

A RANDOMIZED CONTROLLED EVALUATION OF A SPIRITUALLY INTEGRATED
COGNITIVE BEHAVIORAL INTERVENTION FOR SUB-CLINICAL ANXIETY AMONG
JEWS, DELIVERED VIA THE INTERNET

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ABSTRACT

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This study evaluated the efficacy of a spiritually integrated, cognitive behavioral treatment program (SI-CBT) for sub-clinical anxiety, delivered via the internet. One-hundred and twenty-five Jewish individuals reporting elevated levels of stress and worry received SI-CBT, progressive muscle relaxation (PMR), or a waitlist control condition (WLC). SI-CBT and PMR participants accessed on-line treatment on a daily basis for a period of 2-weeks. All participants completed self-report assessments at pre- and post-treatment and 6-8 week follow-up. SI-CBT participants reported greater belief in treatment credibility, expectancies from treatment, and treatment satisfaction than PMR participants. SI-CBT participants reported greater treatment gains in both primary outcomes (stress and worry), one of two secondary outcomes (intolerance of uncertainty), and two of five spiritual outcomes (positive religious coping and mistrust in God) compared to the WLC group, whereas PMR and WLC participants did not differ on these outcomes.

Keywords: stress, worry, spirituality, religion, treatment

I will fear no evil, for You are with me.

Psalm 23.

To my wife Miri, who fanned this project from a spark into a flame.

ACKNOWLEDGMENTS

The roots of this project trace back to the spring of 1999 when I was personally suffering from symptoms of anxiety and worry as a sophomore university student in Toronto, Canada. As an Orthodox Jew, I turned to my teacher, Rabbi Nissan Applebaum for advice. Rabbi Applebaum did not rule out the possibility of me seeking professional help for my anxiety, but as a first line of treatment he introduced me to the psychological wisdom in the 11th Century Jewish religious-philosophical text “Duties of the Heart” by Rabbi Bachya Ibn Pekuda. Specifically, he recommended that I devote 20 minutes each day to the study of a section entitled “the gate of trust in God.” In doing so, his hope was that I would develop an increased sense of trust in and connection to the Creator of the universe and thereby feel more calm and relaxed. While I was initially concerned that this method would not be sufficient to quell my worries, much to my surprise, within only a few short weeks I found that my anxiety had diminished significantly.

Three years later I found myself faced with the daunting task of proposing a thesis as a counseling psychology student in a Masters of Arts program at the University of Toronto. Recollecting the personal experience I had with “the gate of trust in God” I approached my academic supervisors, Professors Lana Stermac and Roy Moodley, with the notion of creating an empirical study about the relevance of trust in God to anxiety. Despite the dearth of previous research on religion/spirituality and anxiety, and in particular among Jews, they encouraged me to pursue my interests. The result was a first attempt at creating a psychometric tool to measure trust in God, which we dubbed the “Trust in God Index”. This measure, which was later revised, allowed for the measurement of trust in God for the purposes of research. Without these first steps, this current project simply could not have materialized.

Upon completion of my Masters degree in 2004, I wished to further my empirical study of trust in God and anxiety but I was hesitant to pursue further study. The lack of previous literature appeared too great a barrier to overcome. At this critical juncture, I forged a relationship with Rabbi Leib Kelemen (Jerusalem, Israel). Rabbi Kelemen enthusiastically encouraged me to continue my research and alerted me to the need within the Jewish world for empirically-supported, spiritually-sensitive psychological treatments. Based on his sage counsel, I decided to apply for PhD programs in clinical psychology. Since this time, Rabbi Kelemen has been more than instrumental in my program of research. His countless hours spent reviewing research proposals and manuscripts and providing professional and personal guidance has been one of the greatest blessings I could imagine. It is my hope that I will continue to merit receiving his advice and direction for years to come.

In the midst of my application process, I was fortunate enough to make the acquaintance of Professor David Barlow (Boston, MA), one of the foremost researchers in cognitive behavioral treatments and a worldwide authority on anxiety and related disorders. Dr. Barlow also encouraged my research, and he promptly suggested that I contact his colleague Professor Kenneth Pargament in the Department of Psychology at Bowling Green State University about my interests. I quickly followed Dr. Barlow's advice and was eager to learn about Dr. Pargament's extensive work in psychology of religion research and his stature in the field.

Throughout the late 1980s, 1990s and current decade, Dr. Pargament and his students have been quietly spearheading a revolution, simply by keeping a steady pace of publishing high quality empirical studies on the relevance of religion to human psychology. His prolific efforts have been successful despite the sometimes vociferous anti-religious aura within the field over the years. Fortunately academic psychology is much more open to the study of religion today and

Dr. Pargament deserves a great deal of credit for changing these attitudes en masse. I therefore felt most blessed to stumble into his laboratory. Fortunately, Dr. Pargament agreed to take me on as his student and I began my PhD studies under his auspices in 2004. In retrospect, I could not have fallen into the presence of a better person to assist me in overcoming the barriers in the way of my ambitions.

