THE WORK OF BYRON KATIE:

THE EFFECT OF APPLYING PRINCIPLES OF INQUIRY

ON THE REDUCTION OF PERCEIVED STRESS
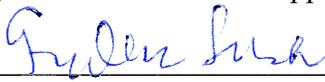
by

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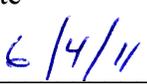
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Abstract

The Work of Byron Katie:

The Effect of Applying Principles of Inquiry

on the Reduction of Perceived Stress

by

Fabrice Ange Nye

Stress has been associated with a variety of chronic and acute conditions and with higher use of health care services. This study examines the effects of a 6-week stress reduction program based on a process developed by Byron Kathleen Mitchell—better known as Byron Katie. This technique is called interchangeably *The Work* or *Inquiry*. This study recruited nearly a hundred volunteers between the ages of 30 and 71, randomized into either an experimental group or a waiting-list control group. Both the treatment and the control groups received the Perceived Stress Scale (PSS), the Acceptance and Action Questionnaire (AAQ-16), the Satisfaction With Life Scale (SWLS), and the State-Trait Anxiety Inventory (STAI) at baseline, postintervention, and a six-week follow-up. The treatment was administered during the first 6 weeks. Prior to the assessments, all participants were prescreened using a questionnaire about their stress level, mental health, and whether they were in therapy. In addition, a demographic questionnaire and the NEO Five Factor Inventory (NEO-FFI) were administered to establish covariates. The members of the treatment group were asked to participate in focus groups at the end of the treatment. The research hypothesis was that the treatment group receiving training in Inquiry would show an improvement superior to that experienced by the control group, as measured by the selected instruments for the study. A set of unpaired *t*-tests applied to measured data revealed

significant changes at postintervention for perceived stress ($p < .01$) and acceptance ($p < .05$), and at follow-up for anxiety ($p < .05$), perceived stress ($p < .001$), acceptance ($p < .05$), and subjective well-being ($p < .01$). A set of unpaired *t*-tests applied to imputed data revealed no significant changes at postintervention or at follow-up. A further refining of the analysis using analyses of covariance revealed significant changes ($p < .001$, except for AAQ/Post/Measured, SWLS/Post/Measured, and AAQ/Post/Imputed where $p < .01$) after correcting for covariates. Covariates for each analysis were chosen by forward selection model. Focus group interviews revealed that participants in the intervention found the treatment helpful and could point to improvements in their lives. Results suggest that an inquiry-based intervention with a nonclinical population may mitigate chronic stress.

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Chapter 1: Introduction

Two decades ago, in the high desert of California, a new process of inquiry was being discovered. This process originated in the mind of Byron Kathleen Mitchell—better known as Byron Katie—an ordinary woman from Barstow who had no academic, psychological, or spiritual background, but who had the sudden realization, one day, that when she believed her stressful thoughts, she suffered, and when she questioned them, she did not suffer (Mitchell & Mitchell, 2002). Since then, tens of thousands of people around the world have applied this process (Byron Katie International, personal communication, February 5, 2009), referred to interchangeably as *The Work* or *Inquiry*, and have reportedly brought more peace into their lives, investigating the beliefs that disturb them, by answering four simple questions.

Suffering is an integral part of the human experience, as evidenced by the number of ancient and modern traditions that have addressed it as a human problem taking root within human cognition, as will be seen below. For Advaita Vedanta, the main source of suffering is ego identification, the notion of separation from *brahman* (the infinite), and an existential sense of finitude (Rambachan, 2006). In Buddhism suffering is attributed to craving, anger, ignorance, arrogance, and wrong views (Khong, 2003). Hinduism, from which Advaita Vedanta was born, seeks a causal explanation for suffering in the law of karma, suggesting that we suffer because of wrongdoing in this life or in previous ones (Kaufman, 2005).

Many methods or systems throughout history have tried to alleviate suffering. Twenty-five centuries ago, Siddhartha Gautama formulated the four noble truths of Buddhism, which attribute the root cause of suffering to people's cravings for impermanent things, enabled by ignorance, especially related to the idea of a separate self (Daya, 2005). Closer to the present era, Latin philosopher Epictetus was asking "What then are the things which are heavy on us and disturb us?

What else than opinions?" (Long, 1890, p. 150). Byron Katie came to a similar conclusion, and

created a process allowing the disputation of those opinions—or "stories," as she also calls beliefs.

She refers in those terms to the thoughts that contradict reality, and yet to which people attach. For

example, a judgment such as "People should not lie" is in conflict with reality, because casual

observation says that people, indeed, do lie. Byron Katie's method of disputing what she terms

"stressful thoughts" (Mitchell & Mitchell, 2002, p. xiv) inscribes itself quite naturally into the

cognitive behavioral tradition, which consists of the questioning of dysfunctional, stress-inducing

thought patterns, in order to bring them in alignment with reality.

 Byron Katie did not arrive at this insight through a logical cognitive process, but in an

extemporaneous manner, in the wake of what can only be construed as a mystical experience, the

central characteristics of which have been variously defined—with much overlap—by several

authors (e.g., Doblin, 1991; Hunt, 2000; Hood et al., 2001). Rooted in numinous knowledge, Byron

Katie's Inquiry goes beyond the realm of cognitive-behavioral methods, in the way it considers *any*

thought or concept as untrue (Mitchell & Mitchell, 2007), and that believing in any untrue concept

brings some level of stress, even if only a subtle one (Byron Katie, 2004). For example, believing a

concept as simple as "I like chocolate" creates a world with a hierarchy of tastes, some better than

others, with the implied discomfort (a subtle form of stress) of eating food that rates low on this

hierarchy. Byron Katie sees this labeling as imposing a fabricated overlay onto reality.

 The Work delves deeply into the suffering brought about by one's stressful thoughts, in

order to unearth the truth that shall set one free. An axiom underlying this work is that the

experience of suffering (what Byron Katie calls "stress") operates as a signal that lets an individual

know that he or she has attached to a concept that is untrue for him or her. Discovering that a

stressful concept is untrue automatically leads to a lessening of this suffering (Mitchell & Mitchell,

2002). Here, Inquiry is an attractive path because it can quickly help someone conduct such an investigation. The word "stress," when used by Byron Katie in publications, materials, and public events, covers not only a person's psychological and physical strain in response to excessive and persistent internal or external demands—often coupled with an inability to cope and restore balance—but also refers to a host of negative emotions including anxiety, anger, resentment, fear, sadness, jealousy, etc., "anything from mild discomfort to intense sorrow, rage, or despair" (Mitchell & Mitchell, 2002, p. x). Many people who use Inquiry to investigate their beliefs report a diminution of such emotions (Byron Katie, 2009).

Stress has been linked to cardiovascular diseases (Heslop et al., 2001; Strodl, Kenardy, & Aroney, 2003; Rosengren et al., 2004; Brotman, Golden, & Wittstein, 2007), the leading cause of death in the United States, affecting one in three American adults according to the World Health Organization (Rosamond et al., 2007). Occupational stress is a concern for employers, in order to maintain organizational efficiency and success, and has spurred the growth of the specialized field of stress management (a journal is dedicated to the field, and a database search on the phrases "occupational stress" and "stress management" returned 539 results). A variety of stress management programs in the workplace provide employees with the skills to cope with stress: relaxation, meditation, biofeedback, cognitive-behavioral therapy, exercise, time management, and counseling through employee assistance programs (Giga, Cooper, & Faragher, 2003).

One must not lose sight of the fact that the aim of psychotherapy ought not to be the relief of symptoms, but that of suffering (R. B. Miller, 2004).

The Work of Byron Katie presents itself as a worthwhile method for addressing stress where it, in theory, originates: in one's thoughts and beliefs about the world. In spite of abundant anecdotal evidence that Inquiry has been helpful for people encountering issues as diverse as financial and

work problems, interpersonal conflicts, or grief and loss, its efficacy has not yet been studied systematically.

The purpose of this study is to determine how effective Byron Katie's method of inquiry is against stress. In the next chapter this method will be compared and contrasted with accepted stress-management methods, such as mindfulness-based stress reduction (Kabat-Zinn, 1990), inspired by Buddhist meditation techniques, or cognitive-behavioral therapy for the treatment of anxiety (Beck & Emery, 1985). This intervention is a process that can easily be taught in a six- to eight-week series, and that does not require the help of a trained professional to be practiced. This study aims to test its potential to enhance the general well-being of people suffering from stress.

The insights that resulted in the development of Inquiry as a method to reduce stress and suffering emanate directly, based on the description given by Byron Katie, from a mystical experience. Byron Katie herself makes no mystical claims, nor is she trying to promote mystical experiences. She writes that when people ask her whether she is enlightened, her response is that she is simply "someone who knows the difference between what hurts and what doesn't" (Mitchell & Mitchell, 2002, p. xii). However, this method presents itself as a contemporary version of widely recognized, time-honored paths within the spiritual traditions. Furthermore, because it does not assert itself as heir to any particular tradition, and because it offers a very pragmatic path to inner peace, it could be beneficial to people who are unable to use more traditional paths. One may look at Inquiry as a new approach to the age-old problem of suffering brought about by what may be called one's separation from one's true nature, separation from God, or fall from grace—even though Byron Katie makes no such claims. Her worldview does not discriminate between more or less stressful thoughts.

Chapter 2: Literature Review

Evidence has accumulated that mental states—in particular negative affects—have a direct influence on physical diseases (Stanley, 2008). Findings from a diversity of disciplines, relating psychosocial factors to cardiovascular disease (CVD) morbidity and mortality, are rapidly accruing (Rosengren et al., 2004; Everson-Rose & Lewis, 2005; Aboa-Eboulé et al., 2007; Player et al., 2007). Available evidence indicates that negative emotional states (depression, anger, and anxiety), psychosocial stressors such as job stress, and social factors (social ties, social support, and social conflict) are associated with increased risk of CVD (Everson-Rose & Lewis, 2005; Rosengren et al., 2004). Job strain increases the risk of a first coronary heart disease (CHD) event, as well as the risk of recurrent CHD events after a first myocardial infarction (MI) (Aboa-Eboulé et al., 2007). High levels of trait anger in middle-aged prehypertensive men are associated with increased risk of hypertension and CHD, and long-term stress is also associated with increased risk of CHD in both men and women (Player et al., 2007). Evidence from a number of studies is beginning to show that circulating inflammatory markers tend to increase following laboratory-induced psychological stress (Steptoe, Hamer, & Chida, 2007). Associations between psychological stress and disease have been established for CVD and HIV/AIDS, and more research findings suggest a role of stress in upper respiratory tract infections, asthma, herpes viral infections, autoimmune diseases, and wound healing. The consistency of those findings strongly supports the hypothesis of a causal link (Cohen & Janicki-Deverts, 2007). In addition, many studies found that cumulative stress from minor stressors (known as *microstressors* or *daily hassles*) was more strongly correlated with physical or psychological disorder than stress from major life events (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner, Coyne, Schaefer, & Lazarus, 1981; Monroe, 1983; Kohn, 1996; Kraaij, Arensman, & Spinhoven, 2002; Serido, Almeida, & Wethington, 2004).

In the past two decades, mindfulness meditation and other Eastern spiritual principles, such as acceptance, have increasingly been influencing Western psychotherapy, taking root in what has been called a third wave of behavioral and cognitive therapies (Hayes, 2004; Ciarrochi, Robb, & Godsell, 2005; Eifert & Forsyth, 2005; Hofmann & Asmundson, 2008; Öst, 2008). These therapies build upon traditional cognitive and behavioral approaches, with key differences. They primarily distinguish themselves by their emphasis on contextual and experiential change strategies. Rather than teaching people how to control and change the contents of their thoughts and feelings, as in traditional behavioral and cognitive therapies, they focus on changing the relationship to thoughts, noticing and accepting them. In other words, the emphasis is not just on trying to change *what* one thinks but *how* one thinks. They also focus on generally applicable skills (e.g., mindfulness, acceptance, commitment, etc.) to enhance clients' repertoire in a skill-building way that does not pathologize their condition. Therapists have a responsibility to apply the methods to themselves as well, so that "therapist and client are thought to be swimming in the same stream" (Hayes, 2004, p. 660). Most notably, many elements coming from other, older traditions are readily embraced when recognized to be therapeutically helpful:

> Issues of spirituality, values, emotional deepening, and the like are now central in a way that was uncommon or even unwelcome before. What is resulting is recognizably part of the behavioral and cognitive therapy tradition, but is nevertheless linked to the issues and concerns of other traditions, including some of those (analytic, Gestalt, humanistic, existential) that were turned away from in the earliest days of behavior therapy. (Hayes, 2004, p. 660)

Within the same time frame when Acceptance and Commitment Therapy (ACT) and other third-wave therapies were being developed, The Work of Byron Katie was gaining popularity as a self-help method among people with a variety of life problems (Mitchell & Mitchell, 2002). Despite many commonalities between The Work and modern therapies, and the fact that several psychotherapists use Inquiry in their practice, no formal studies on its efficacy have been done, and

the only publications describing the process are two general audience books attributed to Byron Katie (Mitchell & Mitchell, 2002; Mitchell & Katz, 2005). The first of these books, *Loving What Is*, co-authored by Byron Katie's husband, Stephen Mitchell, functions as a de-facto manual for the process of Inquiry.

Origin of Suffering

Several traditions have addressed the problem of the root causes of suffering. Over twenty centuries ago, in the *Yoga Sutras*, the basic text of the yoga tradition, where Patanjali codified the contemporary practice and philosophy of yoga, he offered an understanding of the origins of human suffering. According to Patanjali, human suffering is rooted in the five afflictions or *kleshas*, namely: the identification with the body-mind (*asmita*), attachment (*raga*), aversion (*dvesa*), and the ego's fear of death or annihilation (*abhinivesha*), these four afflictions being predicated on the primary cause of the ignorance of one's divine origin (*avidya*) (Hartranft, 2003; Iyengar, 2003).

Gautama Buddha preceded Patanjali by two or three centuries—although the chronology is still debated by scholars. However, whether one was inspired by the other, or whether they both drew from an existing body of knowledge present during those early centuries, one cannot help but notice parallels between the two works, especially around the question of suffering. In the Pali canon, the Buddha addresses the existence and cause of suffering in the first two of the four noble truths (Nhat Hanh, 1998; Heim, 2008): (1) There is suffering (*duhkha*); (2) There is a cause, origin, or arising (*samudaya*) of suffering; (3) There is an end to suffering (*nirodha*); (4) There is a path (eightfold path) (*magga*) out of suffering. Nhat Hanh (1998) describes the afflictions (*kleshas*) that give rise to suffering according to the Buddha: "craving, anger, ignorance, wrong views, and prejudice. Whether we are happy or we suffer depends largely on our perceptions" (p. 54). Because it is usually listed first, craving is often seen as the major affliction, however, the others are no less

susceptible to engender suffering (Khong, 2003). A main tenet of Buddhism is that thoughts (and

other cognitive states) have no power of their own: "Sensory perceptions, memories, thoughts, and

dreams do not have the capability of direct influence on behavior or on the environment. . . . The

true potency of cognition is in its indirect effect on behavior and the environment when an

individual decides to respond to cognition" (Toneatto, 2002, p. 76). Buddhism teaches that

cognitive phenomena are nonveridical, and are rarely based on an accurate description of the

environment, as it presents itself to the senses (Toneatto, 2002). Buddhism recognizes the

inevitability of the arising of thoughts. Toneatto (2002) writes:

> "*Cognitive phenomena are unavoidable*. Humans, while alive and conscious, are
> continuously cognitively active. . . . Efforts to prevent cognition are ineffectual. . . .
>   *The onset of cognitive activity is outside of our control*. Cognitive states appear to
> arise, abide, and cease within awareness without any apparent conscious involvement of the
> individual. This is most obvious with regard to the activity of our senses, which are
> completely outside of our conscious control. Even mental events such as thoughts are rarely
> initiated in a deliberate fashion but typically simply arise within awareness" (p. 75, emphasis
> in the original).

According to Advaita Vedanta, the philosophy derived from the Hindu *Upanishads* and

commented upon by Shankara (Prabhavananda & Isherwood, 1970) and Gaudapada (Gaudapada &

Raphael, 2002), the main source of suffering is the fact that instead of identifying with *atman*

(unborn, ultimate reality), human beings identify with *maya* (illusory, impermanent matter). Here

again, suffering and stress derive from a cognitive misattribution, and relate to the fundamental

nature of human beings. In other words, Gaudapada writes, the cause of suffering is ignorance

(*avidya* or *ajñana*).

In Western traditions, second-century Latin Stoic philosopher Epictetus exhorts his readers,

in his *Enchiridion*—a handbook summarizing for his students the principles described in his

Discourses—to remember that "what disturbs men's minds is not events but their judgments on

events" (Epictetus & Matheson, 1968, p. 276). This view influenced later Stoic philosophers such as

Marcus Aurelius, who writes "Get rid of the judgement; you are rid of the 'I am hurt'; get rid of the 'I am hurt', you are rid of the hurt itself" (Aurelius, Rutherford, & Farquharson, 2008, p. 25). One also finds the notion of acceptance as a path to peace in Epictetus (1994): "Don't demand that events happen as you would wish them to. Accept events as they actually happen. That way peace is possible" (p. 22). Seneca (1969) echoes Epictetus's words in recommending to eat whatever food one is given:

> It is in no man's power to have whatever he wants; but he has it in his power not to wish for what he hasn't got, and cheerfully make the most of the things that come his way. And a stomach firmly under control, one that will put up with hard usage, marks a considerable step towards independence (p. 227).

Historically and culturally closer to modern times, and speaking through the voice of Hamlet comparing Denmark to a prison, Shakespeare (1603) writes that "there is nothing either good or bad, but thinking makes it so" (*Hamlet*, Act 2, Scene II). This line could simply be read as a statement on the relativity of good and evil, but significantly it also places the emphasis on how Shakespeare recognized the influence of thought on human misery.

This relativist maxim was rediscovered by the pioneers of cognitive psychotherapy, along with Hellenistic philosophy, and has become a foundation of Rational-Emotive-Behavior-Therapy (REBT; Still & Dryden, 2003) and Cognitive-Behavioral Therapy (CBT; Beck & Greenberg, 1985). Ellis (1994), in particular, was inspired by the Stoics' thinking in formulating the foundation of REBT (originally called simply "rational therapy"). For Ellis (1993), this distortion of reality is an innate tendency that leads human beings to construct absolutist demands about their desires, resulting in making themselves emotionally and behaviorally dysfunctional. Ellis (1993) describes a phenomenon known as "the ABC of REBT," where an activating event (A), combined with a belief (B) about that event, produces emotional and behavioral consequences (C) of holding that belief.

More recently, the emerging model of Acceptance and Commitment Therapy (ACT) refines

this further, beyond the traditional cognitive therapies model, by introducing the concept of cognitive fusion, defined by Eifert and Forsyth (2005) as "a process that involves fusing with or attaching to the literal content of our private experiences" (p. 88). The authors write that "when fusion occurs, a thought is no longer just a thought, and a word is no longer just a sound; rather, we respond to words about some event as if we were responding to the actual event the words describe" (p. 88), adding that fusion is responsible for much of human suffering, and that the habit of fusion is a difficult one to break. ACT also ranks experiential avoidance among the greatest cause of unnecessary suffering (Hayes & Smith, 2005). According to Hayes and Smith, the underlying mechanism is the fact that people apply the same problem-solving skills to psychological pain as they are trained to do in the material world. This often results in experiential avoidance, and paradoxically increases suffering.

In Byron Katie's worldview, Inquiry is based upon the axiom that "A thought is harmless unless we believe it. It is not our thoughts but the *attachment* to our thoughts that causes suffering. Attaching to a thought means believing that it's true without inquiring" (Mitchell & Mitchell, 2002, p. 4). But not all thoughts are susceptible to induce suffering. Byron Katie writes that "the only time we suffer is when we believe a thought that argues with what is" (p. 1). A thought that "argues with what is," in this context is considered to be untrue, because it opposes reality. Pursuing to its conclusion Byron Katie's constructivist worldview, no concept is seen as true, and therefore, all concepts are susceptible to lead to suffering. In order to be able to inhabit that space, even if only for a moment, Byron Katie prescribes the adoption of the *don't-know mind*, a state of openness to Inquiry that leaves room for any answer to emerge out of the question "Is it true?" This state is not unlike what Zen master Suzuki (2006) called Beginner's Mind, a stance prior to preconceptions and judgments. Yet, one must be aware of not falling into the trap of turning the no-concept-is-true

concept itself into dogma. Doing so would defeat the intent of Inquiry, which invites the practitioner to approach each moment with fresh eyes.

Although emphasis in this work is put on the influence of thinking on emotions, research suggests a bidirectional relation between affect and belief; Boden and Berenbaum (2010) describe how changes in affect influence belief content, and how the need to make sense of experience and the need to regulate affect create feedback loop where affect and belief influence each other. Cognitive behaviorists have adapted their conceptualization of cognitive theories over time, to acknowlege this reciprocity, and recognize that "emotions and behaviors significantly influence and affect thinking, just as thinking significantly influences what we call emotions and behaviors," and that "although emotions may sometimes exist without thought, it appears to be almost impossible to sustain an emotional outburst without bolstering it by repeated ideas" (Ellis, 2003, p. 221), and that "as a cause or independent variable, emotion may impair or interfere with subsequent thought and also produce feedback about its consequences, which engender further thoughts that are emotional. The moment an emotion occurs it becomes food, so to speak, for the next appraisal and emotion" (Lazarus, 1991, p. 353). In this context, one may exercise caution in the face of the assertion that cognition always precedes and engenders emotion, lest one adopt a one-sided or incomplete approach. As a stress-management approach, there may be value in Inquiry, but approaches stemming from the other side of the thinking-emotion equation may have as much legitimacy.

