ABSTRACT

EFFICACY OF A SELF-ADMINISTERED TECHNIQUE COMBINING DESCRIPTIONS AND REFLECTIONS OF PROBLEM-SPECIFIC FEELINGS AND THOUGHTS

by Jay Scolio

This thesis reports an experiment designed to test a newly developed self-administered technique called Empathic Self-Awareness (ESA). While performing this technique, individuals, sitting alone in a room, describe a thought or feeling out loud in the first person and reflect those words back to themselves in the second person; this process is repeated for a specified period of time. An earlier study involving Counseling Psychology graduate students showed the ESA technique to be efficacious. Following up on that study, this study randomly assigned undergraduate students either to an experimental group instructed to perform the ESA technique while focusing on a distressing problem or to a control group instructed to think about their distressing problem in any way they saw fit. Although comparisons of distress reduction, change of cognitions, and self-discovery numerically favored the experimental group, none of those comparisons reached significance. This thesis also presents directions for future research.
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THOUGHTS

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# Table of Contents

Acknowledgments .................................................................................................................. v

Introduction ............................................................................................................................. 1

Theoretical Background ........................................................................................................ 2

The Structure of the Technique ............................................................................................. 2
The ESA Technique as an Aid to Exploration ........................................................................ 2
Humanistic Mechanisms Underlying ESA’s Efficacy ............................................................. 3
Cognitive Mechanisms Underlying ESA’s Efficacy ................................................................. 4
Additional Theoretical Considerations .................................................................................. 8

Participants’ Focus on a Personal Problem while Performing the ESA Technique .............. 9

Changes to the Initial Study Implemented in the Present Study ......................................... 10

The Type of Problem Chosen by Participants ..................................................................... 11
The Manner in which the Techniques were Taught to Participants ...................................... 11
The Elimination of the One-Week Follow-up Survey .......................................................... 12
The Session Evaluation Questionnaire (SEQ) ...................................................................... 12
An Additional Major Outcome Variable ............................................................................... 13
Shortened Duration of the Performance of the Techniques ................................................... 13
Multiple Items Assessing Important Constructs .................................................................... 13
Predictive Items ..................................................................................................................... 14
Statistical Power and Planned Sample Size .......................................................................... 15
Hypotheses ............................................................................................................................. 16

Method ................................................................................................................................... 18

Participants ............................................................................................................................ 18
Measures ................................................................................................................................. 18
Procedure ................................................................................................................................. 23

Results .................................................................................................................................... 25

Assessing Factor Loadings for the Key Variables ................................................................. 25
Random Assignment Confirmation ......................................................................................... 25
The Effect of Teaching the Techniques .................................................................................. 28
List of Tables

1 Means for each of the variables used to assess random assignment. .......................... 27

2 Experimental- / Control-Group Comparisons between Groups of Variables Discussed within the Hypotheses. ................................................................. 31

3 Significant correlations of confidence items with Discovery, Cognitive Shift, and Distress Reduction. ................................................................. 34

4 Correlations of Technique Helpfulness and the four variables derived from the Session Evaluation Questionnaire (SEQ) with Discovery, Cognitive Shift, and Distress Reduction. ................................................................. 36

5 Correlations of the Difficulties in Emotion Regulation Scale (DERS), the DERS subscales, and the Emotion Regulation Questionnaire (ERQ) subscales with the four variables derived from the Session Evaluation Questionnaire (SEQ) and with Discovery, Cognitive Shift, and Distress Reduction. ........................................ 38
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Efficacy of a self-administered technique combining descriptions and reflections of problem-specific feelings and thoughts

Psychotherapy clients spend a small fraction of their lives in a therapist’s office and the bulk of their lives between sessions. During time away from therapy, self-help techniques can help clients take advantage of the opportunities for growth their everyday problems provide—problems that occur in the absence of a therapist. Such techniques allow individuals to work on problems while the emotion and meaning they evoke remain alive. Moreover, people who have psychological problems but are not in therapy may benefit from such techniques.

While conducting this study, I investigated the short-term efficacy of a self-help technique intended to promote both exploration and insight. I thought of this technique several years ago while reading a section of Rogers’ *On Becoming a Person* that explains the importance of therapists simply listening to people in their care without trying to change them. The technique is practiced as follows: When individuals observe a feeling, sensation, thought, or image, they put it into words (out loud in first person). Next, they reflect the sense of those words back to themselves (out loud in second person), taking care to do so in a kind manner. This process then continues by putting into words the next observed feeling, sensation, thought, or image that arises, followed by reflection of those words. I call this procedure *Empathic Self-Awareness* (ESA).

I believe this ESA technique promotes the following processes, which lead to beneficial changes in those who practice it: Awareness of specific, concrete aspects of one’s thoughts and feelings; increased understanding of this inner experience brought about by the process of putting it into words; deepening of inner experience by the sense of being seen by the part of oneself reflecting those words; and deepening of experience through the interaction between the experiencer and the “person” reflecting his or her words.

I conducted an initial study of this technique with the participation of Counseling-Psychology students from Santa Clara University (Scolio, Feldman, & Stiles, 2009). Because a sample of Counseling Psychology graduate students is not representative of the population that could potentially benefit from this technique, and because the outcome of
the initial study was encouraging, the experiment was conducted a second time with undergraduate students as participants.

Theoretical Background

The Structure of the Technique

ESA has similarities with other self-help approaches. Essentially, it combines a form of meditation with a form of psychotherapy.

The ESA technique’s relation to meditation. As with some forms of meditation, the ESA technique employs “fluid attention” to thoughts, images, emotions, and sensations as they arise; asks participants to “simply observe cognitions”; and “foster[s] general mental development and well-being” (Walsh & Shapiro, 2006, p. 229). These distinctions apply to the meditation portion of ESA and not to its psychotherapy aspects.

The main purpose of promoting awareness of inner experience through this technique is to allow those who use it to view their inner experiences with precision—to see accurately what’s happening within them. It directs individuals to experience their thoughts and feelings directly—i.e., through “knowledge by acquaintance” rather than through “knowledge by description” (Russell, 1959, p. 31).

The ESA technique’s relation to psychotherapy. In addition to its similarity to meditation, ESA has similarities to certain aspects of psychotherapy. Just as therapists of virtually every orientation ask clients to put what they observe into words (Linehan, 1993), the ESA technique asks its practitioners to apply words to their inner experience. A specific psychotherapy technique that is similar to ESA is called streaming. When performing this technique, which was recommended by Mahoney (1991), “the individual is invited to report verbally the spontaneous contents of his or her stream of consciousness” (p. 232). Moreover, Mahoney recommended its use, not only during therapy sessions, but also as a self-help technique.

A facet of the ESA technique drawn directly from psychotherapy is reflection of feeling and meaning as described by Rogers (1961). The reflection portion of the ESA technique is fairly simple, as limited teaching time was available during the experiment. Gendlin (1984) claimed it takes several weeks just to learn how to reflect back what the client has said—and this ability is the most basic step in learning the skill of empathic reflecting. ESA asks participants to rephrase their first-person statements within second-
person statements; this was the direction given to those who participated in the initial study as well as the present study. I suggested they could rephrase a statement such as “I feel afraid” into something as simple as “you feel afraid.” I then suggested they could allow their rephrasing to become more sophisticated as they developed competence while they performed the technique.

By reflecting their own experience, participants may experience growth: “When someone understands how it feels and how it seems to be me, without wanting to analyze or judge me, then I can blossom and grow in that climate” (Rogers, 1961, p. 62). I believe an individual may experience a sense of relief or release when this happens, both during therapy and while performing the ESA technique. Furthermore, when a person feels empathically understood while practicing ESA, he or she may feel ready to move on to the next inner experience. When that occurs, new feelings and meanings may open up, leading to breadth and depth of experiencing along with the change that accompanies it.

Reflection can also alter an individual’s cognition. Bohart and Tallman (1999) contend that “empathic reflection can more fully engage clients’ productive thinking processes. When clients hear their own argument mirrored back to them, for instance, they often spontaneously gain insight into it and revise it” (p. 124).

The ESA Technique as an Aid to Exploration

Another aspect of the ESA technique is its potential ability to help individuals find the right “distance” from the thoughts, images, emotions, and sensations that constitute their inner experience. In other words, it helps create a balance between being identified with inner experience and being separated sufficiently from it to be aware of it.

When working with their own inner experience, individuals might get lost within it, that is, fully identified with it, as if they are their current thought, image, feeling, or sensation. Performing the portion of the ESA technique where individuals look objectively at their experience so they can describe it accurately in the first person should cause them to decenter from it sufficiently to see what’s actually transpiring—decentering meaning the ability “to step outside of one’s immediate experience” (Safran & Segal, 1996, p. 117).

At other times, individuals may watch their inner experience “from afar,” identified almost entirely as the part of themselves watching their experience. This sort of distance
might make it difficult for them to learn about themselves. Theoretically, some level of identification with experience is necessary to learn about it; individuals must feel they are their experience to some degree in a given moment. When individuals voice a first-person description of their experience, they will likely, to some degree, become identified with that experience; putting the description of experience in the first person should help individuals become it. Moreover, the deepening of experience that the reflection portion of the technique promotes should also help individuals become more identified with what they’re experiencing.

These degrees of identification with one’s inner experience can be put in terms of Roger’s (1961) process conception of psychotherapy. In this stage theory of movement from “rigid structure to flow” (p. 131), psychotherapy clients move from viewing themselves as an object to experiencing themselves as a subject. Creating this sort of movement is one of the purposes of the ESA technique. While performing ESA, individuals first view themselves as an object with the intent of seeing what’s occurring within them; they then identify as the part of themselves they saw by describing it in the first person.

**Humanistic Mechanisms Underlying ESA’s Efficacy**

The foundation of ESA is the individual’s openness to his or her inner experience without an attempt to judge or change it. This openness is found in the practice of meditation as well as in certain forms of psychotherapy. In fact, it is Rogers’ (1961) “meditative” attitude toward his clients that I hope to instill in those who perform the ESA technique:

> As I try to listen to myself and the experiencing going on in me, and the more I try to extend that same listening attitude to another person, the more respect I feel for the complex processes of life. So I become less and less inclined to hurry in to fix things, to set goals, to mold people, to manipulate and push them in the way that I would like them to go. I am much more content simply to be myself and to let another person be himself. …Yet the paradoxical aspect of my experience is that the more I am simply willing to be myself, in all this complexity of life and the more I am willing to understand and accept the realities in myself and in the other person, the more change seems to be stirred up. (pp. 21–22)
The self-discovery promoted by this openness toward experience is one of ESA’s underlying mechanisms, and thus one of the questions posed to participants in the initial study was whether they discovered aspects of themselves previously unknown to them that were related to a problem they chose to work with for the experiment. The discovery of new facets of experience should lead to growth because of the understanding and insight it enables. Moreover, the emotional experience engendered by this openness could potentially evoke thoughts and images (Greenberg, Rice, & Elliott, 1993) from earlier in life; understanding those cognitions could be key to an individual’s growth (see *Cognitive Mechanisms Underlying ESA’s Efficacy* below).

To help participants “perceive experiences not currently represented in their phenomenological field” (Goldsmith, Mosher, Stiles, & Greenberg, 2008, p. 158), the experimental group in both the initial and present study was instructed, prior to performing the technique, to be curious about what’s happening within them without judging or attempting to change what they saw. Provided the ESA technique helps create the correct distance from inner experience, participants can discover “that awareness per se—by and of itself—can be curative” (Perls, 1969, p. 16).

Because individuals performing ESA must see their inner experience with sufficient clarity to describe it accurately, the technique should increase the detail with which they are aware of that experience; this awareness should permit a concrete (rather than abstract) knowledge (James, 1892/2001) of those experiences. In addition, the repetitive nature of the technique should allow participants to become aware of various related aspects of their experience.

Some theorists divide inner experience into structures such as complexes, internal objects, and schemas, among others. One such structure whose definition subsumes the ideas behind many of these structures is called a *voice*. This concept is defined in the Assimilation Model (Stiles, 2002), which “assumes that people’s experiences leave traces (e.g., memories, skills, action tendencies, expectations) that can be reactivated, and it uses the metaphor of *voice* to emphasize the active agency of these traces” (Brinegar, Salvi, Stiles, & Greenberg, 2006, p. 166). In theory, the psychological problems participants brought to the experiment may have involved at least one problematic, less accessible voice in relationship with another voice. To assimilate the problematic voice
into the *community of voices* that constitutes an individual’s accepted sense of self, it is necessary to create a *meaning bridge*—a word, gesture, token, picture, or story that has the same meaning for each of the voices (Brinegar et al., 2006). Meaning bridges connect voices through their common understanding, allowing them to empathize and communicate with one another and engage in joint action” (Brinegar et al., 2006, p. 167).

