members (13 responses)

### **Time 1: Responses Made by Non-Attendees**

The 5 non-attendees gave a total of 5 responses to this question. Their top three “least helpful” factors were:

- (1a) Nothing—everything is helpful (1 response)
- (1b) Other group members (1 response)
- (1c) Don’t know (1 response): Participants told us that they didn’t know what about RI was least helpful to them.

**Summary of Time 1 “least helpful” responses:** Overwhelmingly, participants told us that they found nothing to be unhelpful about RI; indeed, participants’ primary response was that everything about RI was helpful. Participants who did discuss what was unhelpful cited problems with meeting format and the fact that

the program did not focus on mutual support. They also told us that they felt a more diverse group of meeting participants would have been helpful to them, and that they often felt uncomfortable in meetings with group members who were older, had more severe mental health symptoms, and who had been attending RI for a long time.

### **Time 2: Responses Made by All Participants**

Six participants refused to answer this question at Time 2. The 89 participants who answered this item gave a total of 116 responses. Their top three “least helpful” factors were:

- (1) Nothing—everything is helpful (46 responses)
- (2) RI materials (19 responses): Participants told us that the language used in materials was difficult to understand, and that materials were outdated, making it hard for them to learn RI methods.
- (3) Meeting format (18 responses)

### **Time 2: Responses Made by RI Attendees**

Five attendees did not answer this question. The 75 attendees who answered this item gave a total of 97 responses. Their top three “least helpful” factors were:

- (1) Nothing—everything is helpful (41 responses)
- (2) RI materials (16 responses)
- (3) Meeting format (15 responses)

### **Time 2: Responses Made by Non-Attendees**

One non-attendee refused to answer this item. The 14 non-attendees who answered this question gave a total of 19 responses. Their top three “least helpful” factors included:

- (1) Nothing—everything is helpful (5 responses)
- (2) Other group members (4 responses)
- (3a) RI materials (3 responses)
- (3b) Meeting format (3 responses)

**Summary of Time 2 “least helpful responses:** Similar to Time 1, the most frequent response to this question was that nothing was unhelpful about RI. Factors that were noted to be unhelpful included the language used in materials and outdated materials themselves, other group members, and meeting format.

### **Time 3: Responses Made by All Participants**

Ten participants who completed Time 3 interviews refused to answer this question. The 73 participants who answered this item gave a total of 103 responses. Their top three “least helpful” factors were:

- (1) Nothing—everything is helpful (35 responses)
- (2) Meeting format (20 responses)
- (3) Other group members (17 responses)

### **Time 3: Responses Made by RI Attendees**

Six attendees refused to answer this item. The 55 attendees who answered this question gave a total of 76 responses. Their top three “least helpful” responses included:

- (1) Nothing—everything is helpful (29 responses)
- (2) Meeting format (14 responses)
- (3) Other group members (12 responses)



### **Time 3: Responses Made by Non-Attendees**

Four non-attendees did not answer this question. The 18 non-attendees who answered this question gave a total of 27 responses. Their top three “least helpful” responses were:

- (1) RI is not for me (7 responses): Participants told us that, in general, they found RI was not a good fit for them and/or their problems, and not helpful to them.
- (2a) Nothing—everything is helpful (6 responses)
- (2b) Meeting format (6 responses)
- (3) Other group members (5 responses)

**Summary of Time 3 “least helpful” responses:** Once again, the most frequent response to this question was “nothing”. Not surprisingly, non-attendees were more likely than attendees to tell us that, RI was not a good fit for them, and thus they found the program in general to be unhelpful to them.

### **Time 4: Responses Made by All Participants**

Twelve participants refused to answer this question at Time 4. The 67 participants who answered this question gave a total of 90 responses. Their top three “least helpful” factors were:

- (1) Nothing—everything is helpful (40 responses)
- (2a) Other group members (10 responses)
- (2b) RI materials (10 responses)
- (2c) Meeting format (10 responses)
- (3) Meeting logistics (6 responses): Participants told us that meeting times were inconvenient for them, and that they had to travel long distances to attend meetings.

### **Time 4: Responses Made by RI Attendees**

Two attendees did not answer this item. The 48 attendees who answered this question gave a total of 63 responses. Their top three “least helpful” factors included:

- (1) Nothing—everything is helpful (30 responses)
- (2a) Other group members (10 responses)
- (2b) Meeting format (10 responses)
- (3a) RI materials (5 responses)
- (3b) Meeting logistics (5 responses)

### **Time 4: Responses Made by Non-Attendees**

Ten non-attendees refused to answer this question. The 19 non-attendees who answered this item gave a total of 27 responses. Their top three “least helpful” factors were:

- (1) Nothing—everything is helpful (10 responses)
- (2) RI materials (5 responses)
- (3a) Other group members (3 responses)
- (3b) Meeting format (3 responses)
- (3c) RI is not for me (3 responses)

**Summary of Time 4 “least helpful” responses:** Similar to the three prior interview time points, at Time 4, the predominant response to this question was “nothing”. All participants—both attendees and non-attendees—reported that they found everything to be helpful about the RI program. When participants did

cite unhelpful factors, these included meeting format, other group members and RI materials. Attendees reported that inconvenient meeting logistics were unhelpful in their efforts to go to groups on a regular basis. Non-attendees told us that, in general, RI was not helpful and not a good fit for them.

**Summary of “least helpful” responses.** It is noteworthy that, across all interview time points, participants told us that nothing was unhelpful: quite the opposite, they found everything about the RI program to be helpful to them! This was true for both attendees and non-attendees. In regard to factors that participants did find to be unhelpful, similar to the “dislikes” question, participants told us that the lack of mutual support offered in meetings was unhelpful, as was the discomfort they felt being in groups with individuals who were older and/or who had more severe psychiatric symptoms. In regard to comments that long-time RI members were unhelpful, it was unclear whether participants initially felt intimidated by the wealth of RI knowledge long-time members possessed, or whether long-time members had close bonds and were unwelcoming to new members. Many participants told us they would have liked RI groups to be more diverse in regard to members’ age, gender and ethnicity (“too many old Caucasian women” to paraphrase a few participants’ remarks). Participants reported that the RI materials were outdated, and that the language was difficult to understand. The combination of these factors, they told us, made it hard for them to grasp RI concepts. Finally, several attendees commented that inconvenient meeting times and far-away locations were unhelpful because those logistics made it difficult for them to get to meetings.

### **Summary of Satisfaction Data**

Overall, satisfaction results suggest that evaluation participants were very satisfied with RI group meetings. They felt that the information and tools they received met their needs, and that group leaders are qualified and do a good job facilitating meetings. Not surprising, changes in overall satisfaction were significant for RI attendees, with these participants reporting greater increases in satisfaction with the program over time. We would surmise that non-attendees dissatisfaction with RI was a factor in their decision to quit going to group meetings.

Participants told us that RI’s structure, tools, and 4-Part Example are helpful, and that RI promotes a positive, open environment. They particularly liked that groups are led by peers who face similar challenges. While participants frequently cited peer support as a positive feature of the program, non-attendees appeared to be in search of mutual support groups where “sharing and caring” of concerns is emphasized. A potential area for improvement, as reflected in the dislikes, is an update of Dr. Low’s books. Some participants told us that they felt the books were too hard to understand and that some of the language was sexist and outdated. However, the majority of participants felt that RI is helpful to them, and gave them important skills that help them better manage their daily lives.

## RI Knowledge and the 4-Part Example

**RI knowledge.** Dr. Pickett and Ms. Garcia developed a 17-item multiple choice questionnaire that assesses evaluation participants' knowledge of RI methods and tools. These items were reviewed for accuracy by ALSHS staff and Board members. Participants' correct responses were coded as "1" and incorrect responses were coded as "0". Items were summed together to create a total knowledge scores. Higher scores indicate greater knowledge of RI methods and tools. As shown in Table 6, at each interview time point, knowledge scores ranged from 0 correct answers to 17 correct answers. On average, at each interview, participants had a total of 13 correct answers. This indicates very good knowledge of RI methods and tools. These results also suggest that participants were able to quickly learn this information, and that RI knowledge remained stable over time.

Table 6. RI Knowledge and 4-Part Example Scores					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Recovery Knowledge and Use of Recovery Tools Total Score					
Time 1	114	13.51	2.94	0-17	0.78
Time 2	95	13.32	4.20	0-17	0.90
Time 3	78	13.55	4.72	0-17	0.90
Time 4	77	12.76	5.58	0-17	0.65
4-Part Example- Number of Steps Correct					
Time 1	86	2.72	1.32	0- 4	0.73
Time 2	58	3.00	1.04	1- 4	0.58
Time 3	48	2.75	1.39	0- 4	0.78
Time 4	38	3.42	0.92	1- 4	0.84

**4-Part Example.** To assess participants' ability to correctly give a 4-Part Example, during each interview, we asked them to share an Example with us. Participants received one point for each part of the Example they gave correctly. Example scores ranged from 0 (no parts given correctly) to 4 (all parts given correctly). At each interview time point, on average, participants gave 3 of the 4 parts of the Example correctly (see Table 6). Again, similar to knowledge, these results suggest that participants quickly learn how to give an Example, and that their knowledge and ability to give an Example remains stable over time.

**Participant demographic and mental health characteristics associated with knowledge and ability to give an Example.** Results of our zero-order correlation analyses suggest show that the following participant demographic and mental health characteristics were significantly related to RI knowledge and ability to correctly give a 4-Part Example. At each time point, only a few participant characteristics were significantly associated with RI knowledge and ability to correctly give an Example.

### Time 1

- **Minority status:** Participants who were *racial minorities* were more likely than Caucasian participants to be able to *correctly give several parts of an Example* ( $r=.31$ ,  $p=.033$ )

- **Education:** Participants with *higher levels of education* had *higher knowledge scores* compared to those with lower levels of education ( $r=.46$ ,  $p < .001$ ).
- **Income:** Participants with *higher annual incomes* had *higher knowledge scores* ( $r=.25$ ,  $p=.009$ ) than participants with lower annual incomes.
- **Employment status:** At Time 1, participants who were *employed* had *higher knowledge scores* ( $r=.23$ ,  $p=.012$ ) and were more likely to *correctly give several parts of an Example* ( $r=.23$ ,  $p=.033$ ) than those who were unemployed.
- **Diagnosis:** Participants who had a diagnosis of *depression* had *higher knowledge scores* ( $r=.25$ ,  $p=.015$ ) than participants who had other psychiatric diagnoses.

#### Time 2

- **Diagnosis:** Participants who had a diagnosis of *depression* had *higher knowledge scores* ( $r=.27$ ,  $p=.016$ ) than participants who had other psychiatric diagnoses.

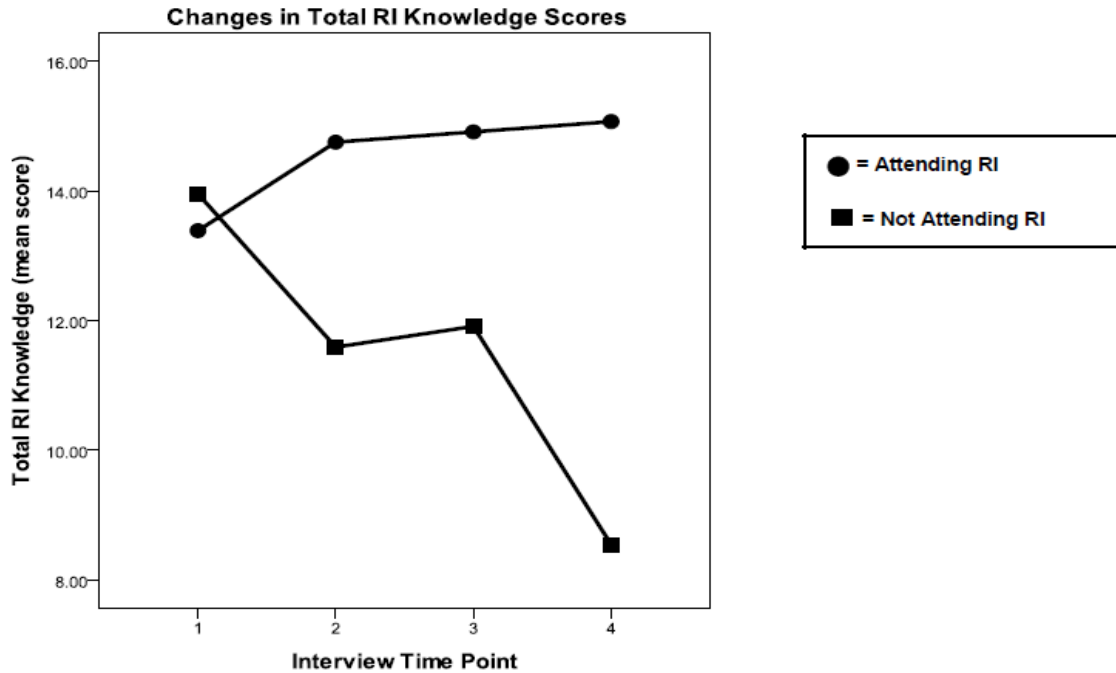
#### Time 3

- **Income:** Participants with *higher annual incomes* had *higher knowledge scores* ( $r=.23$ ,  $p=.046$ ) than participants with lower annual incomes.
- **Any psychiatric hospitalization:** Participants who had *never experienced a psychiatric hospitalization* had *higher knowledge scores* ( $r=-.23$ ,  $p=.046$ ) than participants who had experienced a psychiatric hospitalization.

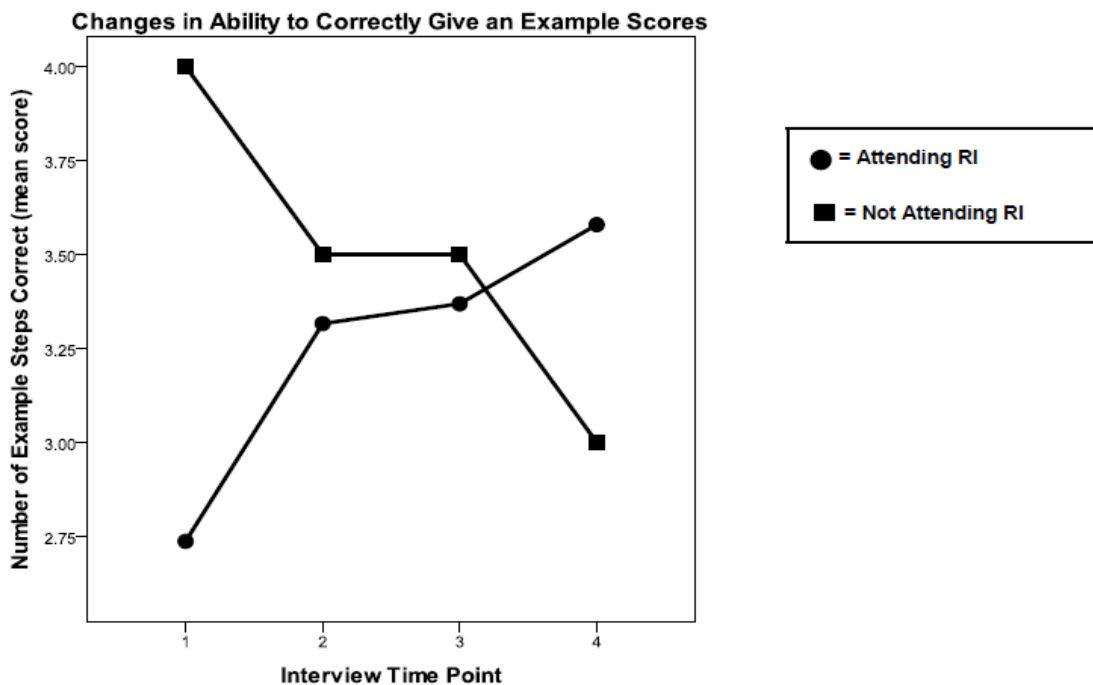
#### Time 4

- **Any psychiatric hospitalization:** Participants who had *never experienced a psychiatric hospitalization* were better able to *correctly give several parts of an Example* ( $r=-.39$ ,  $r=.014$ ) than participants who had experienced a psychiatric hospitalization.