Although peripheral to this study, the biological bases of behavioral and emotional change are worth mentioning here. Given the dramatic increase in the amount of information available to psychologists about neurobiology over the past 20 years, it could be beneficial to consider cognitive methods within that context. Siegel (2006) proposes a neurobiological view of well-being where functionally separate areas of the brain become linked together as an integrated system. This

integration leads to a flexible, adaptive, and coherent flow of energy and information (Siegel 2009).

While chronic stress can affect neurological functioning and play a role in mental health concerns

(Baylis, 2006), research also suggests that psychotherapy has biological effects (Cozolino, 2002;

Gabbard, 2000; Liggan & Kay, 1999). It may be useful to consider interventions that bring about

positive emotional change through the lens of neurobiology.

Defining Stress

The phrase "stressful thoughts" is used liberally in Inquiry, and tends to refer to thoughts

generating a wide range of negative emotions such as sadness, resentment, frustration, anger, etc.

Byron Katie considers "stress" as a useful emotion (or range thereof), that acts as "an alarm clock

that lets [people] know that [they] have attached to thought[s] that are not true for [them]" (Byron

Katie, 2004). In that sense, Byron Katie recognizes, along with Buddhism, ACT, and REBT, that

negative emotions are a useful reminder to start the Inquiry process. Ever since Hans Selye (1950)

introduced the construct of stress in a physiological context as the rate of wear and tear caused by

life, psychologists and medical researchers have studied the correlation between stressors,

psychological distress, stress response, and physiological sequelae. However, if stress is to be the

main target of an intervention, its definition has to be operationalized. Lazarus and Folkman (1984)

define stress as "a particular relationship between the person and the environment that is appraised

by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p.

19). Similarly, Cohen, Kessler, and Gordon (1995) see it as what occurs when an individual

perceives that environmental demands tax or exceed his or her adaptive capacity.

Thoughts produce after their kind, in what Byron Katie terms "the order of creation"

(Mitchell & Mitchell, 2002): (1) A thought (and for the purpose of Inquiry, only stressful thoughts

are considered) gives rise to a feeling; (2) in reaction to the feeling, one acts upon it (either to

assuage or to perpetuate it); (3) the action has consequences, which then, in turn, give birth to more

thoughts. The process is summarized in the sequence Think - Feel - Act - Have, in a fashion

reminiscent of the ABC of REBT.

Relieving Suffering

The systems described above do more than uncover the sources of stress; they also propose

remedies for it. Having observed the existence and the root causes of suffering, Patanjali offers what

Iyengar (2003) prescribes as the fourfold remedy for overcoming these obstacles. They include:

1. *Maitri* – love, friendliness, and a feeling of oneness with others
2. *Karuna* – active compassion with devoted action to relieve the misery of the afflicted
3. *Mudita* – delight at the good
4. *Upeksa* – disregard, equanimity, the understanding of one's own weakness

The qualities listed here are a prescription for life reminiscent of the Buddha's Noble

Eightfold Path. The first strand of the Eightfold Path is Right View, or Right Understanding. Right

View refers to an understanding of the Four Noble Truths and of the way things truly are. Right

View provides an insight into the mechanics of suffering (or stress). Buddhism considers negative

cognitive processes to have value: "Cognitive states, but especially unpleasant ones, more often

than not are indicators of the need for significant changes in our lives. Unpleasant cognitive states

serve the same function, psychologically, as does pain for our physical well-being" (Toneatto, 2002,

p. 76).

The ancient allegory of the snake and the rope, mentioned as far back as the *Upanishads*

(Gaudapada & Raphael, 2002), illustrates how the removal of ignorance, in and of itself, results in

the disappearance of afflictions, without necessarily controlling one's thinking. It tells the story of a

man who encounters a snake on the path at twilight, and becomes frightened. But upon closer

inspection, what looked to him like a snake is seen for what it is: a mere rope lying on the ground.

All fear then disappears, not because of some sudden mastery over snake phobia, but because of the

realization that there is nothing to be feared. Suffering brought about by fear is thus ended not by the acquisition of any skills, but by the acquisition of knowledge.

Indologist Georg Feuerstein (1996) writes that *jñana yoga* "consists in a radical dismantling of all our delusions and illusions, attachments, fears, sorrows, opinions, desires, hopes, and expectations. Every experience or piece of information is approached with the insight that this does not represent the Truth, the Self" (p. 17). The practice of self-inquiry that emerged from Advaita-Vedanta was made popular in the twentieth century by Indian sage Ramana Maharshi (Maharshi & Mahadevan, 1902). Maharshi and Mahadevan (1902) write:

> The enquiry 'Who am I?' is the principal means to the removal of all misery and the attainment of the supreme bliss. When in this manner the mind becomes quiescent in its own state, Self-experience arises of its own accord, without any hindrance. Thereafter sensory pleasures and pains will not affect the mind. (p. 11)

Although REBT can be seen as a method of self-inquiry, Ellis (2006) does not necessarily adopt a linear approach; instead, he sees this process as a confluence of interactions. He writes that "your thinking and perception *influence* your feeling and action; your feelings *influence* your thoughts and actions; and your actions *influence* your thoughts and feelings. They are all integrated with each other, and are not truly separate, although you may think they are" (pp. 64-65). Ellis (2006) warns the reader against demanding that someone else behave a certain way, when the person has no control over what that someone else will do. Staking one's well-being and happiness upon someone else's behavior results in giving away one's power over one's own life. REBT then teaches how to dispute these worldviews. Cognitive therapy also employs a similar questioning in the form of the Socratic Method. The questions, Beck and Emery (1985) write, "induce the patient (1) to become aware of what his thoughts are, (2) to examine them for cognitive distortions, (3) to substitute more balanced thoughts, and (4) to make plans to develop new thoughts patterns" (p. 177). Examples of questions offered by Beck and Emery (1985) include: "Where is the evidence?"

and "Where is the logic?" REBT holds that people develop and attach to rigid beliefs about how the world is supposed to be. Ellis (1993) calls those beliefs absolutistic "musts":

> When people make irrational (self-defeating) demands on themselves, on others, and on the conditions under which they live, they also tend to construct, as derivatives of their musts, unrealistic misperceptions, inferences, and attributions that make important contributions to their disturbances. Thus, if they insist, 'John absolutely must like me!' and John actually ignores them, they rashly conclude (and devoutly believe) that (a) 'He hates me!' (b) 'It's awful that he hates me!' (c) 'I'm worthless because he hates me!' and (d) 'No decent person will ever like me!' (p. 199)

Ellis (2006) asserts that the main problem lies in the cognitive transformation of normal preferences into dysfunctional demands, and that recognizing this difference leads to increased well-being:

> Your *desire* for Jack's kindness and your *aversion* for Jill's hostility turns into a *need* for them to behave as you *demand* that they do; and since you control what you do and not what they do, you disturb yourself.
> Therefore: keep your *desires* but refuse to turn them into unrealistic, God-like *demands* and you can usefully judge Jack and Jill's behaviors. Even if you judge what they do falsely—say, judge Jack to be kind when he is actually nasty and judge Jill to be nasty when she is actually kind—you can undemandingly judge what they *do* and not demandingly judge who they *are*. You will then have little trouble relating to them. *Needing—not wishing—*them to do what you want gets you into trouble. (p. 69, emphasis in the original)

The method prescribed by REBT is to dispute (D) the irrational belief, in order to change it into a more effective (E), functional belief (Ellis, 1993).

Proponents of Acceptance and Commitment Therapy (ACT) assert that the attempt to change negative thoughts through cognitive gymnastics is tantamount to trying to win an all-out war single-handedly (Hayes & Smith, 2005). The antidote to experiential avoidance is *acceptance*, which refers to the "allowance of your internal experience without trying to alter or change it (S.C. Hayes et al., 1999)" (Mennin, 2005, p. 53). In ACT, the prescription to attain acceptance is cognitive *defusion*, a series of techniques allowing one to take a step back in order to observe the unfolding of one's own mental processes, and watch thoughts without identifying with them

(Hayes, Strosahl, Bunting, Twohig, & Wilson, 2005). Mennin (2005) concurs: "Emotion serves an information function to notify individuals of the relevance of their concerns, needs, or goals in a given moment" (p. 39).

Inquiry often uses a construct that Byron Katie calls *the three kinds of business*: *my* business, *your* business, and *God's* business. She echoes here Ellis's (2006) warning about staking one's happiness upon other people's actions. She explains the consequences of occupying one's thoughts with matters over which one has little control:

> (For me, the word *God* means 'reality'. Reality is God, because it rules. Anything that's out of my control, your control, and everyone else's control—I call that God's business.)
>   Much of our stress comes from mentally living out[side] of our own business. When I think, 'You need to get a job', 'I want you to be happy', 'You need to take better care of yourself', I am in your business. When I'm worried about earthquakes, floods, wars, or when I will die, I am in God's business. If I am mentally in your business or in God's business, the effect is separation. (Mitchell & Mitchell, 2002, p. 3)

As Buddhism asserts that the onset of cognitive activity is not within human control (Toneatto, 2002), Byron Katie posits that people are not responsible for their thoughts; thoughts appear in consciousness and fade away (Mitchell & Mitchell, 2002). Thus, the attempt to control one's thoughts is seen as a futile exercise, notwithstanding the multiple meditative traditions that have attempted to do so for centuries. The goal of Inquiry is not to control thoughts, but to remove ignorance—to enlighten the suffering person to the fact that the snake of stressful thoughts is really a rope. The method that Byron Katie has been teaching for this purpose—and that will be developed below—addresses the problem in a very direct and immediate way. Much of the description of this process emanates directly from this author's several years of experience with Inquiry, together with his understanding of other ancient sources.

Fitting squarely within the Socratic method, the actual process of Inquiry consists of four questions and a "turnaround." Byron Katie recommends that people work on their thoughts and

judgments towards others before investigating judgments about themselves, because "[i]f you start by judging yourself, your answers come with a motive and with solutions that haven't worked. Judging someone else, then inquiring and turning it around, is the direct path to understanding" (Mitchell & Mitchell, 2002, p. 10). Outward-directed judgments tend to lead to clearer insights. Putting the judgments in writing is an important step in this process. The mind can be slippery when proceeding with Inquiry mentally, the thoughts under investigation can morph insidiously into elaborate rationalizations that derail the process. This step allows one to stop the mind on paper. Without this stratagem, the mind can elude the most sincere inquirer. When the thoughts are written down, they remain stable enough for Inquiry to proceed. The recommendation, for people new to Inquiry, is to write their judgments about other people; thoughts that evoke frustration, anger, sadness, resentment, etc., such as "My husband left me," "My mother never loved me," "I hate my boss," "I can't stand her behavior." In the words of the Sermon on the Mount, one is more readily aware of the speck in one's brother's eye that of the log in one's own (Matt. 7:3 New American Standard Bible). Yet, because "the world is the projected image of [one's] thoughts" (Mitchell & Mitchell, 2002, p. 10), applying Inquiry to what is seen as external amounts to doing inner work. According to Jungian (1951) theory, when an individual directs negative judgment towards another person or entity, he or she is likely projecting his or her shadow onto the object of judgment.

The next step of the process is asking four questions about each judgmental thought written down (Mitchell & Mitchell, 2002). The first question is *Is it true?* The thought under investigation most often contains an implicit or an explicit *should*. The negative feelings tend to originate from a belief that the world should be different from what it is at this moment. Because such a belief is the projection of a fantasy world, in opposition to reality, it is considered untrue. One may have any number of perfectly good reasons for why things *should* be different; nonetheless, they are precisely

the way they are, and any attachment to a belief that opposes that is liable to be a source of stress. The first question provides a method for disputing (D) the irrational belief, as it is termed in REBT (Ellis, 1993). Occasionally, Byron Katie will replace or supplement the first question, "Is it true?" with one similar to the questions asked by Beck and Emery (1985) in the Socratic method of questioning: "Where is your proof?" A crucial element in this part of Inquiry is not to give a purely rational answer based on declarative thinking, or to do so too quickly because there exists the expectation of a "right" answer. Instead, the answer must come from a deep understanding of the truthfulness or the falsity of a belief, in a meditative rather than a logical movement (Mitchell & Mitchell, 2002). In this respect, Inquiry includes an implicit mindfulness component, which will be discussed further.

The second question (Mitchell & Mitchell, 2002) is *Can you absolutely know that it's true?* This question is only asked when the answer to the first one is not a clear "No." This may happen when the belief has been deeply entrenched for a long time, and *appears* to be true, or when conventional wisdom would confirm that it is, or it feels tantamount to a survival need. When a belief is held so dear, Byron Katie calls it a "religion," a core concept around which an individual is wont to build his or her life and identity. The mind's job, according to Byron Katie, is to selectively look for proofs of someone's unquestioned beliefs (Mitchell & Mitchell, 2002). Asking "Can you absolutely know that it's true?" helps provide a crack in that seemingly solid armor. If a person experiences stress from attaching to a belief that, at face value, feels really true, this probing question allows one to instill at least the shadow of a doubt into that firm belief. Certainly, beliefs formulated in the shape of a need can often take the appearance of imperative demands. The question "What do you need [the person you are judging] to do in order for you to be happy?" appears on the worksheet provided in *Loving What Is* (Mitchell & Mitchell, 2002) and handed out at

public events conducted by Byron Katie. This question's purpose is to elicit such demands in order to expose them to the light of Inquiry. Most likely, *wishing* someone to do something will still be seen, in The Work, as a generator of stress, albeit a milder one than *needing*. This fine point is where Inquiry begins to diverge from REBT and other cognitive therapies. REBT, for example, correctly teaches people how to become aware of their demands, and act against them to return to their preferences (Ellis, 1993). However, the directive is to maintain desires without turning them into cravings. Byron Katie's approach goes one step further by recognizing that desires, too, are the source of stress, and aims towards the goal of loving what is.

The third question (Mitchell & Mitchell, 2002) is *How do you react when you believe that thought?* This is the opportunity for the person engaged in the Inquiry process to really see all the effects the belief has on his or her life. With the help of ancillary questions such as "Where do you feel it in your body?" or "How do you treat others when you believe that thought?" the person doing The Work is invited to explore the sensations, feelings, thoughts, and actions resulting from that one belief, uncovering in that operation other underlying beliefs. Corresponding techniques can be found in humanistic and depth psychotherapies, where attention is paid to the narrative, and it is encouraged to be "in touch" with one's feelings (Hewstone, Fincham, & Foster, 2005). Cognitive therapies, on the other hand, grant much less space to this kind of exploration, although Ellis (2006) writes that "REBT also shows you how to pay attention to your thinking, to observe when it is rational and leads to healthy feelings and behaviors, and to see when it is irrational and leads to destructive feelings and behaviors" (p. 64).

The fourth question (Mitchell & Mitchell, 2002) asks *Who (or what) would you be without this thought?* This is an opportunity to experience—if only in one's imagination—life without the stressful belief. The typical response is the realization that there is stress in life with the belief,

while there is peace without it. It allows the individual to experience directly Epictetus's teaching that it is people's judgments of events that disturb them, and not the events themselves (Epictetus & Matheson, 1968). In Byron Katie's worldview, thought simply happens, and a person is no more responsible for his or her own thoughts than for the weather. What is pointed out by the fourth question is that an alternative exists, and that it only depends on the absence of belief in the initial thought.

The final step in Inquiry is called the *turnaround* (Mitchell & Mitchell, 2002). After the mind has been allowed to cast some doubt upon the belief under scrutiny, it has an opportunity to experience the opposite polarity. This can take several forms, the most obvious of which is the direct negation of the initial thought. For example, the thought "I need more money" would be turned around to "I *don't* need more money." The individual is then asked to look within him- or herself and inquire whether this turnaround is as true as—or truer than—the original stressful belief. When judging someone else, this step provides an opportunity to see that the other person may not be guilty of what he or she is accused of, that the individual doing the Inquiry may be just as guilty of the same fault—even if only in his or her mind—and that the one responsible to satisfy this individual's demands is not the other person, but him- or herself, putting the control squarely back into the hands of the inquirer.

It is in this last step that the power of projection of the inquirer's mind is revealed, and that the truth-seeker is given a chance to reclaim his or her shadow. Jung (1959) writes that the shadow (the negative side of the personality) is dangerous when unrecognized, because one then projects his or her unwanted qualities upon the other. Such projections may not be seen for what they are, and "their recognition is a moral achievement beyond the ordinary" (p. 9). In projecting, the subject isolates himself or herself, since he or she is only in an illusory relation with the environment. Jung

pursues by writing that "the resultant *sentiment d'incomplétude* and the still worse feeling of

sterility are in their turn explained by projection as the malevolence of the environment, and by

means of this vicious circle the isolation is intensified" (p. 9, italics in the text). In a letter to P.W.

Martin, Jung (1973) writes:

> It is a very difficult and important question, what you call the technique of dealing with the shadow. There is, as a matter of fact, no technique at all, inasmuch as technique means that there is a known and perhaps even prescribable way to deal with a certain difficulty, or task. . . . Very often certain apparently impossible intentions of the shadow are mere threats due to unwillingness on the part of the ego to enter upon a serious consideration of the shadow. Such threats diminish usually when one meets them seriously. (p. 234)

One could surmise that Inquiry may be construed as such a method to deal with the shadow.

An indication of this is Jung's (1959) noting that comparing one's reactions with reality gives one a

chance of noticing one's misinterpretation, and that one's picture of the other is a false one.

An aspect of Inquiry that does not receive much emphasis in the writings of Byron Katie is

the skill of mindfulness. Using Kabat-Zinn's (1994) operational definition of mindfulness, "Paying

attention in a particular way: on purpose, in the present moment and nonjudgmentally" (p. 4), it

seems to be a requirement for an individual to be able to answer the questions in a meaningful way.

A minimum level of mindfulness is necessary to observe the quality of feeling that arises when one

attaches to a stressful thought. This observation, in turn, is necessary to isolate the thought that

produced the feeling. The foregoing sequence is necessary to hear the answer to the question "Is it

true?" coming from within. Finally, mindfulness is necessary in order to become aware of the

consequences that holding the belief has on the ability to experience peace. These processes of

metacognition call upon a witnessing presence. This same part of the psyche Deikman (1982) calls

the "observing self." Or again, Linehan (1993) refers to this state as "wise mind," where one has

access to one's innate wisdom and knows what is needed for one's own well-being.

The foundational principles of The Work, in particular its views about the origination of

suffering, and its methodology, namely the questioning of beliefs, may lead the casual observer to

believe that it is but one variant of a new generation of cognitive therapies. However, the method of

Inquiry distinguishes itself by its simplicity, which allows it potentially to be used as a tool without

the need for a therapist to be present. The attitude is one of receiving, when inquiring into a stressful

belief. Byron Katie's injunction is to "[meet] your thoughts with understanding" (Mitchell &

Mitchell, 2002, p. 4). The core motive of the Inquiry process is to uncover what is really true,

without a need to change the person or the thoughts. One might find it useful to compare the notion

of *acceptance* as it appears in The Work with the homonymic notion (Mennin, 2005) in ACT. The

operational definition mentioned earlier is indeed included in The Work, but needs to be expanded

to encompass Byron Katie's understanding of acceptance. A definition much closer to Byron

Katie's is proposed by Sanderson and Linehan (1999) as "the developed capacity to fully embrace

whatever is in the present moment" (p. 200).

Unlike REBT's strategy of replacing the irrational belief with a new, effective (E) belief

(Ellis, 1993) or CBT's cognitive restructuring, which attempts to make plans to develop new

thought patterns (Beck & Emery, 1985), Inquiry takes a more organic, accepting approach, letting

come whatever thoughts may arise, questioning them when they create distress, and not trying to

replace them with "better" or "more functional" thoughts. This approach places Inquiry in the realm

of nondual rather than cognitive psychotherapies. Bodian (2003) presents an eloquent comparison:

> Unlike cognitive-behavioral therapy, which works to replace negative, dysfunctional
> cognitions with more positive, functional ones, nondual therapy doesn't necessarily
> discriminate between good and bad cognitions or try to replace some with others. Rather, the
> fundamental understanding is that no cognitions or concepts of any kind can possibly
> encompass reality as it is, which is ultimately ungraspable by the mind. In particular the
> constructs that constellate an apparent separate self are just that—constructs—and, if taken
> for reality, are the ultimate cause of suffering. Hence, the work is simply to illuminate
> concepts and constructs with the light of awareness and explore the ways in which they
> contribute to suffering. Where cognitive-behavioral therapy tends to reconstruct a better,

more effective self, the nondual approach deconstructs the self by revealing that it has no abiding, substantial reality (p. 240).

A key aspect of The Work that identifies it as a nondual therapy is that it deconstructs the set of maps and values that people construct over the course of their lives, to form patterns and a well-established identity—what Bugental (1999) calls the *self-and-world constructs*. Most traditional psychotherapies work within those constructs without challenging them, leaving the ego-based identity untouched. If Inquiry is practiced at a superficial level or in a purely intellectual manner, then perhaps the ego-based identity will also go unchallenged, but a foundation of Byron Katie's work is that

> The *I* is the origin of the whole universe. All thought is born out of that first thought, and the *I* cannot exist without these thoughts. . . . The thoughts are what allow the *I* to believe that it has an identity. When you see that, you see that there's no *you* to be enlightened. You stop believing in yourself as an identity, and you become equal to everything. (Mitchell & Mitchell, 2007, pp. 152-153, italics added)

Furthermore, as Inquiry deconstructs an individual's maps, it does so not by relying exclusively on declarative thinking, but rather through reliance on the inherent knowledge of "wise mind," as Linehan (1993) incorporates it in dialectical behavior therapy (DBT). This construct focuses "on the inherent wisdom of patients" (Linehan, 1993, p. 33) with respect to their own life; it integrates emotion and reason, but also goes beyond them by adding "intuitive knowing to emotional experiencing and logical analysis" (p. 214). It is founded on the trust that people carry within themselves their own healing potential. In her description of The Work, Byron Katie's (Mitchell & Mitchell, 2002) recommendation is to "[b]e still. If you really want to know the truth, the answer will rise to meet the question. Let the mind ask the question, and wait for the answer that surfaces," (pp. 19-20) and again, to "[l]et the answer find you" (p. 23). She writes:

> To inquire honestly, with intention, is to wait for an answer within you to meet the question. Your wisdom is always there to speak, and it will give you the answer to the question. But the *I-know* mind, rather than wait for the answer, will give itself its own story back again. (Byron Katie, 2008, p. 21; italics added)

To paraphrase Buddhist teacher John Tarrant (2004), who wrote the following about Zen koans, it is this author's opinion that the following can be a fairly accurate characterization of Byron Katie's Inquiry:

> [Inquiry does not] ask you to believe anything offensive to reason. You can have any religion and use [Inquiry]. You can have no religion and use [Inquiry]. [Inquiry does not] take away painful beliefs and put positive beliefs in their place. [Inquiry] just take[s] away the painful beliefs and so provide[s] freedom. What you do with that freedom is up to you (p. 12).