Bowling Green State University is perhaps the most active psychology of religion research unit in the world, and it was a true blessing to train in such an environment. I am very grateful to Dr. Pargament's partner in crime, Professor Annette Mahoney, a talented and dedicated psychology of religion researcher in her own right, for her extensive feedback on this and other projects that I have conducted. I would also like to thank my committee members for this project: Drs. Dale Klopfer and Timothy Murnen. Thanks also go to my fellow graduate students who created an ideal collaborative environment to conduct research, namely Hisham Abu Raiya, Lisa Backus, Kavita Desai, Carol Ann Faigin, Maria Gear, Meryl Gibbel, Krystal Hernandez, Carmen Oemig, Quinten Lynn, Kelly Trevino, and Amy Wachholz. As well, I am particularly grateful to Elizabeth Krumrei for her collaboration over the past few years.

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Throughout my graduate studies I have been very fortunate to receive training in the application of Cognitive Behavioral Therapy for anxiety disorders. I am grateful to Drs. David Barlow, Lisa Smith and Heather Thompson-Brenner from the Center for Anxiety and Related Disorders at Boston University for providing me with a first exposure to these treatments several years ago. I am also very grateful to Drs. Martin Antony, Karen Rowa, Michele Boivin, Lisa Bourque, and Randi McCabe from the Anxiety Treatment and Research Centre of St. Joseph's Healthcare (Hamilton, Canada) for their supervision and guidance over an extended practicum training opportunity. I also wish to thank Drs. Phil Levendusky and Thröstur Björgvinsson of McLean Hospital/Harvard Medical School for providing me with a life changing opportunity to learn the flexible application of Cognitive Behavioral Therapy (CBT) across a wide range of Axis I and II disorders, and for their encouragement of my interests in spiritual and religious issues in behavior change. All of these stellar individuals not only provided me with the theoretical foundation for this project, but kindled within me a steadfast commitment to empirically-supported treatments.

I would also like to thank my co-authors on the foundational papers which made this project possible, including Professor Gerhard Andersson (Linköping University, Sweden) and Dr. Kevin J. Flannelly (Healthcare Chaplaincy, New York). In particular, I am grateful to my colleague Steven Pirutinsky (Columbia University, New York) for his collaboration over the past two years and his consultation on the statistical methodology for this project. Steven's talent and drive are humbling and it has been a true blessing to work with such a fine young scholar. I am also very grateful to Dr. Jedidiah Siev (Massachusetts General Hospital/Harvard Medical School) for sharing his guidance on this and other research and for his collaboration. I would

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I am most grateful to Rabbis Noach Orleweck and Leib Kelemen (Jerusalem, Israel) for their support and collaboration in creating the Increase Your Trust in God program, which served as the spiritually integrated treatment piloted in this study. The contents of the program were almost entirely reincarnations of their efforts and teachings.

I am also very grateful to Shoshana Zakar (Baltimore, MD) for providing the web-programming that enabled this project to be conducted. I am particularly grateful for her deftness and care in attending to the myriad of technical issues and roadblocks in the way of the success of this project enabled. I would also like to thank Jeremy Melnick (Toronto, Canada) for his technical skill in assembling the program on video, and my sister CJ Richards, for designing the slides which provided an attractive background for the Increase Your Trust in God program. I am also grateful to Chayim Newman (Toronto, Canada) for lending his voice for a segment of the program, and for his friendship. Thanks also go to Diana Melnick and her students for providing me with invaluable feedback on an early version of the Increase Your Trust in God program.

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I would also like to try to express my gratitude to my wife Miri, though words cannot possibly capture the debt I owe to her. Her unceasing tolerance, patience and love enabled the dream of this project to become a reality. Moreover, Miri was involved in virtually every decision made throughout this project and this study was truly a joint effort. In my mind she shares authorship of this manuscript and all of my other work.

Finally, I would like to thank God for providing me with the resources and strength to complete this project. I hope and pray that I will continue to merit the countless blessings I receive on a daily, hourly, minute-by-minute, and second-by-second basis. I further hope and that this and my future work will help others to reconnect with their Creator and experience less suffering in their lives.

David H. Rosmarin

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INTRODUCTION

Chronic anxiety, even at subclinical levels, has been identified as a risk factor for a number of major health problems including asthma (Sandberg et al., 2000), hypertension, (McEwen, 1998), diabetes (Wales, 1995), cardiovascular disease (Brosschot, Van Dijk & Thayer, 2007), and cancer (Eysenck, 1988). Fortunately, there is strong empirical support that cognitive behavioral techniques such as Progressive Muscle Relaxation (PMR) are clinically efficacious in reducing symptoms of anxiety including both stress and worry (Borkovec, Newman, Pincus & Lytle, 2002; Carlson & Hoyle, 1993; Rausch, Gramling & Auerbach, 2006). However, while PMR is used widely in clinical and health psychology settings (Pluess, Conrad & Wilhelm, 2009), conventional psychological services are generally underutilized by religious populations as religious individuals tend to prefer spiritually integrated care (Lindgren & Coursey, 1995; Puchalski, Larson & Lu 2001).