**Comparison of knowledge scores by RI attendance.** Results of the GLM analyses comparing changes in knowledge are illustrated in the graph below. Lines with circles represent RI attendees, and each circle shows the mean (average) score for attendees at each interview time point. Lines with squares represent RI non-attendees; each square indicates the mean (average) score for attendees at each interview time point. Both groups experienced significant changes in total knowledge of RI methods and tools over time ( $F_{3,192}=4.89$ ,  $p=.005$ ). As expected, knowledge increased for participants who attended RI meetings throughout the evaluation, and decreased for non-attendees. However, this change in knowledge over time was significantly greater for RI attendees than non-attendees ( $F_{3,192}=13.65$ ,  $p < .001$ ). In other words, as illustrated by the graph, attendees' continual improvement in knowledge from baseline to 12 month follow-up was significantly greater than non-attendees' knowledge decrements. Simply put: attendees' had greater knowledge change over time compared to non-attendees.



**Comparison of 4-Part Example scores by RI attendance.** The next graph shows the results of the GLM analysis comparing changes in participants' ability to give a 4-Part Example. There were no significant changes in participants' ability to correctly give an Example ( $F_{3,57}=.028, p=.99$ ). Despite what is depicted in the graph below, there were no significant differences between the two groups on their ability to give an Example ( $F_{3,57}=1.03, p=.39$ ). Both RI attendees and non-attendees, on average, gave 3 of the 4 steps of the Example correctly at each interview time point.



**“Dosage effect”: Associations between number of RI meetings attended and RI participation benefits.** We conducted zero-order correlation analyses to determine whether the total number of RI meetings attended at each interview—i.e. the “dose” of RI participants received—was associated with RI knowledge and ability to give a 4-Part Example. At all four interview time points, participants who attended a greater total number of RI meetings had higher RI knowledge scores than participants who attended a fewer number of meetings (Time 1:  $r=.30$ ,  $p=.001$ ; Time 2:  $r=.36$ ,  $p < .001$ ; Time 3:  $r=.33$ ,  $p=.003$ ; Time 4:  $r=.39$ ,  $p < .001$ ). However, a dosage effect occurred only at Time 2 and Time 3 for ability to correctly give the Example. At Time 2 and Time 3, participants who attended a greater number of RI meetings were better able to correctly give more steps of the Example (i.e., gave 3 of 4 parts correctly) than those who attended a fewer number of meetings (Time 2:  $r=.31$ ,  $p=.018$ ; Time 3:  $r=.29$ ,  $p=.047$ ).

### **RI Group Support and Structure**

How individuals perceive different aspects of self-help groups has been found to influence their group participation (Heller et al., 1997). For example, newcomers who perceive RI groups as welcoming may be more likely to continue to attend meetings than newcomers who feel that other group members are cold and uncaring. We used Maton’s (1988) self-help group assessment to examine participants’ experiences within RI groups and their appraisals of group structure. This scale consists of 24 items that measure participants’ perceptions of support received and provided between group members, friendship, and group member role differentiation. Participants were asked to rate the extent to which each item accurately described their experiences with RI along a 5-point scale, with 1=not at all accurate to 5=completely accurate.

**Support received.** The support received subscale consists of four items that measure the support participants feel they receive from other RI group members (e.g., “I feel understood and accepted by most group members”). Items were summed together to create a total support received score; higher scores indicate greater support received from other RI group members. Participants’ support received scores at each interview time point are listed in Table 7. At Time 1, participants perceive moderate levels of support from other RI members. This increases by Time 4, where participants report high levels of support received from RI group members.

**Support provided.** The support provided subscale consists of five items that assess the support participants feel they provide to other RI group members (“At most meetings, I attempt to help others with their problems”). One item, “I receive more support than I provide at group meetings” was removed from our calculation of this subscale to preserve the internal consistency of the measure. Responses to the remaining four items were summed together to create the support provided score. Higher scores indicate greater perceptions of support provided to other RI group members. At Time 1, participants reported provided low to moderate levels of support to other group members. These scores increased over time, and by the end of their participation in the study, participants reported providing moderate levels of support to fellow RI group members (see Table 7).

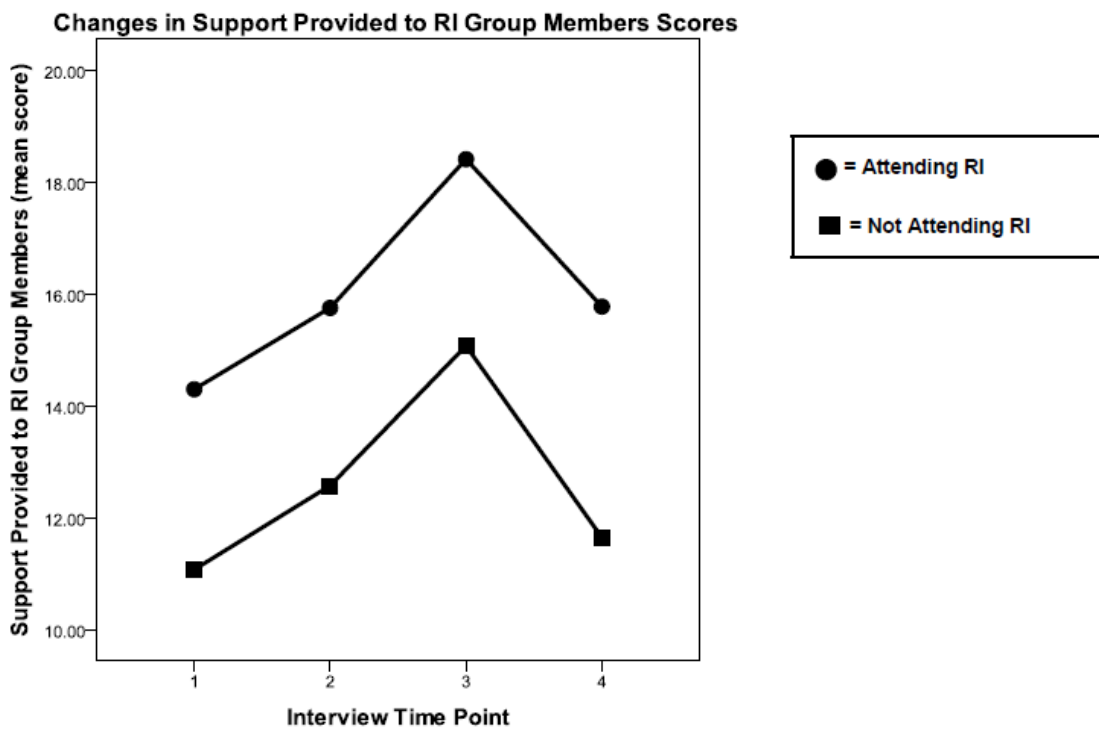
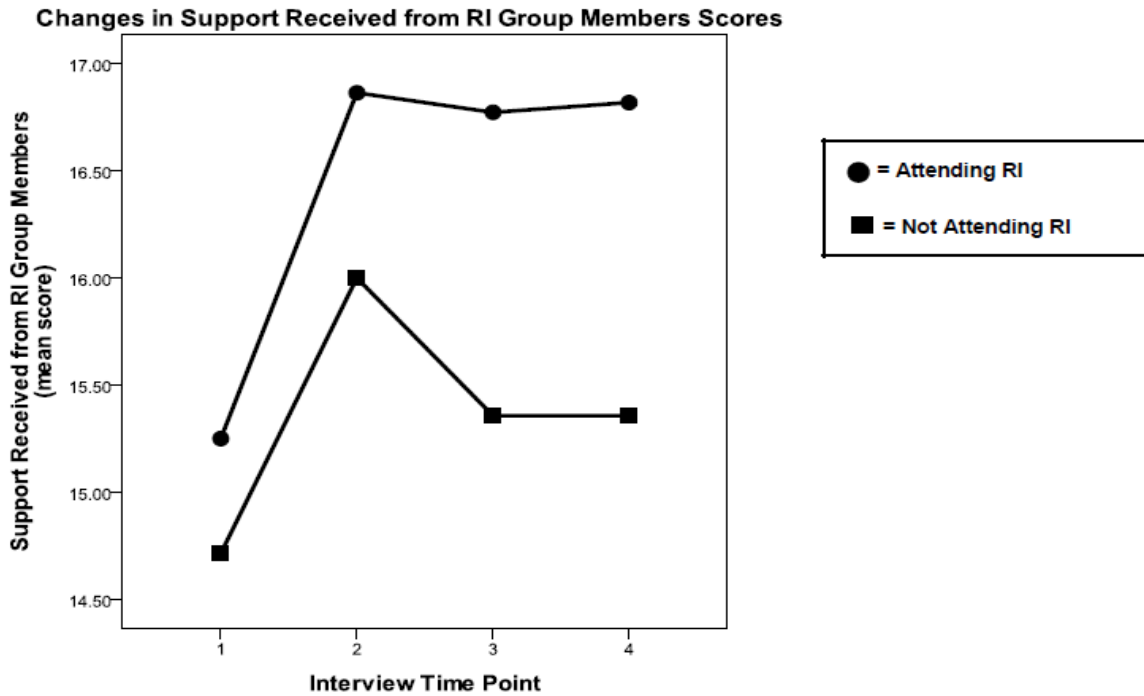
Table 7. Maton Support Group Assessment Scale					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Support Received from RI Group Members Score					
Time 1	114	15.44	3.67	5- 20	0.78
Time 2	93	16.17	3.19	7- 20	0.81
Time 3	77	15.79	3.71	4- 20	0.85
Time 4	68	16.62	3.36	6- 20	0.87
Support Provided to RI Group Members Score					
Time 1	114	13.33	4.12	4- 20	0.83
Time 2	93	14.69	3.67	6- 20	0.82
Time 3	77	17.09	4.55	1- 25	0.86
Time 4	68	14.72	3.85	4- 20	0.88
Friendship Among RI Group Members Score					
Time 1	114	12.39	5.58	3- 25	0.77
Time 2	93	12.51	5.01	5- 25	0.81
Time 3	77	12.31	4.93	4- 24	0.79
Time 4	68	13.94	5.51	3- 25	0.82
Group Role Differentiation Score					
Time 1	113	17.32	4.72	7- 25	0.69
Time 2	93	17.75	4.61	5- 25	0.68
Time 3	76	17.62	4.53	6- 25	0.69
Time 4	68	18.65	3.72	7- 25	0.64

**Friendship development.** The friendship development subscale consists of five items that measure participants' friendships with other RI group members ("I have developed a close friendship with another group member"). Items were summed together to create the friendship development score; higher scores indicate greater friendship development. As shown in Table 7, friendship development scores remain fairly low at each interview time point, increasing only at Time 4. At the final interview, on average, participants report somewhat moderate levels of friendship with other RI group members.

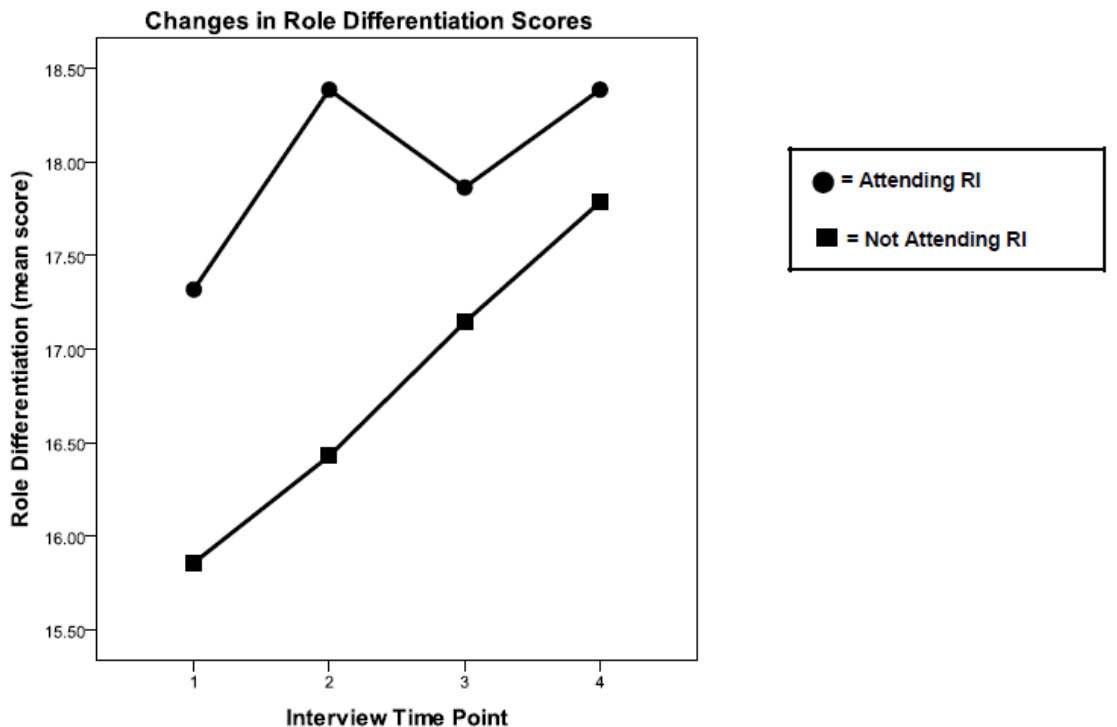
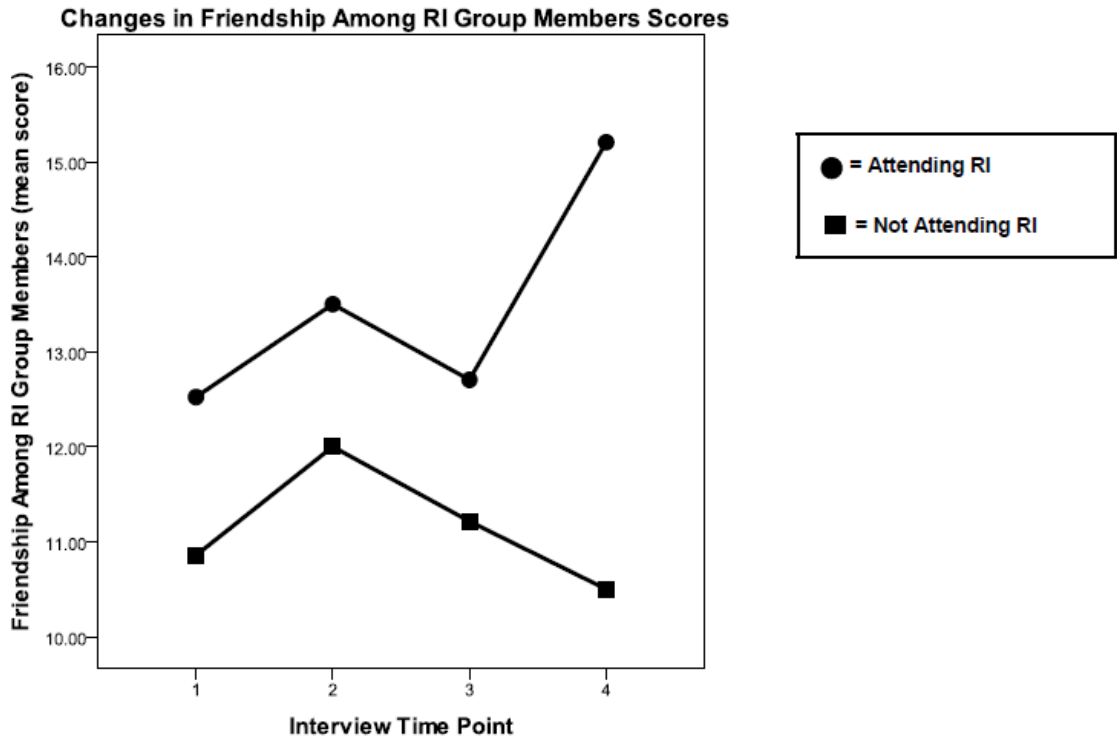
**Role differentiation.** The five-item role differentiation subscale assesses how RI group tasks and duties are distributed among members ("Different members are in charge of different aspects of group functioning"). Participants' responses to these items were summed to create the role differentiation score; higher scores denote greater role differentiation. As shown in Table 7, at all interview time points, on average, participants perceive moderate degrees of role differentiation. That is, they feel that RI tasks and duties are somewhat distributed among group members, and that these responsibilities are fairly well-defined.