Person-centered therapists provide accurate, empathic reflections that build meaning bridges between client and therapist; these meaning bridges ultimately become meaning bridges between the client’s voices (Goldsmith et al., 2008). Moreover, “besides helping the client feel understood and accepted, reflections facilitate meaning bridges by clarifying experiences and encouraging voices to speak” (p. 159). The ESA technique works in precisely the same manner. Meaning bridges are created between the reflecting part of a person and each voice it addresses; those voices, in turn, develop meaning bridges between each other. Furthermore, experiences get clarified and voices are encouraged to speak.

Goldsmith et al. (2008) further explain “the therapist may sometimes insert different words into a reflection, thereby offering the client new signs” (p. 159). Similarly, as practitioners of ESA gain skill at making reflections, they will offer new signs to the first-person aspect, thereby giving that voice (which, while the technique is performed, becomes identified to some extent with the voice it has described) more ways to create meaning bridges with other voices.

*Cognitive Mechanisms Underlying ESA’s Efficacy*

Now that I’m discussing cognitive mechanisms, I’ll move from the concept of *voice* to the concept of the *schema*. Young, Klosko, & Weishaar (2003) give the following definition:

A schema can be thought of generally as any broad organizing principle for making sense of one’s life experience. An important concept with relevance for psychotherapy is the notion that schemas, many of which are formed early in life, continue to be elaborated and then superimposed on later life experiences, even when they are no longer applicable. This is sometimes referred to as the need for “cognitive consistency,” for maintaining a stable view of oneself and the world, even if it is, in reality, inaccurate or distorted. By this broad definition, a schema can be
positive or negative, adaptive or maladaptive; schemas can be formed in childhood or later in life. (p. 7)

Within this quote lies what I believe is the most fundamental mechanism behind ESA’s effectiveness. The exploration that ESA facilitates allows individuals to see that the thoughts and images that constitute certain schemas are outdated and therefore don’t apply to their present-day lives. For example, an individual may discover a portion of his or her self-image is no longer true; the expectation of a fearful event is no longer realistic; or a friend deserves the anger that has been chronically self-directed. As a check for this process, participants in the ESA experiment were asked if thoughts related to their problem changed as a result of performing the technique.

Psychological trauma can dramatically illustrate the effects of outdated schemata. Paraphrasing Horowitz’s ideas about the need to update schemata with new information after a traumatic experience has occurred, Herman (1992) wrote, “the trauma is resolved only when the survivor develops a new mental ‘schema’ for understanding what has happened” (p. 41).

Even when an individual is not aware of the outdated nature of a schema, the process of insight may lead to useful schema changes because of the exploration promoted by ESA. Sternberg (2003) defined insight as “a distinctive and sometimes seemingly sudden understanding of a problem…that aids in solving the problem. Often, an insight involves reconceptualizing a problem…for its solution in a totally new way” (p. 374). Incidentally, the concept of insight is not exclusive to cognitive psychology. In writing about client-centered therapy, Rogers (1961) reported that one of its characteristics is the “increase in insightful statements” (p. 75).

When working with a problem while performing the ESA technique, individuals may discover a series of schemata, each one triggering the next one in the series. For example, an adult abused as a child might, when recalling a recent encounter with a difficult person, discover a relatively powerless objecting-to-mistreatment schema, followed by a powerful critical-toward-self schema, followed by a sulking-to-get-help schema.

This type of series is reminiscent of the cognitive concept called the script. A script is a series of events that is typically seen in a specific context (Sternberg, 2003). For example, within the context of a birthday party, people expect to see a cake with candles,
followed by an individual blowing out the candles, followed by partygoers eating the cake. Similarly, in the context of a difficult person, the previously abused person expects (and relives internally or externally, or both) a series of events that occurred, probably repeatedly, earlier in life. The repetitive nature of ESA might help an individual address the series of schemata that constitute a given problem.

Such repetition may also be advantageous, not only when dealing with a series of schemata, or a voice in relationship with other voices, but also when encountering a network of schemata or voices. The elements (e.g., schemata or voices) associated with a problem could constitute a network, making a solution to the problem more complex. One of Horney’s (1945) ideas suggests the less-than-straightforward architecture of networks; she claims that elements within a psyche can either reinforce or conflict with each other. Caspar’s (1998) explanation of the consequences of an interconnected, distributed network shows the importance of reaching many of the connected elements of a problem: First, an intervention typically reaches only a portion of the elements that cause one’s experience.

[Second,] interconnectedness guarantees that parts that are not reached directly can be reached by their connections to other elements. They are then not changed under the direct influence of an input from the environment, but because other, connected elements inside the system have changed. …[Third,] because interconnectedness is limited in larger systems, among other things by modularity, in the sense of different components performing different tasks, the spreading out of activation is to some extent channelled, [causing, for example, a new attitude applied to one situation to not generalize to other situations]. (pp. 91–92)

Additional Theoretical Considerations

I believe that people generally appreciate what is helpful to them in psychotherapy. As a check, in the initial study, the Counseling Psychology graduate students who participated in it were asked whether they planned to use the technique in the future. Because the undergraduate participants in the present study were hypothesized to have less interest in applying psychological techniques, they were asked instead whether they found the technique helpful.
As mentioned above, when individuals feel empathically understood by the reflecting part, they may feel a sense of relief or release. I also believe this can occur when individuals gain understanding and insight about their problems. Thus, an additional question asked of participants in both studies was whether they felt a sense of relief or release related to their problem after performing the technique.

Participants’ Focus on a Personal Problem while Performing the ESA Technique

I asked the research volunteers to use the ESA technique for a particular problem that they identified, rather than asking them to work with whatever came to mind. This approach made it easier to measure their progress after performing the technique.

Bugental (1987) calls this type of approach while undergoing psychotherapy “concern-guided searching.” His description of concern matches the attitude I attempted to instill while teaching the participants to perform the technique:

Concern is the experience of letting oneself really care about some life issue, of being willing to invest oneself in it, and being ready to work to bring about desired change. …Its value is as an empowering and guiding force in the therapeutic exploration of one’s subjectivity.

Three conditions are required for effective searching to take place: (a) The patient must identify a life issue which he wishes to explore more deeply and fully and describe it to the therapist completely—and often, repeatedly. (b) The patient must be as deeply immersed as possible while carrying out this description…. (c) The patient must maintain an expectancy of discovery, a readiness to be surprised. (p. 167)

In both studies, participants were instructed to choose a problem that causes negative emotion, and thus they most likely chose problems that were in Stage 2 (emergence) or 3 (problem clarification) in the Assimilation of Problematic Experiences Sequence (APES), which details the series of small changes that occur during psychotherapy as problematic experiences “become integrated (assimilated) into the self” (Brinegar et al., 2006, p. 166). Although the APES begins with a warded off stage (Stage 0), clients may begin therapy with a problem that is either in this initial stage or in a later one.

As in psychotherapy, problems chosen for ESA studies may be in stages other than APES Stage 0. If the voice of the problematic experience is warded off (Stage 0) or
actively avoided (Stage 1), the problem statement won’t include it, or will just touch on it. If participants are willing to take a risk, they’ll work on a problem that’s in Stage 2, a stage where individuals are vaguely aware of their problem and in considerable pain because of it. They may choose a Stage 3 problem—a problem that’s mostly known to them—or a Stage 4 problem—a problem that’s mostly solved.

Depending on the stage of the selected problem, the ESA technique may be more or less effective. If individuals pick a problem that’s in Stage 0 or 1—i.e., where the problematic voice is warded off or avoided—it seems likely they will continue to avoid the voice, and the pain that accompanies it, while performing the technique. If that proves true, they will tend to make less progress with their problem. However, it is unlikely that participants would pick a problem that is warded off or that they very much want to avoid thinking about. If on the other hand individuals choose problems in Stages 2 or 3, they stand to make the most progress with their problem. A Stage 2 problem should provide access to strong emotional experiences, which individuals should be able to usefully employ while performing the technique. Because individuals who choose a Stage 3 problem are well aware of the voices associated with it, they should be able to work with those voices while using the technique, and thus make progress in solving their problem. Those who choose a Stage 4 problem have already mostly solved it, and thus they may make some progress while using the technique, but probably less than those individuals who choose a Stage 2 or 3 problem.

Changes to the Initial Study Implemented in the Present Study

Both the poor generalizability of data collected from Counseling Psychology graduate students and a failure of randomization between the experimental and control groups discovered while reviewing the initial study’s data suggested conducting the experiment a second time. Prior to performing the experimental and control techniques, the initial study’s control-group participants were more anxious and depressed than those in the experimental group, and the problems they chose to work on bothered them more. Only the difference in the levels of anxiety between the two groups was significant, however.

Scolio et al. (2009) detail the experimental design, method, results, and discussion for this initial study. The section below lists various changes to the initial study

10
implemented in the present study. The study included some changes to the procedure in addition to a number of refinements to the measures used.

*The Type of Problem Chosen by Participants*

In the initial study, participants were instructed to choose a problem caused by an event in their lives. I gave “breaking up with a girlfriend or boyfriend” as an example and explained that many other types of problems were possible. They were told to choose a concrete problem such as the example I gave, rather than an abstract problem such as “I’d like to be a nicer person.” I explained that the problem had to be one that causes negative emotion(s) such as anger, sadness, or fear.

Of the problems these individuals listed, 39 out of the 53 problems were interpersonal, four were intrapsychic, and ten were situational. Although the example I used to illustrate what a concrete problem is may have skewed the participants’ choices toward the interpersonal type, I believe that most individuals would have chosen this type of problem regardless of the example I used. Of interpersonal and intrapersonal problems, it seems that more individuals are likely to choose the interpersonal type, as evidenced by the initial experiment. Those who participated in the study reported here were asked explicitly to focus on interpersonal problems.

*The Manner in which the Techniques were Taught to Participants*

When the ESA technique was taught to the experimental group during the initial study, a Powerpoint presentation of about eight minutes in duration was given. On the other hand, when the control technique was taught to the control group during the study, a short verbal instruction of about 30 seconds in duration was provided. Moreover, the same individual (i.e., me) delivered the instructions to both groups.

This arrangement introduced some confounding variables: The difference in the duration of the instructions as well as the use of Powerpoint slides for one group and strictly verbal instructions for the other. Additionally, the delivery of instructions to both groups by an individual who had a vested interest in the success of the ESA technique may have influenced the experiment.

For the present experiment, it was not feasible to make the instruction times equal, as the ESA technique requires more instruction than the control technique. Both techniques were, however, taught using Powerpoint slides. Moreover, an undergraduate student was
recruited to deliver a recorded version of the instructions to both groups; he was blind as
to the purpose of the study as well as naïve about the subject of psychology.

As a check on the effect of the instructions, several distress items were included in
measures administered before and after the techniques were taught to assess whether the
教学 process differentially influenced the groups. Moreover, the item *I am confident
this technique will help me feel better about my problem* rated after the techniques were
taught helped gauge the credibility of both techniques.

*The Elimination of the One-Week Follow-up Survey*

The one-week follow-up survey used in the initial study was eliminated in this study
because it seemed unlikely that the effect of such a brief intervention would have
significant lasting effects. The data from the initial study’s follow-up survey showed no
significant difference in the reduction of distress between the experimental and the
control groups a week after the techniques were performed. Similarly, Safran, Vallis,
Segal, Shaw, Balog, & Epstein (1987), when reviewing the results of their session-
outcome experiment, found no evidence of enduring change in target complaints (Battle,
Imber, Hoehn-Saric, Stone, Nash, & Frank, 1966) a week later, despite roughly 50
minutes of cognitive therapy for each participant. Muran, Safran, Samstag, Gorman,
Twining, & Winston (1995)—in a study linking session outcome measures to measures
of the overall outcome of 20 sessions of cognitive therapy—found that cognitive shift,
which is central to change in cognitive therapy, explained improvements in target
complaints, but only during the second half of the 20 therapy sessions.