Although in Byron Katie's worldview, the 'I'-thought, that Ramana Maharshi (Maharshi & Mahadevan, 1902) charges with being the source of human beings' stress, is as untrue as any other construct, her Inquiry addresses mainly thoughts identified by individuals as stressful, keeping the rest as one would allow a pleasant dream to continue.

Transpersonal Roots of Inquiry

The initial event that awoke in Byron Katie the insights that led to her formulation of The Work bears all the characteristics of a mystical experience—although Byron Katie herself does not make any such claim. It presents the key aspects of mystical experiences as described by Pahnke (1966), such as: (1) unity, (2) noetic quality, (3) transcendence of space and time, (4) sense of sacredness, (5) a deeply felt positive mood, (6) paradoxicality, (7) alleged ineffability, (8) transiency, and (9) positive change in attitude or behavior. Most important among those is the noetic quality, which refers to the knowledge associated with the experience. Profound mystical experiences frequently include a revelatory aspect, where the person undergoing the experience receives insights unmediated by normal cognitive processes. Tatsuo (2002) remarks that few mystics succeed in passing this knowledge on to others: "Although acquainted with many examples of mystical experience, I must confess that cases like Gotama Buddha's—where this experience is related to our existential *sufferings*, the basic cause of these *sufferings* is clarified, and even a

method to eliminate them is provided—is rare, I believe" (p. 239, emphasis in original). Among those rare individuals, Byron Katie stands out as a contemporary mystic who managed to translate her numinous knowledge into simple, usable practices for people to use. When she first found Inquiry, Byron Katie (Mitchell & Mitchell, 2002) had been depressed for more than two years, and had checked into a home for women with eating disorders because that was the only treatment covered by her medical insurance. After a week there, she awoke one morning to find that she could no longer identify with the woman she had been for the past 43 years. She had no concept of who she was. Instead her experience was that something else had awakened, was looking through her eyes, and that *it* was not separate from everything it was perceiving (unity). From this realization arose joy and delight (deeply felt positive mood). People in her family felt that she had become a different person, peaceful and filled with love (positive change in attitude and behavior). Byron Katie reports that she then "understood that no thought is true" (noetic quality; Mitchell & Mitchell, 2007, p. 198). She also writes that, "all this took place beyond time" (transcendence of space and time; Mitchell & Mitchell, 2007, p. 198):

> These were the first moments after I was born as it, or it as me. There was nothing left of Katie. There was literally not even a shred of memory of her—no past, no future, not even a present. And in that openness, such joy. (Mitchell & Mitchell, 2007, p. 199)

Beyond the four questions and the Inquiry method, this experience has left her to this day with the conviction that "God is everything and God is good" (sense of sacredness; Mitchell & Mitchell, 2007, p. 100).

Chapter 3: Methods

The Work of Byron Katie had not been formally studied before as a psychoeducational modality, but, as already examined above, it shares much in common with cognitive and behavioral therapies such as Rational-Emotive-Behavior-Therapy (REBT; Still & Dryden, 2003) and Cognitive-Behavioral Therapy (CBT; Beck & Greenberg, 1985) in the way it considers thinking as the primary source of discomfort. An experimental design, with participants randomly assigned to an intervention group and to a wait-list control group, was chosen for this study. The analysis was primarily quantitative with an added qualitative part in the form of postintervention focus groups. In order to be able to give participants their group assignments at the preintervention screening, only gender matching was attempted between the intervention and control groups, relying on the randomness of the assignments to evenly match the groups. The baseline t-tests performed in the data analysis were used to determine whether group randomization led to two groups that could be compared, so that the intervention can be studied as the change factor. This design is modeled after prior studies of other stress-reduction interventions administered to nonclinical populations (Williams, Kolar, Reger, & Pearson, 2001; Vieten & Astin, 2008; Hamdan-Mansour, Puskar, & Bandak, 2009). After an initial screening to determine eligibility, completion of consent forms, and filling out of a set of questionnaires to establish a baseline, participants in the intervention group received a six-week group training on Inquiry. Wait-list group participants were offered the option to take the training after completion of the study. Another set of questionnaires, identical to the baseline set except for personality factors, was administered immediately postintervention, and then again after a six-week follow-up period.

Research Hypotheses

The following hypotheses were examined in the subsequent analysis:

1. There is a significant decrease in anxiety ($p < .05$) as measured by the State-Trait Anxiety Inventory (STAI; Spielberger, 1983), State scale, in the treatment group compared to the control group

   a. between pretest and posttest, and,

   b. between pretest and follow-up,

   corrected for the effect due to covariates.

2. There is a significant decrease in perceived stress ($p < .05$) as measured by the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) in the treatment group compared to the control group

   a. between pretest and posttest, and,

   b. between pretest and follow-up,

   corrected for the effect due to covariates.

3. There is a significant increase in acceptance ($p < .05$) as measured by the Acceptance and Action Questionnaire (AAQ-16; Hayes et al., 2004) in the treatment group compared to the control group

   a. between pretest and posttest, and,

   b. between pretest and follow-up,

   corrected for the effect due to covariates.

4. There is a significant increase in subjective well-being ($p < .05$) as measured by the Satisfaction With Life Scale (SWLS; Diener, Emmons, & Larsen, 1985) in the treatment group compared to the control group

   a. between pretest and posttest, and,

   b. between pretest and follow-up,

corrected for the effect due to covariates.

5. The effect of the intervention will be independent of personality factors, as measured by the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992) personality test, particularly when the factors of Openness to experience (O) and Conscientiousness (C) are controlled.

Participants

Male and female adults, age 30 and older, from communities in the area around Palo Alto, California were recruited, seeking out individuals perceiving a need for stress reduction in their lives. The age range attempts to focus on men and women in their productive years, when they are most likely to engage in professional pursuits, raise a family and deal with elderly parents (the so-called *sandwich generation* [D. A. Miller, 1981]), confront issues associated with aging and be faced with a variety of daily stressors. Individuals were asked to confirm that they had not had recent homicidal or suicidal thoughts, that they were not struggling with significant drug or alcohol problems, or were not currently engaged in a course of therapy (see specifics of the screening in Appendix C: Preintervention and Screening Questionnaire for the text of the questions, as presented online). None were regular practitioners of Byron Katie's Inquiry prior to the beginning of the study. Randomization into treatment and control groups was done at the time the online screening form was completed. Participants who submitted the screening form were alternatively assigned by the software program, by gender, to one group or the other.

An informal survey at the first class meeting of the participants in the treatment group revealed that about half of the people were forwarded an e-mail or a link to the recruitment web site stress-study.com by a friend or colleague. The other half were roughly evenly spread between people who had seen a flyer, a posting on craigslist.com, an ad on facebook.com, were told directly

about the study, or simply did not remember how they heard about it.

Recruitment

Participants were recruited through word of mouth, referrals, lectures, bulletin boards, newspaper, and internet advertising. For the sake of feasibility, as well as to allow participants to travel to the training venue, volunteers were sought from the communities around the Palo Alto, California area.

Individuals selected for the study were asked to agree to attend the six-week class series, one full-day workshop, and practice weekly with a partner either on the phone or face-to-face. In order for participants not to be dropped from the intervention, they were informed that they could not miss more than two class meetings and had to attend the first class meeting, the last class meeting, and the full-day workshop. Completers were defined as participants who completed the control or intervention program with no more than the acceptable number of absences and completed all the questionnaires. Weekly practice with a partner only constituted a recommended element of the intervention and not a required one. Dropouts were counted as participants who voluntarily or involuntarily dropped out of the intervention, or missed three or more classes in the intervention group. Participants lost to follow-up were counted as those who failed to return completed questionnaires.

To obtain a sufficient number of participants ($N = 91$), recruitment and intervention had to be conducted four times. The target sample size was chosen in order to maintain a 5% Type I error rate, and a 20% Type II error rate (see *Instruments* paragraph below, for effect sizes), and to account for a possible 40% attrition rate. Williams et al. (2001) report a 27% drop-out rate from the program, and a further 17% loss to follow-up between the end of the program and the six-week follow-up observed in the same study. Vieten and Astin (2008) report a 13% drop in the

intervention group and a 5% drop in the wait-list control group. A side effect of this staged

recruitment was the possibility to have smaller intervention groups of less than 15 people, and

spread the training over different time periods, moderating somewhat any potential seasonal effect.

Data were collected between June 2010 and May 2011.

Instruments

For the preintervention screening, participants were given a demographic information

questionnaire to complete, which includes age, gender, ethnicity, income (see Appendix C for the

list of questions). Preintervention screenings consisted of a series of online forms, to be completed

at the participant's leisure, after the start of the recruiting period and before the start of the

intervention. The instruments used to assess progress were administered to the qualified participants

electing to remain in the study at the time of preintervention screening, at postintervention, and at

the six-week follow-up. All sets of questionnaires were offered online, with a possibility (for people

who could not complete the questionnaires online) to take them onsite or have the questionnaires

sent to them by mail. No one requested to take advantage of the latter option. The focus groups (see

below) were held about a week after the last training session.

Perceived Stress Scale (PSS). The PSS is a 14-item instrument measuring the degree to

which individuals appraise situations in their life as stressful (Cohen, Kamarck, & Mermelstein,

1983). The PSS has been found to have adequate internal consistency (Cronbach's α = .84) and test-

retest reliability (Spearman's coefficient = .85) and to correlate positively with a variety of self-

report and behavioral indices of stress in adult populations (Cohen et al., 1983; Pbert, Doerfler, &

DeCosimo, 1992). Participants are asked questions about how often they had specific thoughts or

feelings over the past month, using a five-point Likert scale ranging from 0 (never) to 4 (very

often). High scores indicate high perceived stress. Questions include, for example, "In the last

month, how often have you felt difficulties were piling up so high that you could not overcome

them?" Appropriate items, such as "In the last month, how often have you felt that things were

going your way?", are reverse scored. The scoring interval for this scale ranges from a minimum

value of 0 (no perceived stress) to a maximum of 5 (highest perceived stress). Average scores on

this scale for healthy adult populations typically range from 17 to 25 (King, Taylor, & Haskell,

1993). Cohen et al. (1983) make no recommendations about the effect size. For the purpose of this

study, and for the evaluation of statistical power and sample size, a change of ±7 will be considered

meaningful effect size. This scale has been chosen for its relative brevity, ease of administration,

and inexpensiveness. Large, multifactor inventories (e.g. MCMI) may discourage participants from

completing follow-up surveys, thereby contributing to attrition. Unlike measures that refer to actual

life events, this instrument focuses on perceived stress, which is in alignment with the subjective

aspect of stress addressed by Inquiry.

NEO Five-Factor Inventory (NEO-FFI). The NEO Five-Factor Inventory (NEO-FFI; Costa

& McCrae, 1992) is a well-validated, self-report, short form (60 items) assessment of the

dimensions of the five-factor model (Digman, 1990) of personality, derived from the 240-item

Revised NEO Personality Inventory (NEO-PI-R). The NEO-FFI consists of five 12-item scales that

provide a comprehensive measure of the five domains of personality: Neuroticism (N), Extraversion

(E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). It does not

provide information on specific facets within each domain. Each of the five scales includes items

that are rated on a five-point Likert scale ranging from 0 (strongly disagree) to 4 (strongly agree).

The NEO-FFI was developed by initially selecting items from the NEO-PI-R that had demonstrated

the best discriminant and convergent validity. About 10 substitutions were made.

The construct validity, internal consistency, and test-retest stability of the NEO-FFI have

been described by Costa and McCrae (1992). Coefficient alpha for the five domains of the NEO-PI-R were reported as: α(N) = .92, α(E) = .89, α(O) = .87, α(A) = .86, and α(C) = .90 (Costa, McCrae, & Dye, 1991), while coefficients for the NEO-FFI were reported as: α(N) = .86, α(E) = .77, α(O) = .73, α(A) = .68, and α(C) = .81. These values are smaller than those for the corresponding NEO-PI-R domains, but are considered acceptable (Costa & McCrae, 1992). The correlation between the domain scales of the NEO-FFI and the NEO-PI-R were: r(N) = .92, r(E) = .90, r(O) = .91, r(A) = .77, and r(C) = .87. Although not equivalent to the full domain scales of the NEO-PI-R, the NEO-FFI scales carry a portion of the validity of the full scales. On average the 12-item scales of the NEO-FFI account for 85% of the variance in convergent criteria as do the full factor scores.

As covariates in this study, it is hypothesized that Openness and Conscientiousness will be positively correlated with the effectiveness of the treatment. The Openness Scale (O) is a self-report measure of openness to experience involving active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, intellectual curiosity, and independence of judgment. The Conscientiousness Scale (C) is a measure of competence, planning capacities, dutifulness, achievement, self-discipline, and deliberation.

Acceptance and Action Questionnaire (AAQ-16). The Acceptance and Action Questionnaire was created to measure Hayes et al.'s (2004) theoretical construct of experiential avoidance—and its opposite, psychological acceptance. It assesses participants' negative evaluation of private feelings, thoughts, and sensations (e.g., "Anxiety is bad"), their willingness to remain in contact with these negative internal experiences (e.g., "I'm not afraid of my feelings"), and their capacity to take action in accordance with their values and goals in spite of emotional distress (e.g., "Despite doubts, I feel as though I can set a course in my life and then stick to it"). The two-factor, 16-item

version (Bond & Bunce, 2003) of this measure will be used. Responses are rated on a seven-point Likert scale, ranging from 1 (never true) to 7 (always true). Lower scores indicate greater experiential avoidance (Hayes et al., 2004). The AAQ has been shown to have adequate reliability and validity in several studies, in clinical and nonclinical samples (Bond & Bunce, 2003; Hayes et al., 2004), and in a meta-analysis of 32 studies (Hayes et al., 2006). Using this version, Bond and Bunce (2000) were able to assess some of the change processes in an ACT to stress management. However, Hayes et al. (2004) warn that the AAQ may not be sensitive enough as a process measure for experiential avoidance interventions. Bond and Bunce (2003) found a good fit of the data to the two factors of "willingness to experience internal events" and "ability to take action, even in the face of unwanted internal events." Because the two factors were highly correlated ($r = .71$), a second-order factor (e.g., Acceptance) was strongly indicated. Although more psychometric research was required, Bond and Bunce believe that the construct and criterion-related validities of this measure to be sufficient.

Satisfaction With Life Scale (SWLS). The Satisfaction with Life Scale (SWLS; Diener, Emmons, & Larsen, 1985) was created to measure a person's global life satisfaction in his or her own judgment. It contains only five items; the statements: "In most ways my life is close to my ideal," "The conditions of my life are excellent," "I am satisfied with my life," "So far I have gotten the important things I want in life," "If I could live my life over, I would change almost nothing." Responses are rated on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Scores range from 5 to 35, with higher scores indicating more satisfaction with one's life. All five items load on a single factor. The scale is built on the premise that the judgment of how satisfied people are with their life is based on a comparison with an internal set of standards rather

than externally imposed ones. The internal focus of this scale is the reason why it was chosen for this study.

The SWLS possesses desirable psychometric properties. Coefficient α has been reported between .80 and .89. Test–retest reliability values have been reported between .54 and .83 (Pavot, Diener, Colvin, & Sandvik, 1991). The scale was tested on populations of various age ranges and ethnic groups (Pavot & Diener, 1993).

State-Trait Anxiety Inventory (STAI). The State–Trait Anxiety Inventory (STAI; Spielberger, 1983) is a 40-item self-report scale assessing current and personality anxiety symptoms. For the purpose of this study, the 20-item State scale of the STAI was used, in order to assess currently experienced feelings of anxiety. State anxiety questions were designed to tap temporal fluctuations in anxiety. These fluctuations are influenced by situational stressors, while trait anxiety reflects the individual's tendency "to interpret a wider range of situations as dangerous or threatening" (Spielberger, 1983, p. 1). Participants are asked how they generally feel, with items such as "I am worried," and reverse scored items such as "I feel self-confident." Responses are rated on a four-point Likert scale, ranging from 1 (almost never) to 4 (almost always). Scores range from 20 to 80, with higher scores reflecting greater anxiety.

The STAI has high internal consistency and a multicultural evaluation provided supportive evidence for convergent and discriminant validity (Novy, Nelson, Goodwin, & Rowzee, 1993).

Follow-up Questionnaire. In addition to the assessments above, a follow-up questionnaire devised by this researcher was also administered to intervention participants at the end of the six-week follow-up period to determine adherence to the Inquiry practices learned during the six-week training. This questionnaire helped to determine the participants' assiduousness with which they practiced the techniques after completion of the training, and to elucidate possible variability in the

results. The questions included "Do you continue to practice Inquiry?" and "How frequently have you used Inquiry since the end of the training?" (See Appendix D: Follow-up Questionnaire for the full text of the questions.) Participants were also asked whether they would be willing to participate in a focus group.

Procedure

The purpose of Inquiry is to train participants to adopt a doubting attitude in the face of their own thought process, and to learn to question cognitions that lead to distress. Through the practice of the four questions and turnaround as taught by Byron Katie, participants learn to inquire into the veridicality of their thoughts. The training was led by this researcher, who has been studying this technique for several years and became a Certified Facilitator under the auspices of Byron Katie International, Inc. This intervention involved six weekly two-hour group classes, with a day-long (six hours) intensive workshop, totaling 18 hours of training. All participants in the intervention group attended classes and workshop together at regularly scheduled meetings. These meetings took place in a community meeting room for the first treatment group and at the Institute of Transpersonal Psychology for the other three. They were scheduled on a weekday, at the end of the workday. During the six-week intervention, participants learned the principles underlying Inquiry, and how to facilitate their own process as well as someone else's. Audio-visual demonstrations of Byron Katie practicing Inquiry in front of an audience were played at some of the classes (see Appendix E: Syllabus, for a list of media). This researcher, aided by an assistant trained in this type of Inquiry, modeled the practice by facilitating volunteers among the class participants. Everyone was given opportunities to practice the skills learned through working in dyads and small groups while in class, and by partnering with other participants in-between classes. To assist them in their practice outside of class, participants were asked to buy the book *Loving What Is*, were given class

handouts, and were directed to Byron Katie's web site, *www.thework.com*, to download worksheets and other materials useful for the practice of Inquiry. Participants were invited to write down their stressful thoughts as they became aware of them, read chapters from the book, and call their Inquiry partner at least once a week in order to facilitate each other on thoughts that caused them distress. At the end of the six-week training, participants were encouraged to continue their pairing up with partners to help sustain and deepen their practice. A complete outline of the training, as given to the participants, is available in Appendix E: Syllabus.

At the conclusion of the six-week training, at the end of the last class, the intervention group and the control group were asked to complete the second battery of measurements. Again, after the six-week follow-up period, both groups were asked to fill out the follow-up questionnaires online. Figure 1 depicts the timeline of the study in graphical format.

Participants from the intervention group were invited to take part in a focus group held approximately one week after the last class, at the beginning of the follow-up period. The focus group allowed the researcher to gain insight into how these main factors of change were perceived by the participants. In order for the participants' social desirability not to be a confound, the focus group were conducted by an interviewer who was not involved in the intervention. The interviewer was provided with a script and a list of open-ended questions to ask the participants (see Appendix F: Focus Group Script and Questions for a complete list), and was instructed in how to make an audio recording of the interview. However, in the case of the third intervention group, which consisted of only three participants, for the sake of expediency the interviews were conducted individually over the phone by this researcher's assistant. The first and second focus groups were held in a classroom at the Institute of Transpersonal Psychology. The fourth focus group was conducted via telephone conference call.
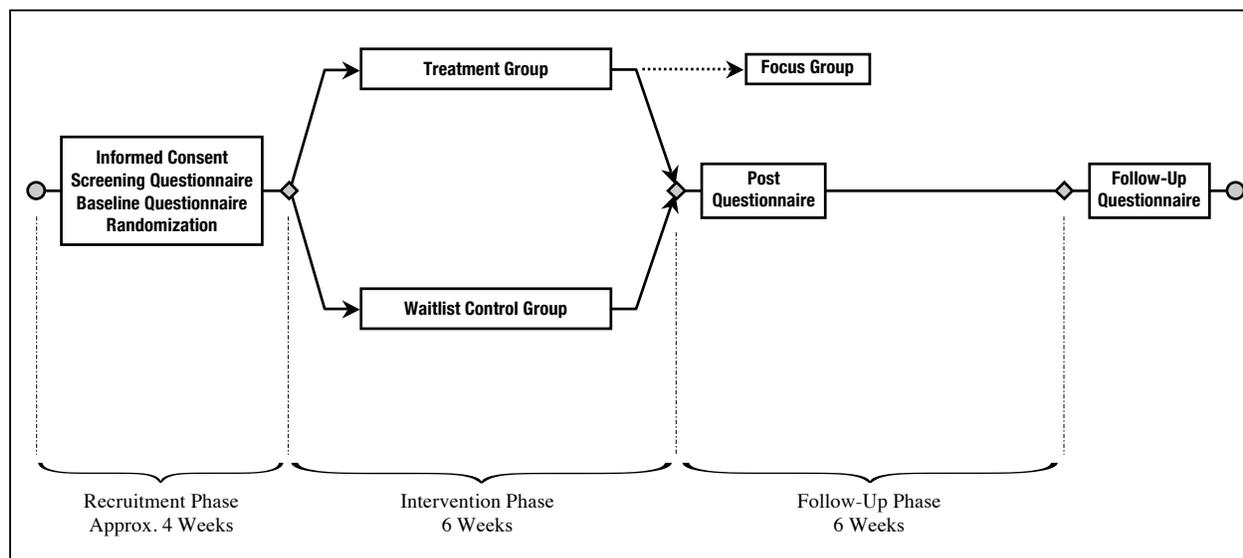
Figure 1. Study Timeline

Treatment of Data

The data analysis was tailored to answer the question "Does this intervention improve the stress levels of the intervention group participants vs. the control group participants?" Data collected during the baseline, at the end of the intervention, and at the six-week follow-up were compared with the following: (1) Independent sample *t*-tests comparing the baseline demographic and clinical characteristics of the treatment and control groups to verify equivalence of group means; (2) Independent sample *t*-tests to compare the between-groups means for measured score changes, i.e. the dependent variable is the *difference* between the measured score at posttest (or follow-up) and the measured score at baseline, and the analysis is conducted between the treatment dependent variable and the control dependent variable; (3) Independent sample *t*-tests to compare the between-groups means for imputed score changes (see below for imputation method), i.e. the dependent variable is the *difference* between the *measured* score at posttest (or follow-up) and the *measured* score at baseline, and the analysis is conducted between the treatment dependent variable

and the control dependent variable; (4) A forward model selection on each of the four dependent variables in order to find out which covariates should be included in the ANCOVA; (5) Analyses of covariance (ANCOVA) on measured data for each of the four dependent variables including the covariates chosen in the preceding model; (6) Analyses of covariance (ANCOVA) on imputed data for each of the four dependent variables including the covariates chosen in the forward selection; (7) A study of treatment dropouts using a tree model to determine the covariates of primary importance.