Spiritually integrated Treatments

In recognition of this fact, as well as considerable evidence suggesting that religion can be an important resource for people in times of stress (Pargament, 1997), numerous spiritually integrated treatments (SITs) have been created in recent years with the hope of providing religious communities with culturally appropriate services (Rosmarin, Pargament and Robb, in press). These interventions directly address spiritual and religious issues, and draw on religious resources in the process of treatment (Pargament, 2007). Much like conventional therapies, SITs target various problems including addictions (Avants, Beitel & Margolin, 2005), social anxiety (McCorkle, Bohn, Hughes & Kim, 2005), physical and psychological wellbeing among cancer patients (Cole, 2005), family functioning (Rye, et al., 2005), migraine headaches (Wachholtz & Pargament, 2008), and stress (Oman, Hedberg, & Thoresen, 2006). While most SITs are not specifically cognitive behavioral in modality, there have been several successful attempts to

integrate spirituality and religion into cognitive behavioral and rational-emotive behavioral therapy (e.g., Johnson & Ridley, 1992; Johnson, DeVries, Ridley, Pettorini, & Peterson, 1994; Pecher & Edwards, 1984; Propst, 1980; Propst, Ostrom, Watkins, Dean, & Mashburn, 1992). Spiritually integrated forms of Cognitive Behavioral Therapy (SI-CBT) are similar to conventional Cognitive Behavioral Therapy (CBT) except that the rationale for treatment is presented in a spiritual framework, and religious concepts and sources are utilized to counter maladaptive beliefs (Nielsen, 2001; Nielsen, Johnson, & Ellis, 2001; Robb, 1988). Furthermore, spiritual/religious practices can be purposefully included in treatment as behavioral activation strategies with the intention of increasing positive emotions such as gratitude and hope.

While research in this area is still in its early stages, more than 30 open and controlled clinical trials of SITs have been conducted (Rosmarin, Pargament & Robb, in press). One meta-analysis of investigations comparing religion-accommodative with standard CBT for depression indicated that both treatments were equally effective in reducing depressive symptomatology at one week follow-up (McCullough, 1999). On this basis, it has been suggested that SITs can be offered to clients without compromising treatment efficacy, and that choice of SITs is a matter of availability and client preference. Another more recent meta-analysis, however, may indicate that SITs are more efficacious than other treatments. Smith, Bartz & Richards (2007) found a between-treatments omnibus effect size of 0.51 among 24 studies comparing SITs to established treatments; that is, SITs produced a 0.51 standard deviation change in post-study measures over and above comparison treatments. Furthermore, this effect size of SITs increased to 0.96 for studies evaluating positive psychological variables such as happiness and wellbeing. It should be noted though that the majority of studies reviewed in this meta-analysis were not cognitive behavioral in nature, and did not use manualized treatments or employ fidelity checks. Therefore

these findings should be interpreted with some caution. Nevertheless, there is evidence to suggest that SITs effective for some presenting problems, and further research is warranted. One major limitation in this burgeoning area of research is that no SITs for the Jewish population have been developed or evaluated to date.

Psychotherapy in the Jewish Community

Several authors have reported that it is currently difficult for religious Jews to engage in psychotherapy. Documented reasons for this include: (1) consultation and collaboration with religious leaders (e.g. rabbis) is often a prerequisite for religious Jews entering treatment and this may be difficult to facilitate (Greenberg, 1991); (2) stigma is often present, posing a major barrier to Jews who might seek treatment (Paradis, Friedman, Hatch and Ackerman, 1997); and (3) despite a more spiritually open ethos in the current century, psychologists are often disinclined and simply not equipped to deal with spirituality and religiousness in the course of therapy (Pargament, Murray-Swank & Tarakeshwar, 2005). These factors may account for some of the reluctance and fear that many religious Jews have towards engaging in psychological services (Heilman & Witztum, 1997; Margolese, 1998; Pirutinsky, Rosmarin & Pargament, 2009). Similar issues have been identified among other religious communities and, consequentially, devoutly religious individuals (both Jewish and non-Jewish) tend to seek psychotherapy only as a last resort (Sell & Goldsmith, 1988). Furthermore, when psychological services are sought by the religious, these issues may lead to decreased treatment adherence and satisfaction, which have been shown to dramatically impact treatment efficacy (Paulson-Karlsson, Nevonen & Engstrom, 2006).