*The Session Evaluation Questionnaire (SEQ)*

The experimental and control techniques should have differential effects on emotion.
Differential changes in the dimensions of positivity and arousal, which “account for most
of the rating variance on a wide variety of measures of mood and emotion in a wide
variety of circumstances” (Russell, 1978, 1979), between the two groups could provide
another way to assess differences in the success of the two techniques. Moreover, these
dimensions could show more precisely what sort of emotional change occurs than by that
found by assessing whether problem distress, anxiety, and depression levels have abated.
The SEQ (Stiles, 1980; Stiles, Gordon, & Lani, 2002) provided the measures of positivity
and arousal that were used in the present experiment, before as well as after the techniques were performed.

The SEQ also assesses the Depth and Smoothness of therapy sessions. The Depth scale of the SEQ measures whether sessions are powerful and valuable; this scale provided another way to assess the usefulness of both the ESA and the control technique. The Smoothness scale, which assesses whether sessions are relaxed and comfortable, was also included in the present experiment.

An Additional Major Outcome Variable

The major outcome variable for the initial study was the shift in how much the problem bothers participants from before to after performing the techniques. Choosing this variable to assess outcome followed from Safran et al.’s (1987) approach where they measured the shift in the distress caused by three target complaints. A reduction in distress is of course useful. However, as Stiles (1980) noted, “good feelings do not always make good therapy, whereas powerful sessions are usually valuable even when they are unpleasant” (p. 183). This assertion suggests that another outcome measure may be warranted. In my opinion, a session that is both powerful and lasting always involves cognitive shift. Thus, another way to measure outcome in this study was through items that measure cognitive shift.

Shortened Duration of the Performance of the Techniques

Because I felt that undergraduate students might have less interest in performing introspective techniques, less practice performing such techniques, and less ability to maintain attention on a specific problem, for the present experiment I asked them to perform the techniques for 10 minutes instead of the 15 minutes that the participants of the initial experiment performed the techniques.

Multiple Items Assessing Important Constructs

The initial study relied on single items to assess cognitive shift, self-discovery, and distress reduction. Because of the importance of these constructs in determining the success of the ESA technique, multiple items were used in the present study to assess these constructs.

The four items associated with cognitive shift, the four items associated with discovery, and the five items associated with distress reduction were examined together
to see if they grouped into these three different factors. This work allowed me to investigate the following potential relationships between these factor-based scales. First, by correlating Cognitive Shift with Distress Reduction, it was possible to examine the idea that changes in thinking, as represented by Cognitive Shift, can cause reductions in distress. I also investigated the correlation between Discovery and Cognitive Shift; self-discovery in theory is a prerequisite to change in cognition.

I also investigated whether a mediational relationship existed that involved the Lack of Emotional Awareness, the Nonacceptance of Emotional Responses, and the Lack of Emotional Clarity subscales of the Difficulties in Emotion Regulation Scale (DERS) individually as the independent variable, Discovery as the mediator, and Cognitive Shift as the dependent variable. In addition, this mediational relationship was examined with initial problem distress substituted as the independent variable. Furthermore, I explored the mediational relationship among Discovery, Cognitive Shift, and Distress Reduction.

I chose not to calculate Perceived Helpfulness for the present experiment despite its use in the initial experiment. Although this scale involves items predictive of distress reduction, some of the items are only indirectly related to distress reduction, and thus the utility of using this scale for prediction of this variable is suspect. For example, the two items that assessed discovery and cognitive shift were a part of the Perceived Helpfulness Scale in the initial experiment. Although both lead to change, cognitive shift leads to distress reduction (although not always) whereas discovery leads to cognitive shift (although not always). Thus, the mediational relationships described above involving the Discovery, Cognitive Shift, and Distress Reduction scales were examined for this experiment rather than the relationship between Perceived Helpfulness and Distress Reduction.

**Predictive Items**

Neither the Psychological Mindedness Scale (PMS) (Conte, Plutchik, Jung, Picard, Karasu, & Lotterman, 1990) nor the Hope Scale (Snyder, Harris, Anderson, Holleran, Irving, Sigmon et al., 1991) predicted the change in distress in the initial study, and thus were eliminated from this study. The confidence items *I am confident I can decrease the intensity of the difficult feeling(s) caused by my problem* was retained, not only to potentially predict outcome, but also as a check that random assignment occurred.
Distress-level items also helped indicate whether random assignment occurred as well as provided a measure of the outcome of performing the techniques. The confidence items *I am confident that using this technique will help me feel better about my problem* and *I am confident that I can perform the technique correctly* were retained to potentially predict outcome.

I also retained the questions regarding the percentage of time participants were able to perform the techniques as well as whether they were able to perform them correctly, as I considered these questions even more important for undergraduate students than Counseling Psychology graduate students. Participants who scored below specific levels on these two items were eliminated from the study. Moreover, although these items did not correlate with the initial study’s outcome, I felt they might correlate with outcome in the present experiment because of the possibility that undergraduates’ scores might have wider ranges for these two items.

Also added to the study were the Emotion Regulation Questionnaire (ERQ) and the Difficulties in Emotion Regulation Scale (DERS). The ERQ assesses whether individuals use reappraisal or suppression to regulate their emotions. It seemed likely that how individuals regulate their emotions would affect performance on both the experimental and control techniques. For example, individuals who tend to reappraise situations to regulate emotions might benefit from performing the control technique, as they may use reappraisal while thinking about their problem. In addition, the DERS includes several subscales that assess specific difficulties individuals have when regulating their emotions. I felt that difficulties such as poor awareness of emotions or an inability to know what emotion one is feeling would affect the results of performing both the experimental and control techniques.

### Statistical Power and Planned Sample Size

The effect size achieved during the initial study—the effect size based on the reduction of problem-specific distress from before to after performing the experimental or control techniques—was .69: 

\[
[(\text{Distress Reduction}_{\text{exptl}} – \text{Distress Reduction}_{\text{control}}) / s_{\text{pooled}} = (25.0 – 10.8) / 20.524 = .69. \text{ (Note that } s_{\text{pooled}} = [27/51*(21.858)^2 + 24/51*(18.912)^2]^{1/2} = 20.524)]
\]

I felt that the effect size would be smaller for undergraduate students of various majors than it was for the participants of the initial
experiment, who were graduate Counseling Psychology majors. I assumed a moderate effect size of 0.5 would be achieved when undergraduates participated in the experiment. A power table for $t$ tests showed that for a two-tailed test with 50 participants in each group, the study’s power equaled 0.7. This level of power gave reasonable reassurance that if our hypothesis that the experimental group’s distress will decrease more than that of the control group after performing their assigned techniques is true, we would correctly accept this hypothesis.

Hypotheses

The following hypotheses were made about the outcome of this study:

1. Because the ESA technique should promote more exploration and insight (cognitive shift) than the control technique, the distress caused by the participants’ chosen problems should decrease more for the experimental group than for the control group.

2. Because the members of the experimental group should experience more cognitive shift than the control group, they should rate Cognitive Shift higher than the control group does. The difference might not reach significance, however, as the control technique should also promote cognitive shift.

3. The experimental group should rate Discovery higher than the control group does, as the ESA technique should promote more discovery than the control technique.

4. Participants who performed the ESA technique should rate the experience of using it as more powerful and valuable (as measured by the SEQ Depth scale) than those who performed the control technique.

5. Whether the experimental group would rate the experience of performing the ESA technique as more relaxed and comfortable (as measured by the SEQ Smoothness scale) as compared to the control group was unclear; if the experimental technique helps participants unearth more difficult material, the experience may be less relaxed and comfortable than for those who perform the control technique.

6. Because the ESA technique should produce more useful results than the control technique, the experimental group’s positivity levels (as measured by the SEQ Positivity scale) should increase more than those of the control group.

7. The experimental participants’ arousal (as measured by the SEQ Arousal scale) level should decrease more than the control participants’ arousal level after the techniques are
performed. It seemed likely that the ESA group’s level of emotional arousal would decrease more than the control group’s because of the higher levels of cognitive shift and the emotional release it should enable. In making this hypothesis, I assumed that the majority of emotional arousal would be due to the problem chosen by participants.

8. Distress reduction should correlate with Cognitive Shift, not only for the experimental group, but also for the control group, as the control group’s experience of cognitive shift would also lead to reduced distress.

9. Discovery should correlate with Cognitive Shift for both groups, as discovery should promote cognitive shift regardless of the means by which it is achieved.

10. Because awareness of emotions should aid discovery, and because discovery in turn should promote cognitive shift, discovery should mediate the relationship between the ability to be aware of emotions and cognitive shift, but only for the experimental group. Moreover, both acceptance of emotional responses and emotional clarity could be substituted as the independent variable in this mediational relationship. I hypothesized the control technique would not promote sufficient discovery to allow this mediational relationship to exist for control participants.

11. Discovery should mediate the relationship between the level of distress caused by the chosen problem at the beginning of the experiment and cognitive shift. In this case, too, this relationship would apply to only the experimental group.

12. Cognitive shift should mediate the relationship between Discovery and Distress Reduction, but for only the experimental group.

Various items assessing the participants’ confidence in their ability to reduce the intensity of the difficult feelings associated with their problem, their confidence in the assigned technique, and their confidence in their ability to perform the assigned technique correctly were included in the study. Moreover, an item assessing whether participants’ confidence in the assigned technique increased or decreased while performing the technique was also included. No specific hypotheses about these confidence items were made; I included them to explore whether a sense of self-efficacy as well as confidence in the assigned technique related to the outcome measures.
Method

Participants

Participants included 43 undergraduates recruited from PSY111 introductory psychology classes at Miami University. In exchange for course credit, students in these classes participated in this or other studies. In lieu of research participation, they were permitted to undertake other activities to fulfill a portion of, or the entirety of, the research-participation requirements.

Participants were eliminated from the study if they rated their performance as 2 or less (on a 7-point Likert scale) on the item I was able to perform the technique correctly, or if they rated their performance as less than 40% for the percentage of the time they were able to perform their assigned technique. Five participants were eliminated for these reasons. The mean age of the 38 remaining participants was 19.26 years; 15 were male and 23 were female; 32 were Caucasian, 2 were African-American, 2 were Hispanic, 1 was Asian-American, and 1 identified as other.

Measures

The Difficulties in Emotion Regulation Scale (DERS). The DERS comprises six separate factors, each with loadings of .40 or higher. Items that loaded on more than one factor were eliminated. “Items with loadings below .40 on all factors were excluded from further analyses. …[Moreover,] upon extraction, the six factors accounted for 55.68% of the total variance of the measured variables” (Gratz & Roemer, 2004, p. 46). The six factors that constitute the DERS are Nonacceptance of Emotional Responses, Difficulties Engaging in Goal-Directed Behavior, Impulse Control Difficulties, Lack of Emotional Awareness, Limited Access to Emotion Regulation Strategies, and Lack of Emotional Clarity.

The DERS exhibits high internal consistency; Cronbach’s Alpha equals .93. Also, each of the six subscales has adequate internal consistency; Cronbach’s Alpha was greater than .80 for each of the six subscales. The overall scale exhibited good test-retest reliability over a period that ranged from 4 to 8 weeks; \( p_t = .88, p < .01 \). “The test-retest reliability of the DERS subscales was adequate \( (p_s = .69 \) for NONACCEPTANCE, .69 for GOALS, .57 for IMPULSE, .68 for AWARENESS, .89 for STRATEGIES, and .80 for CLARITY; all \( ps < .01 \)” (Gratz & Roemer, 2004, p. 52).
To assess the construct validity of the DERS, comparisons were made between the experiential avoidance and emotional expressivity portions of the Negative Mood Regulation Scale (NMR), which is a popular measure of emotion regulation. All correlations of the overall DERS score and the constructs of interest were in the expected directions and statistically significant. Each of the DERS subscales was also significantly correlated (in the expected direction) with the NMR and the measure of experiential avoidance; however, only three of the subscales were significantly correlated with the measure of emotional expressivity. (Gratz & Roemer, 2004, p. 48)

Those three subscales are NONACCEPTANCE, AWARENESS, and CLARITY—the three subscales of most interest in the present study. It is these three subscales that should each predict self-discovery, which in turn should predict insight/cognitive shift.

The Emotion Regulation Questionnaire (ERQ). The ERQ comprises two factor-based scales. The reappraisal scale assesses the degree to which individuals control their emotions by changing the way they think about situations or by changing what they’re thinking about. The suppression factor assesses the degree to which individuals control their emotions by not expressing them. “These two factors accounted for more than 50% of the variance in each sample. In each case, the intended loadings were all substantially higher than even the highest of all cross-loadings (mean cross-loading = .16)” (Gross & John, 2003, p. 351). Alpha reliabilities averaged .79 for the reappraisal scale and .73 for the suppression scale. For both scales, 3-month test-retest reliability was .69.