Where *t*-tests showed a significant difference of means, effect sizes were calculated using Cohen's *d*, as suggested by Salkind (2004):

$$ES = \frac{M_1 - M_2}{SD}$$

Where M_1 is the mean of the first group, M_2 is the mean of the second group, *SD* is the standard deviation of one of the groups and *ES* is the effect size. The greater of the standard deviations of the two groups was used as the denominator to provide the most conservative estimate of the effect size. The effect size was then interpreted in the following way, as suggested by Salkind: "A small effect size ranges from 0.0 to .20. A medium effect size ranges from .20 to .50. A large effect size ranges from .50 and above" (p. 169). Where ANCOVAs showed the group as a significant factor, effect sizes were calculate using partial eta-squared.

To correct for nonrandom attrition in the intervention and wait-list control groups, an intention-to-treat analysis was conducted (Hollis & Campbell, 1999). In order to take the missing data in account the following conservative imputations were used: (1) For the treatment group, the imputed values were derived from the last observation carried forward (LOCF), resulting in score changes of zero for all missing participants, based on the assumption that participants in the treatment group would leave the study because the intervention is not working for them; (2) For the control group, measurements were assumed to changed by the average change over all control

group members with observed data, based on the assumption that even after leaving the study, participants in the control group would see their scores vary and regress to the mean at the same rate as the other control group participants who remained in the study. The analysis included all participants enrolled who completed the baseline questionnaire, in order to determine if successes differed significantly between the two groups. A success is defined as a participant who completed the intervention and reported improvement on stress measures at statistically significant levels. A failure is defined as a participant who completes the intervention but does not report improvement, or who drops out of the program, or is lost to follow-up. Participants were notified that all their responses would remain anonymous, and that only researchers associated with the study would have access to identifying information. Questionnaire entries were assigned tracking numbers linking the data with participants' personal information. This information was kept separately from the data, in an encrypted, password-protected spreadsheet.

For the qualitative part of the study, the interviews were recorded, transcribed, and analyzed using thematic analysis by the researcher. No outside persons were used to handle this data.

Limitations and Delimitations

The composition of the volunteer sample was impossible to predict in advance, but tended to be skewed towards literate people, who had access to the internet, or who were liable to read posted flyers or newspaper ads. An all-volunteer, self-selecting participant sample may contribute particular characteristics. The regional population around Palo Alto is predominantly Caucasian, affluent, and highly educated. The results may not generalize to lower socioeconomic status or nonCaucasian individuals. The sample was also likely skewed towards individuals who had enough leisure time to attend a weekly class and a one-day workshop.

There may be a discrepancy in attrition rates between individuals reporting success and

those reporting failure. Participants may be more likely to drop out of the program if they feel that the intervention is not working for them, creating a positive bias in the sample; hence the addition of an intent-to-treat analysis as well as an analysis of groups at higher risk to drop out. When possible, participants who dropped out were asked for what reason they decided not to continue the program.

Although an attempt was made to control for differences between groups through random assignment, it is possible that the groups differed in susceptibility to the intervention, and that these differences, rather than the training itself, explain the outcome. This limitation would decrease as the sample size increases.

Spillover effects between the two groups should have been minimal; however, there is always a possibility that participants who knew each other between the two groups may have discussed elements of the training, introducing a possible—albeit unlikely—confound.

A number of stress studies use the more objective measure of cortisol levels in the bloodstream. In this study, assessments were limited to self-report, which may have unforeseen effects. However, self-report does represent the criteria upon which participants judged for themselves whether their stress levels had improved.

The use of a six-week follow-up was chosen for the feasibility of this study, but may prove to be too short to assess the permanence of the effects of the intervention. Further studies may benefit from another, longer-termed follow-up assessment.

Because there was a wait-list control in this study, it would be possible to attribute a portion of potential positive results to the attention received by the participants in the intervention group, versus participants in the wait-list group, who had no contact with the researcher in between assessments. The use of a wait-list control design may pose ethical concerns when it involves

delaying treatment of a group of individuals (Behar & Borkovec, 2003), however this study's

sample consisted of a nonclinical population, albeit suffering from chronic stress. In addition,

according to Behar and Borkovec (2003)

> In a similar consideration, there may be a selection problem in this design if the waiting-list control group consists only of clients who *agreed* to delay the reception of treatment. Such a feature would of course result in nonrandom assignment of clients to conditions. The consequential selection bias as well as a potential need to remove deteriorating clients from the waiting-list conditions can yield a nonequivalent control group (e.g., symptomatology may be less severe than that displayed by the experimental group at the pretreatment assessment). (p. 215)

Other issues with the wait-list control design include: (a) the impossibility to conduct a long-

term follow-up since the control group must be treated at the end of the study; and (b) the design

controls for the threat of history and maturation, but any healing active ingredient beyond the mere

passage of time cannot be determined. In particular, the design does not control for participant

expectancy, compliance in reporting improvement at the end of the intervention, and the effect of

the therapeutic alliance and attention received during treatment. A research project with more

resources might use a common factors control group design, in which the control group receives

supportive therapy, and in which "the therapist provides supportive and reflective statements in

response to the content and affect contained in the client's verbal and nonverbal communications"

(Behar & Borkovec, 2003, p. 216). At this stage of the research, it is standard practice to use a wait-

list, no-treatment design when examining a new treatment technique that has not yet been put to

empirical test.

This researcher and his assistant are long-time practitioners of Byron Katie's work, which

could have led to possible researcher bias in the analysis and treatment of the data. This is

especially an issue for the qualitative part of this study, the collection and analysis of quantitative

results being subject to a rather structured process. In order to monitor and attempt to control his

biases, the researcher adhered to a mindfulness discipline, cultivating awareness of his role in the research process, his preconceptions regarding The Work, and his tendencies to overlook data that do not conform with them. In addition, purposefully attempting to search for examples that disconfirm his expectations maintained a broader perspective on the study. Peer review, which is built into the process via the dissertation committee, is another safeguard against bias. The committee is composed of members who are doctors in their field. It supervises the research proposal and evaluates its acceptability, points out discrepancies, provides intellectual guidance, conducts the final evaluation and defense of the dissertation, and ensures that the research makes a contribution to the field.

Chapter 4: Results

This study's purpose was to address the research question of whether the treatment and control groups differed in the degree to which their scores on the four dependent variables changed between the baseline measurement and postintervention measurement immediately subsequent to treatment, and between the baseline measurement and six-week follow-up. Data were obtained at three points: baseline, postintervention, and follow-up. All but one of the baseline questionnaires were completed online. The one baseline finalized on paper forms was carried out immediately prior to beginning the first class; it was later entered into the dataset by this researcher.

Demographics and Descriptive Statistics

Age. There were 91 participants in the study at baseline, with a mean age of 51.5, ranging from 32 to 72 years old. The screening limited the lower age boundary at 30 years old, introducing a skew in the mean sample age. Table 1 displays the age groupings in five-year increments.

Table 1

Age Distribution of All Participants at Baseline

Age Group	N	Percent
30 – 35	6	6.6
36 – 40	8	8.8
41 – 45	11	12.1
46 – 50	16	17.6
51 – 55	19	20.9
56 – 60	13	14.3
61 – 65	9	9.9
66 – 70	7	7.7
71 – 75	2	2.2

Figure 2 displays the age distribution graphically. A chi-squared analysis of these groupings was done to compare it to United States Census data (U. S. Census Bureau, 2010), after mirroring the age groups represented in this study. This analysis revealed that this sample is not closely representative of age groups in the population of California ($\chi^2(8) = 15.60$, $p < .05$) or the United States ($\chi^2(8) = 12.76$, $p = .12$). After correcting for the missing age group under 30, this sample remains skewed toward older age ranges, despite the fact that the principal mode of recruitment consisted of e-mail notices or web-based ads, which would intuitively bring a younger group of people.
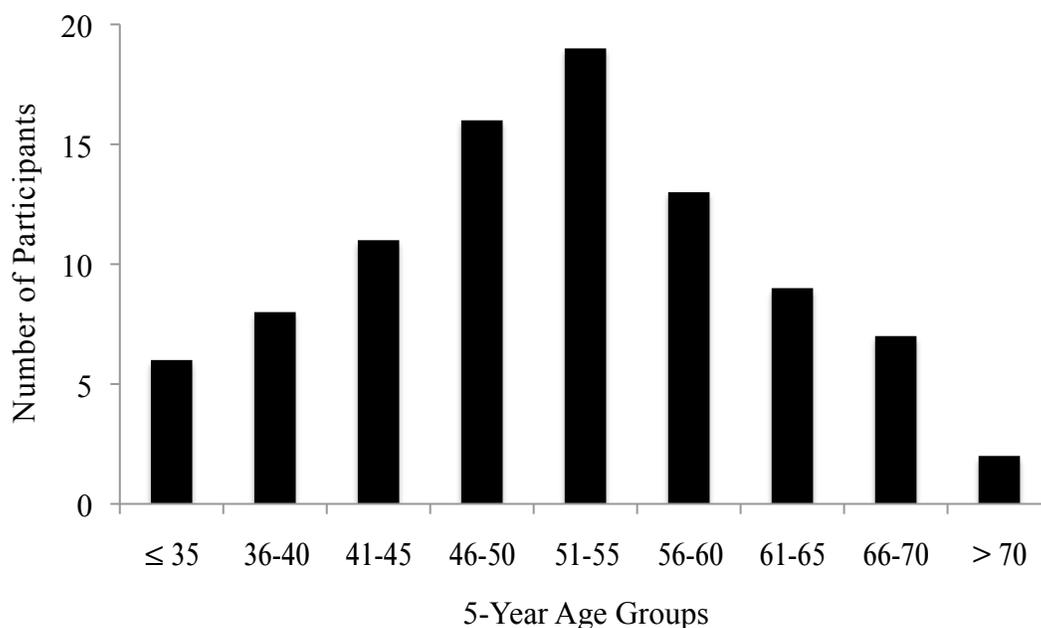
Figure 2.   Age distribution of all participants at baseline, graphical representation

Gender. People who responded to the call for participants were overwhelmingly female, with 74 women (81.3%) versus 17 men (18.7%). This sample is clearly not representative of the general population with regards to gender. It must be noted that the first intervention group was uncharacteristic in this respect, with a more even split between men ($N = 7$) and women ($N = 11$).

Table 2

Gender of All Participants at Baseline

Gender	N	Percent
Male	17	18.7
Female	74	81.3

Other Demographics. The other demographic characteristics of the participants are reported in Table 3.

Table 3

Demographic Characteristics of All Participants at Baseline

Variable	Level	N	Percent
Ethnicity	White	67	73.6
	Black	2	2.2
	Hispanic	9	9.9
	Asian	11	12.1
	Other	2	2.2
Marital Status	Married	34	37.4
	Unmarried	26	28.6
	Separated	6	6.6
	Widow	25	27.5
Education	High School	14	15.4
	Associate Degree	13	14.3
	College Degree	31	34.1
	Graduate Degree	33	36.3
Income Level	Less than $30,000	15	16.5
	$30,000 – $50,000	18	19.8
	$50,000 – $75,000	20	22.0

Variable	Level	N	Percent
	$75,000 – $100,000	17	18.7
	$100,000 – $120,000	7	7.7
	More than $120,000	14	15.4

The sample is skewed toward a college-educated, Caucasian population. However, it is not necessarily representative of the Palo Alto population either. A chi-squared analysis of the ethnicity ($\chi^2(4) = 9.08$, $p = .06$) and the education levels ($\chi^2(3) = 31.97$, $p < .001$) does not match the population of Palo Alto as reported by the United States Census data (U. S. Census Bureau, 2009).

Group Distribution. The distributions of participants in the treatment and control groups at each stage of the study is reported in Table 4.

Table 4

Distribution of All Participants in Treatment and Control Groups at Each Stage of the Study

	Baseline		Postintervention		Follow-up	
	Treatment	Control	Treatment	Control	Treatment	Control
Frequency	46	45	22	28	17	22
Percent	50.5	49.5	44.0	56.0	43.6	56.4

The total attrition, with treatment group and control group combined, is 45% between baseline and postintervention and 57% between baseline and follow-up. Figure 3 shows a graphical representation of the attrition that displays treatment group people who dropped out of the intervention as well as those who submitted the baseline questionnaire but never started the intervention (no-shows).
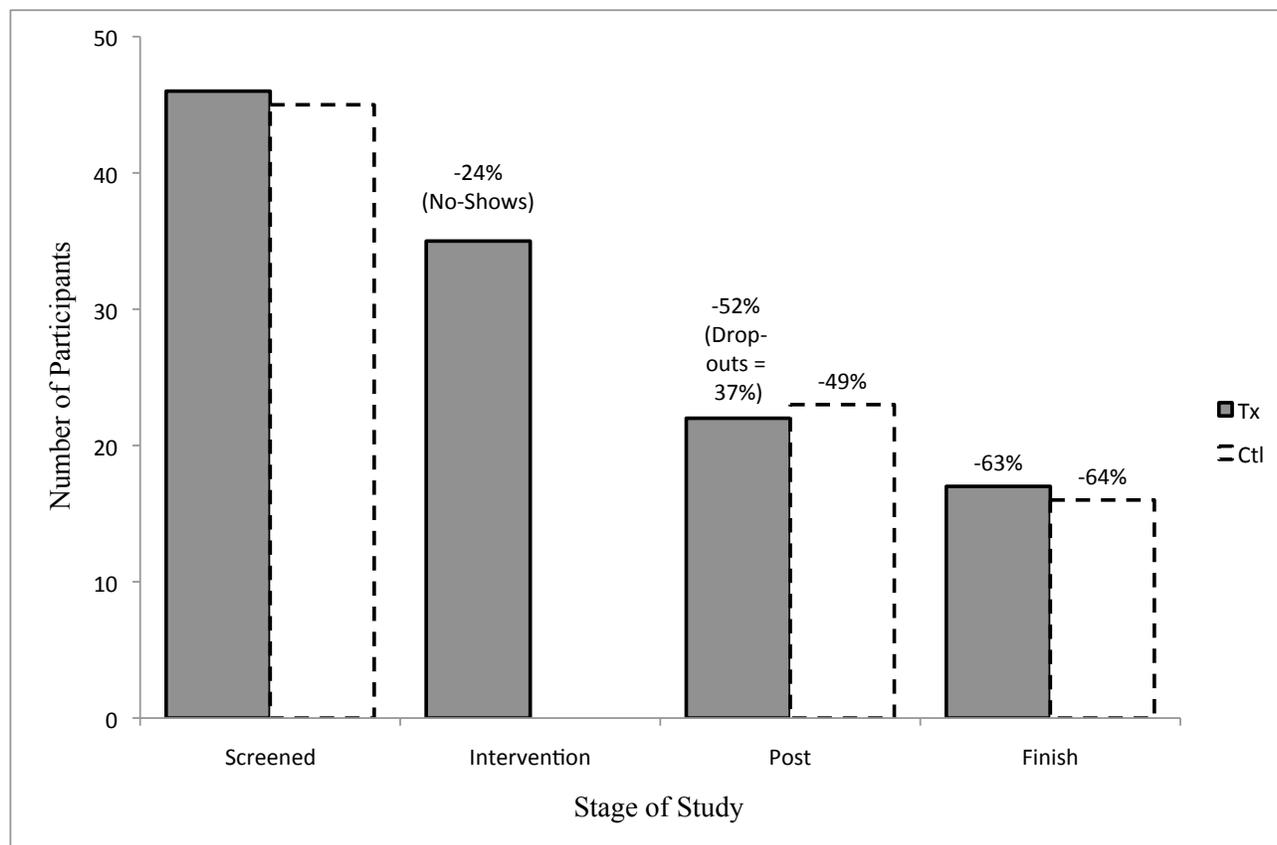
Figure 3. Participant attrition in treatment and control groups at each stage of the study

About a third (37%) of participants dropped out of the intervention after attending at least one class, however, already one out of four members of the treatment group never showed up for class even though they completed their screening and baseline questionnaire. The number of no-shows and the number of dropouts amounted to a 52% attrition in the control group by the end of the intervention.

Descriptive statistics for measured values at baseline, postintervention, and follow-up are presented in Table 5.

Table 5

Descriptive Statistics (N, Mean, & Standard Deviation) for All Measured Variables and Covariates in the Treatment and Control Groups at Each Stage of the Study

Variable	Group	Baseline (N = 91)		Postintervention (N = 50)		Follow-Up (N = 39)	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
STAI	Treatment	47.65	11.55	33.77	10.26	31.53	8.09
	Control	51.76	10.69	47.43	13.50	46.91	13.51
PSS	Treatment	31.78	7.19	20.45	8.32	17.67	7.80
	Control	31.84	5.84	28.79	9.41	28.36	8.42
AAQ	Treatment	67.89	10.17	78.27	11.91	82.60	9.68
	Control	64.58	8.69	65.46	11.28	68.45	7.81
SWLS	Treatment	16.65	6.95	22.59	7.59	23.53	6.69
	Control	16.38	6.21	18.14	8.46	18.59	7.12
NEO[a] N	Treatment	60.72	9.93	-	-	-	-
	Control	60.80	9.60	-	-	-	-
E	Treatment	47.78	12.36	-	-	-	-
	Control	49.62	11.64	-	-	-	-
O	Treatment	59.50	9.44	-	-	-	-
	Control	58.20	9.28	-	-	-	-
A	Treatment	47.96	10.78	-	-	-	-
	Control	48.04	11.89	-	-	-	-
C	Treatment	40.02	12.07	-	-	-	-
	Control	42.51	12.14	-	-	-	-

[a] The NEO-FFI scores are used as covariates and measured only at baseline

Hypothesis Testing

Normality, Homoscedasticity and Goodness of Fit. The dependent variable scores within the treatment and control groups for the baseline and posttreatment assessments were examined for their conformance to the normality and homogeneity of variance assumptions, in order to ensure the fit of a linear model and the validity of the ANOVA method. In Table 6, the levels of significance for all the Shapiro-Wilk tests are greater than .05, meaning the distributions do not deviate significantly from normality.

Table 6

Results of Tests of Assumptions of Normality of the Dependent Variables at Each Stage of the Study

Variable	Group	Shapiro-Wilk

		Baseline			Postintervention		
		Statistic	df	Sig.	Statistic	df	Sig.
STAI	Treatment	.947	22	.270	.941	22	.204
	Control	.952	28	.221	.955	28	.268
PSS	Treatment	.950	22	.312	.972	22	.760
	Control	.974	28	.690	.966	28	.471
AAQ	Treatment	.937	22	.169	.978	22	.890
	Control	.935	28	.085	.977	28	.766
SWLS	Treatment	.916	22	.062	.962	22	.536
	Control	.952	28	.220	.938	28	.097

In Table 7, the Levene Test levels of significance are all greater than .05, meaning that the differences in variance between the treatment and control groups for all of the dependent variables are not significant. A graphical representation of the homoscedascity is presented in Figure 4, Figure 5, and Figure 6 in the form of scatter plots for a sampling of variable pairs (AAQ vs. STAI, AAQ vs. PSS, AAQ vs. SWLS).