**Comparison of group support and structure scores by RI attendance.** We conducted a series of GLM analyses to explore whether participants' appraisals of RI group support and structure changed over time, and whether differences in these appraisals existed between RI attendees and non-attendees. Results of these analyses are illustrated in the graph below.

Significant changes in appraisals of support received from other RI group members occurred for all participants ( $F_{3,168}=2.95$ ,  $p=.034$ ). There were no significant differences in appraisals of support received between the two groups ( $F_{3,168}=.37$ ,  $p=.77$ ). Appraisals of support provided to other RI group members also significantly increased over time for all participants ( $F_{3,168}=22.28$ ,  $p < .001$ ). Differences in appraisals of support provided between attendees and non-attendees were non-significant ( $F_{3,168}=.37$ ,  $p=.77$ ).







There were no significant changes in friendship development ( $F_{3,168}=1.05$ ,  $p=.37$ ) or role differentiation ( $F_{3,168}=1.90$ ,  $p=.13$ ). Similarly, there were no significant differences between the two groups for friendship development ( $F_{3,168}=1.96$ ,  $p=.12$ ) or role differentiation ( $F_{3,168}=.51$ ,  $p=.67$ ).

## Summary of RI Group Support and Structure Results

Results related to RI group support and structure are mixed. Changes in appraisals of support received and provided may reflect the feedback participants received when giving an Example and/or when talking with others during Mutual Aid. RI is not a mutual support group, so it is not surprising that there were no significant changes in friendship development. However, roles within RI groups—particularly that of the group leader—are well-defined, so it is unclear why this measure of group structure received moderate ratings and did not significantly change over time. It is possible that the Maton Scale, which traditionally is used to assess features of self-help, peer-led mutual support groups, may have tapped more components related to mutual support than RI's actual format and structure. Given this, we chose not to conduct additional analyses for these measures.

## RI Participation Benefits Results

We were interested in learning how RI participation influences changes in several key areas of newcomers' lives, such as their mental health symptoms, feelings of empowerment and hope, self-esteem, and service use. During each interview, we administered questionnaires used in prior studies of self-help and/or peer support programs that assessed these outcomes. Asking these questions at each interview enables us to determine whether these participants' outcomes—that is, their RI participation benefits—changed over time.

In this section, we present the following results for each RI participation benefit. First, we describe the instrument (i.e., questionnaire) used to assess the outcome, and the mean scores for all participants at each interview time point. Second, we present GLM RM-ANOVA results. The GLM results describe whether significant changes in outcomes occurred over the four interview time points, and whether changes in outcomes are significantly different for RI attendees versus non-attendees. Graphs depicting GLMS results for each outcome are provided.

### Mental Health Symptoms

Participants' mental health symptoms were assessed by the Brief Symptoms Inventory (BSI) (Derogatis, 1993). The BSI measures the presence of symptoms, and the extent to which participants are troubled by these symptoms. Participants were read a list of 53 symptoms, and asked to tell us how much they were bothered by each symptom in the past week from 0=not at all to 4=extremely. Responses were summed together and divided by the total number of responses to create a total symptom score. Higher scores indicate a greater presence and severity of symptoms (i.e., a greater number of symptoms that greatly distress participants). As shown in Table 7, at Time 1, participants report experiencing several symptoms and low to moderate levels of distress. At Time 2, the number and intensity of their symptoms have decreased, and remains stable at Time 3 and Time 4.

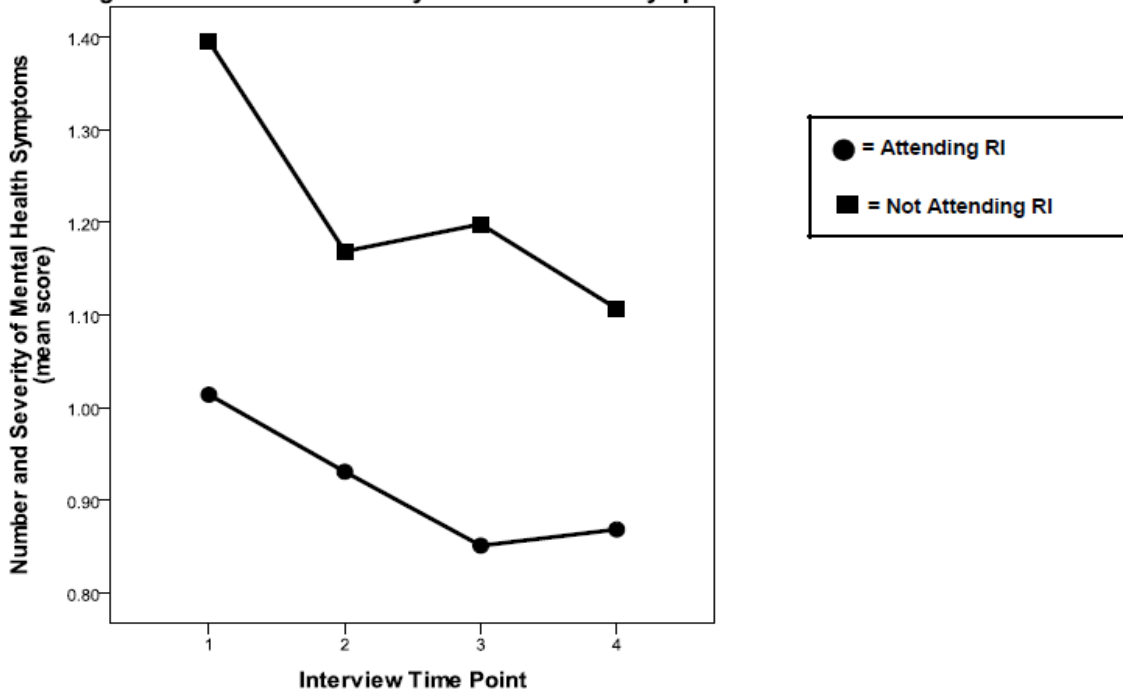
**Depressive and anxiety symptoms.** Since many participants reported that they initially sought out RI for help with depression and anxiety, we examined participants'

responses to these two BSI subscales. The BSI depression subscale contains six items that assess the presence of depressive symptoms, such as feeling worthless and sad, and the extent to which participants have been bothered by these symptoms in the past week. The BSI anxiety subscale consists of six items that assess the presence of anxiety symptoms, such as feeling tense and fearful, and the extent to which participants have been bothered by these symptoms in the past week. For both subscales, scores are computed by summing responses and dividing the total number of responses, respectively. Higher scores indicate greater and more severe depressive and anxiety symptoms. As shown in Table 7, at Time 1, participants reported moderate levels of depressive and anxiety symptoms. Depressive symptoms decreased at Time 2 and remain somewhat stable at Time 3, and then decrease again at Time 4. Anxiety symptoms also decrease at Time 2, and stay predominantly stable at each subsequent interview.

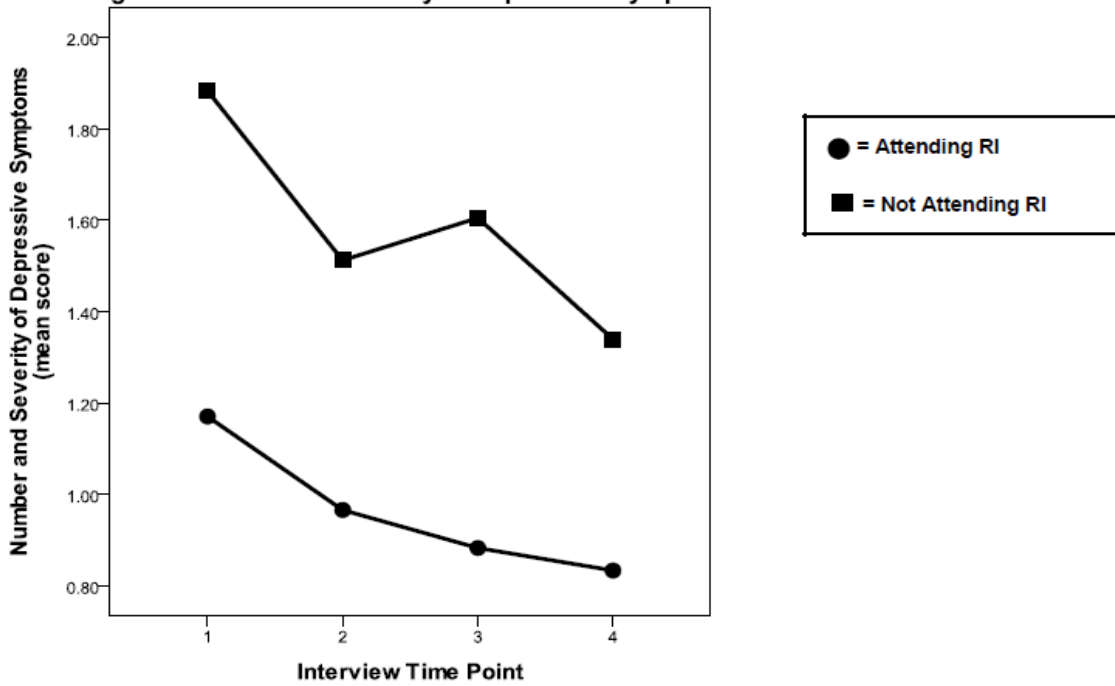
Table 7. Brief Symptom Inventory (BSI)					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
BSI Total Score					
Time 1	114	1.11	.73	.00-3.38	0.97
Time 2	95	.93	.69	.06-3.30	0.97
Time 3	81	.93	.75	.00-3.26	0.98
Time 4	79	.93	.63	.13-3.51	0.97
BSI Depression Subscale					
Time 1	114	1.40	1.07	.00-4.00	0.91
Time 2	95	1.05	1.00	.00-4.00	0.92
Time 3	81	1.09	1.08	.00-3.83	0.93
Time 4	79	.99	.93	.00-3.83	0.92
BSI Anxiety Subscale					
Time 1	114	1.37	.98	.00-4.00	0.88
Time 2	95	1.10	.86	.00-4.00	0.87
Time 3	81	1.10	.91	.00-4.00	0.88
Time 4	79	1.13	.82	.00-4.00	0.84

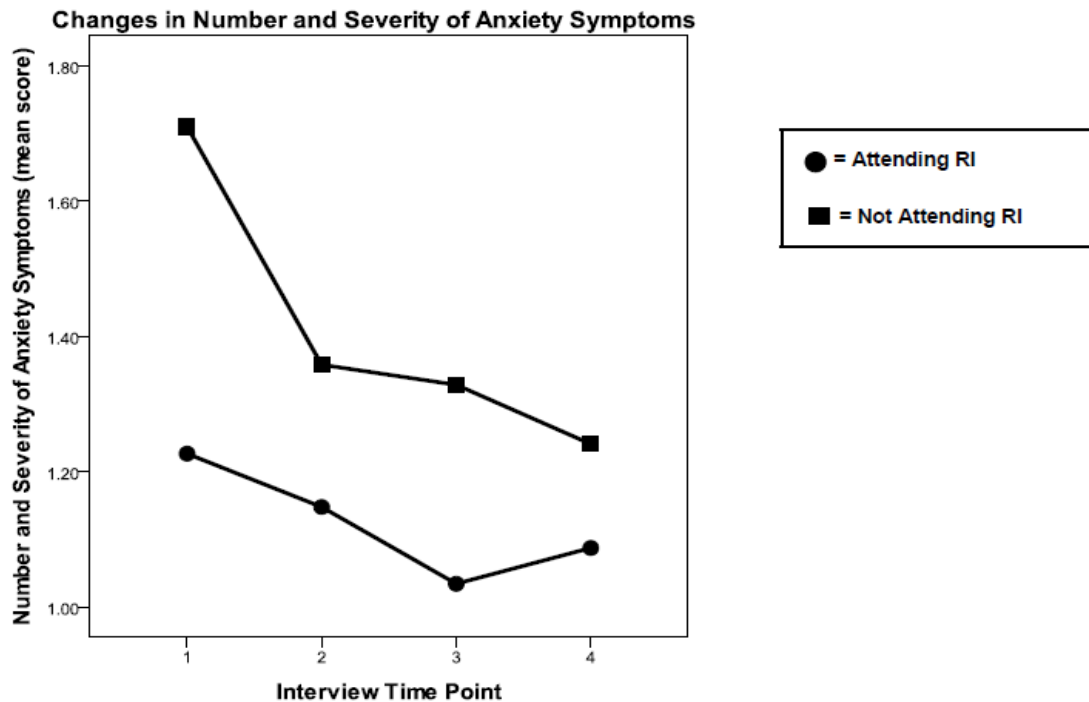
**Comparison of changes in mental health, depressive and anxiety symptoms by RI attendance.** The graphs below depict changes in participants' total mental health symptoms, depressive symptoms, and anxiety symptoms over time, and by their RI attendance. Lines with circles represent RI attendees, and each circle shows the mean (average) score for attendees at each interview time point. Lines with squares represent RI non-attendees; each square indicates the mean (average) score for attendees at each interview time point. Both RI attendees and non-attendees experienced significant decreases in the severity of their total mental health symptoms ( $F_{3,207}=6.95$ ,  $p < .001$ ); depressive symptoms ( $F_{3,207}=8.44$ ,  $p < .001$ ); and anxiety symptoms ( $F_{3,207}=4.96$ ,  $p = .002$ ). There were no significant differences between the two groups in changes in total mental health symptoms ( $F_{3,207}=.94$ ,  $p=.40$ ); depressive symptoms ( $F_{3,207}=.78$ ,  $p=.51$ ); or anxiety symptoms ( $F_{3,207}=1.31$ ,  $p=.27$ ).

**Changes in Number and Severity of Mental Health Symptoms**



**Changes in Number and Severity of Depressive Symptoms**





## Personal Mental Health Recovery

We used the 41-item Recovery Assessment Scale (RAS) (Corrigan et al., 1999; Giffort et al., 1995) to measure participants' belief and confidence in their ability to recover from their mental illness. Participants were asked to rate their agreement with each item along a 5-point Likert scale, with 1=strongly disagree to 5=strongly agree. Responses were summed together to create a total personal mental health recovery score. Higher scores indicate a greater belief and confidence in personal recovery. The RAS contains five subscales that assess specific aspects of personal recovery; these subscales are described in detail below.

As Table 8 shows, at Time 1, participants reported low levels of personal recovery. Their overall belief and confidence in their own recovery increased slightly at Time 2, decreased again at Time 3, and increased again at Time 4. However, throughout the evaluation, on average, participants' total personal recovery scores remained somewhat low.

**Personal confidence.** The RAS contains five subscales that assess specific aspects of personal recovery. The 9-item personal confidence and hope subscale measures participants' personal confidence ("I can handle what happens in my life") and hope for the future ("Something good will eventually happen"). Higher scores for this subscale denote greater degrees of confidence and hope. Participants entered the study with moderate levels of personal confidence in their own recovery (see Table 8). These scores increased slightly at Time 2, and remained consistent at subsequent follow-up interviews.

Table 8. Recovery Assessment Scale					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Recovery Assessment Scale Total Score					
Time 1	108	88.90	15.42	28-115	0.96
Time 2	88	92.28	15.69	27-120	0.97
Time 3	71	89.08	20.00	10-119	0.96
Time 4	71	93.68	15.16	27-116	0.97
Recovery Personal Confidence and Hope Score					
Time 1	112	32.89	7.02	11- 44	0.90
Time 2	92	34.75	6.94	9- 45	0.92
Time 3	78	34.28	6.42	9- 45	0.89
Time 4	79	34.95	6.49	9- 45	0.91
Recovery Willingness to Ask for Help Score					
Time 1	113	11.58	2.32	3- 15	0.79
Time 2	94	12.10	2.33	3- 15	0.89
Time 3	80	12.06	2.35	5- 15	0.85
Time 4	78	12.27	2.68	3- 15	0.94
Recovery Goal Orientation Score					
Time 1	113	19.59	4.01	5- 25	0.86
Time 2	94	19.82	3.74	5- 25	0.87
Time 3	81	19.68	3.74	7- 25	0.89
Time 4	77	20.12	3.69	6- 25	0.89
Recovery Reliance on Others Score					
Time 1	113	16.05	2.57	6- 20	0.76
Time 2	93	16.17	2.73	7- 20	0.81
Time 3	79	16.15	2.66	6- 20	0.77
Time 4	79	16.42	2.77	6- 20	0.79
Recovery No Symptom Domination Score					
Time 1	108	9.09	2.73	3- 15	0.74
Time 2	89	10.11	2.83	3- 15	0.82
Time 3	72	10.11	2.80	3- 15	0.81
Time 4	71	10.35	2.77	3- 15	0.80

**Willingness to ask for help.** The 3-item willingness to ask for help subscale assesses participants' readiness to ask others for help ("I ask for help when I need it"). Higher scores indicate a greater willingness to ask for help. As shown in Table 8, at Time 1, participants expressed a moderate level of readiness to ask others for help when needed. Scores increased over time, and at Time 4, on average, participants reported high levels of willingness to ask others for help.