E-Therapy

Electronic therapy (e-therapy) may be a uniquely suited platform to overcome these difficulties and thus provide religious communities with psychological treatment. It would be a

seemingly simple task to collaborate with spiritual/religious leaders and incorporate spiritual content into e-therapy protocols at the design level. This would, in turn, circumvent many of the cumbersome ethical and practical issues that may arise when secular psychotherapists provide services to spiritual/religious individuals. Additionally, spiritually integrated e-therapies may help reduce stigma by enabling religious individuals to participate in treatment in a private setting. Finally, e-therapies may increase the accessibility of spiritually integrated services to religious communities in a cost-effective manner. In recent years, internet-based interventions have been developed to treat a variety of difficulties including social phobia (Andersson et al., 2006), insomnia (Strom, Pettersson & Andersson, 2004), childhood encopresis (Ritterband et al., 2003), and eating disorders (Winzelberg et al., 2000). Several randomized controlled trials have been conducted, suggesting that e-therapies can be effective (Carlbring & Andersson, 2006). However, to my knowledge, no e-therapies have addressed religious or spiritual issues, or focused on Jews in particular.

Trust in God

One religious construct that could be integrated into a treatment program for Jews is trust/mistrust in God. Trust in God has its origins in traditional Jewish thought (Ibn Pekuda, 1996). Principally, it is a cognitive and affective state in which one feels that God is taking care of his/her best interests. More specifically, trust in God involves the following three core beliefs about the nature of the Divine: (a) God has constant regard for all worldly affairs (God is omniscient); (b) No power is greater than God (God is omnipotent); and (c) God is always merciful and generous (God is omnibenevolent). Conversely, mistrust in God is a state in which one feels that God is ignorant, impotent and/or malevolent. In two recent investigations with large community samples of Jewish and Christian believers, higher levels of trust in God were

linked to less anxiety and depression whereas mistrust in God was associated with higher levels of anxiety and depression (Rosmarin, Pargament & Mahoney, 2009; Rosmarin, Krumrei & Andersson, 2009). Several psychological processes may tie trust/mistrust in God to stress and worry. First, perceptions of adversity may be shaped by the beliefs associated with trust in God. A worldview in which God is wholly knowledgeable, powerful and good may generate positive appraisals and reduce negative appraisals of stressful situations. Second, the core beliefs of trust in God may mitigate intolerance to uncontrollability and unpredictability, two cognitive factors that have been identified as important in maintaining worry (Barlow, 2002; Dugas, Freeston, & Ladouceur, 1997). Third, trust in God may contribute to positive religious coping (Pargament, 1997) and act as a psychological resource in times of stress by promoting a sense of spiritual support, connectedness with a transcendent force, or inspiration, meaning, and hope. Fourth, trust in God may further reduce stress and worry by increasing positive spiritual emotions, such as gratitude, which have been linked to psychological well-being (Emmons & McCullough, 2003). In contrast, mistrust in God may exacerbate stress and worry by promoting fundamental questions, doubts, conflicts, and struggles with the Divine (Pargament, Murray-Swank, Magyar, & Ano, 2005). Furthermore, belief in a malevolent God may promote negative perceptions of threat and increase appraisals of danger, especially in situations that are uncontrollable or unpredictable. It should be noted that although trust in God is theoretically compatible with all monotheistic religions (e.g. Judaism, Christianity, Islam) the theoretical links between trust/mistrust in God and psychological health are unlikely to be relevant to atheists because a basic belief in God's existence is a precondition for trust or mistrust in God. Nevertheless, they may be important variables in the development and prevention of stress and worry among believers.

The Present Study and Hypotheses

The present study attempted to evaluate the efficacy of a short-term, spiritually integrated, cognitive behavioral therapy program for stress and worry among Jews (SI-CBT). To my knowledge, the present investigation was the first study to examine an electronic spiritually-based treatment program in a randomized controlled study. To this end, a spiritually-based audio/video treatment program (described below) was developed through extensive consultation with Jewish religious leaders and teachers. To test the relative efficacy of this program, I administered progressive muscle relaxation (PMR) in similar electronic format to a comparison group. As well, a third group of respondents was randomized to a waitlist control group (WLC) and received no treatment. Prior to the study, I proposed the following hypotheses.

- 1) Participants in the SI-CBT group will report higher levels of belief in treatment credibility, have higher expectancies of treatment, be more likely to complete treatment, and report more treatment satisfaction than participants in the PMR group.
- 2) Participants in the SI-CBT group will report greater reductions in reported levels of primary (stress and worry) and secondary outcome variables (depression and intolerance of uncertainty) compared to PMR or WLC participants. However, participants in the PMR group will report greater post-treatment reductions in symptoms than WLC participants. Treatment gains will be maintained at 6-8 week follow-up.
- 3) Participants in the SI-CBT group will report increased levels of positive spiritual outcomes (trust in God, positive religious coping and gratitude) and decreased levels of negative spiritual outcomes (mistrust in God, and negative religious coping) from pre- to post-treatment whereas participants in the comparison groups will not. These changes will be maintained at 6-8 week follow-up.