Convergent relationships between the following were found: “Suppression was related to Inauthenticity [a measure of masking one’s true self-expression because of concerns over self-presentation] (β = .47) but reappraisal was not. …Reappraisal was related to coping through reinterpretation (β = .43), and suppression was related to coping through venting (β = - .43). …[Also,] suppression was related negatively to all three Meta-Mood scales…[and] the efficacy of negative mood regulation was related positively to reappraisal but negatively to suppression” (Gross & John, 2003, p. 354).

Modest discriminant relationships were found between Neuroticism (a Big Five personality dimension) and reappraisal (β = - .20) and between Extraversion (a Big Five personality dimension) and suppression (β = - .41).
The Session Evaluation Questionnaire (SEQ). Two of the ways in which this questionnaire was designed to assess psychotherapy sessions are the following: “(1) as powerful and valuable versus weak and worthless and (2) as relaxed and comfortable versus tense and distressing. On the SEQ, these two session evaluation dimensions are called Depth and Smoothness, respectively. …[Factor analysis with orthogonal (varimax) rotations obtained] robust, internally consistent sets of items” (Stiles et al., 2002, p. 327). Moreover, ratings by both therapists and clients resulted in the same groupings of items, suggesting that these two dimensions are appropriate for use by the participants in the present study. Another portion of the SEQ assesses postsession mood; it measures positivity and arousal, which are “widely considered as basic theoretical dimensions of mood and emotion” (Stiles et al., 2002, p. 327).

“Internal consistency, measured by coefficient alpha, has been high for all SEQ indices across a wide variety of conditions and settings” (Stiles et al., 2002, p. 328).

Anxiety and depression items. The participants in the initial study were asked to rate how depressed do you feel right now? and how anxious do you feel right now? As per the Safran et al. (1987) study, anxiety and depression were rated on 11-point Likert scales with “Not at all” and “Couldn’t be worse” anchoring them.

Distress-level items. Two items similar to one used by Battle et al. (1966) to assess target complaints were used to assess the level of distress associated with the participants’ chosen problems. Unlike that study, for this study only one target complaint was addressed—the problem participants choose to work with while performing the techniques. One of the two items was in general, how much does your problem bother you? It was rated on an 11-point Likert scale, thus matching the Safran et al. (1987) study. Moreover, it was anchored with the phrase “Not at all” on one end, and the phrase “Couldn’t be worse” on the other.

The second item was created to allow the assessment of the level at which the participants’ problems bother them right before and right after performing the experimental and control techniques. The question asked was right now, how much does the problem bother you? To match the Safran et al. (1987) study, the item was rated on an 11-point Likert scale with “Not at all” and “Couldn’t be worse” anchoring it.
Another item intended to assess problem distress was *rate the level of distress you feel right now as you think about your problem*. This item was rated on a 7-point Likert scale with “None” and “Couldn’t be worse” anchoring the scale. Additional distress-level items included *while performing the technique, I felt a sense of relief or release related to my problem; performing the technique caused my problem to be less of a concern to me; and performing the technique has helped me put this problem behind me*. All three were rated on 7-point Likert scales with “Completely false” and Completely true” anchoring them.

**Items assessing cognitive shift.** An item from Safran et al.’s (1987) study to be used to assess cognitive shift was *while performing the technique, how much did any belief, thought, attitude, or expectation related to your problem change?* Added to this item parenthetically was the instruction *if more than one belief, thought, attitude, or expectation changed, rate the one that changed the most*. The item was rated on an 11-point Likert scale as per the Safran et al. (1987) study, with “Not at all” and “Significantly” anchoring the scale.

Additional items for assessing cognitive shift included the following: *The way I think about my problem changed in a positive way as a result of performing the technique; performing this technique gave me understanding about myself in relation to my problem; and my thoughts that cause my problem to bother me changed as a result of performing the technique*. Each of these items was rated on 7-point Likert scales, with “Completely false” and “Completely true” anchoring them.

**Items assessing discovery.** Four items assessed the degree to which participants discovered new aspects of their inner experience: *While performing the technique, I discovered aspects of myself previously unknown to me; performing the technique helped me see more of what happens within me when I think about my problem; performing the technique helped me see more clearly what happens within me when I think about my problem; and while performing the technique, about how many times did you discover aspects of yourself previously unknown to you?* The first three items were rated on 7-point Likert scales with “Completely false” and “Completely true” anchoring them. Participants supplied a number for the last item.
The order of Distress Reduction, Cognitive Shift, and Discovery items. The order of the items that assessed Distress Reduction, Cognitive Shift, and Discovery in the questionnaire filled out after performing the techniques was the following: A Distress Reduction item was followed by a Cognitive Shift item, which was followed by a Discovery item. This order was repeated several times until all the items assessing these three constructs were listed. This allowed each item that was part of a given construct to be rated independently of the others that assess the same construct. Furthermore, this arrangement allowed the influence on each of the items by the items that precede them to be more diverse.

Items assessing ability to perform the technique. Two items assessed the participants’ ability to perform the technique: I was able to perform the technique correctly, rated on a 7-point Likert scale anchored by “Completely false” and “Completely true,” and for what percentage of the 10-minute time period were you able to perform the technique?

Items assessing confidence. The four items assessing confidence about ability to perform the assigned technique and about feeling better about the chosen problem are as follows: I am confident I can perform the technique correctly, I am confident I can decrease the intensity of the difficult feeling(s) caused by my problem, I am confident that using this technique will help me feel better about my problem, and while performing the technique, my confidence that it would help me feel better about my problem increased/decreased. The first three items were rated on 7-point Likert scales with “Completely false” and “Completely true” anchoring them. The last item was rated on an 11-point Likert scale with “Decreased” and “Increased” anchoring it.

Item assessing technique usefulness. One item used to assess the technique’s usefulness was I found the technique helpful, rated on a 7-point Likert scale with “Completely false” and “Completely true” anchoring the scale. The item I am confident this technique will help me feel better about my problem, when rated after the technique has been performed, also assessed the technique’s usefulness.

Qualitative questions assessing the technique. To learn more about what happens for participants as they perform the technique as well as to obtain guidance for future research, the following three qualitative questions were asked: What happened for you while you performed the technique? What, if anything, happened while performing the
technique that made it work for you? and What problems, if any, did you experience as you performed the technique? The participants wrote their responses to these questions on blank space provided within the final questionnaire.

Procedure

All experimental sessions were conducted on Wednesdays and Thursdays with the exception of one session, which was conducted on a Monday. Because sessions took place in the early evening and because it is common for students at Miami University to celebrate the approaching weekend on Thursday evenings at a time close to when the experimental sessions ended, care was taken to ensure that an approximately equal number of experimental-group and control-group members participated on Wednesday and Thursday evenings. The first group of individuals who participated in the experiment was assigned to the control condition on the first Wednesday of the experiment by use of a random number generator. The group that participated the next day (Thursday) was assigned to the experimental condition. The following week, the group assignments were reversed; the Wednesday group was assigned to the experimental condition and the Thursday group to the control condition. This reversal procedure continued until the number of individuals who participated in each condition became unbalanced due to unequal-sized groups. At this point, groups were assigned to whatever condition was necessary to balance out the number of individuals in each condition who participated on a given night. Monday evening was considered approximately the same as a Wednesday evening.

Twenty individuals were assigned to the experimental condition and 18 individuals were assigned to the control condition. Thirteen of the experimental-group members participated on a Monday/Wednesday, and seven of those members participated on a Thursday. Eleven of the control-group members participated on a Wednesday (none on a Monday) and seven of those members participated on a Thursday.

The participants were first asked to read and sign a consent form. Next, the participants were asked to choose a letter out of a box and to keep it hidden from the researcher. That letter assigned each of them to an individual room where they were to fill out the experiment’s questionnaires as well as perform the technique assigned to them. They were next instructed to complete the first questionnaire in their assigned
individual rooms and to return to the group room when finished. (See Appendices A – F to refer to all four questionnaires used in the study as well as the consent form and the debriefing statement). Note that the group of items in the first questionnaire used to assess whether participants prefer to use their right or left hands was intended only as a distracter, which was needed to help participants forget the two strategies for regulating emotions that they may have learned by filling out the ERQ.

After all individuals returned to the group room, they were asked to choose an interpersonal problem that causes them to feel one or more negative emotion(s) and then were instructed to return to their individual rooms to fill out the second questionnaire.

After all individuals returned to the group room, they watched a Powerpoint presentation that instructed them in how to perform either the experimental (ESA) or the control (think-about-the-problem) technique. An undergraduate student, who was naïve as to the purpose of the experiment, pre-recorded the instructions that accompanied the Powerpoint slides. Scripts for both the experimental- and control-group instructions are included in Appendix G.

The last portion of the Powerpoint presentation for the experimental group instructed participants to perform the technique out loud at any volume at which they felt comfortable. They were advised that they may feel silly at first, but to keep performing the technique. Both groups were told they could arrange the furniture within their individual rooms in any way they preferred and that they could turn the lights on or off. They were further instructed not to lie down—the intent being to keep them from falling asleep while performing the assigned technique for 10 minutes.

After returning to their individual rooms, the participants filled out the third questionnaire, performed the assigned technique, and filled out the fourth questionnaire. They remained in their individual rooms to complete all three of these activities.

After they returned to the group room, they were debriefed through the use of a short written statement. Also, a copy of the informed consent was given to the participants to keep for their records.

By the end of the semester, 43 individuals had participated in the experiment. The data from five participants were discarded, and the remaining data were analyzed. This analysis demonstrated clearly that the key variables would not show significant
differences between the groups even if data from 100 participants were analyzed, and thus the experiment was terminated. Because the experiment was ended early, results were reported, not only when significances were less than .05, but also when they were less than .10. The intent in doing this was to help illuminate which statistical tests might have become significant had 100 individuals participated in the experiment.

Results

Assessing Factor Loadings for the Key Variables

The five items that assessed problem-related distress reduction loaded primarily onto a single factor, which I called Distress Reduction. Three of the four discovery items loaded onto another factor, which I called Discovery; the fourth item loaded onto its own factor and was discarded.

Of the four items that assessed cognitive shift, one of them loaded strongly on the Discovery factor, and thus was included as a fourth item assessing discovery. The three remaining cognitive-shift items were (a) while performing the technique, how much did any belief, thought, attitude, or expectation related to your problem change? (Item 1), (b) the way I think about my problem changed in a positive way as a result of performing the technique (Item 2), and (c) my thoughts that cause my problem to bother me changed as a result of performing the technique (Item 3). Because Item 1 assessed change in cognitions without reference to whether the change was positive or negative, it was discarded. Items 2 and 3 assessed whether changes to cognitions that would aid the participant had occurred, and thus they were used to create the scale called Cognitive Shift. These two items loaded on both the Distress Reduction and the Discovery factor, but loaded more strongly on the Distress Reduction factor.

Internal consistency, measured by Cronbach’s alpha, was .849 for the Distress Reduction scale, .925 for the Discovery scale, and .814 for the Cognitive Shift scale.

Random Assignment Confirmation

As a check that random assignment occurred (a problem with the initial experiment), comparisons between the experimental and control groups were made for the following variables: Age, number of meditation and therapy sessions, levels of depression and anxiety, the level at which the chosen problem bothered participants at present as well as in general, and the level of confidence participants felt that they could decrease the
difficult feelings associated with their problem. Table 1 lists the means of the data collected for each of these variables.

There were no significant differences between the two groups. In addition, there were no significant differences between the groups in the ratings of the ERQ subscales, the DERS, or the DERS subscales.