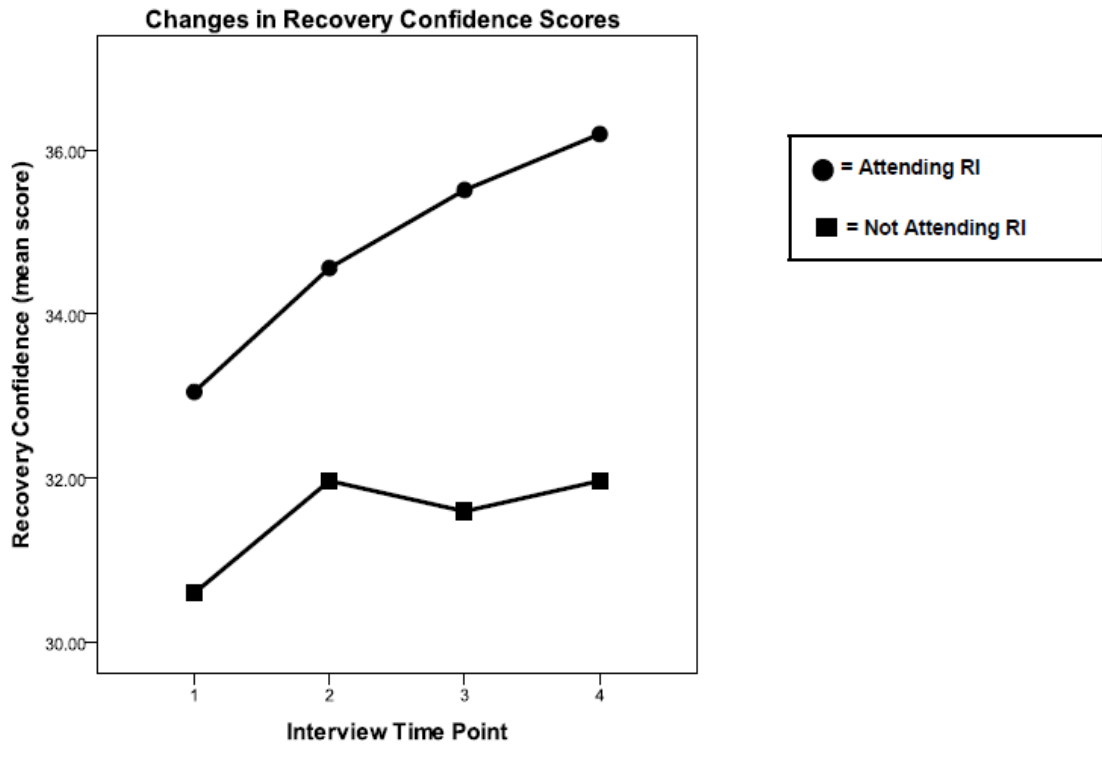
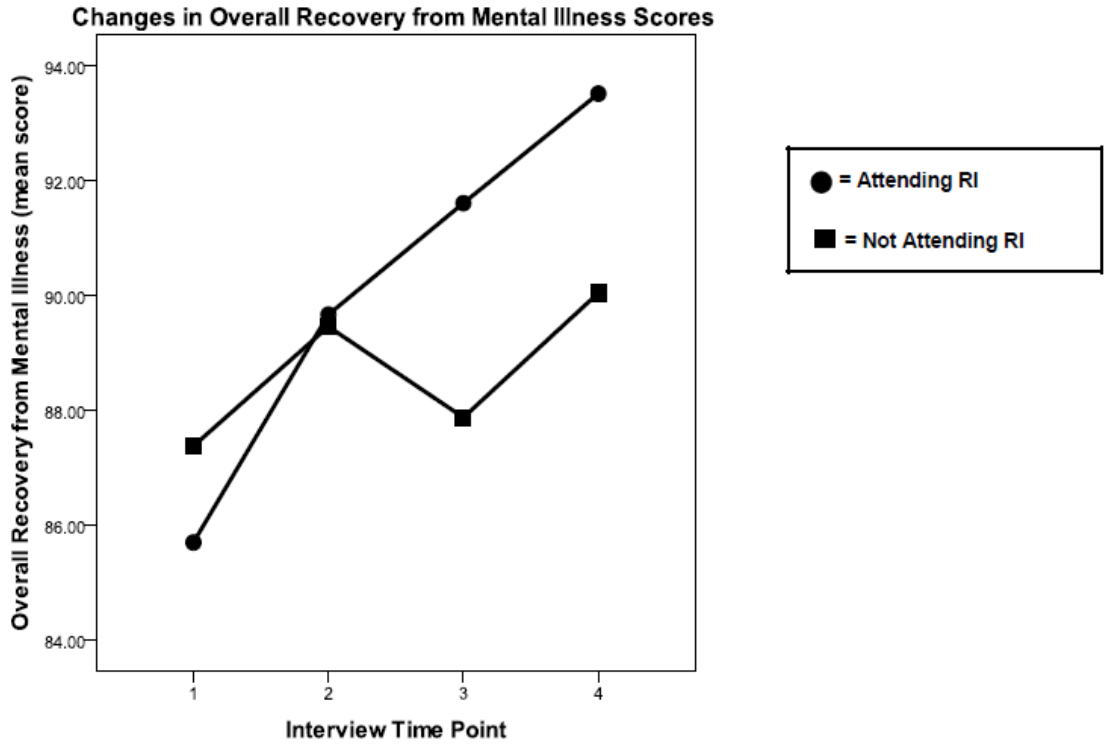
**Goal orientation.** This 5-item subscale measures whether participants have personal goals ("I have goals in life that I want to reach"), and their belief that they will succeed in achieving those goals ("I believe I can meet my current personal goals"). Higher scores indicate greater belief in one's ability to achieve personal goals. Table 8 shows that, at Time 1, participants had moderate levels of personal belief that they would succeed in achieving their goals. This subscale score slightly increased over

time, with participants reporting, on average, fairly high levels of positive goal orientation at Time 4.

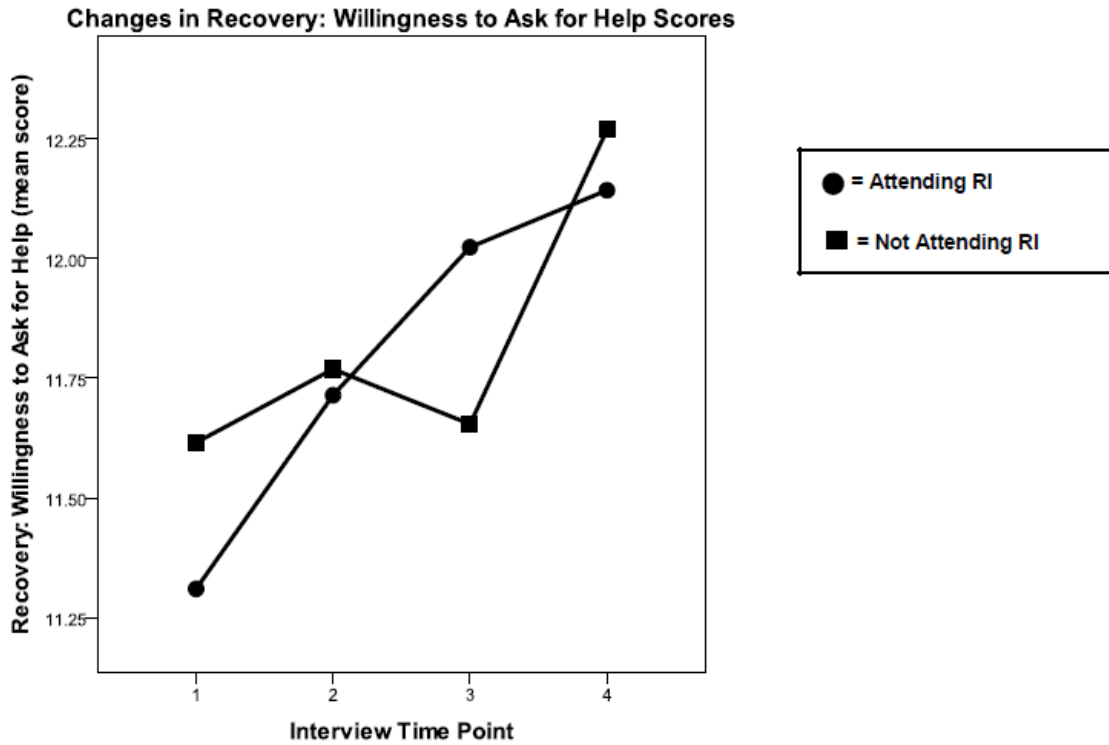
**Reliance on others.** The 4-item reliance on others subscale assesses whether participants have people in their lives they can count on for support and assistance, especially when they are feeling discouraged (“I have people I can count on”, “Even when I don’t believe in myself, other people do”). Higher scores indicate greater reliance on others. Across all time points, on average, participants reported high levels of reliance on others (see Table 8).

**No symptom domination.** This three item subscale measures the extent to which participants’ mental health symptoms dominate their lives (“My symptoms interfere less and less with my life”). The focus is on *no* symptom domination; thus, higher scores denote that mental health symptoms are *not* the focus of one’s life. As shown in Table 8, at Time 1, participants reported moderate levels of no symptom domination; that is, mental health symptoms were somewhat interfering with their daily lives. However, over time, these scores increased, indicating that symptom domination decreased for participants. In other words, at Time 4, participants reported greater degrees of no symptom domination.

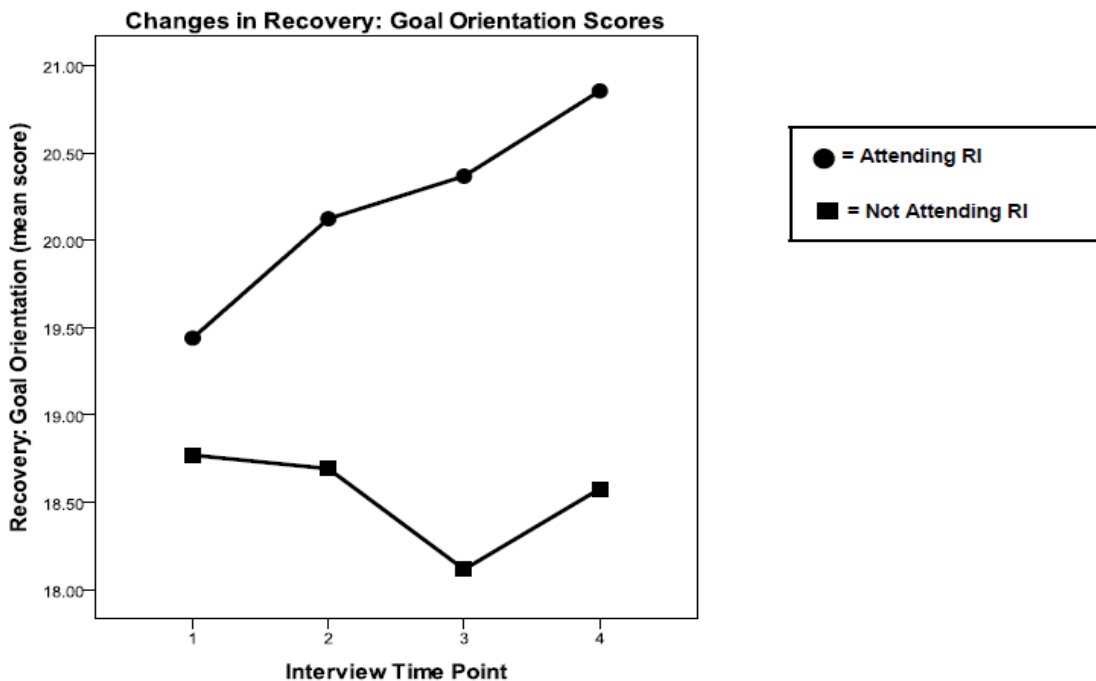
**Comparison of personal recovery scores by RI attendance.** We conducted GLM analyses that examined changes in participants’ total personal recovery scores and each personal recovery subscale score over time. These analyses also compared changes in personal recovery scores by RI attendance. GLM personal recovery results are illustrated in the graphs below. All participants had significant increases in their total personal recovery scores over time ( $F_{3,195}=5.60$ ,  $p=.001$ ) and in their personal confidence and hope ( $F_{3,198}=7.24$ ,  $p < .001$ ). Changes in willingness to ask for help approaches significance ( $F_{3,198}=2.56$ ,  $p=.058$ ). There were no significant differences between attendees and non-attendees on these recovery measures (total recovery:  $F_{3,195}=2.06$ ,  $p=.11$ ; personal confidence:  $F_{3,198}=1.59$ ,  $p=.19$ ; willingness to ask for help:  $F_{3,198}=.55$ ,  $p=.65$ ).