- 4) In light of mixed findings from previous research on the benefits of matching spiritual treatments to spiritual clients (see Worthington, Kurusu, McCollough & Sandage, 1996 for a review), no hypotheses were proposed about whether SI-CBT and PMR treatment effects will be moderated by pre-existing Jewish religiousness.

METHOD

Participants and Procedure

This study was approved by the Human Subjects Review Board of Bowling Green State University. No adverse events were reported in the administration of this study.

Analyses were conducted with data provided by 125 participants who completed both the pre- and post-treatment assessments. The demographic characteristics of each treatment group and the sample as a whole are presented in Table 1. Participants ranged in age from 19 to 78 years ($M = 41.0$; $SD = 13.2$) and just over half of the sample (57%) was female. Economic status of the sample was high with the majority of participants (82.9%) reporting a college degree or higher education and an average yearly income of \$50-75,000. The majority of the sample was American ($n = 135$), but there were several participants from Israel ($n = 24$), Canada ($n = 20$), Europe ($n = 14$), Australia ($n = 8$) and other parts of the world ($n = 60$; e.g., South Africa, Mexico, China). Religious affiliation in the sample was distributed as follows: 5.4% Hassidic ($n = 11$); 27.7% Yeshiva Orthodox ($n = 56$); 30.7% Modern Orthodox ($n = 62$); 16.3% Conservative ($n = 33$); 9.9% Reform ($n = 20$); and 9.9% other Jewish affiliation ($n = 20$). Thus, 63.9% of the sample reported affiliation with Orthodoxy.

All study procedures (informed consent, screening, administration of assessments, randomization, administration of treatment, and communication) were conducted on-line between September, 2008 and June, 2009. All information including treatment was presented in

the English language. Recruitment was carried out by the following means: (1) distribution of electronic-mail to a large distribution list belonging to a website dedicated to furthering research on Judaism and mental health (www.jpsych.com), (2) distribution of electronic-flyers to Jewish community email lists and bulletin boards (e.g., Yahoo “shul” groups, www.shamash.org, Jewish Facebook groups), (3) paid advertising on Jewish websites (e.g., www.luach.com), (4) solicitation of Jewish community organizations to distribute information about the study (e.g., synagogues in the Greater Toronto Area, Aish HaTorah Jerusalem, and Hebrew Union College), (5) solicitation of Jewish mental health organizations to distribute information about the study (e.g., Jewish Family and Child Service branches across the United States and Canada; the Jewish Association for the Mentally Ill in London, England; and the Jewish Mental Health Network in Australia, Relief Resources in Toronto and New York, and NEFESH: The international network of Orthodox Jewish Mental Health Professionals), (6) the creation and posting of a web-based video advertisement for the study, and (7) posting of paper-flyers on Jewish community bulletin boards (see Appendix A for solicitation materials). Additionally, study participants were encouraged to solicit their friends and family members to participate in the study.

Individuals who responded to study solicitations were directed to the study website where they were presented with an informed consent form (see Appendix B). After consenting to participate, participants were prompted to register for the study by creating a username and password. To facilitate communication, participants were required to provide and confirm a working email address. However, participants were informed that they could create an alias email address for the purposes of participating in the study to protect their anonymity. After registration, participants completed a screening procedure (see Appendix C) to determine their eligibility for the study. Eligible participants reported elevated levels of current stress and worry

as defined by a score of 27 or higher on the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) and 54 or higher on the Penn State Worry Questionnaire (Meyer, Miller, Metzger & Borkovec, 1990). These scores correspond to 1 SD above the mean based on evaluations of each scale with large community (non-clinical) samples (Cohen & Williamson, 1988; Gillis, Haaga & Ford, 1995), and are thus indicative of elevated though not necessarily clinical levels of anxiety. Participants further had to identify with the Jewish religion, be 18 years of age or older, be fluent in English, and indicate no changes in psychotropic medication (type or dosage) during the 8-weeks before treatment. Participants reporting severe symptoms (i.e., current intent to self-harm; a past or current diagnosis of mania, schizophrenia or substance abuse) or cognitive impairment (i.e., previous traumatic brain injury) were excluded from participation. Participants further had to be willing to be randomized to one of the three study conditions (SI-CBT, PMR or WLC) and commit to maintain a stable dose of psychotropic medication and withhold from engaging in any additional psychotherapy or counseling during the treatment period (2-weeks). After completing the screening procedure, eligible participants were automatically randomly assigned to one of the three study conditions using a computer-generated allocation sequence and hence no blinding/masking was necessary. No blocking or stratification rules were utilized in the randomization process. Subsequently, participants were informed via email whether they were eligible to participate in the study, and if so, which study condition they were randomized to. Non-eligible participants were provided with a list of alternative psychological and spiritual resources (see Appendix D).