As a further check that random assignment occurred, a between-groups multivariate analysis of variance (MANOVA) test was conducted with the levels of problem distress (three items), anxiety, depression, and confidence in ability to decrease the difficult feelings associated with the problem as the dependent variables. No significant difference between the two groups was found, \(F (6, 31) = .834, p = .139\). In addition, a between-groups MANOVA with the ratings of the DERS subscales as dependent variables was conducted; again, no significant difference between the two groups was found, \(F (6, 29) = 1.641, p = .172\). Finally, a between-groups MANOVA with the ratings of the ERQ Reappraisal and Suppression subscales as dependent variables was conducted; here also, no significant difference between the two groups was found, \(F (2, 34) = .068, p = .935\).
Table 1. Means for each of the variables used to assess random assignment.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental Group Mean</th>
<th>Experimental Group Standard Deviation</th>
<th>Control Group Mean</th>
<th>Control Group Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19.30</td>
<td>1.17</td>
<td>19.22</td>
<td>1.26</td>
</tr>
<tr>
<td>Number of times meditated</td>
<td>5.25</td>
<td>6.52</td>
<td>4.17</td>
<td>6.08</td>
</tr>
<tr>
<td>Number of psychotherapy sessions</td>
<td>1.50</td>
<td>3.69</td>
<td>2.44</td>
<td>3.59</td>
</tr>
<tr>
<td>How much problem bothers at present</td>
<td>60.50</td>
<td>20.38</td>
<td>61.11</td>
<td>20.55</td>
</tr>
<tr>
<td>How much problem bothers in general</td>
<td>60.00</td>
<td>23.62</td>
<td>68.33</td>
<td>14.65</td>
</tr>
<tr>
<td>How much distress problem causes</td>
<td>3.75</td>
<td>1.25</td>
<td>4.00</td>
<td>.91</td>
</tr>
<tr>
<td>Level at which feels depressed</td>
<td>30.00</td>
<td>30.78</td>
<td>40.56</td>
<td>29.20</td>
</tr>
<tr>
<td>Level at which feels anxious</td>
<td>42.00</td>
<td>32.38</td>
<td>32.78</td>
<td>24.25</td>
</tr>
<tr>
<td>Level of confidence can decrease diffi-</td>
<td>4.40</td>
<td>1.50</td>
<td>4.33</td>
<td>1.41</td>
</tr>
</tbody>
</table>

n = 20 for the experimental group.  n = 18 for the control group.
The Effect of Teaching the Techniques

Because the duration of the prerecorded instructions was considerably longer for the experimental group than for the control group—7 minutes, 5 seconds versus 1 minute, 40 seconds—a check was made to see if hearing the instructions differentially affected the two groups. Comparisons were made between the two groups for the difference in the ratings of the following variables from before to after learning the techniques: Distress caused by the chosen problem, anxiety, depression, and confidence in ability to decrease the difficult feelings associated with the problem. None of these comparisons was significant. However, the control group’s level of depression decreased more than the experimental group’s and the difference trended toward significance, \( t(36) = -1.801, p = .080 \). The control group’s level of depression (40.56) was higher than the experimental group’s level (30.00) prior to learning the techniques, however.

In addition, there was no significant difference between the groups in confidence in ability to perform the techniques correctly. Moreover, comparisons between the two groups on the rating of confidence that the technique would help participants feel better about their problems showed no significant difference (\( t(36) = 1.587, p = .121 \)). It should be noted, however, that the experimental group’s mean for this item was 3.40 and the control group’s mean was 2.67 (on a Likert scale with a range from 0 to 6). Relatively large standard deviations prevented this comparison from reaching significance.

Analyses of Hypothesized Relationships

Experimental-/control-group comparisons. Table 2 shows a summary of the comparisons between the experimental- and control-group means of the variables that were discussed within the experiment’s hypotheses. What follows is the results of these comparisons, given in the numerical order in which the hypotheses associated with them were listed earlier. In brief, weak trends favoring the experimental group were found, but only one comparison reached significance.

1. The distress caused by the participants’ chosen problems decreased more for the experimental group than for the control group, but the comparison was not significant.
2. The members of the experimental group rated Cognitive Shift higher than the control group did, and the difference did not reach significance, as predicted.
A between-groups MANOVA was performed with the two outcome measures (Distress Reduction and Cognitive Shift) as the dependent variables. No significant difference between the two groups was found, $F (2, 35) = .244, p = .785$.

3. The experimental group rated Discovery higher than the control group did, but the comparison was not significant.

A between-groups MANOVA was performed with the two outcome measures and Discovery as the dependent variables. No significant difference between the two groups was found, $F (3, 34) = .764, p = .522$.

4. Participants who performed the ESA technique rated the experience of using it as more powerful and valuable (as measured by the SEQ Depth scale) than those who performed the control technique, but the comparison was not significant.

5. The experimental group rated the experience of performing the ESA technique as more relaxed and comfortable (as measured by the SEQ Smoothness scale) as compared to the control group. The comparison was not significant. No prediction was made about this comparison.

6. The experimental group’s positivity levels (as measured by the SEQ Positivity scale) increased more than those of the control group, and the comparison was significant as predicted. Although no predictions were made about whether an increase in Cognitive Shift would cause an increase in positivity, a correlation involving these two variables was conducted for the two groups. For the experimental group, Cognitive Shift correlated with the increase in positivity ($r = -.540, p = .017$). For the control group, the correlation did not reach significance and it did not trend toward significance.

7. The experimental participants’ arousal level (as measured by the SEQ Arousal scale) decreased more than the control participants’ arousal level after the techniques were performed, but the comparison was not significant. Although no predictions were made about whether an increase in Cognitive Shift would cause a reduction in arousal, a correlation involving these two variables was conducted for the two groups. For the control group, the correlation of Cognitive Shift with arousal difference trended toward significance ($r = .410, p = .091$). For the experimental group, the correlation was not significant and did not trend toward significance.
To further test whether the two techniques produced differential changes in emotion, a between-groups MANOVA was performed with the reduction of arousal and the increase in positivity as the dependent variables. No significant difference between the two groups was found, $F (2, 34) = 2.875, p = .070.$
Table 2. Experimental- / Control-Group comparisons between groups of variables discussed within the hypotheses.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental group mean</th>
<th>Experimental group standard deviation</th>
<th>Control group mean</th>
<th>Control group standard deviation</th>
<th>t (36)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distress Reduction</td>
<td>.0696</td>
<td>.7497</td>
<td>-.0774</td>
<td>.8474</td>
<td>.567</td>
<td>.574</td>
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<tr>
<td>Cognitive Shift</td>
<td>.0195</td>
<td>.9322</td>
<td>-.0217</td>
<td>.9286</td>
<td>.137</td>
<td>.892</td>
</tr>
<tr>
<td>Discovery</td>
<td>.1584</td>
<td>.9038</td>
<td>-.1760</td>
<td>.8956</td>
<td>1.144</td>
<td>.260</td>
</tr>
<tr>
<td>SEQ Depth</td>
<td>4.850</td>
<td>.7864</td>
<td>4.511</td>
<td>1.0363</td>
<td>1.142</td>
<td>.261</td>
</tr>
<tr>
<td>SEQ Smoothness</td>
<td>4.230</td>
<td>1.1810</td>
<td>4.189</td>
<td>1.2281</td>
<td>.105</td>
<td>.917</td>
</tr>
<tr>
<td>SEQ Positivity Reduction</td>
<td>-.4632</td>
<td>1.0605</td>
<td>.4333</td>
<td>1.1946</td>
<td>-2.417</td>
<td>.021</td>
</tr>
<tr>
<td>SEQ Arousal Reduction</td>
<td>.5900</td>
<td>1.1452</td>
<td>.2222</td>
<td>.9795</td>
<td>1.058</td>
<td>.297</td>
</tr>
</tbody>
</table>

n = 20 for the experimental group (n = 19 for experimental-group SEQ Positivity Reduction comparison).  n = 18 for the control group.
**Correlations of key variables.** Correlations were conducted to assess the possibility that a shift in thinking would relate to a reduction of distress, and to assess whether discovery of aspects of oneself related to the chosen problem would relate to a shift in thinking. As for the above comparisons between groups, these correlations are given in the numerical order in which the associated hypotheses were listed earlier.

8. Distress Reduction correlated with Cognitive Shift for both the control group ($r = .650$, $n = 18$, $p = .004$) and for the experimental group ($r = .837$, $n = 20$, $p < .001$), as predicted.

9. Discovery trended toward correlation with Cognitive Shift for the control group ($r = .458$, $n = 18$, $p = .056$). For the experimental group, the correlation of Discovery and Cognitive Shift was not significant ($r = .372$, $n = 20$, $p = .106$).

**Mediational analyses.** After examining the distress items, confidence items, the two ERQ subscales, and the DERS subscales as well as the DERS itself as potential independent variables within mediational relationships, no meaningful relationships were found for this study.

10. Thus the prediction that Discovery would mediate the relationship between the ability to be aware of emotions (from the DERS) and Cognitive Shift for the experimental group was not confirmed. Moreover, no mediational relationships were found when acceptance of emotional responses and emotional clarity (both from the DERS) were individually substituted as the independent variable in this mediational relationship.

11. Also, the prediction that Discovery would mediate the relationship between the level of distress caused by the chosen problem at the beginning of the experiment and Cognitive Shift was not shown. In this case, too, this relationship would have applied only to the experimental group.

12. The prediction that Cognitive Shift would mediate the relationship between Discovery and Distress Reduction for the experimental group was not shown.

**Exploratory Analyses**

*Confidence in techniques as a predictor of outcome.* Because it seemed plausible that measures of self-efficacy (Bandura, 1977), or confidence, might predict outcome measures, items assessing the participants’ self-efficacy were included in the experiment’s measures. These items measured confidence in participants’ ability to reduce the intensity of the difficult feelings associated with their problem, their
confidence in the assigned technique, and their confidence in their ability to perform the assigned technique correctly. Moreover, an item assessing whether participants’ confidence in the assigned technique increased or decreased while performing the technique was also included.

The reported increase/decrease in confidence in the assigned technique while performing it correlated with Distress Reduction and Cognitive Shift—the experiment’s two outcome variables—for both groups. Moreover, confidence that the technique would help participants feel better about their problem, as rated right before performing the techniques, predicted Cognitive Shift for the control group and trended toward a significant correlation with Cognitive Shift for the experimental group (see Table 3). None of the confidence measures predicted reductions in depression or anxiety.
Table 3. Correlations of confidence items with Discovery, Cognitive Shift, and Distress Reduction.

<table>
<thead>
<tr>
<th>Confidence…</th>
<th>Group</th>
<th>Discovery</th>
<th>Cognitive Shift</th>
<th>Distress Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>…in ability to decrease difficult feelings (T2)</td>
<td>Control</td>
<td>.38</td>
<td>.32</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>-.21</td>
<td>-.33</td>
<td>-.25</td>
</tr>
<tr>
<td>…in ability to decrease difficult feelings (T3)</td>
<td>Control</td>
<td>.64**</td>
<td>.21</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.09</td>
<td>-.04</td>
<td>.02</td>
</tr>
<tr>
<td>…technique will help feel better about problem (T3)</td>
<td>Control</td>
<td>.40*</td>
<td>.52**</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.35</td>
<td>.38*</td>
<td>.22</td>
</tr>
<tr>
<td>…can perform technique correctly (T3)</td>
<td>Control</td>
<td>-.01</td>
<td>.01</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.52**</td>
<td>.05</td>
<td>.13</td>
</tr>
<tr>
<td>…in technique increase/decrease while performing it (T3–T4)</td>
<td>Control</td>
<td>.25</td>
<td>.81**</td>
<td>.69**</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>-.079</td>
<td>.68**</td>
<td>.74**</td>
</tr>
</tbody>
</table>

*p < .10.  **p < .05.  n = 20 for the experimental group.  n = 18 for the control group.

T2 denotes the time before the techniques were taught, T3 denotes the time just prior to performing the techniques, and T4 denotes the time just after performing the techniques.
Technique helpfulness and Session Impact. It also seemed plausible that how helpful (single-item measure), how powerful and valuable (SEQ Depth), and how relaxed and comfortable (SEQ Smoothness) participants found the techniques would correlate with Discovery, Cognitive Shift, and Distress Reduction. In addition, it seemed likely that the increase in emotional positivity (SEQ Positivity) and decrease in emotional arousal (SEQ Arousal), from before to after performing the techniques, would correlate with Discovery, Cognitive Shift, and Distress Reduction. The assertion that these three key variables would correlate with how helpful participants found the techniques was based on the idea that individuals would know whether a specific therapeutic intervention benefited them. Moreover, another way to assess the benefit of an intervention is by measuring its power and value as well as by measuring the increase in positivity it produces. Furthermore, a decrease in arousal might signal beneficial effects. Less clear was whether the level of relaxation and comfort experienced while performing the techniques would predict the sort of benefits measured by the three variables.