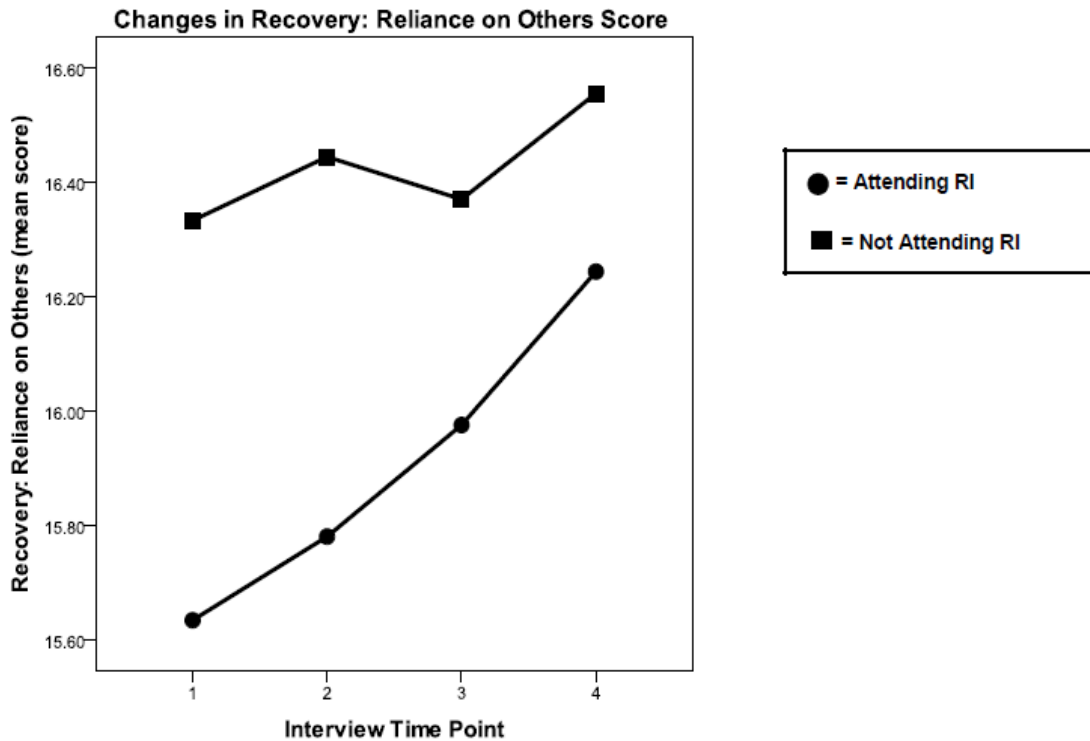




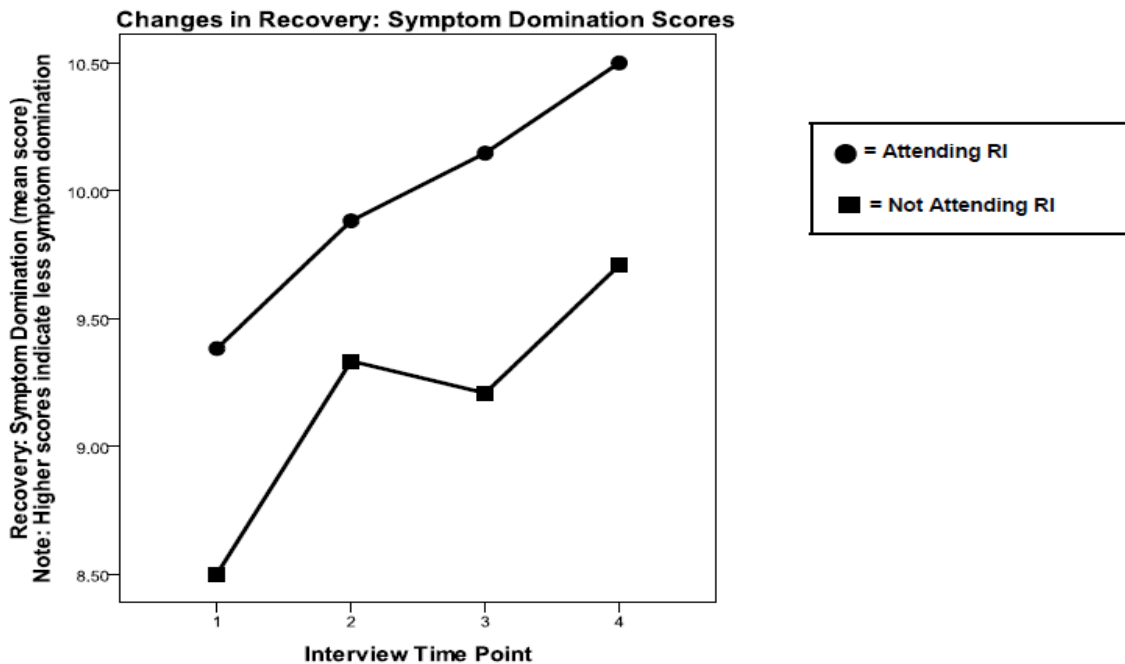
Although overall changes in goal orientation were non-significant ( $F_{3,195}=1.41$ ,  $p=.24$ ), there was a significant interaction between changes in goal orientation and RI attendance. Participants who attended RI meetings throughout the evaluation had significant increases in their belief in their ability to successfully achieve their personal goals than those who had stopped going to RI meetings ( $F_{3,195}=2.98$ ,  $p=.032$ ).



There were no significant changes in participants' reliance on others scores ( $F_{3,198}=.82$ ,  $p=.452$ ), nor were there significant differences between attendees and non-attendees for this measure ( $F_{3,198}=.27$ ,  $p=.85$ ).



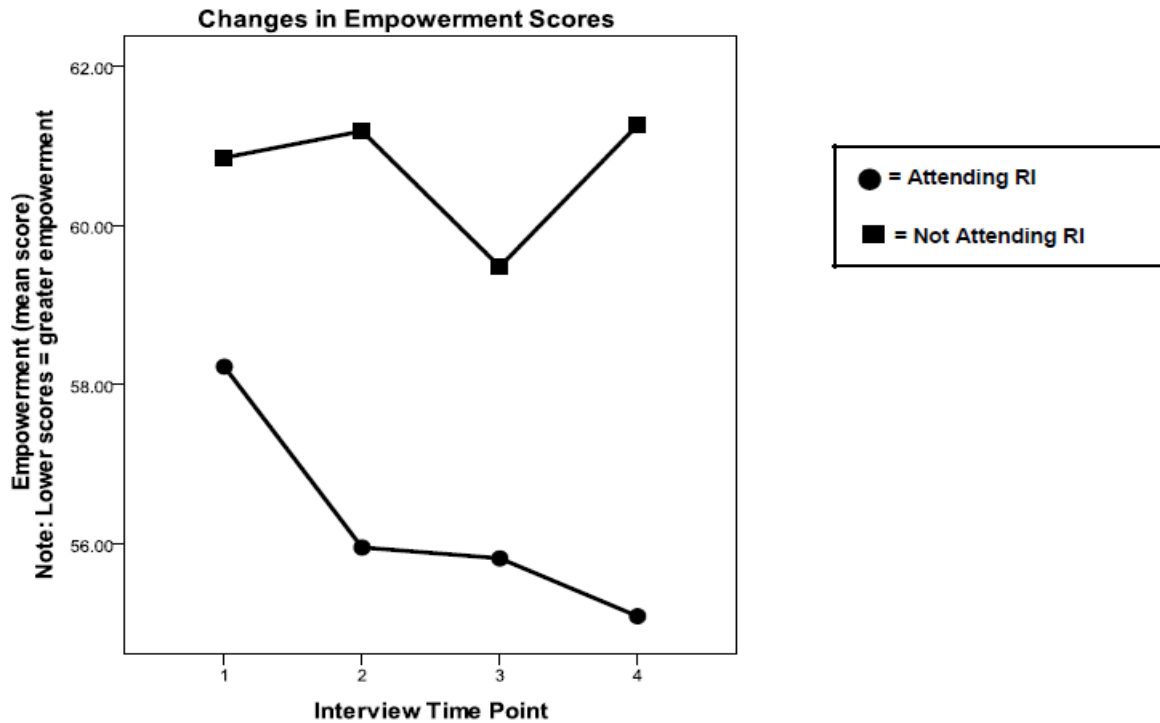
Finally, changes in no symptom domination were significant for all participants, with increases in these scores indicating that the extent to which mental health symptoms interfered with participants' daily lives significantly decreased from Time 1 to Time 4 ( $F_{3,168}=3.52$ ,  $p=.016$ ). There were no significant differences between the group for this personal recovery outcome ( $F_{3,168}=.11$ ,  $p=.95$ ).



## Empowerment

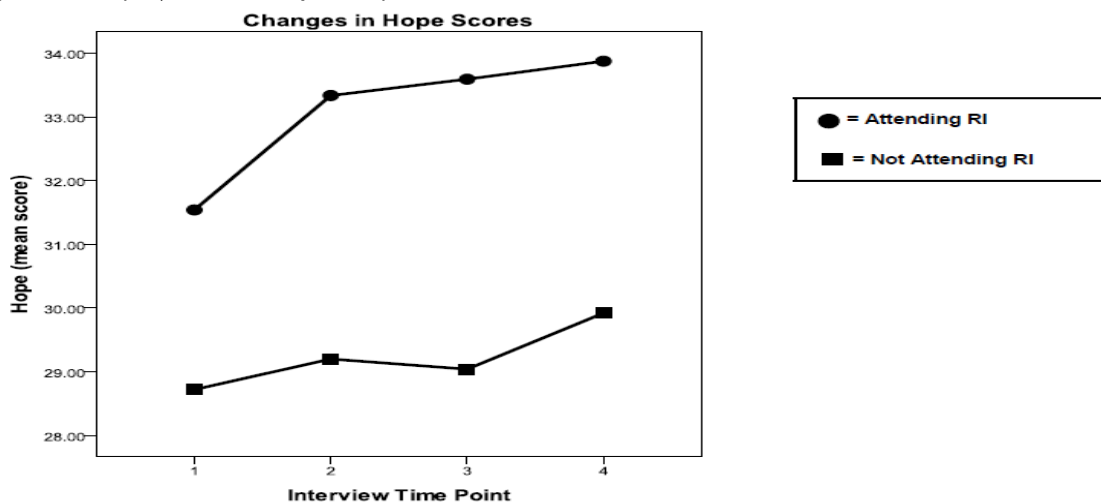
We used the 28-item Empowerment Scale (Rogers et al., 1997) to assess participants' feelings of personal empowerment—their ability to make and enact choices (“When I make plans, I am almost certain to make them work”). Participants were asked to state their agreement with each item along a 4-point Likert scale, with 1=strongly agree and 4=strongly disagree. Items were summed together to create a total empowerment score, with lower scores representing greater feelings of personal empowerment. As shown in Table 9, participants had, on average, somewhat high levels of personal empowerment at baseline. Empowerment slightly improved over time (i.e., scores decreased). However, results of the GLM analyses show that these changes over time were not significant ( $F_{3,207}=1.814$ ,  $p=.15$ ). There also were no significant differences in attendees' and non-attendees' empowerment scores ( $F_{3,207}=1.78$ ,  $p=.15$ ).

Table 9. Outcome Measures					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Empowerment Scale Total Score					
Time 1	114	58.04	9.57	36- 80	0.85
Time 2	95	56.38	9.59	37- 89	0.87
Time 3	81	56.65	10.24	36- 88	0.88
Time 4	79	57.15	9.97	35- 92	0.90
Hope Scale Total Score					
Time 1	108	31.34	6.49	12- 45	0.87
Time 2	90	32.68	6.10	12- 44	0.88
Time 3	80	32.35	6.61	14- 48	0.90
Time 4	74	32.47	5.63	15- 44	0.86
Social Connectedness Scale Total Score					
Time 1	114	73.74	19.12	22-118	0.95
Time 2	95	80.67	18.13	40-120	0.95
Time 3	81	78.36	18.66	21-120	0.97
Time 4	79	79.35	18.86	26-120	0.97
Self-Esteem Scale Total Score					
Time 1	114	38.79	10.76	10- 60	0.90
Time 2	95	42.77	11.39	10- 60	0.93
Time 3	81	41.21	11.54	10- 60	0.92
Time 4	79	39.81	9.95	11- 60	0.86
Coping Mastery Scale Total Score					
Time 1	114	26.89	6.78	8- 42	0.79
Time 2	95	28.72	6.93	7- 41	0.82
Time 3	81	27.72	7.16	8- 42	0.83
Time 4	79	28.06	7.22	7- 42	0.85



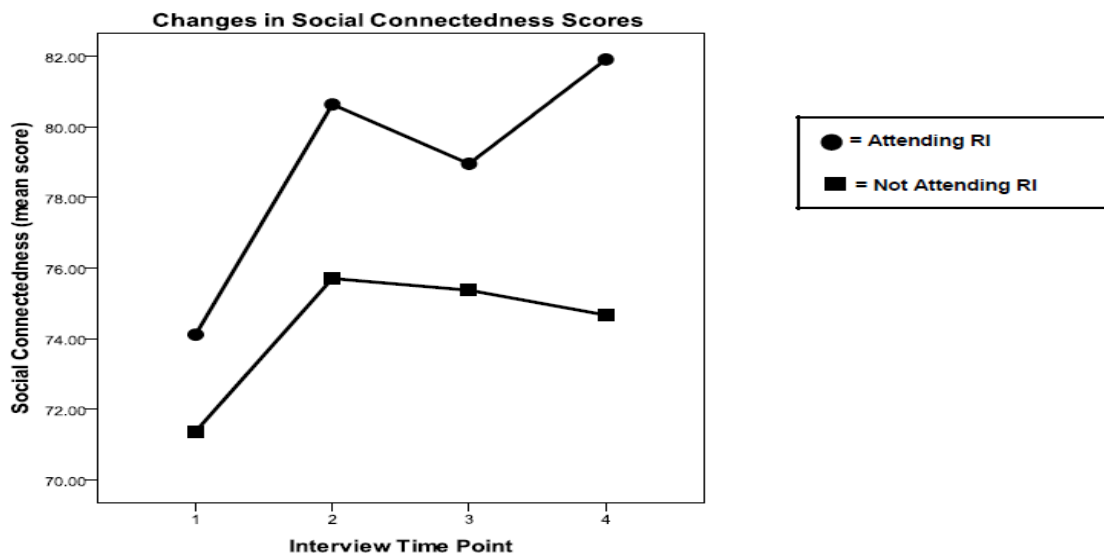
## Hope

The 12-item Hope Scale (Synder et al., 1991) was used to measure participants' feelings of hopefulness about the future ("My past experiences have prepared me well for my future") and their ability to achieve their life goals ("I meet the goals I set forth for myself"). Participants rated the extent to which each statement was true for them along a 4-point Likert scale with 1=definitely false to 4=definitely true. Responses were summed together to create a total hope score; higher scores indicate greater hopefulness. At Time 1, participants reported, on average, somewhat low levels of hopefulness (see Table 9). These scores increased slightly over time, with participants reporting moderate levels of hopefulness at Time 4. GLM analyses results indicate that all participants had significant increases in hopefulness over time ( $F_{3,186}=3.99, p=.009$ ). Differences between attendees and non-attendees for this measure were non-significant ( $F_{3,186}=1.00, p=.39$ ).



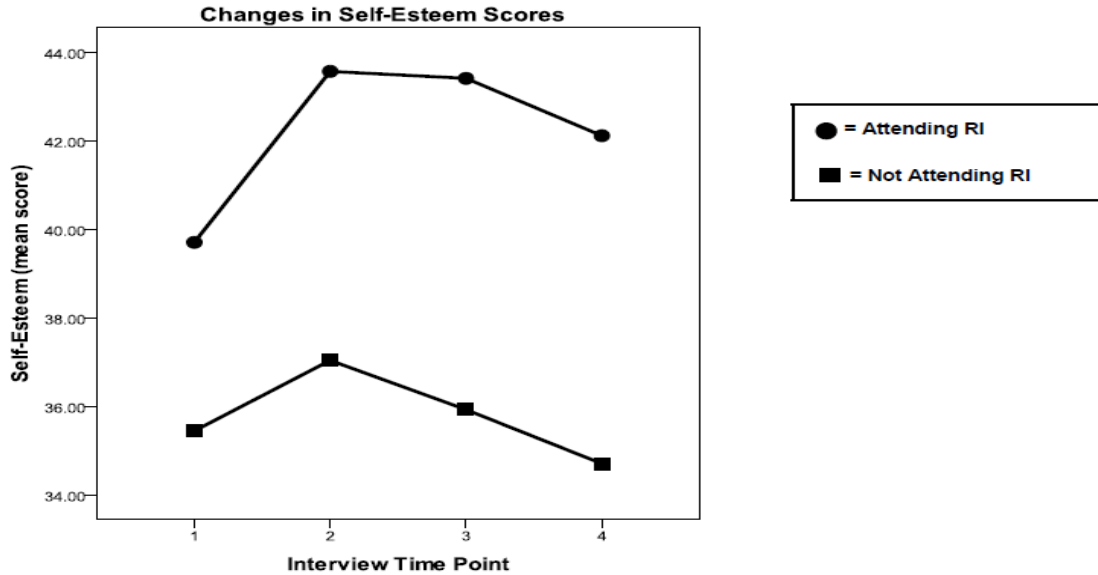
## Social Connectedness

The 20-item Social Connectedness Scale (Lee et al., 2001) assesses participants' feelings about their relationships or social connections to other people ("I feel close to people"; "My friends feel like family"). Participants rated their agreement with each item along a 6-point Likert scale with 1=strongly disagree and 6=strongly agree. Responses were summed together to create a total social connectedness score; higher scores indicate greater levels of social connectedness. At baseline, on average, participants reported moderate levels of social connectedness (see Table 9). Scores increased at Time 2, decreased slightly at Time 3, and increased again at Time 4. GLM results show that these increases in participants' social connectedness scores were significant ( $F_{3,207}=5.95$ ,  $p=.001$ ). There were no significant differences between attendees and non-attendees ( $F_{3,207}=.84$ ,  $p=.47$ ).