Table 7

Results of Tests of Assumptions of Variance Homogeneity of the Dependent Variables

Variable	Baseline Assessments				Posttreatment Assessments			
	Levene Statistic	*df1*	*df2*	Sig.	Levene Statistic	*df1*	*df2*	Sig.
STAI	.006	1	48	.940	3.231	1	48	.079
PSS	1.729	1	48	.195	.421	1	48	.519
AAQ	.061	1	48	.806	.107	1	48	.745
SWLS	.391	1	48	.535	.472	1	48	.495
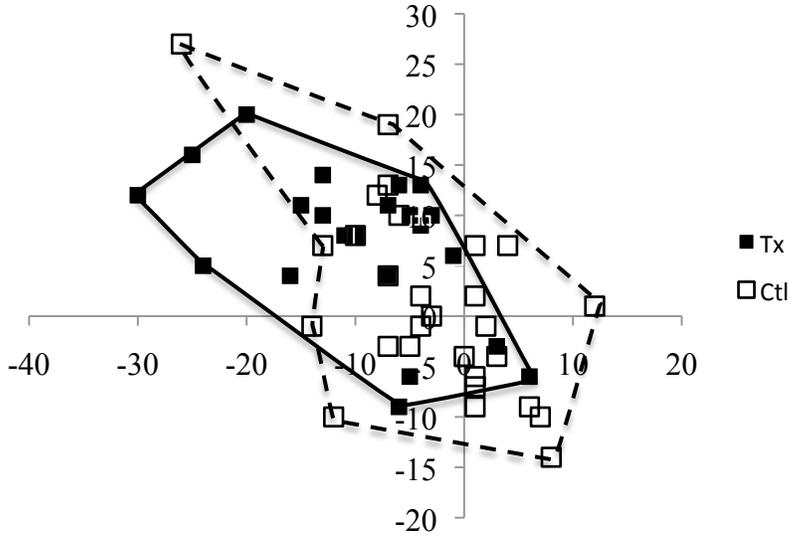
Figure 4. Scatter Plot of AAQ vs. PSS Variables
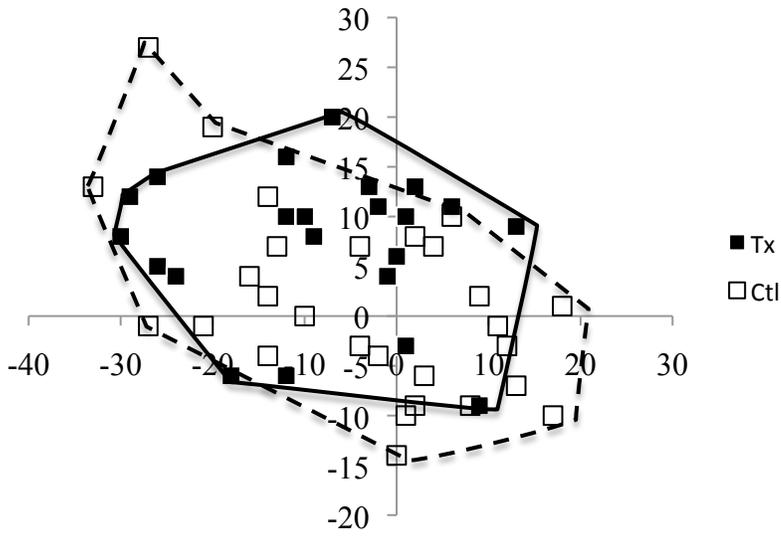
Figure 5. Scatter Plot of AAQ vs. STAI Variables
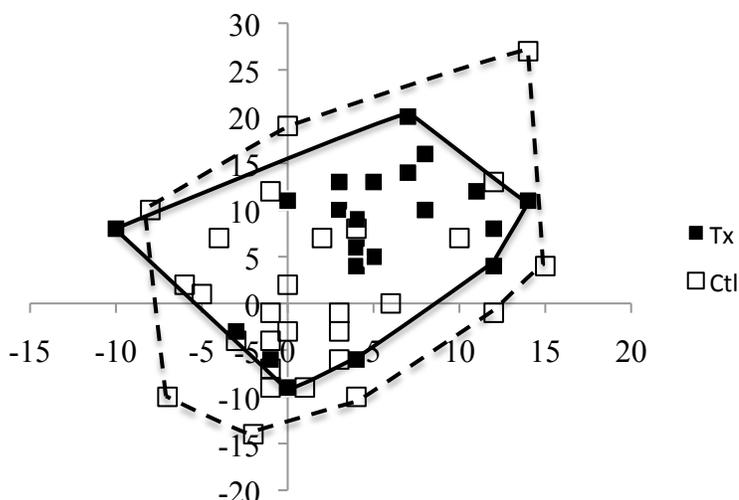
Figure 6. Scatter Plot of AAQ vs. SWLS Variables

The treatment and control group means were compared with regards to the baseline dependent variables and covariates, in order to verify the randomization process. The *t*-test levels of significance reported in Table 8 are all greater than .05, indicating that the differences of means between the treatment and control groups for all of the dependent variables and covariates were not significant.

Table 8

Independent Sample t-Tests at Baseline for Treatment and Control Groups on All Dependent Variables and Covariates

Variable	Group	Mean	Std. Dev.	*t*-Test for Equality of Means	
				Mean Difference	Sig. (2-tailed)
STAI	Treatment	47.65	11.55	-4.103	0.082
	Control	51.76	10.69		
PSS	Treatment	31.78	7.19	-0.062	0.964
	Control	31.84	5.84		
AAQ	Treatment	67.89	10.17	3.314	0.099
	Control	64.58	8.69		
SWLS	Treatment	16.65	6.95	0.274	0.843
	Control	16.38	6.21		
NEO N	Treatment	60.72	9.93	-0.083	0.968
	Control	60.80	9.60		

E	Treatment	47.78	12.36	-1.840	0.467
	Control	49.62	11.64		
O	Treatment	59.50	9.44	1.300	0.509
	Control	58.20	9.28		
A	Treatment	47.96	10.78	-0.088	0.971
	Control	48.04	11.89		
C	Treatment	40.02	12.07	-2.489	0.329
	Control	42.51	12.14		

This analysis confirms that participants were adequately randomized into treatment and control groups by the screening process at baseline.

Independent Sample t-Tests. A graphical representation of the dependent variables at postintervention and at follow-up depicts the decrease in anxiety and stress, and the increase in acceptance and subjective well being (see Figure 7 below).
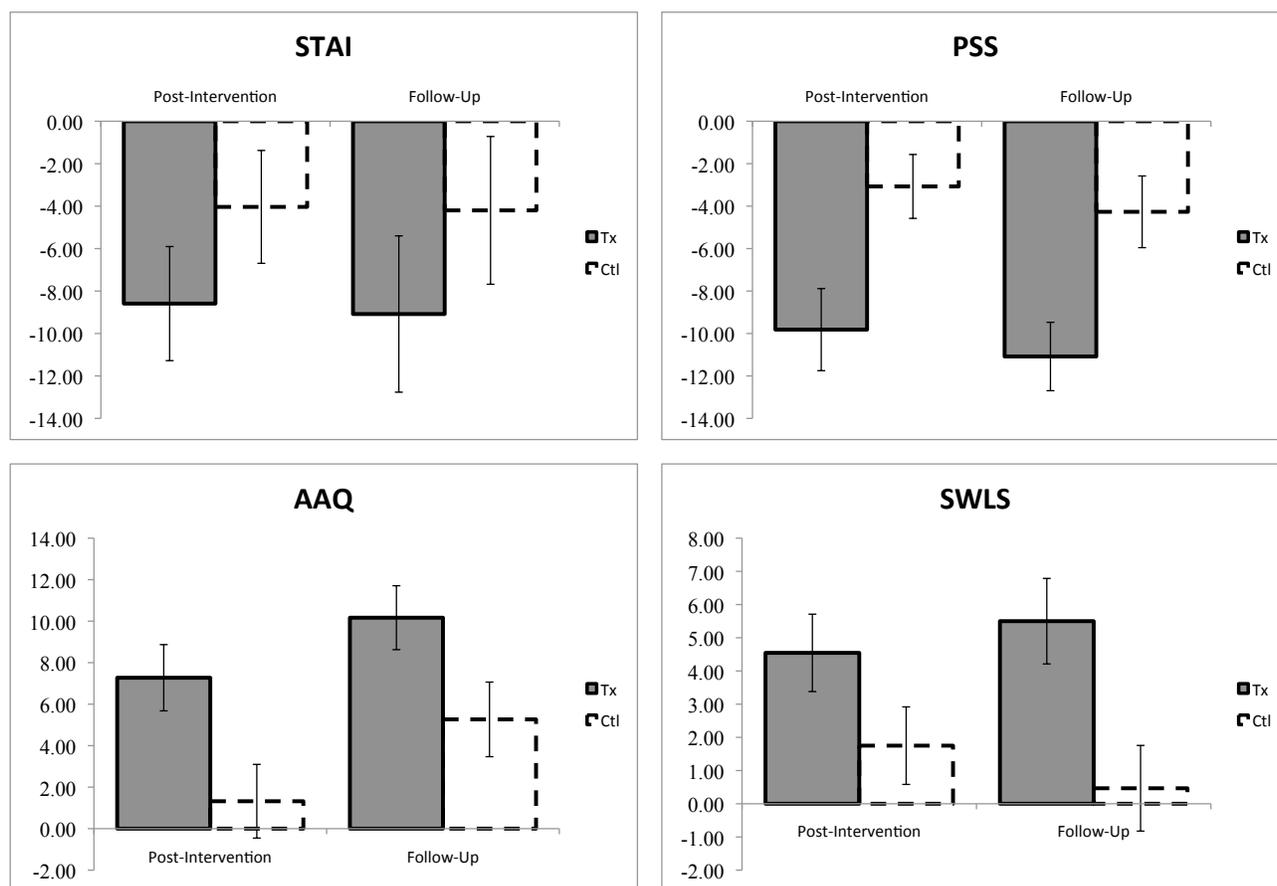
Figure 7. Measured Values for All Dependent Variables at Postintervention and Follow-Up

A set of eight *t*-test analyses was performed on measured data between the treatment and control groups to assess the level significance of the observed changes (see results in Table 9 below).

Table 9

Independent Sample t-Tests at Postintervention and Follow-Up for Treatment and Control Groups on All Dependent Variables Measured

Variable		Mean Change[a]	Postintervention ($N = 50$) Diff. of Means	t ($df = 48$)	ES		Mean Change[a]	Follow-Up ($N = 39$) Diff. of Means	t ($df = 37$)	ES
STAI	Treatment	-8.59	-4.56	1.189	0.324		-11.35	-8.17	2.071[*]	0.658
	Control	-4.04					-3.18			
PSS	Treatment	-9.82	-6.75	2.798[**]	0.744		-12.53	-9.39	4.151[***]	1.290
	Control	-3.07					-3.14			
AAQ	Treatment	7.27	5.95	2.425[*]	0.633		9.94	5.49	2.605[*]	0.804
	Control	1.32					4.45			
SWLS	Treatment	4.55	2.80	1.669	0.452		5.88	4.25	2.950[**]	0.887
	Control	1.75					1.64			

*$p < .05$. **$p < .01$. ***$p < .001$. [a] From baseline.

These analyses show significant changes on the postintervention measurements for perceived stress ($p < .01$) and acceptance ($p < .05$), and for follow-up measurements for anxiety ($p < .05$), perceived stress ($p < .001$), acceptance ($p < .05$) and subjective well-being ($p < .01$). For all significant values, the effect sizes that were calculated according to the formula in Chapter 3, the section entitled Treatment of Data, were large. The differences of means on the other dependent variables are not significant at this level of the analysis, however, the presence of effect sizes from moderate to large on those variables indicate the need for additional analyses. A set of paired *t*-tests was done for each group of participants between postintervention and follow-up values to assess whether there were changes in anxiety, stress, acceptance and subjective well-being in the six weeks

following the intervention (in the case of the treatment group) or the regression to the mean (in the case of the control group). To be able to run paired *t*-tests, this analysis was done on the set of participants who completed the study in the treatment (*N* = 17) and the control (*N* = 22) groups. The results of these *t*-tests are presented in Table 10 below.

Table 10

Paired Sample t-Tests Between Postintervention and Follow-Up Values on All Groups and All

Variables Measured on Completers

Variable		Postintervention		Follow-up		Stability of Treatment		
		Mean	SD	Mean	SD	Diff. of Means	t	p
STAI	Treatment	32.24	8.15	31.41	7.59	-0.82	0.378	0.708
	Control	48.59	13.32	47.86	13.14	-0.73	0.438	0.664
PSS	Treatment	18.65	6.44	17.59	7.33	-1.06	0.681	0.501
	Control	29.36	8.66	28.50	8.29	-0.86	0.482	0.632
AAQ	Treatment	80.18	11.22	82.00	9.69	1.82	1.078	0.289
	Control	64.91	9.88	68.41	7.81	3.50	1.957	0.057
SWLS	Treatment	23.00	6.62	23.71	6.36	0.71	0.551	0.586
	Control	18.09	7.73	18.32	7.09	0.23	0.212	0.833

No significant change was detected on any of the variables and for either of the groups, indicating that the values remained stable during the follow-up period. Another set of *t*-tests using *imputed* data are described in Figure 8 and Table 11 below.
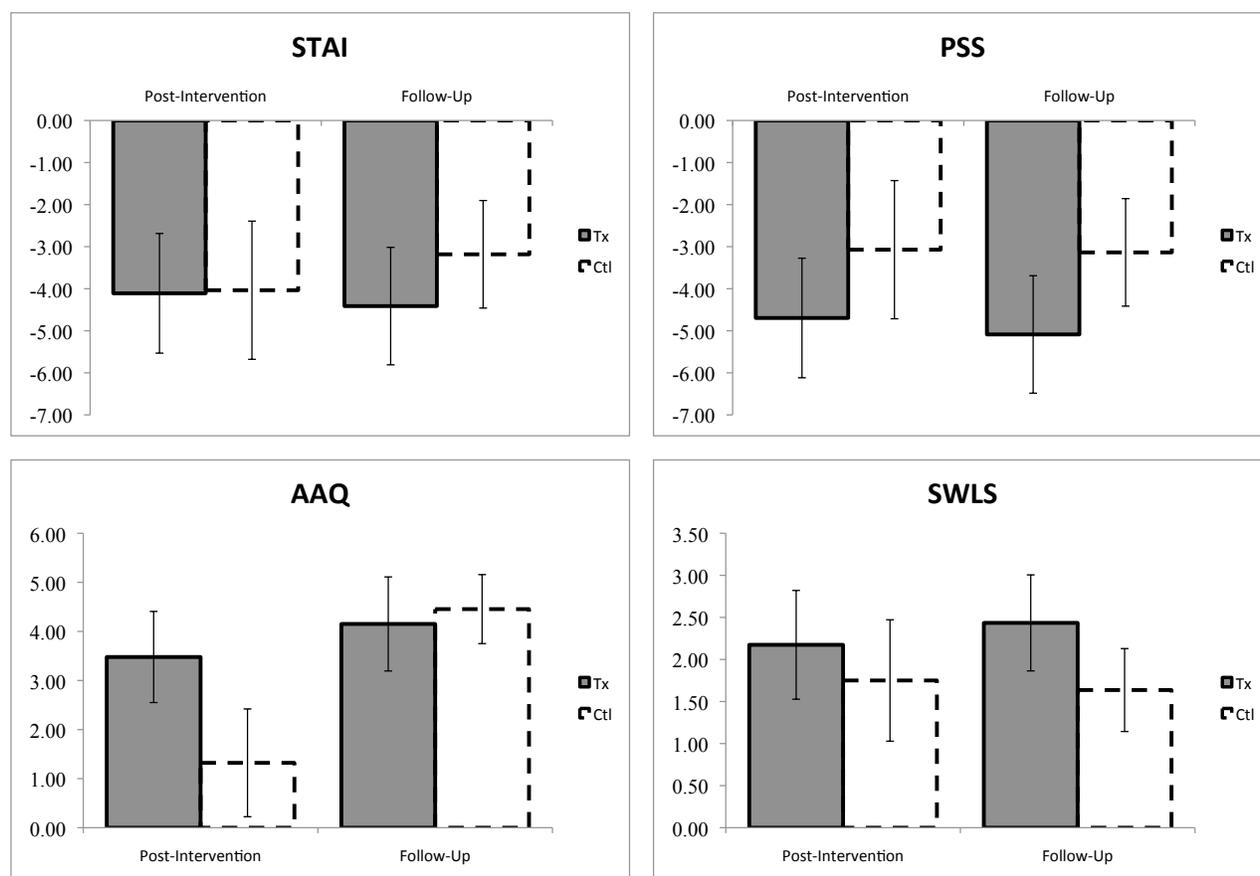
Figure 8. Imputed Values for All Dependent Variables at Postintervention and Follow-Up

Table 11

Independent Sample t-Tests at Postintervention and Follow-Up for Treatment and Control Groups

on All Dependent Variables Imputed

	Postintervention ($N = 91$)				Follow-Up ($N = 91$)			
Variable	Mean Change[a]	Diff. of Means	t ($df = 89$)	*ES*	Mean Change[a]	Diff. of Means	t ($df = 89$)	*ES*
STAI	Treatment −4.11	−0.07	0.034	0.007	−4.41	−1.23	0.649	0.130
	Control −4.04				−3.18			
PSS	Treatment −4.70	−1.62	1.084	0.205	−5.09	−1.95	1.391	0.244
	Control −3.07				−3.14			
AAQ	Treatment 3.48	2.16	1.503	0.293	4.15	−0.30	0.254	0.047
	Control 1.32				4.45			
SWLS	Treatment 2.17	0.42	0.438	0.088	2.43	0.80	1.056	0.206
	Control 1.75				1.64			

*p < .05. **p < .01. ***p < .001. ª From baseline.

These analyses show no significant changes on the postintervention imputed data nor on the follow-up imputed data. More sensitive analyses including the influence of covariates are described in the next paragraph in order to better extract the effect of the intervention.

Analyses of Variance. In order to do an analysis of covariance of the treatment effect, one had to find out which covariates needed to be included in the ANCOVA. To do this a forward model selection was performed for each of the four dependent variables and the complete set of covariates, leaving the covariates with highest significance for the later ANCOVA. In this process, the dependent variables were the score changes for all four measurements between baseline and postintervention, and between baseline and follow-up. The covariates are all four baseline measurements and the five factor scores from the NEO-FFI. Note that, for each of the four variables, the corresponding baseline value is always added to the covariate set even if it is not chosen by forward selection. This is an attempt to compensate for the possible effect that a participant with a higher baseline value will naturally show more improvement through regression to the mean. Table 10 and Table 13 display the sets of covariates yielded by the forward model selection.

Table 12

Sets of Covariates Chosen by Forward Model Selection for All Dependent Variables at

Postintervention for Measured Data

Variable	Covariates	Sig.
STAI Score Change	STAI Baseline	0.007**
	NEO: O	0.000***
	NEO: A	0.148
PSS Score Change	PSS Baseline	0.115
	NEO: O	0.044*

AAQ Score Change	AAQ Baseline	0.143
	STAI Baseline	0.029*
	NEO: O	0.068
SWLS Score Change	SWLS Baseline	0.398
	NEO: O	0.085

*p < .05. **p < .01. ***p < .001.

Table 13

Sets of Covariates Chosen by Forward Model Selection for All Dependent Variables at Follow-Up

for Measured Data

Variable	Covariates	Sig.
STAI Score Change	STAI Baseline	0.005**
	AAQ Baseline	0.045*
	NEO: A	0.341
PSS Score Change	PSS Baseline	0.078
	AAQ Baseline	0.002**
	NEO: A	0.138
AAQ Score Change	AAQ Baseline	0.774
	NEO: A	0.185
SWLS Score Change	SWLS Baseline	0.417
	NEO: O	0.018*
	NEO: A	0.214
	NEO: C	0.387

*p < .05. **p < .01. ***p < .001.

Notably, the NEO-FFI factor Openness to Experience (NEO:O) appears among the covariates of highest significance for all four of the dependent variables at postintervention and two of them at follow-up. Table 14 displays a correlation matrix that shows the relationship between the four dependent variables. Table 15 displays the correlation between the baseline scores and the score changes between all measures. Table 16 displays the correlation between the NEO-FFI factors and the score changes.

Table 14

Correlation Matrix Between All Dependent Variables Measured at Postintervention

	STAI	PSS	AAQ	SWLS
STAI	1	-	-	-
PSS	0.57	1	-	-
AAQ	-0.41	-0.61	1	-
SWLS	-0.59	-0.62	0.41	1

The PSS score changes show strong negative correlations to the AAQ and SWLS score changes. The STAI score changes show moderate negative correlations to the AAQ and SWLS score changes, and moderate positive correlations to the PSS score changes. The AAQ score changes show moderate negative correlation to the SWLS score changes. The labeling of correlation is according to Salkind's (2004) suggestion: .8-1.0 is referred to as a very strong relationship, .6-.8 is referred to as a strong relationship, .4-.6 is referred to as a moderate relationship, a .2-.4 correlation is referred to as a weak relationship, and a .0-.2 correlation is referred to as no relationship.

Table 15

Correlation Matrix Between Baseline Scores and Dependent Variables at Postintervention

	STAI (Δ)	PSS (Δ)	AAQ (Δ)	SWLS (Δ)
STAI (Baseline)	-0.63	-0.06	-0.27	0.10
PSS (Baseline)	-0.32	-0.51	0.07	0.17
AAQ (Baseline)	-0.26	-0.07	-0.05	0.14
SWLS (Baseline)	-0.07	0.13	0.22	-0.18

The STAI score changes show strong positive correlation to the STAI baseline scores. The PSS score changes show moderate positive correlation to the PSS baseline scores.

Table 16

Correlation Matrix Between NEO-FFI Factors and Dependent Variables

		STAI (Δ)	PSS (Δ)	AAQ (Δ)	SWLS (Δ)
	N	-0.10	-0.24	0.08	0.21
	E	0.37	0.26	-0.09	-0.23
NEO-FFI	O	-0.37	-0.26	0.12	0.11
	A	0.25	0.24	-0.19	0.02
	C	-0.01	-0.16	0.04	-0.18

The main relationships were found between the dependent variables themselves rather than between the dependent variables and the covariates, validating the choice of the four instruments to measure changes in stress levels.

The results of the ANCOVAs reveal that the treatment and control groups differed significantly in their baseline to postintervention and baseline to follow-up changes on all four dependent variables. The results of these analyses are reported in Table 17.