Eligible participants were re-directed to the study web-site and asked to complete the pre-treatment (baseline) assessment (see Appendix E). Subsequently, participants in active treatment conditions (SI-CBT and PMR) were required to view a 10-minute orientation video (described

below) and complete measures assessing participants' expectations about the treatment, and whether treatments appeared to be credible and sensible (see Appendix E). To ensure that pre-treatment assessments were an accurate reflection of participants' symptoms at the start of the treatment period, participants in the two active treatment groups (SI-CBT and PMR) were required to begin their treatment programs within seven days of completing the assessment. Participants in these groups who failed to begin treatment within this time frame were required to complete the assessment again prior to commencing treatment.

The treatment period lasted two weeks (14 days) in duration. Participants in the active treatment groups were asked to visit the study website and participate in their treatment once each calendar day (12:00am to 11:59pm, Eastern Time); however it was realistically expected that participants would only complete the program 7-10 times during the treatment period. Participants were not able to participate in treatment more than once each day. During this time period, participants in the waitlist control condition did not receive any contact. To encourage participation in the treatment programs, participants in the active treatment groups received a daily email reminder about their treatment period (see Appendix D). Completion of daily treatment was tracked electronically to provide information about how many sessions each participant completed. Regardless of how many sessions were completed, each participant's treatment period ended 14-days after commencing treatment. At the end of the treatment period, all participants were prompted via email to complete the post-treatment assessment (see Appendix D). Six weeks following the end of the treatment period, all participants were prompted again via email to complete the follow-up assessment (see Appendix D). To facilitate compliance, email messages prompting participants to complete the post-treatment and follow-up assessments were sent on a daily basis until the assessments were completed. Participants

were not compensated monetarily and completed all study assessments on a volunteer basis. However, subsequent to completing the follow-up assessment, all participants were given unlimited access to both active treatments (SI-CBT and PMR) for one year, thus enabling participants to engage in their treatment of choice on an independent basis after completing participation in the study.

Interventions

Two cognitive behavioral interventions (SI-CBT and PMR) were administered over the internet on a daily basis during the two-week (14 day) treatment period.

SI-CBT

The SI-CBT program, entitled “Increase Your Trust in God,” was comprised of a series of audio-visual presentations. This program was principally developed by David H. Rosmarin and Kenneth I. Pargament in conjunction with Jewish community leaders and teachers. The program was initially created on a series of Microsoft PowerPoint© slides that were then transferred to video. This video was then over-dubbed with an audio overlay (an actor’s voice) so that the instructions and content were presented both visually and audibly. A script of the entire program can be found in Appendix F.

The SI-CBT contained four components: (1) an introduction; (2) a cognitive component consisting of stories and readings, in which participants were encouraged to think about what it means to trust in God, and the role of God in their lives; (3) a behavioral component consisting of spiritually integrated strategies designed to increase awareness of God’s benevolence and care; and (4) a brief prayer for Divine assistance in building trust in God (see Figure 1 for a brief summary of these components).

More specifically, in the introduction to the program, participants were informed that the purpose of the program is to strengthen the perspective that God is completely knowing, powerful, kind and loving. Participants were then asked to try to be open to and enjoy the activities. Next, participants were asked to try to sit comfortably and clear their minds of any present stressors. Finally, participants were asked to try to think of how their lives may be different if they were to raise their level of trust in God. In the second (cognitive) segment of the program, participants were first presented with stories adapted from classic Jewish sources and folk tales as well as modern anecdotes. Every two days throughout the treatment period participants were presented with a different story. After the story was completed, participants were presented with a series of four short passages about trust in God adapted from the words of Jewish sages and teachers, written over the past 2000 years. After each passage, a bulleted summary of the reading was presented and participants were asked to read each line out loud. In the third (behavioral) segment of the program, participants were led through a series of four exercises, designed to build increased trust in God. The exercises involved: (a) picturing a trusted person (e.g. parent, teacher, doctor) and thinking of them as being sent by God to provide personal help; (b) thinking of something important in life (e.g. a body part, a family member) as a gift from God, trying to feel that God gave it as an act of love, and thanking God verbally; (c) thinking about a challenging time in the past when it seemed that God provided help and things turned out for the best, and thanking God verbally for this help; and (d) trying to feel that God is directly involved in basic life activities (e.g., standing up from one's chair). In the fourth and final segment of the program, participants were encouraged to pray briefly for increased levels of trust in God.

It should be noted that participants were asked to practice the behavioral components of the program throughout their daily life, particularly when experiencing stress and worry. To encourage this, participants were provided with a link to download and print a single page (8.5” x 11”; Microsoft Word© and Adobe Acrobat© formats), which summarized the four behavioral activities (see Appendix G).