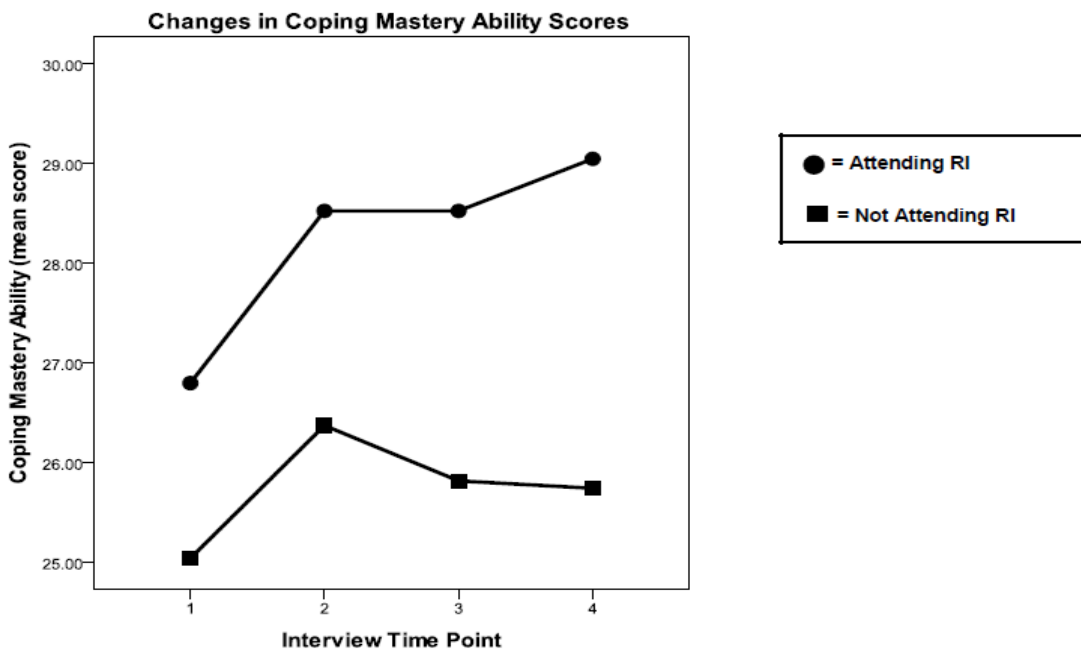
## Self-Esteem

The Self-Esteem Scale (Rosenberg, 1969) consists of 10 items that measure participants' feelings of self-worth ("I have a number of good qualities"). Participants rated their agreement with each item along a 6-point Likert scale, with 1=strongly disagree and 6=strongly agree. Item responses were summed together to create a total self-esteem score; higher scores indicate greater self-esteem. As shown above in Table 9, at baseline, participants reported, on average, moderate levels of self-esteem. These scores increased at Time 2, decreased at Time 3 and improved again at Time 4. GLM analyses indicate that, for all participants, these changes over time were significant ( $F_{3,207}=4.37$ ,  $p=.005$ ). Although RI attendees' scores were higher than non-attendees, these differences in self-esteem scores were not significant ( $F_{3,207}=1.64$ ,  $p=.18$ ).



### Coping Mastery Ability

The 7-item Coping Mastery Scale (Pearlin & Schooler, 1978) measures participants' feelings about their ability to cope with and solve life's problems ("What happens to me in the future mostly depends on me"). Participants were asked to rate their agreement with each statement along a 6-point Likert scale with 1=strongly disagree and 6=strongly agree. Higher scores indicate greater coping mastery ability. Participants entered the evaluation with moderate degrees of coping mastery ability (see Table 9). On average, participants' coping mastery ability scores increased at Time 2, and decreased slightly at Time 3. At Time 4, scores increased again, and on average, participants exited the evaluation with high levels of coping mastery ability. GLM analyses confirm that these improved coping mastery ability scores were significant for all participants ( $F_{3,207}=2.99, p=.032$ ). Differences between attendees and non-attendees were not significant ( $F_{3,207}=.65, p=.58$ ).

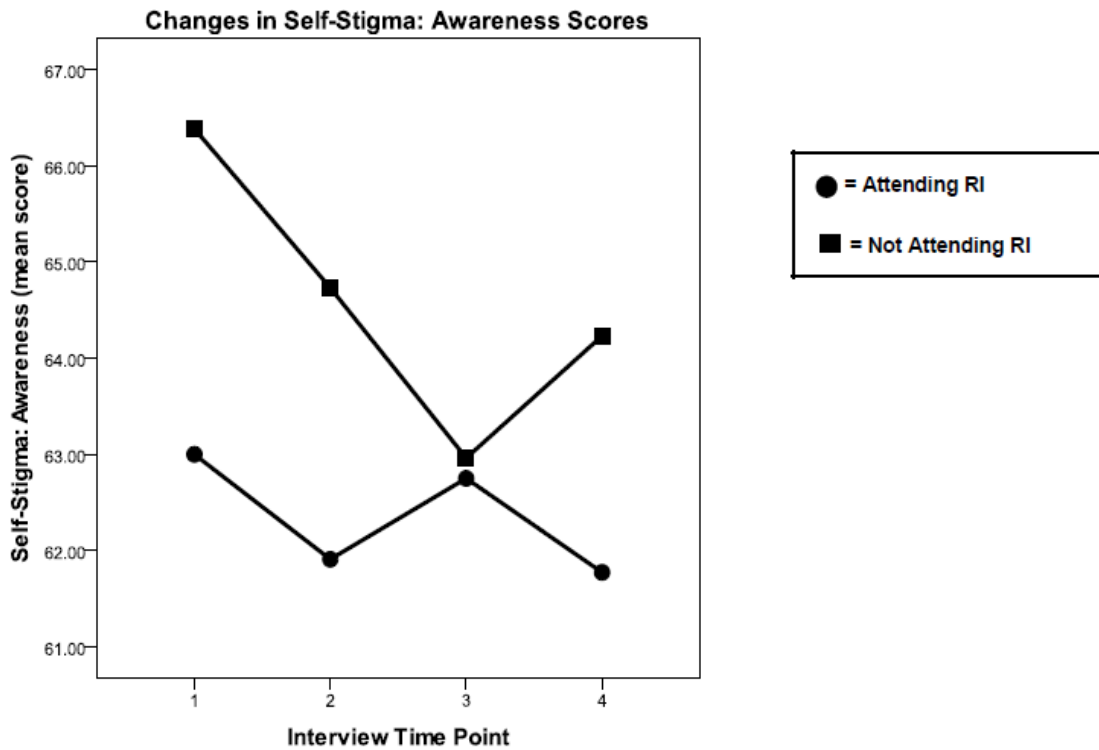


## Self-Stigma

Self-stigma is the internalization of negative public stereotypes that say that people with mental illness are dangerous, incompetent, and should be avoided at all costs. Individuals who believe that these stereotypes are true about themselves suffer self-stigma, and often feel more isolated and incapable of achieving life goals than individuals who do not experience self-stigma. We used the Self-Stigma of Mental Illness Scale (Corrigan et al., 2006) to assess participants' self-stigma. This 40-item scale contains four subscales that measure awareness of negative public stereotypes of mental illness ("I think the public believes most people with mental illness are disgusting"); agreement with negative public stereotypes ("I think most persons with mental illness are disgusting"); self-concurrence with these stereotypes—believing that the stereotypes are true about oneself ("Because I have a mental illness, I am disgusting"); and self-esteem decrement—decreased self-worth due to the internalization of these stereotypes ("I currently respect myself less because I am disgusting"). Each subscale consists of 10 items. Participants were asked to rate their agreement with each item along a 9-point scale with 1=strongly disagree, 5=neither agree nor disagree, and 9=strongly agree. Items in each subscale were summed together to create each specific self-stigma construct. Higher scores indicate greater levels of awareness of negative public stereotypes of mental illness, agreement with these negative public stereotypes, self-concurrence with these stereotypes, and self-esteem decrement, respectively. Mean self-stigma subscale scores are listed in Table 10.

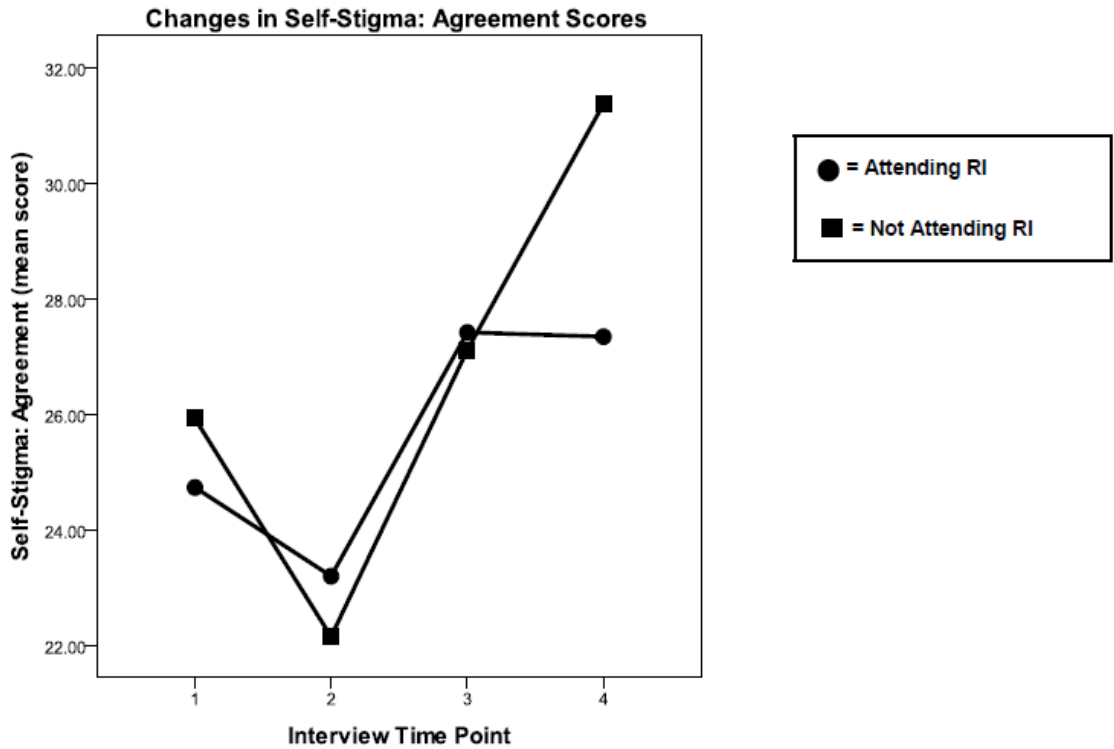
Table 10. Self-Stigma Scale					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Awareness of Public Stereotypes Score					
Time 1	114	63.36	16.52	13-90	0.92
Time 2	94	62.03	18.69	10-90	0.95
Time 3	80	62.10	14.76	15-90	0.93
Time 4	79	62.03	16.25	10-90	0.95
Agreement with Stigma Score					
Time 1	111	24.30	11.25	10-62	0.87
Time 2	90	21.59	11.33	10-70	0.89
Time 3	81	28.05	11.29	10-58	0.87
Time 4	79	28.33	12.44	10-77	0.90
Self-Concurrence Score					
Time 1	106	24.16	13.00	10-81	0.86
Time 2	89	23.63	12.66	10-84	0.88
Time 3	68	22.27	13.07	7-86	0.86
Time 4	69	21.75	13.17	10-85	0.89
Stigma Self-Esteem Score					
Time 1	105	24.85	14.34	7-74	0.87
Time 2	85	21.12	15.14	10-89	0.91
Time 3	71	22.47	15.92	5-90	0.92
Time 4	71	20.32	13.83	9-90	0.90

**Awareness of negative public stereotypes of mental illness.** As shown in Table 10, at Time 1, participants were mostly aware of negative public stereotypes of mental illness. Interestingly, this awareness of negative public perceptions of persons with mental illness decreased slightly over time. Changes over time in awareness of negative public stereotypes was non-significant ( $F_{3,204}=.58, p=.63$ ). There were no significant differences between attendees and non-attendees for this first self-stigma construct ( $F_{3,204}=.40, p=.75$ ).

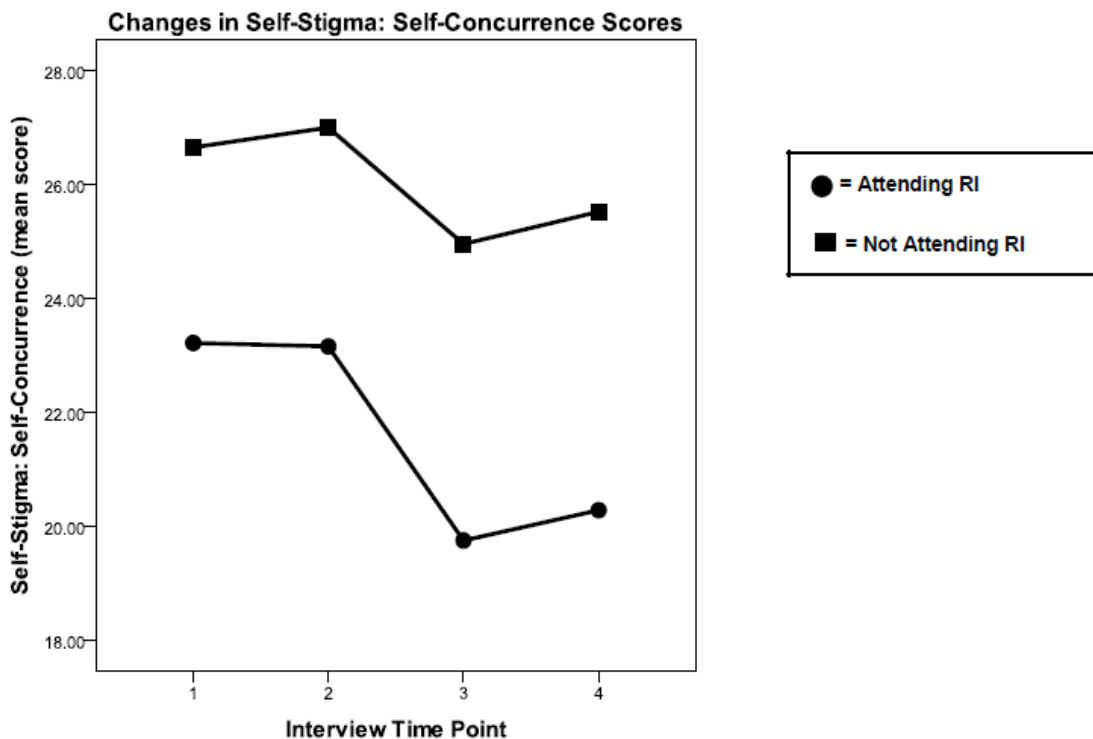


**Agreement with negative public stereotypes of mental illness.** At Time 1, on average, participants disagreed with these negative public stereotypes of mental illness. This score decreased at Time 2, but, interestingly, increased at each subsequent follow-up interview. By Time 4, on average, participants still disagreed with these stereotypes, but disagreed less than they did at Time 1. These changes over time in agreement with negative public stereotypes were significant ( $F_{3,198}=9.05, p < .001$ ). Differences between attendees and non-attendees for this second self-stigma construct were non-significant ( $F_{3,198}=1.41, p= .24$ ).





**Self-concurrence.** At Time 1, on average, participants reported low levels of self-concurrence with negative public stereotypes of mental illness (see Table 10). Their internalization of these stereotypes decreased over time, and remained low throughout the evaluation. However, our GLM results show that these decreases were non-significant ( $F_{3,159}=1.74, p=.16$ ). Similarly, there were no differences between attendees and non-attendees for this third self-stigma measure ( $F_{3,159}=.19, p=.90$ ).



**Self-esteem decrement.** On average, at Time 1, participants reported low levels of decreased self-esteem due to their internalization of negative public stereotypes of mental illness (see Table 10). These scores decreased at Time 2, increased slightly at Time 3, and decreased again at Time 4. Although, overall, participants' self-esteem decrement scores decreased over time, these changes were non-significant ( $F_{3,162}=1.65, p=.18$ ). There were no significant differences in self-esteem decrement scores between attendees and non-attendees ( $F_{3,162}=.83, p=.48$ ).