Table 17

Results of ANCOVAs Using the Measured Values and the Covariate Sets Found by Forward Selection in Table 12 and Table 13

Variable		Postintervention ($N = 50$)				Follow-Up ($N = 39$)		
		df	F	$\eta_p{}^2$		df	F	$\eta_p{}^2$
STAI	Covariates	3	10.75***	0.417	Covariates	3	5.11**	0.311
	Group	2	11.08***	0.330	Group	2	12.59***	0.426
PSS	Covariates	2	3.86*	0.144	Covariates	3	5.85**	0.341
	Group	2	18.22***	0.442	Group	2	27.58***	0.619
AAQ	Covariates	3	2.65	0.150	Covariates	2	1.09	0.058
	Group	2	7.62**	0.253	Group	2	25.78***	0.596
SWLS	Covariates	2	1.75	0.071	Covariates	4	2.32	0.219
	Group	2	7.73**	0.252	Group	2	14.23***	0.463

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

These results verify the research hypotheses: There was a significant decrease in anxiety, a

significant decrease in perceived stress, a significant increase in acceptance, and a significant

increase in subjective well-being for measured data, when controlling for the effect of covariates.

The imputed values for missing data by forward model selection yielded the set of

covariates of highest significance presented in Table 18 and Table 19.

Table 18

Sets of Covariates Chosen by Forward Model Selection for All Dependent Variables at

Postintervention for Imputed Data

Variable	Covariates	Significance
STAI Score Change	STAI Baseline	0.003^{**}
	NEO: O	0.000^{***}
	NEO: E	0.319
PSS Score Change	PSS Baseline	0.008^{**}
	STAI Baseline	0.005^{**}
	NEO: O	0.041^{*}
AAQ Score Change	AAQ Baseline	0.424
	STAI Baseline	0.005^{**}
	NEO: N	0.202
	NEO: O	0.124
SWLS Score Change	SWLS Baseline	0.493
	NEO: O	0.061
	NEO: C	0.388

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

Table 19

Sets of Covariates Chosen by Forward Model Selection for All Dependent Variables at Follow-Up

for Imputed Data

Variable	Covariates	Significance
STAI Score Change	STAI Baseline	0.005^{**}

	AAQ Baseline	0.114
	NEO: O	0.099
PSS Score Change	PSS Baseline	0.155
	AAQ Baseline	0.010**
	STAI Baseline	0.033*
	NEO: N	0.085
AAQ Score Change	AAQ Baseline	0.699
	NEO: C	0.201
SWLS Score Change	SWLS Baseline	0.719
	NEO: O	0.107

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

The analysis results (using imputed data) for the second set of ANCOVAs is presented in Table 20. In these conservative analyses, the treatment and control groups differed significantly in their preintervention to postintervention changes on all four dependent variables. Scores declined on both the STAI and the PSS significantly more for the treatment group than for the control group. On the AAQ and the SWLS, scores increased significantly more for the treatment group than for the control group.

Table 20

Results of ANCOVAs Using the Imputed Values and the Covariate Sets Found by Forward Selection in Table 18 and Table 19

Variable		Postintervention ($N = 91$)				Follow-Up ($N = 91$)		
		df	F	$\eta_p{}^2$		df	F	$\eta_p{}^2$
STAI	Covariates	3	8.56***	0.230	Covariates	3	4.18**	0.127
	Group	2	8.88***	0.171	Group	2	9.27***	0.177
PSS	Covariates	2	4.84**	0.144	Covariates	4	3.46*	0.140
	Group	2	15.13***	0.260	Group	2	18.90***	0.308
AAQ	Covariates	3	2.74*	0.114	Covariates	2	0.82	0.019
	Group	2	6.54**	0.133	Group	2	25.90***	0.373
SWLS	Covariates	2	1.39	0.046	Covariates	2	1.33	0.030

| | Group | 2 | 8.44*** | 0.164 | Group | 2 | 15.10*** | 0.258 |

p < .05. **p* < .01. ***p* < .001.

The imputed data are more conservative, but nearly double the data set (*N* = 91) compared to the nonimputed postintervention data (*N* = 50), and nearly triple the data set compared to the nonimputed follow-up data (*N* = 39). Incidentally, the score changes were still found to be significant, with a higher statistical significance than for the nonimputed data. However, the effect size, as estimated by the partial eta-squared, diminished by about one third.

Dropout Analysis. The other question addressed by this study was whether treatment group participants who began the intervention but then dropped out of the study (*N* = 13) before completing the postintervention questionnaire were distinguished from those who did not drop out (*N* = 22) on any of several demographic and personal characteristics. The difference between the sum of those two groups and the total number of people screened into the treatment group is the number of people screened successfully who never began the intervention (*N* = 11). A first approach to address this question was to conduct independent group *t*-tests, assigning numerical values to categorical variables, between the dropouts and nondropouts on 12 characteristics considered to be potentially differentiating. The results of these *t*-tests are presented in Table 21.

Table 21

Results of t-Tests of Differences Between Dropouts and Nondropouts

Characteristic	Group	Means	*N*	Means Difference	*t*[a]	*df*	Sig. (2-tailed)
Stress	Nondropouts	30.27	22	-2.50	-0.984	33	0.332
	Dropouts	32.77	13				
Anxiety	Nondropouts	42.36	22	-11.33	-3.283	33	0.002**
	Dropouts	53.69	13				
Distance	Nondropouts	10.27	22	-2.65	-0.846	33	0.404
	Dropouts	12.92	13				
NEO: N	Nondropouts	61.14	22	1.83	0.533	33	0.598

Characteristic	Group	Means	N	Means Difference	t^a	df	Sig. (2-tailed)
	Dropouts	59.31	13				
NEO: E	Nondropouts	47.32	22	-1.84	-0.397	33	0.694
	Dropouts	49.15	13				
NEO: O	Nondropouts	61.32	22	1.70	0.524	33	0.604
	Dropouts	59.62	13				
NEO: A	Nondropouts	49.91	22	5.76	1.49	33	0.146
	Dropouts	44.15	13				
NEO: C	Nondropouts	44.32	22	6.70	1.566	33	0.127
	Dropouts	37.62	13				
Income	Nondropouts	3.82	22	0.36	0.579	33	0.567
	Dropouts	3.46	13				
Children at home	Nondropouts	1.64	22	0.25	0.841	33	0.406
	Dropouts	1.38	13				
Gender	Nondropouts	1.18	22	-0.05	-0.340	33	0.736
	Dropouts	1.23	13				
Ethnicity	Nondropouts	3.55	22	0.01	0.020	33	0.985
	Dropouts	3.54	13				

*$p < .05$. **$p < .01$. [a] Levene's test nonsignificant for all tests; equal variances assumed

The dropouts differed significantly from nondropouts on only one of the 12 characteristics reported in Table 21: Anxiety. Nondropouts had significantly lower anxiety than dropouts. To further refine the method and determine high-risk dropout populations, a recursive partitioning of a tree model was used to study the dropout data. The model finds the optimal way to split the entire dataset according to the dropout indicator (0 = nondropout, 1 = dropout), such that the misclassified proportion is minimized. The covariates are ranked by their significance in the classification and the one with primary importance is reported. When the Anxiety variable (STAI-S) is included in the partitioning, the optimal division is always characterizing the individuals with an Anxiety measurement higher than 44.5 to be the group likely to dropout. Therefore the key indicator for dropout is Anxiety and threshold is 44.5, confirming the preliminary analysis using *t*-tests.

Out of the 13 people who began the classes but later left the training, ten of them notified the researcher. These are e-mails they sent with regards to their abandoning the intervention:

"I have been giving a lot of thought to my participation in your stress management study and, after much deliberation, have decided that the distance and time required to travel to participate are not optimal for me."

"Unfortunately, [my husband] and I will not be able to join the group anymore. For personal reason our family has to fly to Germany in the next days."

"I have been reading the Katie book and I feel that her method is not a good fit for me. I find it a little bit studied. . . . I have increasing demands on my time and need to consider whether I will benefit enough from continued attendance to justify the time investment."

"I wanted to let you know that I will have to drop out of the class. I'm very sorry about that. I got bit by a spider (if you can believe that) and am having a systemic reaction."

"After giving it some thought over the last couple of days I've decided to stop participating in the study/training. Although I did learn a lot and will continue with the book & techniques, ultimately the training wasn't what I was looking for."

"I no longer wish to continue this class. Perhaps my life is too peaceful these days or maybe I find Katie's method being over simplified in applying to all life situations and all cultures."

"I've really bitten off more than I can chew at this time."

"I apologize, but I have decided to focus on a meditation group locally instead."

The tenth one did finish the training, but because she had to travel for family reasons during some of the classes (including the full-day workshop), she was considered a dropout and was not given a postintervention questionnaire to fill out. Several people in this group quit the program due to over-committing or for logistics-, family-, or schedule-related reasons. Others decided that the

method taught did not meet their expectations, and was not worth their time or their commute. It is unclear whether these reasons bear any relationship with higher baseline anxiety levels. Some participants declined to attend the training after completing their baseline questionnaire. These are not included in the dropout recursive partitioning analysis, because *dropouts* were defined in the previous chapter as people who began the treatment. See below the e-mail communications from those who were assigned to the treatment group but did not attend the class:

"I went to map the training dates on my calendar & realized that I have two conflicts!!"

"I have decided not to participate."

"I have discovered that it will conflict with some other dates that I already have planned."

"[I have] been weighing for the past few days the various factors with getting to the sessions on time from SF and, unfortunately I just cannot get comfortable with the commitment."

"My apologies for signing up as Monday nights will not work for me after all!"

"I never received confirmation, directions, or any details."

"I apologize ... for not showing up last eve -a friend who had planned on accompanying me could not last min accommodate."

"I have decided not to participate. Thank you for your consideration."

If these eight people are representative of the 11 who did not attend the training, about half of the people realized that they over-committed or could no longer fit the training into their schedule, in a fashion similar to some of the intervention dropouts. The other half did not share their reasons.

Focus Groups

The overwhelming feedback from participants who attended the postintervention focus groups was that the training was helpful. Many people had the firm intention to continue using and

practicing the tools learned during the six-week class. There were a small minority—two participants, mainly—of dissenting voices who expressed skepticism about the intrinsic validity and usefulness of the process. (Some of the objections are presented at the end of this section.)

Participants described some tangible benefits from the six weeks of training, reporting for example that "My mind is quieter, now, which is really nice." "I felt my stress come down and my sleep issue wasn't nearly so bad." "It sort of allowed me more to witness my own thoughts." "I've been feeling good and more productive." "It's been empowering." and "I am less attached to predicting the outcome of behaviors by others."

Participants in general received the concept of the four questions fairly easily, but a number of people were confused by the concept of turnaround, either because they had difficulties finding appropriate ones for their stressful beliefs ("I would sometimes be unable to find a turnaround, and felt like I was missing something that could be valuable."), or because they had trouble grasping the purpose of the turnarounds ("It just seemed like a weird concept." "I never felt like I really got the purpose."). In some cases, because the turnarounds pointed the judgments right back at them, some participants felt that it would lead them into a pattern of self blame ("If I am someone who beats myself up and I am stressed with someone else and I play it back onto my own self again, how do you get out of that loop...").

The first two questions also went counter to some people's habitual patterns of thinking. Asking oneself whether a belief or concept (held lifelong in some cases) is true tends to provoke a reaction: In particular this occurs when all proofs and corroborating opinions seem to point to its truth (e.g., "I really struggled with 'Is it true?' because I think that it's true, it's so true in my life, I know it's true and it happened and, God, I'm feeling it!" "You don't absolutely know anything; then it just collapses into something that isn't useful."). There were comments about having more

flexibility in the wording of the questions, rather than applying them unchanged to each and every situation or concept (e.g., "For some people you can ask the questions a certain way and they're not getting it."). Once the questions and their meaning were assimilated, people reported finding them a crucial tool (e.g., "The question 'Is it true?' is alive within me." "'Who would you be without that thought?' was really an eye-opener for me."). Other tools were taught that many people found useful, such as finding underlying beliefs, accepting the gift of criticism, and telling apart other people's business from one's own (e.g., "Finding underlying beliefs using 'And it means that...' was also a big help for me." "That was just like 'Wow!' this is an interesting perspective to have about criticism." "Why wasn't I told 20 years ago about the different kinds of business! It all makes sense now.").

A notion that met with resistance from a number of participants was Byron Katie's use of the word "God" in several contexts such as presenting the world as God's doing, or labeling events over which people had no control "God's business." In spite of the book's qualification of God as "reality" (Mitchell & Mitchell, 2002, p. 3) and not a divine being, the use of the word made some participants uncomfortable (e.g., "I'm not a religious person, but it did irritate me a little [using the word 'God'] ... For the method it would have been great if she didn't use that.").

With regards to the way the training was conducted, a few people wished for tighter control (of time, how long participant had the floor, etc.) and more pushing of the edges, rather than always leaving participants within their comfort zone. However, others felt like this work was being pushed too hard on them. Although one person did not think it wise to ask people to commit to a full Saturday in the training, many more felt like the full-day seminar was a key part of the training, sometimes suggesting that there be another one. Many people felt like a six-week period was just enough to bring them to a sufficient level of practice and clarity about the process, and would have

willingly continued the program for another two or three classes, if given such an opportunity.

The book *Loving What Is* (Mitchell & Mitchell, 2002) was the main textbook for this training, and the readings from the book were done in class, although participants were encouraged to read the text at home. A number of people commented that assigning readings prior to coming to class would have helped understand the concepts being presented, and that reading aloud during the class took away valuable time from practice or didactics. The syllabus included some poetry pieces that the researcher felt were relevant to the topics being presented. The list of poetry can be found in Appendix E: Syllabus. A few people were of the opinion that poetry should have been omitted from the syllabus or handed out on paper to read at home, in order to make space for more practice.

The demonstration videos were very popular among most participants, offering examples of how Byron Katie herself facilitated volunteers through Inquiry, and giving people a more precise understanding of the whole process (e.g., "Watching her work with people. I really appreciated that." "I could see it almost visually that they knew change had taken place and they were comfortable with it." "It was really helpful to see the videos because really it's reviewing a lot of information."). In addition to videos featuring Byron Katie, an excerpt of a National Geographic interview of Robert Sapolsky on stress and a video on the concept of projection by Philip van Munching were presented (see Appendix E: Syllabus).

Another element that people appreciated, and would have liked to experience more often, was the live in-class sessions, where a participant was facilitated by the instructor in front of the group or two participants were coached through a facilitation. There was also a lot of positive feedback in the focus groups about the work with a partner. Having someone to practice the tools with was invaluable to many participants. Homework was assigned each week to use the tools learned in class for practice with a partner from class (e.g., "One of the things [that worked] was for

me the partnering." "What helped most was doing it.").

Among the exercises assigned in between class meetings, the Judge Your Partner exercise was skipped by many participants. People reported not feeling comfortable writing down judgments on someone of whom they knew very little (e.g., "I was upset about judging your partner session. I don't feel I know people well enough to do good constructive criticism and [don't] feel there's anything I want to say to anybody." "I couldn't get past the idea that whatever I picked, whatever lame thing I might choose, that I might hit something sensitive that I wasn't willing to do, that would hurt the other."). Participants applied the recommendation, in this case, to not engage in any given exercise if they did not feel comfortable doing it.

Other issues that were brought up included the fact that Inquiry is not a solution-focused process; it may help you feel less stressed, but does not offer specific ways to accomplish one's goals. The criticism also addressed the common question posed about this work, namely that accepting what is could undermine actions that need to be taken in one's life (e.g., "There was another issue about procrastination. Again, the issue of... Well, you know, is it true you have to do things?" "There's nothing in this program that has anything to do with changing." "I didn't find it quite as helpful with things that I would have... you know, taking action with anything."). Some participants felt cautious about using Inquiry with people who were victims of traumatic incidents, and believed that only qualified therapists should work with this type of patient (e.g., "Around traumatic events ... I'm not really sure if I fully stand behind the idea that it couldn't be dangerous to try or facilitate someone unless you're a qualified therapist.").

The majority of the criticism concerning the training process, the method of Inquiry, and the organization supporting Byron Katie emanated from one participant in one of the focus groups. It is worth describing independently the points made by that individual, as they may not have surfaced

from other participants simply because someone holding on to such points of view may be unlikely

to give feedback within the context of focus groups, and may be more prone to drop out of the

training. Fortunately, this individual was very vocal about his dissenting opinion. His first concern

was the objectivity of the study. From his point of view, this study amounted to indoctrination

because the intervention consisted of training in Inquiry, that the course facilitators shared their

personal positive experience and trust in the method, that the videos presented were "encouraging"

(sic), and that he felt his objections about the validity of the method were met with

recommendations to just apply it and report on his personal experience.

A related issue, echoed by two other participants in the same study group, was the

impression that Inquiry was promoted as a panacea for all psychological problems. Because the

implementation of the method was seen as too simple, it was not perceived as having the potential

to address complex problems "from incest to work-related issues to marriage issues, to being out of

work." This participant objected to the breadth of scope of this modality, arguing that a well-trained

and qualified therapist uses a full palette of methodologies adapted to different kinds of problems

and different levels of complexity (e.g., "I don't dispute that there is value to it. I do dispute that it

cures everything.").

The centrality of Byron Katie's persona through the textbook, the videos, the quotes and the

handouts was qualified as "guruism." The naming of the Inquiry process as "The Work" was seen

negatively as proprietary, especially in regards to the fact that there are other "works" in the fields

of psychology and spirituality (i.e. the "work" of Abraham Maslow, or the "work" of Carl Jung). It

also led this individual to question the ties between this researcher and Byron Katie's organization,

and the vested interest that the organization would have in this research (e.g., "It's an excellent

marketing tool because now once you get a researcher to write an article, a study on it, with a Ph.D.

after their name, now it's The Work of Byron Katie, as discussed in the work of so-and-so, Ph.D."). In fact the marketing aspect of this work seemed particularly irksome to him, as he listed the cost of various workshops offered by Byron Katie International, Inc., the merchandizing products, or the salary that he believed Byron Katie was receiving from her organization.

As already addressed in the literature review chapter, the principles at work in the Inquiry process are similar to those found in other disciplines such as Buddhism, ancient Greek philosophy, and other cognitive therapies. Some participants even commented on that (e.g., "I saw parallels like in Buddhism. I liked that."). However, it was seen as a drawback by this dissenting voice (e.g., "I believe that it's similar to many other things, as other people in the room have talked about: Buddhism, Stoics, the Bible, the Serenity Prayer, and so I think it's just a branding of a lot of stuff that's sort of common knowledge, general wisdom, over the eons that's been packaged into this.").

Overall, many participants in the focus groups reported that the training had been helpful to them and had produced positive changes in their lives. However, there is little in their reports that betrays the underlying mechanisms of change. Occasional comments reveal that the notion of witnessing oneself, the sense of empowerment, and a quieter mind may be active ingredients in these life changes. The interview script was not specifically tailored to uncover the factors of change and whether the participants understood the essence of Inquiry, but instead to find out what worked and what did not work for them in the intervention.

Chapter 5: Discussion

Quantitative Results

The research hypothesis was that a six-week class and regular practice in Inquiry would produce statistically significant reductions in self-reported anxiety and stress levels, and increases in acceptance and satisfaction with life for the participants in the study.

The initial approach was to use *t*-tests to compare the baseline values to the measured postintervention values and to the measured follow-up values. Results from those *t*-tests show this hypothesis to be verified for the PSS and AAQ scores at postintervention, and for the PSS and SWLS scores at follow-up time. The drop in scores on the PSS is almost expected, since participants are screened for higher stress levels. One would assume that scores on this artificially high scale would tend to regress to the mean. However, the difference between treatment and control was dramatic, both at postintervention and at follow-up times. The values measured at postintervention appeared to remain stable during the follow-up period, possibly indicating a change in the set-point of the participants in the treatment group. Examining the questions that compose the PSS may shine light upon the kind of changes that took place within the participants. The main themes of the scale ask the respondents about how they felt in the last month with regards to their ability to control the important things in their life and to handle their personal problems, whether difficulties were piling up so high that they could not overcome them, and whether things were going their way. It is worthy of notice that these questions mainly concern control over one's life and whether one's life is fraught with obstacles, while Inquiry tends to point to the illusion of control and the acceptance of what is. One can speculate that study participants answered these questions with the understanding that life becomes easier as one relinquishes more control, and that resisting what fate puts in one's way can only increase one's levels of distress. So it may be that

people for whom the PSS score improved did not actually gain more control over things in their lives, but instead learned to be less attached to the outcomes.

Because this first analysis did not include missing data from dropouts and subjects lost to follow-up, the t-test analysis was repeated with the more conservative intention-to-treat imputed data set. In this case, the t-tests did not reveal any significant changes for any of the dependent variables. Nonetheless, the effect sizes were in the moderate range for AAQ, and the data set lent itself to a more sensitive analysis. Because of the high attrition rate, the imputed values for no-shows, dropouts, and lost to follow-up accounted for more than half of the initial study sample. Although it was appropriate to calculate the results for this more conservative estimate of the data in order to provide a worst-case scenario, mixing actual measured values with an equal number of forecast values severely lowered the signal-to-noise ratio. A more refined analysis was necessary to explain the changes observed in the dependent variables as well as verbal reports from the participants. Further discussion on the nature of the attrition and its influence on the findings is included later in this section.

The results from the t-tests were significant enough when using measured data, but lost their significance when the t-tests were applied to imputed data. The next set of analyses consisted of ANCOVAs using the baseline scores on the STAI, PSS, AAQ and SWLS, and the NEO-FFI factors N, E, O, A and C as covariates. For each dependent variable, only significant covariates were chosen, which limited the number of covariates for each ANCOVA to two or three. A determination of significant covariates for each dependent variable was done using forward model selection. Once the results were controlled for the influence of covariates, the significance of the treatment vs. control group assignment became more evident and appeared in each one of the four dependent variables. This significance persisted when the ANCOVA analyses were applied to the imputed

data. The set of ANCOVA analyses using these covariates yielded a significant effect (p < .01) for the treatment vs. control groups, both for measured values and after the intention-to-treat imputation for missing values. The means of scores varied in the same direction for the treatment and control groups, due to regression to the mean, but with a significantly greater variation for the treatment group. The effect size was described using partial eta-squared from the ANCOVA results, yielding sizable values, with 33% of the variance of STAI accounted for by the treatment group ($\eta_p^2 = .330$), 44% for PSS ($\eta_p^2 = .442$), and 25% for AAQ and SWLS ($\eta_p^2 = .253$ and $\eta_p^2 = .252$ respectively). Although partial eta-squared is not the most conservative indicator of effect size (Ferguson, 2009), the levels calculated clearly indicate a strong influence of the treatment on the measured scores. In spite of the relatively small population sample used in this study, this intervention can be described as effective with regards to participants' perceived stress.