To orient participants to the program, a 10-minute orientation video was prepared (see Appendix H for script). This video explained how trust in God may be tied to anxiety and stress, provided an overview of the program content, and outlined the potential risks and benefits of the program. Additionally, to be consistent with the orientation video utilized for the PMR program (described below), this video also conveyed the message that passive participation (e.g., just watching the video without engaging in the activities) will not likely be beneficial and therefore active participation is recommended. All participants randomized to the SI-CBT group viewed this video prior to commencing treatment.

Progressive Muscle Relaxation

In this study, we employed the well-utilized PMR program of Bernstein and Borkovec (1973) in which participants are presented with instructions for tensing and relaxing 16 different muscle groups. A script of the entire program can be found in Appendix I. Based on the counsel of Dr. Thomas Borkovec (personal communication, November, 2007), the treatment was administered in an audio-only format and no video component was utilized, in order to minimize distraction and to encourage participants to close their eyes during participation in the program. Additionally, participants were instructed to sit in a quiet place, to minimize the chances of distraction, and to turn away from their computer monitors while engaging in the program. Consistent with standard practice of PMR (Bernstein and Borkovec, 1973), participants were

asked to practice the tensing and relaxing of muscle groups throughout their daily life, particularly when experiencing stress and worry. To encourage this, participants were provided with a link to download and print a single page (8.5" x 11"; Microsoft Word© and Adobe Acrobat© formats), which summarized the PMR program (see Appendix J).

As for the SI-CBT program, a 10-minute video was prepared to orient participants to the PMR program (see Appendix K for script). In this video, an actor presented an introduction to and rationale for PMR based on the guidelines of Bernstein & Borkovec (1973) and Bernstein & Carlson (1993). All participants randomized to the PMR group viewed this video prior to commencing treatment.

In order to minimize possible confounds associated with treatment delivery, both the SI-CBT and PMR programs utilized the same voice and were of approximately equal length (25-30 minutes). Additionally, the orientation videos for each treatment utilized the same actor.

Measures

All of the following measures were administered in an on-line format. Previous research suggests that online administration of questionnaires generally results in excellent psychometric properties (Buchanan, 2003). Please see Table 2 for a list of all measures and when they were completed during the study. Copies of all measures can be found in Appendix E.

Demographic Variables

At the pre-treatment assessment, participants completed single items assessing for age, gender, marital status, number of children, highest level of education attained, current employment status, and family income.

Life Change

At the pre-treatment assessment, participants completed the Indices of Life Change Events subscale from the Health and Daily Living Form (Moos, R., Cronkite, R. & Finney, J., 1990). This measure assessed whether participants experienced any of 30 negative (e.g., divorce), positive (took a better job) and exit (e.g., moved to a new residence) life change events in the past 12 months, providing a composite index of the number of life changes participants had experienced in the year prior to treatment. This measure demonstrated a satisfactory level of internal consistency in the sample ($\alpha = .75$).

General Religiousness

At the pre-treatment assessment, participants completed a series of ten single items measuring the following aspects of global Jewish religiousness: belief in God and synagogue membership (anchors: no, yes); level of religiousness, level of spirituality and importance of religion (anchors ranging from not at all to very); changes in level of religious activity over the past 5 years (anchors ranging from decreased substantially to increased substantially); feelings about being Jewish (anchors ranging from very negative to very positive); frequency of private/public prayer, frequency of synagogue attendance and frequency of religious study (anchors ranging from never to several times a day). These items were totaled to provide a summary measure of general Jewish religiousness, with higher values denoting higher reported levels of each item (e.g., greater importance of religion, increases in religious activity over past 5 years). This measure demonstrated a satisfactory level of internal consistency in the sample ($\alpha = .73$).

Treatment Credibility and Expectations

After viewing the orientation videos and prior to commencing treatment, participants in the active treatment groups (SI-CBT and PMR) completed the Treatment Credibility/Expectancy Questionnaire (CEQ; Devilly & Borkovec, 2000). This 6-item measure contains 2 subscales

measuring participants' beliefs about treatment credibility, and expectations for improvement of symptoms during treatment. This scale uses a combination of response scales ranging from "not at all" to "very" on a 9-point scale, and a 0-100% rating in 10% increments. To compute total scores, all item responses are converted to standard scores and summed. In accordance with the scale's usage guidelines, items were adapted to assess for credibility and expectations relating to the reduction of primary treatment targets (i.e., stress and worry). Previous research has demonstrated that this scale possesses adequate internal consistency and test-retest reliability (Deville & Borkovec, 2000). It was observed that internal consistency in the study sample was high ($\alpha = .93$).