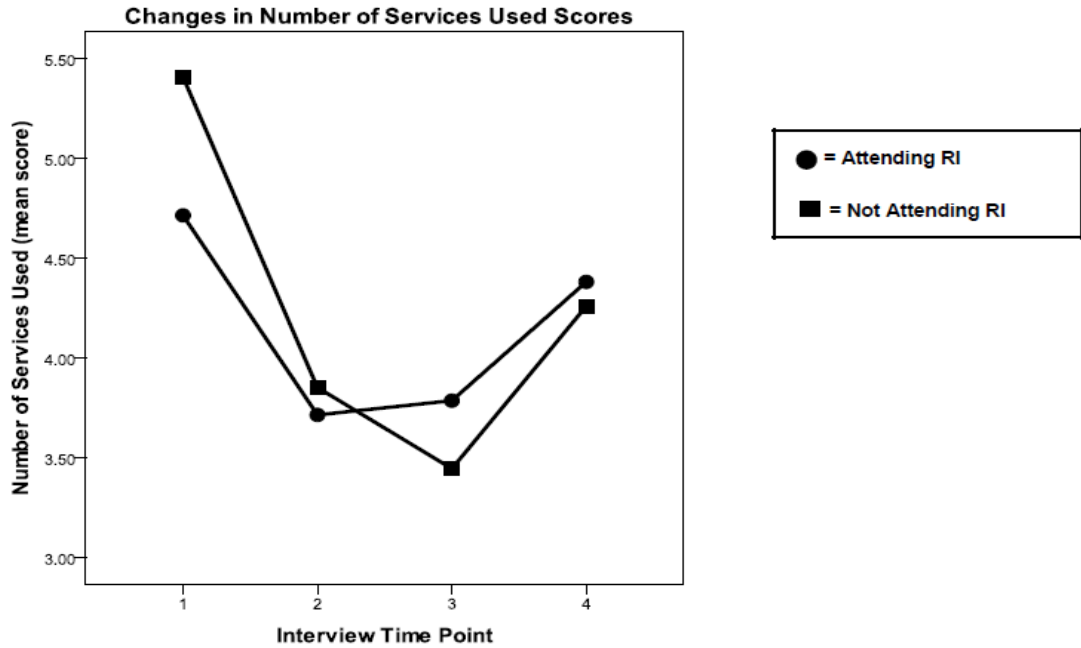


### Service Use and Needs

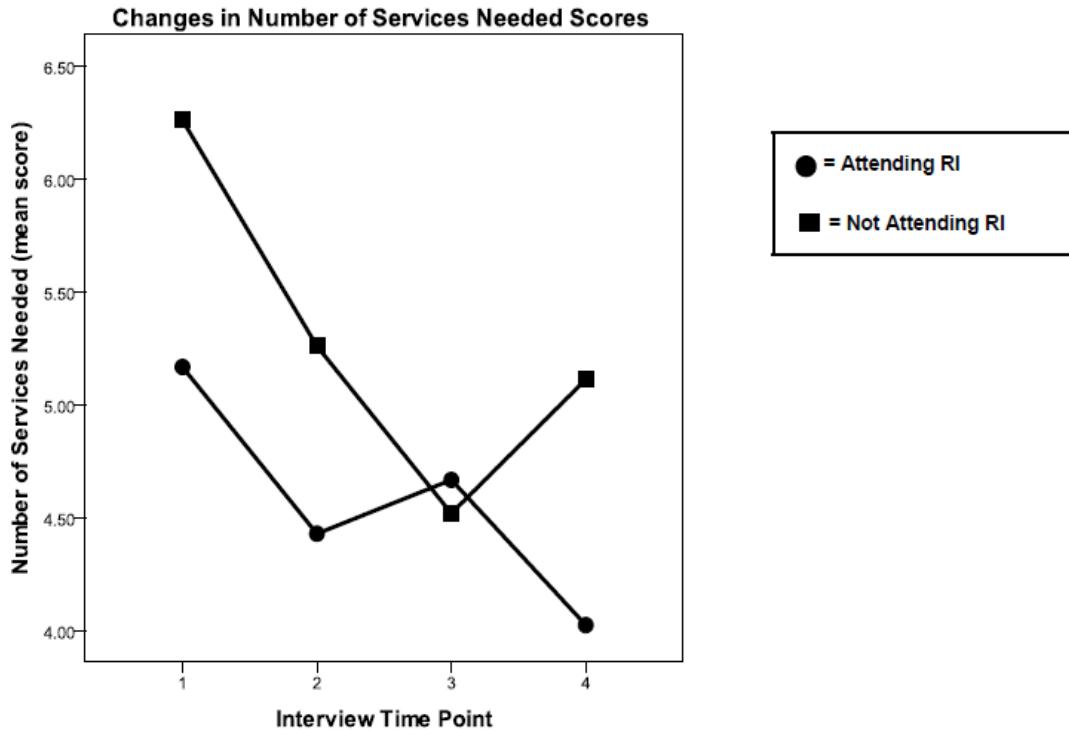
We used an adapted version of the Support Service Index (Heller & Factor, 1991) to assess participants use and need of 16 different types of mental health and social services. For each service type (i.e., case management, medication management, housing, employment services), participants first were asked whether they used the service in the past six months, and then were asked if they felt that they currently needed the service, regardless of whether they had received it. For example, participants might tell us that they used crisis intervention services in the past six months, but currently did not need this type of service. Each “yes” response was coded as 1 and each “no” response was coded as 0. All service use responses were summed together to create a total services used score. All service need responses were summed to create the total services needed score.

Table 11. Support Service Index					
Scale	N	Mean	SD	Range of Scores	Reliability Alpha
Services Used Score					
Time 1	114	4.77	2.26	0-12	0.52
Time 2	94	3.64	2.10	0- 9	0.53
Time 3	81	3.58	2.45	0-12	0.66
Time 4	79	4.32	2.36	0-12	0.61
Services Needed Score					
Time 1	114	5.39	2.77	0-13	0.64
Time 2	94	4.67	2.78	0-11	0.69
Time 3	81	4.41	2.76	0-11	0.71
Time 4	79	4.39	2.54	0-10	0.66

**Services used.** As shown in Table 11, at Time 1, on average, participants used (approximately) five types of mental health and social services. Their service use decreased slightly over time: by Time 4, participants used four services. GLM results show that these changes in participants' service use over time were significant ( $F_{3,201}=13.09, p < .001$ ). There were no significant differences in the number of services used by attendees and non-attendees ( $F_{3,201}=1.54, p=.21$ ).



**Services needed.** Participants reported a similar decrease in their service needs (see Table 11). On average, at Time 1, participants needed five types of mental health and/or social services. Service need decreased at each time point, with participants telling us that they needed, on average, four services at Time 4. These changes in service needs over time were significant for all participants ( $F_{3,201}=6.62, p < .001$ ). There were no significant differences in the number of services needed by RI attendance ( $F_{3,201}=1.99, p=.12$ ).



### Summary of Overall Changes in RI Participation Benefits

These results indicate several important benefits of RI participation. First, over time, participants report experiencing fewer, and less severe, mental health symptoms. Most notable, they report experiencing fewer depressive and anxiety symptoms. They report an increased belief and confidence in their personal mental health recovery, and that their own recovery is possible. Participants report significant decreases in symptom domination: their mental health symptoms do not control their life. Along with this, they report feeling more hopeful over time, have enhanced self-esteem and coping ability, and experience more social support. Finally, participants report that, over time, they need and use fewer mental health and social services.

Regarding changes over time for RI attendees versus non-attendees, only recovery-goal orientation was significant. RI attendees had greater increases in their belief that they can achieve their personal goals over time; changes in these scores were not significant for non-attendees. As described in detail in the Limitations section, we surmise that the lack of significant difference between the groups on participation benefits is primarily due to our small sample size.

### Factors Associated with RI Participation Benefits

We conducted a series of zero-order correlation analyses to examine whether (1) any participant demographic and mental health characteristics were associated with RI participation benefits; (2) the total number of RI groups attended was related to RI participation benefits; and (3) RI knowledge and ability to correctly give the 4-Part Example were significantly associated with RI participation benefits.

**Participant demographic and mental health characteristics associated with RI participation benefits.** Significant relationships between participant characteristics and RI participation benefits at each time point are summarized below.

#### **Time 1**

- **Gender:** *Women reported greater awareness of negative public stereotypes of mental illness ( $r=.20$ ,  $p=.031$ ).*
- **Age:** *Older participants reported fewer and less severe mental health symptoms ( $r=-.25$ ,  $p=.008$ ) and fewer and less severe anxiety symptoms ( $r=-.24$ ,  $p=.009$ ).*
- **Minority status:** *Participants who were racial minorities had higher total recovery scores ( $r=.20$ ,  $p=.043$ ) higher personal confidence in recovery scores ( $r=.24$ ,  $p=.010$ ); higher recovery goal orientation scores ( $r=.23$ ,  $p=.013$ ); greater empowerment ( $r=-.21$ ,  $p=.029$ ) and less agreement with negative public stereotypes of mental illness ( $r=-.24$ ,  $p=.012$ ).*
- **Marital status:** *Participants who were married had fewer and less severe mental health symptoms ( $r=-.20$ ,  $p=.030$ ), fewer and less severe depressive symptoms ( $r=-.28$ ,  $p=.002$ ); higher total personal recovery scores ( $r=.22$ ,  $p=.024$ ); higher recovery-reliance on others scores ( $r=.30$ ,  $p=.001$ ); greater hopefulness ( $r=.22$ ,  $p=.024$ ); less agreement with negative public stereotypes of mental illness ( $r=-.23$ ,  $p=.015$ ) and needed a fewer number of services ( $r=-.21$ ,  $p=.027$ ).*
- **Diagnosis:** *Participants who had a diagnosis of depression reported lower levels of hopefulness ( $r=-.27$ ,  $p=.011$ ).*
- **Any psychiatric hospitalization:** *Participants who had experienced a psychiatric hospitalization reported greater awareness of negative public stereotypes of mental illness ( $r=.24$ ,  $p=.012$ ) and used a greater number of services ( $r=.36$ ,  $p < .001$ ).*
- **Illness length:** *Participants with longer lengths of psychiatric illness reported greater empowerment ( $r=-.23$ ,  $p=.016$ ).*

#### **Time 2**

- **Age:** *Older participants reported fewer and less severe mental health symptoms ( $r=-.24$ ,  $p=.019$ ); fewer and less severe anxiety symptoms ( $r=-.30$ ,  $p=.004$ ); greater recovery non-symptom domination ( $r=.22$ ,  $p=.038$ ); and less awareness of negative public stereotypes of mental illness ( $r=-.21$ ,  $p=.048$ ).*
- **Minority status:** *Compared to Caucasians, participants who were racial minorities had higher personal confidence in recovery scores ( $r=.22$ ,  $p=.040$ ); higher recovery goal orientation scores ( $r=.28$ ,  $p=.006$ ); greater empowerment ( $r=-.24$ ,  $p=.019$ ); greater hopefulness ( $r=.22$ ,  $p=.040$ ); greater self-esteem ( $r=.27$ ,  $p=.009$ ); greater coping mastery ability ( $r=.21$ ,  $p=.042$ ) less agreement with negative public stereotypes of mental illness ( $r=-.22$ ,  $p=.041$ ); less stigma self-concurrence ( $r=-.29$ ,  $p=.007$ ); and less stigma self-esteem decrement ( $r=-.25$ ,  $p=.024$ ).*
- **Marital status:** *Participants who were married reported less agreement with negative public stereotypes of mental illness ( $r=-.30$ ,  $p=.004$ ) and needed a fewer number of services ( $r=-.25$ ,  $p=.014$ ).*
- **Employment status:** *Participants who were working used a fewer number of services ( $r=-.27$ ,  $p=.009$ ) and needed a fewer number of services ( $r=-.27$ ,  $p=.007$ ).*

- **Any psychiatric hospitalization:** Participants who had experienced a *psychiatric hospitalization* reported *lower levels of social connectedness* ( $r=-.23$ ,  $p=.030$ ) and *used a greater number of services* ( $r=.36$ ,  $p=.001$ ).
- **Illness length:** Participants with *longer lengths of psychiatric illness* reported *greater agreement with negative public stereotypes of mental illness* ( $r=.25$ ,  $p=.022$ ) and *needed a greater number of services* ( $r=.26$ ,  $p=.016$ ).

### Time 3

- **Age:** Older participants reported *greater agreement with negative public stereotypes of mental illness* ( $r=.24$ ,  $p=.031$ ).
- **Minority status:** Compared to Caucasians, participants who were *racial minorities* had *less stigma self-concurrence* ( $r=-.25$ ,  $p=.040$ ); and *less stigma self-esteem decrement* ( $r=-.24$ ,  $p=.047$ ).
- **Marital status:** Participants who were *married* had *fewer and less severe depressive symptoms* ( $r=-.26$ ,  $p=.020$ ); and *less stigma self-concurrence* ( $r=-.24$ ,  $p=.047$ ).
- **Employment status:** *Employed participants* had *less stigma self-concurrence* ( $r=-.29$ ,  $p=.016$ ); *used a fewer number of services* ( $r=-.28$ ,  $p=.011$ ) and *needed a fewer number of services* ( $r=-.26$ ,  $p=.019$ ).
- **Any psychiatric hospitalization:** Participants who had experienced a *psychiatric hospitalization* had *lower recovery-reliance on others scores* ( $r=-.26$ ,  $p=.019$ ); *less social connectedness* ( $r=-.28$ ,  $p=.011$ ); *lower coping mastery ability scores* ( $r=-.24$ ,  $p=.029$ ); *used a greater number of services* ( $r=.36$ ,  $p=.001$ ) and *needed a greater number of services* ( $r=.24$ ,  $p=.035$ ).
- **Illness length:** Participants with *longer lengths of psychiatric illness* needed *a greater number of services* ( $r=.25$ ,  $p=.028$ ).

### Time 4

- **Gender:** *Women* reported *greater awareness of negative public stereotypes of mental illness* ( $r=.25$ ,  $p=.026$ ).
- **Age:** Older participants reported *fewer and less severe mental health symptoms* ( $r=-.28$ ,  $p=.013$ ); and *fewer and less severe anxiety symptoms* ( $r=-.31$ ,  $p=.005$ ).
- **Minority status:** Compared to Caucasians, participants who were *racial minorities* had *higher recovery goal orientation scores* ( $r=.25$ ,  $p=.028$ ); and *less agreement with negative public stereotypes of mental illness* ( $r=-.25$ ,  $p=.024$ ).
- **Marital status:** *Married participants* reported *fewer and less severe mental health symptoms* ( $r=-.37$ ,  $p=.001$ ), *depressive symptoms* ( $r=-.38$ ,  $p < .001$ ), and *anxiety symptoms* ( $r=-.34$ ,  $p < .001$ ); had *higher total recovery* ( $r=.28$ ,  $p=.018$ ), *recovery personal-confidence* ( $r=.26$ ,  $p=.023$ ), *recovery-goal orientation* ( $r=.23$ ,  $p=.047$ ) and *recovery-no symptom domination* ( $r=.30$ ,  $p=.012$ ); *greater social connectedness* ( $r=.23$ ,  $p=.037$ ); *greater self-esteem* ( $r=.33$ ,  $p=.003$ ); *greater coping mastery ability* ( $r=.23$ ,  $p=.044$ ); *less agreement with negative public stereotypes of mental illness* ( $r=-.24$ ,  $p=.035$ ), *less stigma self-concurrence* ( $r=-.29$ ,  $p=.015$ ), and *less stigma self-esteem decrement* ( $r=-.23$ ,  $p=.048$ ); and *needed a fewer number of services* ( $r=-.23$ ,  $p=.039$ ).

- **Employment status:** *Employed participants needed a fewer number of services ( $r=-.25$ ,  $p=.024$ ).*
- **Any psychiatric hospitalization:** *Participants who had experienced a psychiatric hospitalization used a greater number of services ( $r=.32$ ,  $p=.005$ ).*
- **Illness length:** *Participants with longer lengths of psychiatric illness needed a greater number of services ( $r=.30$ ,  $p=.009$ ).*

**Summary of participant characteristics associated with RI participation benefits.** Participant demographic and psychiatric illness characteristics that were most consistently related to outcomes include age, minority status, marital status, prior psychiatric hospitalizations, and illness length. Older participants, and those who were married reported fewer and less severe mental health symptoms. Participants who were racial minorities had greater mental health recovery and lower self-stigma scores than Caucasian participants. Not surprising, individuals who had experienced a psychiatric hospitalization and those with longer illness lengths used and needed a greater number of mental health and social services.