How helpful participants found the techniques correlated with Discovery, Cognitive Shift, and Distress Reduction for both groups. SEQ Depth correlated with Cognitive Shift for both groups and Discovery for the control group. In addition, SEQ Depth correlated with the participants’ rating of the technique’s helpfulness for both the control ($r = .73, p = .001$) and experimental ($r = .54, p = .014$) groups. Moreover, both SEQ Smoothness and SEQ Positivity difference correlated with both Cognitive Shift and Distress Reduction for the experimental group (see Table 4).
Table 4. Correlations of Technique Helpfulness and the four variables derived from the Session Evaluation Questionnaire (SEQ) with Discovery, Cognitive Shift, and Distress Reduction.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Discovery</th>
<th>Cognitive Shift</th>
<th>Distress Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique Helpfulness</td>
<td>Control</td>
<td>.54**</td>
<td>.87**</td>
<td>.64**</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.48**</td>
<td>.77**</td>
<td>.68**</td>
</tr>
<tr>
<td>SEQ Depth</td>
<td>Control</td>
<td>.69**</td>
<td>.73**</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.40*</td>
<td>.65**</td>
<td>.40*</td>
</tr>
<tr>
<td>SEQ Smoothness</td>
<td>Control</td>
<td>.11</td>
<td>.24</td>
<td>.39</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>-.13</td>
<td>.52**</td>
<td>.58**</td>
</tr>
<tr>
<td>SEQ Positivity Difference†</td>
<td>Control</td>
<td>.12</td>
<td>-.17</td>
<td>-.50**</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.26</td>
<td>-.54**</td>
<td>-.73**</td>
</tr>
<tr>
<td>SEQ Arousal Difference†</td>
<td>Control</td>
<td>.19</td>
<td>.41*</td>
<td>.49**</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>-.02</td>
<td>.23</td>
<td>.21</td>
</tr>
</tbody>
</table>

*p < .10.  **p < .05.  †Represents the difference in the measurement from before to after performing the techniques.  n = 20 for the experimental group.  n = 18 for the control group.
Emotion regulation and difficulties in emotion regulation. For purposes of exploration, whether the DERS, DERS subscales, and the ERQ subscales would predict SEQ Depth, SEQ Smoothness, SEQ Positivity difference, and SEQ Arousal difference as well as Distress Reduction, Discovery, and Cognitive Shift was investigated. Table 5 shows the relationships among these variables. This investigation was undertaken because it seemed possible that difficulties in emotion regulation could be related to achieving less success with the experimental technique. For example, a problem with awareness of emotions or an inability to accept emotions seemed likely to predict less ability to benefit from performing the experimental technique. Moreover, an ability to reappraise the situations that cause emotions might lead to more success while performing the control technique.
Table 5. Correlations of the Difficulties in Emotion Regulation Scale (DERS), the DERS subscales, and the Emotion Regulation Questionnaire (ERQ) subscales with the four variables derived from the Session Evaluation Questionnaire (SEQ) and with Discovery, Cognitive Shift, and Distress Reduction.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>SEQ Depth</th>
<th>SEQ Smoothness</th>
<th>SEQ Positivity Difference</th>
<th>SEQ Arousal Difference</th>
<th>Distress Reduction</th>
<th>Discovery</th>
<th>Cognitive Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>DERS Nonacceptance</td>
<td>Control</td>
<td>.064</td>
<td>-.22</td>
<td>.32</td>
<td>-.16</td>
<td>-.34</td>
<td>.27</td>
<td>-.23</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.17</td>
<td>.20</td>
<td>-.16</td>
<td>.12</td>
<td>.34</td>
<td>.19</td>
<td>.47**</td>
</tr>
<tr>
<td>DERS Goals</td>
<td>Control</td>
<td>-.04</td>
<td>.24</td>
<td>.14</td>
<td>-.19</td>
<td>-.49**</td>
<td>.13</td>
<td>-.54**</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.21</td>
<td>.35</td>
<td>-.45*</td>
<td>.00</td>
<td>.37</td>
<td>.02</td>
<td>.56**</td>
</tr>
<tr>
<td>DERS Impulse</td>
<td>Control</td>
<td>-.25</td>
<td>-.19</td>
<td>-.01</td>
<td>-.29</td>
<td>-.04</td>
<td>-.12</td>
<td>-.36</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>-.09</td>
<td>.19</td>
<td>-.06</td>
<td>-.13</td>
<td>.03</td>
<td>.07</td>
<td>.14</td>
</tr>
<tr>
<td>DERS Aware</td>
<td>Control</td>
<td>.15</td>
<td>-.47**</td>
<td>.31</td>
<td>-.50**</td>
<td>.05</td>
<td>.16</td>
<td>-.05</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.19</td>
<td>.26</td>
<td>-.40*</td>
<td>.29</td>
<td>.19</td>
<td>.05</td>
<td>.36</td>
</tr>
<tr>
<td>DERS Strategy</td>
<td>Control</td>
<td>-.23</td>
<td>-.28</td>
<td>.09</td>
<td>-.19</td>
<td>-.11</td>
<td>.06</td>
<td>-.36</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.01</td>
<td>.16</td>
<td>-.23</td>
<td>.34</td>
<td>.27</td>
<td>.17</td>
<td>.44*</td>
</tr>
<tr>
<td>DERS Clarity</td>
<td>Control</td>
<td>-.03</td>
<td>-.59**</td>
<td>.01</td>
<td>-.42*</td>
<td>-.11</td>
<td>.04</td>
<td>-.13</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.04</td>
<td>.08</td>
<td>-.06</td>
<td>.23</td>
<td>-.10</td>
<td>.10</td>
<td>.12</td>
</tr>
<tr>
<td>DERS</td>
<td>Control</td>
<td>-.09</td>
<td>-.30</td>
<td>.10</td>
<td>-.48*</td>
<td>-.25</td>
<td>.10</td>
<td>-.56**</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.11</td>
<td>.28</td>
<td>-.30</td>
<td>.16</td>
<td>.25</td>
<td>.13</td>
<td>.47**</td>
</tr>
<tr>
<td>ERQ Reappraisal</td>
<td>Control</td>
<td>.24</td>
<td>.22</td>
<td>-.08</td>
<td>.36</td>
<td>.13</td>
<td>-.04</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>-.38</td>
<td>-.27</td>
<td>.14</td>
<td>-.41*</td>
<td>-.14</td>
<td>.13</td>
<td>-.39*</td>
</tr>
<tr>
<td>ERQ Suppression</td>
<td>Control</td>
<td>.21</td>
<td>-.80**</td>
<td>.45*</td>
<td>-.51**</td>
<td>-.35</td>
<td>.15</td>
<td>-.14</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>.27</td>
<td>.20</td>
<td>-.23</td>
<td>.06</td>
<td>.30</td>
<td>.10</td>
<td>.31</td>
</tr>
</tbody>
</table>
*p < .10.  **p < .05.  n = 20 for the experimental group (n = 19 for experimental-group Positivity Difference correlations).  n = 18 for the control group.
Anxiety and depression shift. The experimental group experienced a greater reduction of both anxiety and depression than the control group, but none of those comparisons reached significance. To examine whether changes in thinking could explain reductions in both depression and anxiety, Cognitive Shift was correlated with the differences in depression and anxiety. For the experimental group, Cognitive Shift correlated with the difference in depression ($r = .458, p = .043$), and for the control group, Cognitive Shift trended toward correlation with anxiety ($r = .416, p = .086$).

Distress items and reported history of psychotherapy and meditation sessions. The distress items used to predict Discovery as well as the experiment’s various outcome variables included how much the chosen problem presently bothers the participant, how much it bothers the participant in general, and the level of distress the participant associates with the problem. This relationship between these distress items and both Discovery and the two outcome variables was investigated for this experiment because of Norcross & Lambert’s (2006) contention that a higher level of disturbance positively affects treatment outcome more than any other variable. The distress items that were used for the correlations that follow were measured essentially at the beginning of the experiment—i.e., after the participants chose a problem and before they learned the techniques.

The experimental group’s rating of Discovery was predicted by the three measures of problem-related distress as well as the level of depression (but not anxiety). Also, Discovery trended toward a correlation with the number of times individuals in the experimental group had meditated ($r = .401, p = .080$); there was, however, no significant correlation of Discovery with the number of psychotherapy sessions members of the experimental group had attended.

For the control group, one measure of problem-related distress (the level of distress associated with the problem) trended toward correlation with the decrease in the level of depression from before to after the group performed its technique ($r = .459, p = .055$). For the experimental group, the same measure of problem-related distress correlated with the decrease in anxiety from before to after the group performed its technique ($r = .510, p = .022$). It is noteworthy that right after the participants chose a problem to work with, the experimental group reported a higher (albeit not significantly higher) level of general
anxiety than the control group, and the control group reported a higher (albeit not significantly higher) level of general depression than the experimental group. The number of psychotherapy sessions attended by the experimental group trended toward correlation with the decrease in the level of depression from before to after the group performed the experimental technique \(r = .415, p = .069\).

The problem-distress items, levels of anxiety, levels of depression, and number of meditation and psychotherapy sessions did not predict Depth, Smoothness, Distress Reduction, Cognitive Shift, or positivity and arousal differences from before to after the techniques were performed. Despite the contention that higher levels of disturbance lead to better treatment outcomes, the evidence that this was the case for the participants of this experiment was weak. Moreover, the evidence that the number of times participants meditated or the number of times participants attended psychotherapy sessions predicted the experiment’s outcome measures was also weak. Note, however, that the mean of both of those variables was quite low, indicating any experience that might have been gained while meditating or attending psychotherapy sessions—and that could have helped individuals perform the techniques—would be minimal.

**Mediation relationships.** In examining Discovery, the distress items, confidence items, the two ERQ subscales, and the DERS subscales as well as the DERS itself as potential independent variables in mediation relationships, no meaningful relationships were found.

**Qualitative questions assessing the technique.** These items were not used in this report.

**Terminating the Experiment**

The experiment was terminated after only 43 individuals participated (the data from five of those participants was eliminated) rather the planned N of 100 because an examination of comparisons between groups for three key variables indicated that even if 100 individuals were to participate, those comparisons would not become significant. See Table 1.

The variable Distress Reduction was examined more closely because it is the experiment’s most important outcome variable. For the 38 individuals who had participated thus far, the effect size demonstrated via the difference in Distress Reduction
between the experimental and control groups was .1844. Assuming the results generated by additional participants would yield the same effect size, with 100 participants in total, the statistical power for the experiment would have been .147. This small level of statistical power in combination with the results of comparisons between groups for two additional important variables, Discovery and Cognitive Shift, provided sufficient reason to conclude the experiment.

Discussion

Comparisons between Groups

Although only one of the experimental-/control-group comparisons of the variables listed in Table 1 reached significance, the experimental group’s mean scores for all of these variables were numerically higher than the control group’s scores; these findings only weakly suggest that the experimental technique is more efficacious than the control technique. In general, mood improved more for the experimental group than for the control group, but only the comparison of the increase in emotional positivity from before to after performing the techniques reached significance.

In the initial experiment, the single-item scale used to assess distress reduction indicated a significantly higher reduction in distress for the experimental group than for the control group. The experimental group also showed a significantly higher level of discovery than did the control group. As in the present experiment, however, the experimental group in the initial study did not show a significantly higher level of cognitive shift than did the control group.

The samples in the initial and the present experiment differed in both age and majors. In the initial-study, participants averaged 32.3 years old (range 22 to 62), whereas the present-study participants averaged 19.3 (range 17 to 22). Because they were considerably younger, the participants in the initial study had likely experienced less practice directing their attention inwardly, focusing on problems in general, and focusing on problems that occur inwardly. Moreover, because none of them were Counseling Psychology majors (as was the case in the initial study), many probably had little interest in, or understanding of, the rationale behind the techniques. This lack of interest and understanding may have caused some participants to perform their assigned techniques for considerably less time and with considerably less precision than those who
participated in the initial study; performance of the techniques was not monitored in either study.

In addition, the amount of time over which individuals who participated in the present study performed the technique was limited. For the present study, participants performed the technique for 10 minutes—5 fewer minutes than those who participated in the initial study. It is not possible to say whether practicing the technique for five fewer minutes had an impact on the participants’ performance. It is possible, however, that performing the technique for longer periods or multiple times, or both, could have caused additional significant differences to appear between the two groups.

**Support for the Expected Link between Cognitive Shift and Distress Reduction**

Correlations between Cognitive Shift and Distress Reduction were significant for both groups, thus providing support for the idea that a change in the thinking related to a specific problem can lead to a reduction in the distress caused by the problem. Moreover, this distress reduction could be enduring, as the change in thinking that in theory prompted the reduced distress could also be long lasting. It is consistent with this theory that both groups exhibited a significant correlation between these two scales; change in distress is possible when cognitive changes occur, regardless of how they occur.