In the process of selecting the covariates with highest significance, as was hypothesized, the Openness to Experience factor of the NEO-FFI was found to account for a significant portion of the variance in all four dependent variables, both for measured and imputed values. This cannot be ascribed to the fact that participants scoring low on this factor tend to drop out of the study, because the dropout analysis did not show this factor to be significant in the mean difference between dropouts and nondropouts. One may consider that there is a predisposition to this type of intervention for people who score high on this factor. Williams, Rau, Cribbet and Gunn's (2009) research suggests greater stress resilience among individuals scoring high on Openness to Experience and greater vulnerability to adverse effects of stress among individuals scoring low on that factor.

Conversely, there was no evidence of an effect of the Conscientiousness factor of the NEO-FFI, apart from a minor influence as covariate on the SWLS imputed score change ($p = .388$).

However, it is notable that among the people who completed the baseline questionnaire ($N = 91$), the mean of the T-scores for Conscientiousness is slightly below the normative population average ($C = 41.3$, 30th percentile). One may speculate that people who score low on this factor may be more likely to seek outside help when it comes to stress reduction, or that they are more likely to experience stress. Answering this question would be a valuable topic for further research. Perhaps shedding some light on this, Bartley and Roesch's (2011) research suggests that Conscientiousness serves as a protective factor from stress through its influence on coping strategy selection. Such individuals might therefore be less likely to seek out a stress-reduction intervention.

A minor but unexpected finding was a moderate correlation between the Extraversion factor of the NEO-FFI and the anxiety score change (STAI-S). The correlation was positive, which is to say that scoring higher on Extraversion leads to a lesser decrease in state anxiety. This result seems to go counter to previous finding linking extraversion and psychopathology, where negative correlations were found between Extraversion and unipolar depression, dysthymic disorder, obsessive-compulsive disorder, and panic disorder (Kotov et al., 2010). Nonetheless, while Extraversion may indicate an individual's inclination to use coping mechanisms through social support, from the point of view of Byron Katie's work, expecting others to meet one's own needs (and assuming the Extraversion factor is related to need-meeting expectations), being an extrovert tends to lead to more stress.

The study of the subset of individuals who dropped out of the intervention revealed that the major risk factor was baseline anxiety (STAI-S). Since we are using STAI-S as one of the correlates for stress, it tends to indicate that the more stressed an individual is, the less likely he or she is to complete this stress-management intervention. The implications of this finding would justify placing extra attention on the retention of individuals who score high on the STAI.

The attrition rate was forecast to be 40% for this study, based on prior studies of stress-reduction interventions in the general population (Williams, Kolar, Reger, & Pearson, 2001; Vieten & Astin, 2008; Hamdan-Mansour, Puskar, & Bandak, 2009). It proved to be notably higher, when including no-shows, dropouts, and participants lost to follow-up. In particular, the proportion of no-shows was remarkable. Out of 46 people who were screened into the treatment group and who completed the baseline questionnaire, 11 never showed up for class, nearly one quarter of all treatment group participants. One may speculate that people who are under stress and want to do something to help themselves also have a tendency to over-commit and only realize after-the-fact that they cannot meet their commitments. This phenomenon peaked with the third treatment group, for which nine participants were expected at the first class and only three attended. A series of phone calls to the missing participants managed to convince two more to attend a make-up class and rejoin the program, however, after the second class, the number of participants in this treatment group had fallen back to three. It is unclear how to prevent such early attrition, but it may be useful, when conducting a study of this type, to establish a relationship with participants as soon as they are screened into the treatment group. One approach might be to welcome each person individually with a telephone call. This would certainly be recommended if the training was offered as a regular class rather than as part of a research project. A contributing factor to the number of no-shows was likely that participants had no financial investment in the program. One would think that people who pay out of pocket to attend a class of their choice would be more likely to come than people who are offered it for free, knowing that the method offered is still under development.

Among the people who began the training but later dropped out, the majority attended one or two classes and never returned to the training. This may be a consequence of not correctly setting expectations. Perhaps explaining more clearly the method under study in the recruitment phase

would help. Participants came to the first few classes to assess for themselves whether they wanted to stay for the whole program, and left if they did not find there what they expected. The participants who remained after the first two classes tended to be firmly committed. A smaller number of people dropped out because of life obligations or were unable to attend a sufficient number of class meetings to be kept in the study. Two did finish the class but never completed the postintervention questionnaire. This latter type of problem was alleviated in the last treatment group by bringing enough computers to the last class for people to complete the questionnaire on the spot. Treatment dropouts and attrition present several problems leading to possibly skewed results. First, by decreasing the sample size, attrition reduces the power of the study. Even when retaining the baseline $N = 91$ through imputed data, the imputation also reduces power via reduced effect sizes. Second, dropouts and people lost to follow-up in the treatment group may have left the study because they were not responding as well to the intervention. If this is the case, the significant results found on the nonimputed data may be overstated. Finally, although a posthoc analysis of dropouts was done, it only used quantitative data that was available at baseline for those 13 participants, revealing the baseline anxiety level to be a factor; a more discriminative analysis would have consisted in reaching out to the dropouts and people lost to follow-up, asking simple questions about their perceived effectiveness of the method.

A shorthand description of the demographics of the sample for this study would be "educated, middle-aged, white women." At least the gender part of the bias is not attributable to the population demographics of the region of recruitment. While it may be true that women are more likely than men to seek self-help and personal growth, attracting more men to this type of study would make the results more representative of the population as a whole. With regards to other characteristics, further research should focus on different subgroups. For instance, it would be of

interest to explore the question of whether this method's effectiveness would differ when used on a sample with a high-school education or lower. Targeting a younger age range would help examine whether the concerns of young people could be addressed through Inquiry. Lastly, focusing on diverse ethnicities and races would provide insight into issues specific to those groups.

Qualitative Results

The quantitative reduction in stress and anxiety, and the improvement in acceptance and subjective well-being corroborated the qualitative reports that suggested that the training in Inquiry was associated with positive transformative experiences. The focus groups added first-hand experience validity to the results presented above. The main finding from participants' reports was that the training in Inquiry was helpful to most, and led to a number of observed positive life changes. The training was beneficial enough to some that they suggested that it be extended by two to three weeks. It must be noted that a decision was made at the outset to restrict the intervention to six weeks in order to minimize attrition. Had this not been a concern, the proposed intervention would have mirrored the mindfulness-based stress reduction programs of eight weeks including one full-day seminar. Among the improvements reported by the focus groups were more peace, less stress, a different attitude in response to the daily hassles of life, more compassion for oneself and for others.

One of the differences between well-established cognitive-behavior modalities and this type of work is the way cognitions are investigated. Typical cognitive restructuring examines thoughts and beliefs and asks whether they are irrational and whether they are conducive to some emotional distress, not unlike the questions "Is it true?" and "How do you react when you believe that thought?" However, the answers to these questions in cognitive restructuring proceed from a well-reasoned look at such thoughts. In contrast, participants who seemed to have breakthroughs while

practicing Inquiry often appeared to answer the questions not through a purely rational process of declarative thinking, but through a more organic or meditative process reminiscent of "wise mind" (Linehan, 1993). Another difference is the fact that cognitive restructuring seeks to replace one thought with another. There is no such intent in Inquiry. This point had to be emphasized to the class repeatedly during investigation of stressful thoughts and examination of turnarounds. The way this dissipates stress is by exposing to the light of day the fact that the stressful belief under investigation may be no more real than the rope that appeared to be a snake. Inquiry chips away at the stance that human beings adopt naturally, which consists of firmly believing that one is right and one's view of the world is accurate. As this state of mind wears away, the more open *don't-know mind* begins to appear. Inquiry allows this to happen in a gentle way, unlike cognitive restructuring, which sometimes appears to coerce irrational beliefs into Stuart-Smalley-like feel-good affirmations: "I'm good enough, I'm smart enough, and doggone it, people like me!" (Franken, 1992). Practitioners of Inquiry have to be cautioned not to understand turnarounds as being this kind of affirmation, but instead as an alternative that may be as valid as the thought that caused them stress.

A point that sometimes confuses participants in the training is the turnaround of a belief containing the word *should* or *shouldn't*. In future trainings, it might be useful to address this point early. When the thought under scrutiny is in the form "My wife shouldn't have wrecked the car," and one is firmly attached to that belief, one lives in a world that is not in accord with reality, a world of unscathed cars and perfectly-driving spouses, a world that does not exist. Turning it around to "My wife *should* have wrecked the car" brings one back in alignment with what is. In Byron Katie's own words, speaking about the insanity of opposing reality, "How do I know that the wind should blow? It's blowing!" (Mitchell & Mitchell, 2002). However, this kind of turnaround can be

disturbing for people, especially because the word *should* expresses different meanings. It can express, in particular, (1) duty (as in "you should be paying your fair share"), (2) propriety (as in "children should be seen and not heard"), or (3) suitability (as in "drivers should slow down in order to save gas"). Saying that "My wife should have wrecked the car" makes it sound like a teleological phenomenon, as if a greater will was determining the course of events. In truth, this step of Inquiry stands for recognizing what is happening. It should have happened because of the infinite number of factors that conspired at that moment to make it happen, and no denial in the world can ever change anything about it. This kind of turnaround can be even more confusing when the stressful thought is something that is generally seen as reprehensible, such as "My father should not beat me." Yet, students of Inquiry must be shown that it is no less futile than attaching to the belief that the wind should not be blowing.

The Inquiry process requires one to maintain an awareness of one's thoughts and feelings in order to answer the questions. Furthermore, one must resist the impulse to change those thoughts and simply notice whether or not they are true. In this sense, it demands certain mental skills that pertain to mindfulness, as construed in mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990). The Inquiry training would greatly benefit from being coupled with training in MBSR, which has been recognized as effective for stress reduction. Creating a synergy between the two techniques could enable people to be better aware of their inner processes while practicing Inquiry, and might alleviate the busy-ness of the mind by putting stressful thoughts to rest while practicing MBSR, resulting in a mixed process of *mindful inquiry*. Some participants noticed the emergence of an observing self, they noted that they were able to become a witness of their own thoughts, and they found it to be helpful. Incidentally, the full day workshop that is part of the training begins with a guided meditation, similar to what is practiced during the nine-day retreats offered by Byron

Katie. This meditation is similar to the part of MBSR that teaches practitioners to observe their

thoughts without being attached to them. When engaging in the process of Inquiry, the mindfulness

of feelings allows practitioners to first notice when the "alarm clock" lets them know "I have

attached to a thought that is not true for me" (Byron Katie, 2004). The mindfulness of thought first

allows practitioners to be aware of the thought that produced the corresponding feeling, then to

detach from that thought—or *defuse* it, in ACT terms (Hayes & Smith, 2005)—in order to see

whether it is true. It is not uncommon for people new to Inquiry to state that they are experiencing

some negative feeling, but that they cannot find the thought that underlies it. Finally, the

mindfulness of body allows one to tune into the physiological manifestation of the stress. In the set

of questions intended to deepen the Inquiry appears the statement "describe the physical sensations

that happen when you believe that thought." The intent here is to become more attuned to the

signals sent by the body when a stress reaction takes place. The capacity of observing oneself is

integral to the practice of Inquiry, and this is a capacity that is actively developed by the practice of

MBSR. However, in spite of the commonality of purpose shared by Inquiry and MBSR, any

training in mindfulness was omitted from the intervention in order to prevent any confounding

effect. It would be valuable in further research to compare the effectiveness of combining the two

methods versus using any single method by itself. It must be noted that a search of the PsycINFO

database for the years 2000 to 2011 conducted through Cambridge Scientific Abstracts on May 18,

2011 and worded as follows:

> (DE="*therapeutic modality*") and (DE="stress") and not ((DE="posttraumatic") or
> (DE="acute stress")) and ((DE="psychotherapy") or (DE="counseling") or
> (DE="intervention") or (DE="self help") or (DE="psychotherapeutic outcomes") or
> (DE="treatment outcomes") or (DE="treatment effectiveness") or (DE="therapeutic
> processes"))

> returns 90 published works when replacing *therapeutic modality* with "cognitive behavior

therapy" or "cognitive therapy," 70 published works for "mindfulness" or "meditation," 4 for

"acceptance and commitment therapy," 2 for "rational emotive behavior therapy," 2 for "client

centered therapy" or "humanistic therapy," and 1 for "existential therapy." Even though MBSR is a

relatively new modality compared to cognitive therapies, it is used for stress interventions at a

comparable rate. Furthermore, mindfulness and meditation techniques are often used as an adjunct

in CBT-based stress interventions such as cognitive-behavioral stress management (CBSM; Antoni

et al., 1991) group therapy, which includes meditation, diaphragmatic breathing, guided imagery,

progressive muscle relaxation and autogenics alongside cognitive restructuring, and has been used

with cancer patients (Bower & Segerstrom, 2004; Penedo et al., 2006), athletes with sports injuries

(Perna et al., 2003), and HIV-infected populations (Cruess et al., 2002; Laperriere et al., 2005;

Berger et al., 2008).

In order to adequately compare cognitive-behavior therapy intervention with Inquiry, it

would have been necessary to include a third group receiving this type of treatment. However, as a

point of comparison, another study that used a group intervention on self-referred individuals from a

nonclinical population (Hamdan-Mansour, Puskar, & Bandak, 2009) reports a decrease on the PSS

of 50% at postintervention and 37% at follow-up compared to baseline, while the study described in

this dissertation finds 36% and 44% respectively, and 15% and 16% with imputed data. However,

the Hamdan-Mansour study had a 5% attrition rate and finished with a larger number of participants

($N = 84$), and therefore did not use imputed data. No effect size was reported but could be

approximated to a Cohen's d of 1.02 at postintervention, which is larger than the 0.744 found in the

present study at the same stage. However, making a comparison (even with a somewhat similar

study) might be fraught with difficulties, let alone using studies that were structured differently or

used different populations. In an attempt to situate the present study within the field of stress-

management studies, similar randomized controlled trials with comparable treatment durations, using a measure of perceived stress, and testing mindfulness-based treatments are presented below. The first two trials (Jain, Shapiro, et al., 2007; Vieten & Astin, 2009) were chosen from Chiesa and Serretti's (2009) meta-analysis based on their proximity to the present study. In addition, the Hamdan-Mansour, Puskar, and Bandak (2009) trial was added for comparison. Because none of those trials used an intent-to-treat analysis, the nonimputed values from this study were used. For effect sizes, the computed Cohen's *d* uses the means and standard deviations of the treatment and control groups at postintervention only (this is a different effect size than the one originally computed for this study, which used the score *changes* between pre- and postintervention; it has been recomputed here to match the other studies):

Table 22

Comparison of Effect Sizes With Similar Stress-Management Studies

Study Name	Instrument	Treatment			Control			Cohen's d
		M	SD	N	M	SD	N	
Nye (2011)	*PSS*	*20.45*	*8.32*	*22*	*28.79*	*9.41*	*28*	*-0.95*
Jain & Shapiro (2007)	BSI	0.22	0.17	27	0.46	0.52	30	-0.62
Vieten & Astin (2008)	PSS	15.9	5.7	13	16.9	4.6	18	-0.20
Hamdan-Mansour (2009)	PSS	12.4	5.3	44	18.2	6.2	40	-1.02

As a supplemental point of comparison, Richardson and Rothstein (2008) conducted a meta-analysis of 36 occupational stress-management interventions that were not predominantly mindfulness-based (modalities were cited as cognitive-behavioral, relaxation, organizational, multimodal and alternative). This meta-analysis derived a combined Cohen's *d* using the inverse-variance weighted average effect size from each individual intervention, which yielded $d = 0.526$ across all studies.

The modes of action of the Inquiry method, as reported by some focus group participants,

differed from usual cognitive restructuring. One way is in the method used to make clients look at

themselves, through asking themselves whose business the clients are in as they pass judgment, and

what taking this point of view means about the clients themselves. When someone comments that

"the advice I give others is really for myself," as one of the participants in this study did, that

individual moved from attempting to control someone else's life to focusing on his/her own.

Another element that stood out was how this work allows one to better receive criticism, which is

not an integral part of cognitive restructuring. This practice was described by one participant as "a

real opportunity for some sort of mini-therapeutic interaction with everybody that ever criticizes

you."

As discussed in the previous chapter, addressing a criticism regarding concerns about

acceptance of what is and how such acceptance might lead to inaction, or is not solution-oriented, or

does not lead to change, a number of focus group participants reported actual action items and noted

changes in their lives. One person said that she had been "feeling good and more productive," and

that it made her decide to "come out of her reclusiveness" and to "be more sociable," giving an

example of the mood improvement that often accompanies stress reduction and how it can empower

one to take action. Another reported to have recently been "able to go through a day and feel good

about what I got done and write down the things I need to do next," a testimony that clarity of mind

can enable more effective action. Someone else described how she was in a state of panic while

trying to decide whether to take time off work and go visit a sick friend, and how what she learned

in the training helped her extract herself from the stress cycle related to that trip, allowing her to

make her decision while trusting that things would fall into place. Yet another participant reported

how he had been able to make the decision to quit his job and feel peaceful about it. These are

reported experiences that demonstrate that Inquiry does not lead to accepting everything and

stopping all action. When met with people's concerns that they need their stress to motivate them to

change the world around them, and that if they were peaceful in all circumstances, why would they

bother working for change at all? Byron Katie responds:

> Because that's what love does. To think that we need sadness or outrage to motivate us to do what's right is insane. As if the clearer and happier you get, the less kind you become. As if when someone finds freedom, she just sits around all day with drool running down her chin. My experience is the opposite. Love is action. It's clear, it's kind, it's effortless, and it's irresistible. (Mitchell, 2008)

> Acceptance is not passive, but an intentional act to reconcile oneself with reality. These

words are echoed by Hayes and Smith (2005) who write that

> If you are being abused by someone else, "acceptance of abuse" is not what is called for. What may be called for is acceptance that you are in pain, acceptance of the difficult memories that have been produced, and acceptance of the fear that will come from taking the necessary steps to stop the abuse.
>   If you have an addiction problem, acceptance of substance abuse is very likely not what is called for. What may be called for is acceptance of the urge to use drugs, or acceptance of the sense of loss that may result from giving up your favorite coping strategy, or acceptance of the emotional pain that will arrive when you stop relying on drugs or alcohol to regulate your emotions. (p. 123)

Limitations

Several important limitations of this study must be recognized. A larger sample size would

be needed to strengthen the current findings, even though the present results are noteworthy. The

main issue in this study was one of attrition. The decision to screen out applicants who did not self-

report a high enough level of perceived stress now looks questionable. Indeed, this choice probably

increased the initial change due to regression to the mean. Conversely, if participants had not been

screened on this criterion, the intervention could have had a protective effect on nonstressed

individuals, preventing them from an otherwise higher stress increase due to possible life events

during the follow-up period. Thus, screening out applicants with low stress levels was most likely

unnecessary, and perhaps detrimental to the generalizability of the study. Another decision made

was to exclude participants under the age of 30, on grounds that a population engaged in professional life, family life, and potentially care of elderly parents would have a higher level of stress than younger people. This might disregard the fact that people at earlier stages of their lives have to face the stress of college or graduate studies, the search for a career, possible unemployment, and the move towards independence from their parents. In brief, omitting these restrictive criteria might have brought more participants to this study. Broadening the scope of the participant pool may also have addressed another limitation of the study, namely the ethnic and gender homogeneity of the sample, as well as the skewedness towards an older age range. Research tailored to specific populations is greatly needed to investigate how race, ethnicity, culture, age, gender, sexual orientation, education, and socioeconomic status may mediate the appropriateness and utility of this approach for diverse populations. Although a multicultural heterogeneous target population was the aim of this study, the majority of the participants came from a homogeneous population. Therefore the ability to generalize the present study's findings is limited by some characteristics of the sample population.

Another limitation of this study was that the participants were self-referred. One may speculate that people who answer calls for participants on flyers or on the internet have a certain characteristic profile, such as being willing to seek self-help solutions, have enough inner awareness to realize their stress level, and be sufficiently motivated to commit to a six-week class. One hint that the self-referred pool of participants may not have been representative is the below-average score on the Conscientiousness factor of the NEO-FFI. Another is the preponderance of women among the participants. The profile of participants may have been different if, in addition, they had been referred by professionals such as physicians, counselors, or human resources staff.

It also unclear what effect the selected follow-up time had on obtained outcome

measurements. For instance, in addition to the six-week follow-up used in this study, measurements done at a more distant follow-up point would provide an alternative time frame with unknown ramifications for the outcomes of interest. Indeed, the intent of this intervention was not merely to temporarily reduce participants' stress but to provide tools and, ultimately, a different frame of mind with which to appraise their lives. To determine this longer-term effect, the six-week follow-up period that was adopted for convenience was not adequate.

Similarly, it is unknown whether the duration of the intervention itself is sufficient to stimulate meaningful and lasting change. A grand total of 18 hours of Inquiry training (per participant) may not be enough to cause participants not only to lower their current stress, but also to integrate the subtleties and minutia of the method, and to adopt a new, more accepting view on their lives. Several participants in the focus groups have commented on their readiness to continue the training for another two or three weeks, should it be offered. Some of them have chosen to join the make-up training offered to the control group (after completion of the study) to deepen their practice. A few people commented that less emphasis should be placed on teaching participants how to facilitate and more focus placed on the individual practice, leaving more time for facilitation in-class by the instructor.

Furthermore, the effects of the intervention may also have been associated with the social support and environment for disclosure provided by the training and the instructor—two variables which may be related to psychological well-being (Lumley & Provenzano, 2003; Frattaroli, 2006; Jimmieson et al., 2010; Gremore et al., 2011).