**“Dosage effect”: Associations between number of RI meetings attended and RI participation benefits.** The next set of zero-order correlations examined the total number of RI meetings attended at each interview—i.e. the “dose” of RI that participants received—and each outcome at each interview time point.

**Time 2: A greater total number of RI meetings attended was significantly associated with:**

- *Fewer and less severe depressive symptoms ( $r=-.21$ ,  $p=.04$ )*
- *Lower levels of stigma self-decrement ( $r=-.25$ ,  $p=.02$ ).*

**Time 3: A greater total number of RI meetings attended was significantly associated with:**

- *Fewer and less severe mental health symptoms ( $r=-.31$ ,  $p=.004$ )*
- *Fewer and less severe depressive symptoms ( $r=-.35$ ,  $p=.001$ )*
- *Fewer and less severe anxiety symptoms ( $r=-.23$ ,  $p=.034$ )*
- *Greater hopefulness ( $r=.25$ ,  $p=.023$ )*
- *Greater self-esteem ( $r=.31$ ,  $p=.005$ )*
- *Greater coping mastery ability ( $r=.25$ ,  $p=.027$ )*
- *Less stigma self-concurrence ( $r=-.35$ ,  $p=.003$ )*
- *Lower levels of stigma self-decrement ( $r=-.28$ ,  $p=.016$ )*

**Time 4: A greater total number of RI meetings attended was significantly associated with:**

- *Fewer and less severe mental health symptoms ( $r=-.26$ ,  $p=.020$ )*
- *Fewer and less severe depressive symptoms ( $r=-.29$ ,  $p=.039$ )*
- *Fewer and less severe anxiety symptoms ( $r=-.23$ ,  $p=.039$ )*
- *Greater empowerment ( $r=-.29$ ,  $p=.010$ )*
- *Greater hopefulness ( $r=.27$ ,  $p=.018$ )*
- *Greater social connectedness ( $r=.27$ ,  $p=.017$ )*
- *Greater self-esteem ( $r=.32$ ,  $p=.004$ )*
- *Greater coping mastery ability ( $r=.33$ ,  $p=.003$ )*
- *Lower levels of stigma self-decrement ( $r=-.24$ ,  $p=.041$ )*

**Summary of RI dosage effect and RI participation benefits.** At each time point, greater attendance of RI groups is significantly associated with fewer and less severe total mental health symptoms, depressive symptoms, and anxiety symptoms. This suggests that greater participation in RI provides greater opportunities to learn and practice skills that help newcomers better manage their mental health symptoms. Greater receipt of RI also appears to help participants feel better about themselves, enhancing their self-esteem and coping mastery ability. Finally, RI participation appears to be a stigma buster, helping to enforce a message that public negative stereotypes of mental illness do not diminish participants' self-worth.

**Relationship between RI knowledge, the 4-Part Example and RI participation benefits.** The last set of zero-order correlations examined the whether participants' RI knowledge and their ability to give an Example were related to RI participation benefits. Only one significant relationship emerged in this analysis. At *Time 4* only, *higher RI knowledge scores* were associated with *greater recovery-personal confidence* ( $r=.29, p=.012$ ).

## Conclusions

The final section of our report describes our study limitations and our recommendations on the ways that future evaluations of the RI program might overcome these problems. We then discuss in greater detail our key findings, the implications of evaluation results for the RI program, and our plans for additional analyses and dissemination of our findings. We conclude by sharing quotes from evaluation participants about their RI experiences.

## Evaluation Limitations

There are several limitations to our evaluation results. Most notable is our small sample size. When we began the evaluation, based on prior similar studies, we estimated that we would “lose” approximately 20 participants. That is, over time, 20 evaluation participants would either decide to stop doing interviews with us and/or we would be unable to locate them for their follow-up interviews. Of the 126 newcomers who enrolled in the evaluation, a total of 21 participants (17%) withdrew from the study. These 105 participants provided an adequate sample to conduct our statistical analyses. However, as previously described, despite our diligent efforts, 26 (25%) of these 105 participants could not be located for their follow-up interviews. While our final sample of 79 participants was large enough to conduct most statistical analyses, it may have been too small to detect significant differences between RI attendees and non-attendees. In other words, in the GLM analyses, the sample was large enough to detect significant changes in participation benefits for *all* participants, regardless of their RI attendance. When we then “split” the sample and compared RI attendees to non-attendees, some differences in outcomes between attendees and non-attendees may have not been statistically significant because there simply were not enough participants in each group.

Due to budget and personnel constraints, we did not assess individual RI group leader and member characteristics. That is, we did not conduct interviews with each of



the 97 leaders of the groups that our participants were from, nor did we assess the characteristics of all of the individuals who attended these groups. Thus, we do not know if factors related to group leaders and the groups themselves influenced newcomers' participation and participation benefits. For example, it possible that the number of years that leaders had been facilitating groups varied; some leaders may have been running groups for several years, and other leaders may have been running groups for only a few months. We do not know if participants' attendance was related to group leaders' tenure, i.e., whether participants were more likely to continue to attend groups lead by individuals who had been facilitating RI groups for several years or go to groups run by new group leaders. Similarly, we do not know if group leaders' demographic characteristics influenced RI participation and benefits. It is possible that younger participants may have been more likely to attend groups led by individuals close to their own age (i.e., younger group leaders), or that women may have felt more comfortable going to groups led by other women. In regard to features of other group members, our qualitative satisfaction results suggest in part that some participants may have felt uncomfortable with individuals whom they perceived to be too different from themselves. Since we did not assess the age, gender or diagnoses of all of the individuals who went to participants' RI meetings, we do not definitively know if characteristics of other group member influenced participants' attendance. In other words, we do not have the data to tell us whether younger participants who attended groups comprised of older individuals went to fewer meetings than participants who attended groups comprised of individuals who were their own age.

The majority of our participants were attending RI groups in California. Since we do not know how RI groups in California may differ from those in other states, our findings may not be generalizable to all RI groups nationwide. In other words, the experiences of newcomers in California may not be similar to those in Iowa. Participant characteristics also may differ by state, i.e., a greater number of women may attend groups in Ohio and Oregon while a greater number of men may attend groups in New Jersey and Michigan. As described below, future analyses will examine whether differences in participation and participant benefits occur by state.

Since we did not conduct a randomized clinical trial—a very large study in which we would have randomly assigned people to go to RI meetings or to another self-help or peer-led group, then compare outcomes for RI groups to other groups—we cannot conclude that RI participation *alone* is the reason for improvements in outcomes. Along with this, as described below, we also need to further examine whether receipt of similar services, such as participation in a mutual support group, was associated with changes in RI participation benefits.

We have several recommendations on ways that future evaluations of RI groups might handle these issues:

- Require RI group leaders to collect basic demographic characteristics from all RI participants at all RI meetings. This could be accomplished via a short form that participants fill out at the beginning of each meeting that asks for their age, gender, and race. Group leaders with Internet access could enter the forms on a secured page on the ALSHS website. Group leaders without Internet access

would need to mail the forms to a designated ALSHS staff member, who would then enter the information into a RI group meeting member database.

- Require RI group leaders to collect attendance information. Attendance data could be gathered in several ways. First, RI group leaders could simply report the number of people who attended their meetings each week. Second, RI group leaders could report the number of newcomers who attended meetings, and the number of long-time members (i.e., “non”-newcomers) who were present. Third, the form described above could include a question that asks participants to list the number of RI group meetings they have attended to date (e.g., 1 meeting, 2 meetings, etc.). To track attendance per person, the form could ask participants to list their initials and birth date. This way, ALSHS staff could count the number of forms for participant “AB” born on 01/01/1970 and track changes in his/her attendance. For example, five forms collected for AB from October through December 2011 would indicate that he/she attended five RI meetings in that time period, and information listed in AB’s forms may show that, as of December 2011, he/she had attended a total of eight group meetings.
- These attendance forms also will provide basic information about RI group composition. For example, forms for a group in Illinois may show that, in a six month period, on average, ten people attended group meetings. These data also may show that most of these ten people were women who ranged in age from 45-60 years, and that both Caucasians and African Americans attended the group.
- Keep a database of RI group leaders that documents their demographic characteristics (e.g., age, gender, race); number of years they have attended RI group meetings; number of years (or months) that they have been leading RI groups; and number of different groups they have led.
- As described below in our additional analyses section, we plan to conduct analyses that will examine whether participants’ state and receipt of other services is associated with changes in attendance and outcomes.
- A larger, more rigorous study requires several factors. These include ensuring an adequate sample of RI participants, a willingness to randomly assign individuals to receive RI or a similar self-help program, and agreement to adhere to study procedures. Such a study would involve both RI groups that consistently have a larger number of newcomers and collaborations with community mental health agencies. Clients at these agencies who agree to be in the study would have a 50/50 chance of being assigned to an RI group, or another similar group, such as Wellness Recovery Action Planning (WRAP). Both RI and WRAP group leaders would have to agree to accept these participants into their respective programs. Participants in both RI and WRAP would be interviewed over time, similar to our evaluation, in order to determine whether they experience changes in outcomes, and whether these outcomes differ by RI and WRAP participation. Studies such as these are expensive, and would require federal or foundation funding.

## Key Findings and Implications for the RI Program

Our evaluation participants provided us with a wealth of data on their RI experiences. Despite our study limitations, our analyses produced several key findings. Many of these findings have been summarized in prior sections of the report. Taken together, RI participation and RI participation benefit results suggest the following:

**RI participants received the help they wanted to better manage their mental health symptoms.** Newcomers initially came to RI for help coping with depression and anxiety. The significant results related to mental health symptoms and RI dosage effect suggest that, over time, participants learned skills in their RI groups that helped decrease the number and severity of their depressive and anxiety symptoms. At each interview time point, RI participation was significantly associated with decreases in total mental health, depressive and anxiety symptoms. Thus, the greater their attendance, the greater the opportunities to learn and practice the RI Method, and apply it to their everyday lives. As shown in the qualitative satisfaction results, participants themselves reported that RI gave them practical, common sense tools they could easily apply and that helped them feel better.

**Peer support is powerful.** Numerous studies demonstrate the effectiveness of cognitive-behavioral techniques in improving mental health. Most of these programs, however, are led by professionals. Our evaluation results suggest that peers can be similar instruments of change. Since we did not compare RI to a professional program, we cannot claim that RI produces similar results. What we can say, however, is that our initial evidence shows that receipt of peer-led CBT helps reduce psychiatric symptoms and enhance emotional well-being. The significant relationships between greater participation in RI and decreased symptoms, greater hopefulness, self-esteem and coping mastery ability, and decreased stigma self-decrement reflect the peer support features of RI. Group leaders are peers who face similar challenges, and are positive role models of what RI can do. Giving and receiving feedback from peers within group meetings helps build participants' confidence that they can successfully make changes and achieve life goals. The peer support and connections with others are vital to people struggling with mental health problems, particularly those whom, like our newcomers, may have few people to turn to for help. Indeed, participants themselves told us that one of the aspects they liked most about RI was that they were able to be with people "just like me", and that RI groups helped them feel less lonely and isolated.

**RI participation enhances mental health recovery.** Compared to non-attendees, RI attendees experienced significant increases in their recovery-goal orientation scores. Over time, RI attendees reported improved confidence in their belief and ability to achieve personal life goals. We attribute this result to several RI program components. First, the Method and tools itself—for example, "try, fail, try, fail, try, succeed"—teaches participants that it takes many attempts to successfully change a behavior. By endorsing themselves for simply making an effort, RI participants are encouraged to keep trying, and to not give up. Second, as noted above, attendees continually and consistently practiced these skills amongst peers tackling similar challenges. Third, they had peer group leaders who were real life examples of how to overcome obstacles and achieve personal goals. Along with the results for goal

orientation, a related recovery finding of note is that symptom domination decreased for all participants. Over time, evaluation participants reported significant improvements in no symptom domination—their mental health symptoms were not a focus of their lives. Again, we surmise that RI gave participants the knowledge and skills they needed to help them move beyond their illness, and not focus all of their energy on their psychiatric symptoms. Finally, the relationship between knowledge and recovery-personal confidence at Time 4 suggests that the information imparted in RI—and retaining that information over time—may helped increase participants’ belief that their own recovery from mental health problems is possible.

**Recommendations for RI.** Our findings—particularly the qualitative satisfaction results—offer suggestions that may help RI reach more people, and encourage and enhance their participation in RI.

- *Continue outreach efforts to racial and ethnic minority communities.* Although the majority of our evaluation participants were Caucasian, we were pleasantly surprised to find several significant results for racial minority participants. Compared to Caucasian participants, racial minority participants were more likely to be attending RI groups at Time 3 and Time 4, reported greater satisfaction with RI, and had greater personal recovery and decreased self-stigma. We plan to conduct additional quantitative and qualitative analyses to explore why these results occurred for minority participants.
- *Consider use of updated materials.* A consistent RI dislike reported by participants was that program materials are old and contain language that is difficult to understand. This may be a participation barrier for individuals who have low literacy levels. Updated materials, such as the workbook used in RI Discovery and The Power to Change that describe the RI Method in more basic, understandable terms may facilitate participant retention.
- *Hold RI meetings in places accessible by public transportation.* This meeting logistic was a frequent RI dislike. Given that the majority of participants were older, low-income individuals, having to travel long distances to meetings they could not easily get to by bus or train made their group meeting attendance difficult.
- *Poll members on convenient or “best” meeting days and times.* Schedule conflicts were the number one reason why participants stopped attending groups. Meetings days and times that were inconvenient—i.e., conflicted with participants’ schedules—also were cited as program dislikes. One potential solution is for group leaders to simply ask their members to tell them what days and times work best for them. While not everyone’s schedule can be accommodated, group leaders may find that a Wednesday evening group is a preferred over their traditional Saturday morning group.
- *Reach out to younger participants via the ALSHS website and same-age group leaders.* A request made by younger participants was that they would like to go to an RI group of people their own age. Continued efforts to market RI to younger

participants via the ALSHS website and its Facebook and Twitter pages may help recruit younger participants. Additionally, offering groups led by individuals who are in their 20s and 30s also may attract this age group to RI, and facilitate their meeting retention.

## **Getting the Word Out**

Although this document contains the title “final report”, given our rich dataset, our analyses are not over! We are in the process of conducting additional statistical analyses that will allow us to further explore these findings. For example, we will examine in greater detail data from our racial minority participants to determine why they had greater attendance and satisfaction with RI than our Caucasian participants. As noted above, these analyses also include examining RI participation by state, and exploring whether receipt of specific mental health and social services is associated with changes in RI participation benefits. We will explore the nature of the RI dosage effect, i.e., is there a magic number of groups for which this effect occurs? Do some participants experience a greater dosage effect than others?

Taken together, these findings suggest that: (1) participants received help for the problems that first brought them to RI; (2) they learned and applied strategies to help them cope more effectively with their problems; and (3) in so doing, began achieving their mental health recovery. In sum, RI is an important resource for individuals who have been struggling for many years with depression, anxiety and other mental health problems. It provides the skills and support participants need to better manage their symptoms and not allow their illness to control their lives. To help promote the good work of RI, we need to get the word out about these findings. This will be accomplished through manuscripts submitted to professional journals read by psychiatrists, social workers, and others in the mental health field. Conference presentations will help us reach agency administrators and service providers, and mental health consumer advocates. Given that RI is a peer-led program, we particularly encourage sharing these evaluation results with peer-led programs, such as WRAP, and consumer advocacy organizations.

## **In Their Own Words...**

We would like to conclude this report with selected quotes from our participants on how RI is helpful to them:

- ★ “Helps me cope with the little and big things in life”
- ★ “Before RI, I was isolated, depressed, not able to get out of bed. Now, I’m able to function and live my life!”
- ★ “They reach out to me and open me up so that I am calmer and not stressed out”
- ★ “It helps me understand that there is more than one way to look at situations”
- ★ “There is an insight that is calming; the empathy is great!”

- ★ “It makes me stop and think when I’m having a problem. I now know there are things I can do help myself get out of those situations”
- ★ “Teaches us how to handle problems without being emotionally attached to the problem”
- ★ “A venue outside of traditional therapy to help me with my depressive symptoms”
- ★ “Before RI, I was isolated, depressed, and not able to get out of bed. Now, I’m able to function and live my life in Example form”
- ★ **“RI is lifesaving!”**

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