For the experimental group, Cognitive Shift also correlated with the increase in positivity and the decrease in depression from before to after performing the experimental technique. Although these correlations are also consistent with the above theoretical account of potentially enduring change, these findings were not explicitly hypothesized. The correlation between positivity increase and Cognitive Shift and the correlation between depression decrease and Cognitive Shift could be explained by the positive emotion created by the participants’ realization that their thinking about their problems changed in a positive direction.

The hypothesized correlation of Discovery with Cognitive Shift was not found for either group, although for the control group Discovery nearly correlated significantly with Cognitive Shift ($r = .46, p = .056$). No explanation is available for this finding.

**Support for the Expected Links between Predictive Items and Outcome**

Norcross & Lambert (2006) contended that a higher level of initial disturbance positively affects change in treatment more than any other variable. The relationship
between initial distress and Discovery for the present study’s experimental group is consistent with this idea. Problems that cause higher levels of distress should facilitate the discovery of what happens within oneself when thinking about the problem; emotion generally tends to bring cognitions relevant to change to the surface (Greenberg et al., 1993). It is worth noting that although distress levels predicted Discovery, they did not predict Cognitive Shift or Distress Reduction. It is possible that these higher distress levels facilitated discovery while making cognitive shift and the distress reduction it causes more difficult to achieve. The presence of a solid therapeutic alliance as found in psychotherapy might have provided the safety needed to allow cognitive shift as well as the distress reduction that results from it. Greenberg (2002) argued that high emotional arousal, when taking place under the aegis of a good therapeutic alliance, promotes good outcomes for psychotherapy sessions.

Levels of confidence that the technique would help participants feel better about the problem they chose, as rated right before performing the technique, predicted Cognitive Shift for the control group and trended toward a significant correlation with Cognitive Shift for the experimental group. This finding supports the idea that one of the expectancies that plays a part in the effectiveness of psychotherapy is “confidence in [the] therapist and treatment, [which Frank (1971) felt was] the critical determinant of outcome” (Clarkin & Levy, 2004, p. 205).

All the experimental-group DERS, DERS subscale, and ERQ Reappraisal scores that predicted outcome variables did so in a direction opposite to what was expected. This finding is similar to the finding from the initial study where Affectivity (a subscale of the Psychological Mindedness scale) predicted the item that assessed discovery in a direction opposite to what was expected. No explanation is available for these findings. Interestingly, all the DERS and ERQ subscales as well as the DERS scale that correlated with the control group’s various scores (for the present study) did so in the anticipated direction.

Support for the Link between Perception of Technique Helpfulness and Outcome

The finding that participants’ ratings of the helpfulness of their assigned technique as well as their ratings of the power and value (i.e., SEQ Depth) of the technique correlated significantly with Discovery (both groups for helpfulness, control group for power and
value), Cognitive Shift (for both groups), and Distress Reduction (both groups for helpfulness) supports the theoretical suggestion that individuals are aware of whether a technique assists them in accomplishing what is psychologically helpful to them. Also supporting this suggestion is the finding that participants’ increase/decrease in confidence in their assigned technique as they performed it correlated significantly with Distress Reduction and Cognitive Shift for both groups.

Reasons for Terminating the Experiment

The problem with randomization that occurred in the initial experiment did not occur in the present experiment. On the other hand, the results of the present experiment were less convincing than those found in the initial experiment, which resulted in an early termination of the experiment; it was determined that significant findings for important variables were unlikely to occur. The effect size for the variable Distress Reduction that resulted from the data supplied from 38 participants indicated that the experiment’s statistical power if a total of 100 individuals were to participate would be less than .15. This small level of statistical power in combination with the results of comparisons between groups for two additional important variables, Discovery and Cognitive Shift, provided sufficient reason to conclude the experiment.

Future Directions

The failure of this experiment to show significant differences between the two groups (other than for positivity) may reflect the amount of time for which individuals who participated in the present study performed the technique. It is possible that a more intense intervention—performing the technique for longer periods or multiple times, or both—could have produced larger differences between the two groups. Asking volunteers to perform the technique for 20 minutes a day for three months, for example, might yield additional significant results. Moreover, longer and better training with both practice and feedback from coaches included would almost certainly enhance the benefits of performing the technique. Furthermore, finding individuals who are motivated to benefit from the technique would also increase the chances of demonstrating the efficacy of the ESA technique.
References


APPENDIX A

Informed Consent

You are invited to participate in this research study investigating the effectiveness of the way in which you think through problems. During today’s experimental session, you will be asked to complete some questionnaires and to think about a problem in your life for 15 minutes. The entire procedure will take approximately 1 hour total.

To ensure your privacy, you will be asked to fill out questionnaires, as well as work with the problem you choose, in individual rooms. Please note that these rooms come equipped with video cameras and microphones; they will not be used at any time while you are in those rooms or at any time while you are in the clinic today. We must seek your permission to use those cameras and microphones, and we are not seeking your permission to use them.

Your participation today may help us understand what happens when individuals think about their problems, and could ultimately help psychologists understand how to help people. For participating today, you will receive credit toward satisfying your course’s requirements. You may also learn skills to help you in your daily life. The only other direct benefit to you for your participation in this research is the possibility that you will gain a greater understanding of how psychology research is done. You may experience some discomfort while thinking about a problem you choose, however, as the problem will involve a situation in your life that causes you to feel negative emotion. Also, you will be asked for some sensitive personal information on the questionnaires you fill out. You are free to decide whether to answer any of the questions asked.

You will not be asked to put your name on any of the questionnaires that you will be asked to complete. For the purposes of this study, you will be asked only to write the letter of the room in which you fill out the questionnaires on each questionnaire, allowing us to keep your answers as anonymous as possible. Anything with your name written on it will be kept completely separate from your answers on the questionnaires. The information obtained in this study may be published in scientific journals or presented at scientific meetings, but your identity will always be kept confidential.

Participation is voluntary. Your decision whether or not to participate will not affect your present or future relationship with the Psychology Department or Miami University, nor will it affect the grade you receive in your class. You are free to withdraw from this study at any time without penalty. If you want help with the problem you address today, the Student Counseling Service in the Health Services Center is a good place to contact: (513) 529 4634.

If you have any questions about your rights as participants in this research study, you may contact the Office for the Advancement of Research and Scholarship (513 529 3600 or <humansubjects@muohio.edu>). If you have any questions about the study today, please do not hesitate to ask. All questions will be answered. If you think of any additional questions later, please feel free to contact Jay Scolio (513 529 2400 or <scolioaj@muohio.edu>) or William Stiles (513 529 2405 or <stileswb@muohio.edu>). This contact information is provided for you on another
copy of this form that you are invited to keep.

By signing this form, you acknowledge that you are at least 18 years of age and have received a copy of this form that you may keep. Also, your signature indicates that you understand and agree to the above terms and agree to participate in this study.

Name (please print) ____________________ Signature_______________________

Researcher’s Signature __________________ Date ____________________
APPENDIX B
Questionnaire Packet 1

List the letter of the room in which you’re filling out this questionnaire. 

Instructions: For the various items in this questionnaire, please circle the answer that best fits you. You are not required to answer a question if you so choose.

ERQ

We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

<table>
<thead>
<tr>
<th></th>
<th>1 – Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7 – Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I want to feel more positive emotion (such as joy or amusement), I change what I’m thinking about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. I keep my emotions to myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. When I want to feel less negative emotion (such as sadness or anger), I change what I’m thinking about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. When I am feeling positive emotions, I am careful not to express them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. I control my emotions by not expressing them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. When I want to feel more positive emotion, I change the way I’m thinking about the situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. I control my emotions by changing the way I think about the situation I’m in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. When I am feeling negative emotions, I make sure not to express them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. When I want to feel less negative emotion, I change the way I’m thinking about the situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
**DERS**

Please indicate how often the following statements apply to you by circling the appropriate number from the scale below on the line beside each item:

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am clear about my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I pay attention to how I feel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I experience my emotions as overwhelming and out of control.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I have no idea how I am feeling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I have difficulty making sense out of my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I am attentive to my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I know exactly how I am feeling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I care about what I am feeling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I am confused about how I feel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. When I’m upset, I acknowledge my emotions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. When I’m upset, I become angry with myself for feeling that way.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. When I’m upset, I become embarrassed for feeling that way.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. When I’m upset, I have difficulty getting work done.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. When I’m upset, I become out of control.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. When I’m upset, I believe that I will remain that way for a long time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. When I’m upset, I believe that I’ll end up feeling very depressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. When I’m upset, I believe that my feelings are valid and important.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. When I’m upset, I have difficulty focusing on other things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>19.</td>
<td>When I'm upset, I feel out of control.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>When I'm upset, I can still get things done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21.</td>
<td>When I'm upset, I feel ashamed with myself for feeling that way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22.</td>
<td>When I'm upset, I know that I can find a way to eventually feel better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23.</td>
<td>When I'm upset, I feel like I am weak.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24.</td>
<td>When I'm upset, I feel like I can remain in control of my behaviors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25.</td>
<td>When I'm upset, I feel guilty for feeling that way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26.</td>
<td>When I'm upset, I have difficulty concentrating.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27.</td>
<td>When I'm upset, I have difficulty controlling my behaviors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28.</td>
<td>When I'm upset, I believe that there is nothing I can do to make myself feel better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29.</td>
<td>When I'm upset, I become irritated with myself for feeling that way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30.</td>
<td>When I'm upset, I start to feel very bad about myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31.</td>
<td>When I'm upset, I believe that wallowing in it is all I can do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32.</td>
<td>When I'm upset, I lose control over my behaviors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33.</td>
<td>When I'm upset, I have difficulty thinking about anything else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34.</td>
<td>When I'm upset, I take time to figure out what I'm really feeling.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35.</td>
<td>When I'm upset, it takes me a long time to feel better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36.</td>
<td>When I'm upset, my emotions feel overwhelming.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Age ___________

Sex ___________

Year in school (Circle one)   Freshman   Sophomore
       Junior   Senior (includes 5th year and beyond)
       Graduate  Student

Ethnic background (Circle one)   Caucasian   African-American
       Hispanic   Asian-American
       Native-American   Other

**Instructions:** For the following items, please circle the answer that best fits you.

Approximately how many times have you meditated in your entire life? (Circle one)

0       1 – 10       11 – 20       21 – 30       31 – 40       41 – 50       51 – 60       61 – 70
71 – 80       81 – 90       91 – 100       101 – 110       111 – 120       121 – 130       131 – 140
141 – 150       More than 150

Approximately how many sessions of psychotherapy/mental health counseling have you had in your entire life? (Circle one)

0       1 – 10       11 – 20       21 – 30       31 – 40       41 – 50       51 – 60       61 – 70
71 – 80       81 – 90       91 – 100       101 – 110       111 – 120       121 – 130       131 – 140
141 – 150       More than 150
Please indicate your preference in the use of hands in the following activities by putting + in the appropriate column. Where the preference is so strong that you would never try to use the other hand unless absolutely forced to, put + +. If in any case you are really indifferent put a + in both columns.

Some of the activities require both hands. In these cases the part of the task, or object, for which hand preference is wanted is indicated in brackets.

Please try to answer all the questions, and only leave a blank if you have no experience at all of the object or task.

<table>
<thead>
<tr>
<th></th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Writing</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Drawing</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Throwing</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Scissors</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Toothbrush</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Knife (without fork)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Spoon</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Broom (upper hand)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Striking a match (match)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Opening a box (lid)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Which foot do you prefer to kick with?</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Which eye do you use when using only one?</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C
Questionaire Packet 2

List the letter of the room in which you’re filling out this form. ______________

Instructions: You are not required to answer a question if you so choose.

Briefly describe the problem you’ve chosen.
________________________________________________________________________
________________________________________________________________________

Instructions: For the following items, please circle the answer that best fits you.

Right now, how much does your problem bother you? (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Couldn’t Be Worse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How depressed are you feeling right now? (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Couldn’t Be Worse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How anxious are you feeling right now? (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Couldn’t Be Worse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I am confident I can decrease the intensity of the difficult feeling(s) caused by my problem. (Circle one)

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Completely False

Completely True

_in general_, how much does your problem bother you? (Circle one)

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not at All

Couldn’t Be Worse

Rate the level of distress you feel _right now_ as you think about your problem. (Circle one)

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

None

Couldn’t Be Worse
APPENDIX D
Questionaire Packet 3

List the letter of the room in which you’re filling out this form. __________

Instructions: You are not required to answer a question if you so choose.