Future Directions

Given the findings of this study, a number of questions are raised which are ripe for further study. First, the basic parameters of the study such as sample size, duration of the intervention,

duration of the follow-up period, and representativeness of the sample, should be considered when trying to replicate the results. Future studies should ensure a large enough sample size in order to test the proposed hypotheses. To do so, it would be advisable to broaden the inclusion criteria. More attention should also be brought to the retention of study participants, with each questionnaire submission being followed up by a personal phone call, especially in light of the finding that baseline anxiety may be a contributing factor in their dropping out of the study. Thirdly, the alternative of either paying participants to complete the study or asking participants to pay a fee should be tested for its influence on attrition. The length of the training should certainly be extended to eight weeks to cover the syllabus while still having enough time for everyone to practice the in-class exercises. An additional follow-up of three to six months postintervention would also be of benefit in determining the persistence of the skills gained during the intervention.

Part of the training consisted in guiding the participants in how to facilitate others, with the double goal of fostering the partner work and of helping individuals better facilitate themselves. It would appear that learning how to facilitate requires an extra set of skills that people who are in the program to reduce their stress did not come to learn. This tended to distract from the actual work, which was to lead people to practice Inquiry on their own stressful thoughts. Although working with a partner is an integral and necessary part of this program, the facilitation of one participant by another should be limited to asking the four questions or a predefined set of sub-questions without leaving any room for improvisation. The certification program offered by Byron Katie International to train facilitators is long and demanding, and it cannot be expected in any way that participants in a six- or eight-week course could develop adequate skills to properly facilitate others. This suggests that extra time should be allotted for people to receive facilitation from the instructor in the classroom, to permit them to experience the process for themselves.

The measurements taken in this study were limited to self-reports concerning *perceived* stress or *subjective* well-being. Different measurements such as levels of cortisol in blood or urine would add an objective component to the evaluation of stress. Behavioral elements could be introduced, such as number of missed workdays or reduction in the number of interpersonal arguments. Personality variables were limited to the Big Five Factor Model, but some other components may be relevant to stress such as perfectionism, as measured in the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) or in the Perfectionism Inventory (Hill et al., 2004).

To address the issue of determining whether the influence of the group support and the instructor's attention were determinants in the outcome measures, future studies should be constructed with a psychoeducational support group about stress that does not involve training in Inquiry. It would also be useful to add a fourth group to compare standard, group-based stress management techniques such as CBSM or MBSR.

While the preliminary findings from this study suggest that Inquiry is an effective method to alleviate perceived stress, its application is still strongly tied to Byron Katie and her supporting organization. The method can be practiced by anyone without the help of a facilitator by using the instructions on the website *www.thework.com* or in *Loving What Is*. Yet, for it to be openly accepted as a technique by the mental health community, it has to be shown more extensively to be evidence-based. If anecdotal evidence indicates that a number of psychotherapists use it in their practice, they may be disinclined to admit this openly among their peers as long as it remains an obscure self-help technique uniquely associated with the name of its creator. One could surmise that CBT may not have received as much attention if it had been called "The Work of Aaron Beck," or that DBT would remain confined to a laboratory at the University of Washington if it had only been known as "Marsha Linehan's borderline-reduction system." The fact that REBT, for instance, was associated

for so long with what some consider to be Albert Ellis's abrasive personality has not favored its

dissemination as a modality. With regards to the Inquiry process, Byron Katie retains the

intellectual property on the technique that she calls The Work, as evidenced by the notice on her

web site, *www.thework.com*:

> There is only one authorized School for The Work, and it is presented by Byron Katie
> through Byron Katie International. . . . Any other website that presents a school for The
> Work or a certification program for The Work is illegitimate. There are many people on the
> Internet today advertising workshops, courses, or trainings in The Work. Please don't be
> fooled if you should stumble onto unauthorized certification programs for The Work.
> Facilitators/trainers who are certified and therefore authorized through Byron Katie
> International will always have a Certified Facilitator for The Work logo on their website,
> assuring you that what they offer is legitimate. (The Work of Byron Katie – Privacy
> Statement, 2011)

Incidentally, one cannot improvise oneself as facilitator of this work. One attempting to

teach this method is advised either to train to be a certified facilitator or at least to become

thoroughly familiar with it, having at a minimum attended the nine-day school for The Work. To

allow this method to be studied further and to be developed as more evidence of its effectiveness is

gathered, some cooperation may be required from the intellectual property owner. It should be made

possible to isolate different components of the method to determine active therapeutic ingredients.

Some form of manualized training would need to be developed to enable practitioners well versed

in the technique to train new facilitators. This could be done through a standardized curriculum

involving the practice of the method as well as mentoring and supervision. Meanwhile, the training

would be reevaluated as necessary based on the latest findings and on the shared experience of users

and practitioners. This would permit the inclusion of complementary techniques such as

mindfulness, which could enhance the effectiveness of the Inquiry process.

This study used a group format with a trained facilitator in order to teach the method, but

dissemination need not be limited to this format. Just as Byron Katie's web site provides all

necessary instructions to do The Work by oneself, with worksheets, demonstration videos, and the availability of the book *Loving What Is* as a reference, the evolving method can also be disseminated via a combination of written and audio-visual materials. Nevertheless, several participants have noted that working with a trained facilitator was easier and more beneficial than practicing alone or even with a partner who was new to this work. The work with a trained facilitator can also happen individually rather than in a group, with similar advantages and disadvantages that differentiate individual from group therapy. One advantage of group work is the opportunity for participants to learn facilitation skills by witnessing another group member being led through Inquiry by a trained facilitator. These skills can be beneficial when people practice this work on their own, where they become their own facilitator.

In addition, the theoretical underpinnings of Inquiry ought to be made explicit and be thoroughly tested to clarify what makes this method effective. For instance, the notion that stress is the result of attaching to a belief that is not true (for the individual experiencing it) is interesting and provocative, but requires a more refined experimental validation than this study is able to provide. Likewise, the idea that "letting go" is not volitional but instead the result of investigating the truth of a concept is counterintuitive and should be tested. The question of whether the acceptance that results from the practice is the same as that advocated by other approaches such as ACT and mindfulness should also be investigated.

Conclusion

The research question for this dissertation was: Is there a significant decrease (P < .05) on the PSS and STAI-S scores and a significant increase (P < .05) on the AAQ-16 and SWLS scores between the treatment and control groups postintervention, and after a six-week follow-up period, corrected for the effect due to covariates? A negative change was expected on the PSS and STAI-S

and a positive change was expected on the AAQ-16 and SWLS. After analyses of variance on collected and imputed data, it was found that indeed there was a significant difference in means between the group that received the intervention and the group that did not.

The set of covariates applied to each dependent variable was determined by forward model selection. After adjusting for covariates, each analysis of variance on the four dependent variables yielded a significant group effect. The same results held after a conservative imputation of missing data. Given the statistical results as well as participants' first-hand accounts of the perceived benefits of this training, the use of Inquiry may help therapists enhance the effectiveness of existing stress-reduction regimens. This study may be useful in confirming validity for those who already use Inquiry informally in their practices.

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Appendix A: Consent Form

Stress-Management Research Program and Training
To Be Held at the Institute of Transpersonal Psychology

To the Participant in This Research:

You are invited to participate in a study to explore the impact of a new technique on stress. This study may contribute to the advancement of knowledge in the treatment of stress. A potential benefit of participating in this study is learning to cope better with the stress in your life.

The study will ask different things of you at different times. First, you will be asked, after you sign this consent form, to fill out questionnaires (this should not take more than 30 minutes). You will be asked to fill out similar questionnaires after 6 weeks, and then again 6 weeks later. These questionnaires will ask questions about your demographics, as well as your physical and mental well-being. You may be asked to take part in a six-week group training program starting (date) or (later date). The six-week training is an intensive process. It will involve weekly meetings every [insert day of week] at [insert time] for one-and-a-half hour, a one-day workshop including different experiential exercises, and personal practice during the week, individually and with a partner, for at least two hours per week. Homework with a partner will involve phone calls where the techniques learned in weekly meetings will be put into practice. Some participants will be randomly assigned to a control group who will be asked to answer similar questionnaires as people receiving the training, but the control group will only receive the training at the end of the study, approximately after 12 weeks.

Some participants will be also asked to participate in a private, confidential one-hour to one-and-a-half hour focus group about their experience of the stress management training. If you are selected and agree to participate, interviews will be conducted in a private room at the Institute of Transpersonal Psychology, and will be audio taped. The interviews will be transcribed by the researcher or by an outside transcriber bound by a confidentiality agreement.

For the protection of your privacy, all information received from you will be kept confidential and your identity will be protected. Only the interviewer (myself) will have access to the original audio tape. Your name will be omitted from the results collected from the questionnaires, which will be assigned a number to protect your identity. At the time of transcription your interview will be coded in the same way. The key to this code, as well as the audio recordings, will be kept in a locked filing cabinet accessible only to the researcher. At the conclusion of the study the audio tape will be destroyed. In the reporting of study information in any published material, any information that might identify you will be altered to ensure your anonymity.

This study is designed to minimize potential risks to you; your facilitator is well trained in the technique and in leading groups. However, exploring stressful experiences may bring up unexpected emotions. A list of referrals to mental health professionals in the community and/or pastoral counselors will be provided upon request, should you experience distress during the training. If at any time you have any concerns or questions, I will make every effort to discuss them with you and inform you of options for resolving your concerns.

If you have any questions or concerns, you may call me, the primary researcher, Fabrice Nye at (650) XXX-XXXX or Frederic Luskin, Ph.D., dissertation Chair and head of the Ethics Committee at the Institute of Transpersonal Psychology, at (650) 493-4330. The Institute of Transpersonal Psychology assumes no responsibility for any psychological or physical injury resulting from this research.

Your participation in this research is entirely voluntary. If you decide to participate, you may withdraw your consent and discontinue your participation at any time during the conduct of the study and for any reason without penalty or prejudice. Should you terminate your participation, all records and transcripts related to your participation will be destroyed.

You may request a summary of the research findings (results and discussion section of the dissertation) and/or results of your participation (test results and interview transcript) by providing your email address at the bottom of this form.

I, _____ attest that I have read and understood this form, had the study explained by the researcher, and had any questions about this research answered to my satisfaction. My participation in this research is entirely voluntary and no pressure has been applied to encourage participation. My signature indicates my willingness to be a participant in this research.

_____   _____
Participant's Signature

Date

_____   _____
Researcher's Signature

Date

Fabrice Nye
fabrice@life.net

I would like to have the research sent (please check what applies)

❑ a summary of the research findings

❑ the results of my participation

to the following e-mail address:

_____

Appendix B: Transcriptionist Confidentiality Agreement

As a transcriptionist, I agree to maintain confidentiality with regard to all participant information, specifically the tapes from the interview sessions, but also the assessments and any other related written material. I will also help to aid the researcher in protecting the identity of participants to ensure anonymity.

Today's Date: ___ / ___ / _____

Transcriber name: _____

Transcriber signature: _____

Researcher's Contact Information:

Fabrice Nye
123 Main Street
City, State 94000
(650) XXX-XXXX
email@domain.net

Appendix C: Preintervention and Screening Questionnaire

Today's Date: ___ / ___ / _____

<u>DEMOGRAPHIC QUESTIONS</u>

First Name: _____ Last Name: _____

Street Address: _____

City, State: _____ Zip: _____

Phone Numbers: (Please check which one you can best be reached at)

      Home: _____ ☐

      Work: _____ ☐

      Cell: _____ ☐

E-mail Address: _____ Date of Birth: ___ /___ /_____

Sex: __ Female __ Male   Race/Ethnicity: _____ First Language: _____

Marital Status (most recent):   Number of children: _____

    ☐ Married or living with someone as if married   Ages of children: _____

    ☐ Widowed, divorced, or annulled
    ☐ Separated   Number of children
    ☐ Never married   living at home: _____

Highest Education Level Achieved: Work Status (check ALL that apply):

    ☐ High school   ☐ Employed full-time
    ☐ Associate degree   ☐ Employed part-time
    ☐ Four-year college degree   ☐ Self-employed
    ☐ Graduate degree   ☐ Student
                                              ☐ Homemaker
                                              ☐ Unemployed
                                              ☐ Retired (not working, by choice)

Profession: _____

Family Annual Income Level:

    ☐ less than $30,000   ☐ $75,000 - $100,000
    ☐ $30,000 - $50,000   ☐ $100,000 - $120,000
    ☐ $50,000 - $75,000   ☐ more than $120,000

SCREENING QUESTIONS

Are you familiar with a technique known as "The Work of Byron Katie"? (Please check the answer that best matches your experience)

☐ I have never heard of it
☐ I have heard of it, but I don't know what it is
☐ I know about it, but I have not practiced it
☐ I am familiar with it and have used it a few times
☐ I am very familiar with it and practice it regularly

On a scale of 1 to 10, how stressed have you felt for the past month? (1 = no stress at all, 5 = more than I am comfortable with, 10 = my life is unbearable because of stress):

1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Due to the way this research project is constructed, and as it has been approved by the Ethics Committee, participants who are having or have had recent homicidal or suicidal thoughts, or participants struggling with significant drug or alcohol problems may not be included in this study. Likewise, because this study tries to determine the effectiveness of a new method, participants who are currently engaged in a course of therapy (through either counseling or drug therapy) could see their stress reduced because of external factors, and therefore may not be included in this study either.

Yes   No

Based on the above criteria, do you believe that you qualify for this training?   ☐   ☐

Comments:

Appendix D: Follow-up Questionnaire

Today's Date: ___ / ___ / _____

<u>FOLLOW-UP QUESTIONS</u>

Do you continue to practice Inquiry? _____

How frequently have you used Inquiry since the end of the training?

      ☐ Three times a day
      ☐ Once a day
      ☐ Three times a week
      ☐ Once a week
      ☐ Twice a month
      ☐ I haven't used Inquiry since the end of the training

If you have continued practicing with your assigned partner, how?

      ☐ We spoke/met _____ times a week
      ☐ We practiced formally (filled out worksheets and asked the 4 questions)
      ☐ We practiced informally (discussed various aspects of The Work, etc.)

Have you looked further into The Work of Byron Katie? (check all that apply)

      ☐ I have bought other publications by Byron Katie
      ☐ I have attended or signed up to attend Byron Katie events and seminars
      ☐ I have joined a group that practices Inquiry in my area
      ☐ I have contacted other facilitators of The Work
      ☐ Other (please specify): _____
      ☐ None of the above

Appendix E: Syllabus

Class #1

Agenda:

Registration • Sign confidentiality agreement
Welcome • Refreshments
Poll participants about how they found out about the study
Housekeeping details
Introduction of instructor and assistant
Participants' self-introductions (name, where are you from, and main sources of stress)
Introduction to this study
Why stress management is important
Video: *Stress Response - Savior to Killer* by Robert Sapolsky
Introduction to stress and its cognitive causes
Introduction to Inquiry as a way to break the stress cycle
Practice:
- Complete Judge-Your-Neighbor worksheets
- Facilitate a volunteer in front of the group
- Sharing, feedback
Select a partner to pair up with • Assign homework (pick one statement on the worksheet and have one's partner ask the 4 questions from the yellow card)
Ask participants to acquire or borrow *Loving What Is* for next time
Reading: *Suffering and Glory* by Anthony de Mello

Handouts:

Nametags
Confidentiality agreement and contract of attendance
Judge-Your-Neighbor worksheets
Yellow cards with the 4 questions

Class #2

Agenda:

Feedback about working with a partner
Video: Demonstration of the 4 question by Byron Katie from the Public Outreach DVD
Questions and comments
Reading: *Loving What Is*, Chapter 1: Noticing When Your Thoughts Argue With Reality and Staying in Your Own Business
Read and discuss handout on the three kinds of business
Video: *Loving the One You're With (Part 2)* by Byron Katie
Facilitate a volunteer on their worksheet
Reading: Rumi's *The Guest House*

Handouts:

Judge-Your-Neighbor worksheets

The Three Kinds of Business
The Guest House

Class #3

<u>Agenda</u>:

Audio: *The Well of Grief* by David Whyte's
Feedback about working with a partner
Reading: *Loving What Is*, Chapter 2: Putting the Mind on Paper, Why and How to Write on the Worksheet, and The Judge-Your-Neighbor Worksheet to the bottom of p. 13 (hardcover).
Video: *The Judge-Your-Neighbor Worksheet* by Byron Katie
Video: *Unconditional Love Happens in a Questioned Mind* and *The Reality of Pressure* by Byron Katie
Demo facilitation with assistant
Questions and comments

<u>Handouts</u>:

Judge-Your-Neighbor worksheets
Facilitation Guide ("Blue Sheet")
The Well of Grief

Class #4

<u>Agenda</u>:

Videos: *I Need a Drink*, *I Love Criticism* and *No One Can Hurt Me But Me* by Byron Katie
Audio: *Accepting Criticism Gracefully*, interview of Byron Katie by Stever Robbins (first 18 minutes)
Reading: Handout *Accepting the Gift of Criticism*
Reading: *Loving What Is*, Chapter 11 on Doing The Work on the Body and Addictions
Discussion
Facilitate a volunteer on a whole worksheet
Assign partner homework on criticism ("Judge Your Partner")

<u>Handouts</u>:

Judge-Your-Neighbor worksheets
Accepting the Gift of Criticism

Class #5 (full day)

<u>Agenda</u>:

Welcome • Logistics
Guided Meditation: "Be Breathed" from Byron Katie's meditation CD
Video: *Weight, Sex, and Adultery* by Byron Katie
Feedback on the "judge-your-partner" exercise • If people haven't done it, ask for volunteers to do it in class (If not doing this exercise, facilitate a complete worksheet in front of group)

Lunch Break: With a partner • Ask everyone to either fill out a worksheet about themselves (recommended) or write down 3 self-judgments (in the form "I am ...", "I should...") – except that worksheets are swapped between partners, and each participant is asked to facilitate their partner on one's own self-judgments
Reading: *Loving What Is*, Chapter 5: Deepening Inquiry – When You Think That It's True (p. 69) to the bottom of paragraph Where's your proof?
Reading: *Loving What Is*, Chapter 5: Uncovering underlying beliefs (p. 132)
Exercise: Finding underlying beliefs using "And It Means That..."
Exercise: The Proof of Truth
Exercise: Saying an honest "no." Work with one person as demo
Video: *Resentment and Jealousy* by Byron Katie

Handouts:
       Judge-Your-Neighbor worksheets
       Finding Underlying Beliefs
       The Proof of Truth – Facilitation Exercise
       Responding With an Honest "No"

Class #6

Agenda:
       Videos: *I Need a Drink*, *Becoming a Believer* and *The War With What Is* by Byron Katie
       Reading: Handout *Frequently Asked Question* "Is The Work just about making ourselves accept things?"
       Reading: *Loving What Is*, Chapter 5 on The Living Turnarounds (p. 79)
       Reading: Handout *Making Amends – The Living Turnaround*
       Reading: *Loving What Is*, Chapter 7 Doing The Work on Self-Judgments (p. 117, ¶3)
       Exercise: Instruct people to write a worksheet on themselves • Facilitate volunteer on their worksheet
       Assign homework • Do the work with a partner on self judgments

Handouts:
       Judge-Your-Neighbor worksheets
       Frequently Asked Question
       Making Amends – The Living Turnaround

Class #7

Agenda:
       Answer any remaining questions
       Demo facilitation of one-liner(s)
       Ask for two volunteers to be client/facilitator and be coached
       Video: *Projection and Your Relationships* by Philip van Munching
       Discussion about projection
       Breathing Exercise: Square breathing (inhale, hold, exhale, hold while counting). Explain that this can be used to lower the level of arousal/excitement before practicing Inquiry

Audio: *Tilicho Lake* by David Whyte

Closing • Mention that they will receive a link to complete the post questionnaire and another one 6 weeks later

<u>Handouts</u>:

Judge-Your-Neighbor worksheets

Tilicho Lake

Sheet with resources on where to continue Inquiry practice

Appendix F: Focus Group Script and Questions

This is the script that was provided to the interviewer with the open-ended questions to ask the group of participants.

FOCUS GROUP

This interview should be conducted in a Motivational Interviewing style. The open-ended questions to start with are the ones presented in the script below. But this should not be thought of as a limitation. The conversation may elicit new questions from the interviewer. However, they should always remain open-ended. Participants' answers should be validated, reflected back, and summarized. Care should be taken, if participants begin to engage in philosophical discussion, to bring them back to what their own experience was like for them. Note body language that will not be picked up by the audiotape.

Start with: *"Welcome and thank you for your willingness to participate in this focus group. This will be extremely useful in helping us refine this stress-management training curriculum. This evening, we would like you to reflect on what you have learned during this training, and the exercises that you have practiced. You have in front of you a list of bullet points to help you remember the main topics that were covered. Take a moment to think back to the reactions you have had to this stress-management training across the time in which it was given--positive or negative, or changes from positive to negative, and vice versa. Reflect on what it was like to sit in the meeting room, to participate in the full-day workshop, to work with your partner or to do the homework by yourself."*

Please, can you find examples of ways in which studying and practicing this method has helped you or has shifted your relationship to your stressful thoughts?
_____
_____
_____

What would you say worked for you? (Let the question stand. Give them some time to think about it, in silence if necessary)
_____
_____
_____

What didn't work for you?
_____
_____
_____

Which concepts did you feel were the most difficult to understand?
_____
_____
_____

How could this training be improved?

_____

_____

_____

Give participants this list of topics to remind them of some of the things that were covered during the training:

     Opposing reality creates stress
     The Judge-Your-Neighbor worksheet
     Who would you be without this thought?
     The three kinds of turnarounds
     The three kinds of business
     Staying in your own business
     Video "Weight, Sex, and Adultery"
     Video "Resentment and Jealousy"
     When the story is hard to find
     Finding underlying beliefs using "And it means that..."
     Saying an honest "no"
     Making amends
     Accepting the gift of criticism
     Judging your partner
     The meaning of projection