Once again, briefly describe the problem you wrote on the previous packet.

_________________________________________________________________
_________________________________________________________________

Instructions: For the following items, please circle the answer that best fits you.

Rate the level of distress you feel right now as you think about your problem. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Couldn’t Be Worse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am confident I can perform the technique correctly. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely False</td>
<td>Completely True</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am confident that using this technique will help me feel better about my problem. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely False</td>
<td>Completely True</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I am confident I can decrease the intensity of the difficult feeling(s) caused by my problem. (Circle one)

0        1        2        3        4        5        6

Completely False

Completely True

Right now, how much does your problem bother you? (Circle one)

0        10        20        30        40        50        60        70        80        90        100

Not at All

Couldn’t Be Worse

How depressed are you feeling right now? (Circle one)

0        10        20        30        40        50        60        70        80        90        100

Not at All

Couldn’t Be Worse

How anxious are you feeling right now? (Circle one)

0        10        20        30        40        50        60        70        80        90        100

Not at All

Couldn’t Be Worse
Right now I feel:

<table>
<thead>
<tr>
<th>Feeling</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>happy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>angry</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>moving</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>uncertain</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>calm</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>confident</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>friendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>slow</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>energetic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>quiet</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
List the letter of the room in which you’re filling out this form. ____________

**Instructions**: You are not required to answer a question if you so choose.

Once again, briefly describe the problem you wrote on the previous two packets.

________________________________________________________________________

________________________________________________________________________

**Instructions**: For the following items, please circle the answer that best fits you.

Right now, how much does your problem bother you? (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Couldn’t Be Worse</td>
<td></td>
<td></td>
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How depressed are you feeling right now? (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Couldn’t Be Worse</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

How anxious are you feeling right now? (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Couldn’t Be Worse</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
Rate the level of distress you feel right now as you think about your problem. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While performing the technique, I discovered aspects of myself previously unknown to me. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely False</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While performing the technique, how much did any belief, thought, attitude, or expectation related to your problem change? (If more than one belief, thought, attitude, or expectation changed, rate the one that changed the most.) (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
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<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Significantly</td>
</tr>
</tbody>
</table>

While performing the technique, I felt a sense of relief or release related to my problem. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely False</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Performing the technique helped me see more of what happens within me when I think about my problem. (Circle one)

0  1  2  3  4  5  6
Completely
False

The way I think about my problem changed in a positive way as a result of performing the technique. (Circle one)

0  1  2  3  4  5  6
Completely
False

Performing the technique caused my problem to be less of a concern to me. (Circle one)

0  1  2  3  4  5  6
Completely
False

Performing the technique helped me see more clearly what happens within me when I think about my problem. (Circle one)

0  1  2  3  4  5  6
Completely
False

Performing this technique gave me understanding about myself in relation to my problem. (Circle one)

0  1  2  3  4  5  6
Completely
Performing the technique has helped me put this problem behind me. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>False</td>
<td>Completely</td>
<td>True</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True</td>
<td>Completely</td>
<td>False</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

While performing the technique, about how many times did you discover aspects of yourself previously unknown to you?

________

My thoughts that cause my problem to bother me changed as a result of performing the technique. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>False</td>
<td>Completely</td>
<td>True</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True</td>
<td>Completely</td>
<td>False</td>
<td></td>
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</tbody>
</table>

For what percentage of the 10-minute time period were you able to perform the technique?

________% 

I was able to perform the technique correctly. (Circle one)

<table>
<thead>
<tr>
<th>0</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>False</td>
<td>Completely</td>
<td>True</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True</td>
<td>Completely</td>
<td>False</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
While performing the technique, my confidence that it would help me feel better about my problem increased / decreased. (Circle one)

-50  -40  -30  -20  -10  0  10  20  30  40  50

Decreased  Increased

I am confident that I can decrease the intensity of the difficult feeling(s) caused by my problem. (Circle one)

0  1  2  3  4  5  6

Completely False

Completely True

I am confident that using this technique will help me feel better about my problem. (Circle one)

0  1  2  3  4  5  6

Completely False

Completely True

I found the technique helpful. (Circle one)

0  1  2  3  4  5  6

Completely False

Completely True
The experience of performing the technique was:

- bad 1 2 3 4 5 6 7 good
- difficult 1 2 3 4 5 6 7 easy
- valuable 1 2 3 4 5 6 7 worthless
- shallow 1 2 3 4 5 6 7 deep
- relaxed 1 2 3 4 5 6 7 tense
- unpleasant 1 2 3 4 5 6 7 pleasant
- full 1 2 3 4 5 6 7 empty
- weak 1 2 3 4 5 6 7 powerful
- special 1 2 3 4 5 6 7 ordinary
- rough 1 2 3 4 5 6 7 smooth
- comfortable 1 2 3 4 5 6 7 uncomfortable

Right now I feel:

- happy 1 2 3 4 5 6 7 sad
- angry 1 2 3 4 5 6 7 pleased
- moving 1 2 3 4 5 6 7 still
- uncertain 1 2 3 4 5 6 7 definite
- calm 1 2 3 4 5 6 7 excited
- confident 1 2 3 4 5 6 7 afraid
- friendly 1 2 3 4 5 6 7 unfriendly
- slow 1 2 3 4 5 6 7 fast
- energetic 1 2 3 4 5 6 7 peaceful
- quiet 1 2 3 4 5 6 7 aroused
What happened for you while you performed the technique?

What, if anything, happened while performing the technique that made it work for you?

What problems, if any, did you experience while performing the technique?

Please return to the group room when you’ve finished this questionnaire. Please place this questionnaire, and the questionnaire you filled out prior to performing the technique, in the box in the group room.
APPENDIX F
Debriefing Statement

Thank you for participating in today’s experiment. It is because of participation such as yours that the field of psychology can make advances. Also, research such as you experienced today enhances Miami University’s reputation.

You were asked to sit in a room and think about the problem you chose. You were given one of two different techniques to try as you considered your problem. We are interested in determining if these techniques were effective in helping you with your problem and if one might have been more effective than the other.

As suggested by the questionnaires you filled out today, we’re interested in how this impacted your thoughts and feelings. Understanding how your thoughts and feelings were impacted will help us understand how to help people suffering from problems such as the one you addressed today.

Considering a problem in your life may have caused you some discomfort. If you would like help dealing with this or any other problem, the Student Counseling Service is a good place to contact. Their phone number is (513) 529 4634, and they are located within the Health Services Center.
APPENDIX G

Instructions for Performing Both Techniques

Instructions for Performing the Experimental Technique

Slide 1. <Blank>

Slide 2. I’d like to teach you how to perform a technique that could help reduce the negative emotion associated with the problem you chose. This technique relies on your awareness of what’s going on within you while you focus on your problem.

Slide 3. Just what is it that goes on within you that we’d like you to be aware of today? That’s pretty straightforward: Your feelings, physical sensations, images of past or present situations, and thoughts. We’d like you to become aware of whichever of these holds your attention or seems important to you.

Slide 4. Why would you want to be aware of these aspects of yourself? It may be worthwhile to see what’s going on inside yourself because you may gain some relief from your problem in doing so.

Slide 5. There’s an art to seeing clearly what goes on within you. It involves being curious about your inner experience. It also involves being open to new discoveries about yourself. It’s a willingness to be surprised by what you discover about your feelings, sensations, images, or thoughts. What it does not involve is trying to change, suppress, or get rid of what you see. Instead, it’s a gentle awareness of what’s going on within you without trying to change it.

Slide 6. When you perform this technique in the privacy of your individual rooms, it will work as follows: First, focus on the problem you’ve chosen. Shortly after you’ve begun focusing on the problem, you should experience a feeling, a physical sensation, an image, or a thought. Put what you experience into words – out loud, at a volume that’s comfortable to you. Also, make sure to say it in the first person – using “I,” “I’m,” or “my” at the beginning of the sentence.

Slide 7. Here are some examples of describing what you experience: If you experience a feeling such as fear, you might say, “I’m feeling afraid.” The word “I’m” makes this a first-person expression. If you experience a physical sensation, you might say, for example, “My chest muscles are tightening.” The word “my” makes this a first-person expression. If you experience an image of a past situation, you might say, for example, “I’m trying to object to my father’s abuse.” And if you experience a thought, it might be “I’m no good” or “I have a lot to do today.” Here “I’m” and “I” make these sentences first person. So, again, please use “I,” “I’m,” or “my” to describe your inner experience.
Slide 8. Next, say your first-person description of what’s going on inside you back to yourself. Please do this out loud and make sure to say it kindly. Also, you need to say it to yourself in the second person, which means using “you” or “you’re” at the beginning of the sentence. Finally, use different words to do this. That is, rephrase the words of the first-person statement into your second-person statement.

Slide 9. Here are two examples of rephrasing: An example involving fear includes the first-person statement “I’m afraid.” One way to rephrase it back to yourself kindly would be, “You’re scared right now.” An example involving an image of a situation from the past includes the first-person statement, “I’m trying to object to my mother’s behavior.” One way to rephrase that statement back to yourself, while making sure to say it kindly to yourself, would be, “You’re feeling too intimidated by your mother to tell her to stop.”

Why are we asking you to do this rephrasing? It's possible that it may help you to experience more of what's going on within you in relation to your problem.

Slide 10. There’s no need to stress about rephrasing. Just change as many words as you’re comfortable with. If need be, just rephrase a statement such as “I’m angry” into “you’re angry.” In other words, “I’m” just becomes “you’re.” Make sure you say it kindly to yourself with a sense of understanding. Your ability to rephrase first-person statements into second-person statements might become more sophisticated as you continue to perform the technique. After you’ve rephrased your statement back to yourself, another feeling, sensation, image, or thought should arise. Put that experience into words and then rephrase those words. In the off chance that nothing arises, just repeat the rephrased words until something does arise.

Slide 11. Here’s a review of what to do when performing this technique: Focus on the problem you chose. Describe the feeling, sensation, image, or thought that arises. Make sure to say it out loud in the first person. Rephrase these words kindly to yourself. Make sure to rephrase out loud in the second person. Then, repeat this technique with the next feeling, sensation, image, or thought that arises.

Slide 12. If you’re feeling judgmental or critical toward yourself as you’re performing the technique, you might, for example, find yourself saying things like “I’m messing this up,” or “I’ve got to get rid of this feeling,” or “nothing’s happening.” If such a thought becomes distracting, you can use the technique to help you work with it. In that case, you’d perform the technique with your critical thought as the focus, making sure to return to your original problem within 30 seconds, however.

Slide 13. So here’s one more review: Focus on the problem you chose. Describe the feeling, sensation, image, or thought that arises. Make sure to say it out loud in the first person. Rephrase these words kindly to yourself. Make sure to rephrase out loud in the second person. Then, repeat this technique with the next feeling, sensation, image, or thought that arises. Continue to repeat these steps for the duration of the exercise. When instructed to start, perform the technique for 10 minutes. You’ll be given the opportunity to do this in the privacy of your individual rooms. You might feel a little silly at first when beginning the technique, but please go ahead and perform it when you’re asked to
start. Make sure to keep performing the technique until the 10 minutes are up. Because 10 minutes are available, there’s no need to rush. Take the time to see accurately what’s going on within you, then describe it accurately, and then rephrase it to yourself with kindness and understanding.

Instructions for Performing the Control Technique

Slide 1. <Blank>

Slide 2. I’d like to review for you a technique that could help reduce the negative emotion associated with the problem you chose. It’s something that you have more than likely done with other problems you’ve experienced in the past. This technique is simply to think about your problem.

Slide 3. Just what is it that we want you to think about today? That’s pretty straightforward: Anything that you would typically think about when you have an interpersonal problem, as long as you restrict your thinking to the problem you chose. You might, for example, think about the external situation—what the other person did or what you did—or you might think about your internal reactions, or what you might have done differently. In short, anything you want to think about regarding your chosen problem is appropriate for this study.

Slide 4. Why would you want to think about your problem? It may be worthwhile to think about your problem because doing so exposes you to its various aspects. By facing your problem in this manner, you might gain some relief from it.

Slide 5. Because individuals think about their problems in their own idiosyncratic ways, I’m not going to give you any direction in how to do so. When instructed to start, simply think about your problem in any way you see fit for 10 minutes. You’ll be given the opportunity to do this in the privacy of your individual rooms. Make sure to keep performing this technique of thinking about your problem until the 10 minutes are up. Because 10 minutes are available to perform the technique, there’s no need to rush. Take the time to think about your problem in any way you see fit.