Treatment Satisfaction

At the posttest assessment, the Client Satisfaction Questionnaire (CSQ-8; Attkisson & Greenfield, 1999) was administered to participants in the two active treatment conditions (SI-CBT and PMR). The CSQ-8 is a well-utilized one-dimensional instrument that is short and easy to comprehend. It has further demonstrated adequate psychometric properties and has been validated for use with international populations (e.g. De Wilde & Hendriks, 2005). The measure utilizes a 4-point Likert-type scale with various response anchors (e.g., "Poor" to "Excellent"; "No, definitely not" to "Yes, definitely") to assess the degree to which psychological or other health-related services received were found to be desirable, helpful and satisfactory. Higher scores on the scale indicate higher levels of satisfaction with services provided. Internal consistency of this measures in the sample was high ($\alpha = .95$).

Psychotherapy and Changes in Psychotropic Medication

A brief check was conducted to determine participants' involvement in non-study psychotherapy and use of psychotropic medication. At the pretest assessment, participants were asked whether they had started, stopped, or had any change in dosage in psychotropic medication

in the past 6 weeks. At the posttest assessment, participants were asked whether they engaged in any additional counseling or psychotherapy or experienced a change in psychotropic medications during the 2-week treatment period. Participants who responded affirmatively to these items were excluded from the treatment outcome analyses.

The following measures were included in all three study assessments (pre-treatment, post-treatment and follow-up).

Primary Outcomes

Stress

Stress was measured by the Perceived Stress Scale (PSS; Cohen, Kamarck & Mermelstein, 1983), a commonly utilized 14-item measure of an individual's appraisal of stress over the past month. This measure asks respondents to indicate the frequency which they have experienced a series of 14 specific stressful thoughts and feelings over the past month using a 5-point Likert-type scale (ranging from "Never" to "Very Often"). For the purposes of this study the scale instructions were revised to assess perceived stress over the past week. Higher scores on the scale indicate higher levels of stress. Previous analyses have yielded satisfactory levels of reliability and validity for the scale (Cohen & Williamson, 1988), and internal consistency was high in the sample (α s ranging from .86 to .92).

Worry

Worry was assessed with the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger & Borkovec, 1990). This measure asks respondents to indicate the degree to which a series of 16 statements about worry are characteristic of them in general. For the purposes of this study, scale instructions were revised to assess worry over the past week. The PSWQ is scored using a 5-point Likert-type scale ranging from 1 (not at all typical) to 5 (very typical), and higher scores on the inventory indicate higher levels of worry. The PSWQ has well established norms

and psychometric properties in both clinical and community samples; it has been found to possess high internal consistency, good test-retest reliability, and good concurrent validity (Brown, 2003). Internal consistency of the scale was high in the sample (α s ranging from .91 to .94).

Secondary Outcomes

Depression

Previous research has indicated that considerable overlap exists between stress, worry and depressive symptoms (Hutchinson & Williams, 2007). Furthermore, several stress-intervention studies have reported reductions in depression accompanying ameliorations in stress (e.g. Antoni et al., 2000). Thus, the impact of the interventions on depressive symptoms was assessed using the Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977). The CES-D contains 20 items describing symptoms of depression. Respondents are asked to rate indicate how frequently each symptom was experienced over the past month on a 4-point Likert-type scale (ranging from “Rarely or none of the time” to “Most or all of the time”). For the purposes of this study the scale instructions were revised to assess for depression over the past week. Higher scores on the scale indicate higher levels of depression. The CES-D has been validated extensively in community settings as a measure of general depressive symptomatology (Orme, Reis & Herz, 1986), and internal consistency in the sample was satisfactory (α s ranging from .71 to .76).

Intolerance of Uncertainty

Intolerance of uncertainty, the tendency to be greatly bothered by even a small possibility of a negative event occurring, has been identified as a key component of worry and anxiety (Dugas, Freeston, & Ladouceur, 1997). As proposed above, trust in God may undermine the

salience of intolerance to uncertainty by reinforcing the perspective that the unknown is never truly threatening. To examine the impact of the SI-CBT program on this construct, a short-version of the Intolerance of Uncertainty Scale was utilized (IUS-12; Carleton, Norton & Asmundson, 2007). This measure asks respondents to rate the degree to which 12 statements reflecting intolerance of uncertainty are characteristic of them in general using a 5-point Likert-type scale (ranging from “Not at all characteristic of me” to “Entirely characteristic of me”). For the purposes of this study the scale instructions were revised to assess intolerance of uncertainty over the past week. Higher scores on the scale indicate higher levels of intolerance to uncertainty. The measure has demonstrated a stable 2-factor structure representing both anxious and avoidant components of this construct, and exemplary internal consistency (Carleton, Norton & Asmundson, 2007). The internal consistency of the two subscales in this sample was high (α s ranging from .89 to .91).

Spiritual Outcomes

Trust and Mistrust in God

In order to determine whether the SI-CBT program was more effective in increasing trust in God and reducing mistrust in God than the comparison groups (PMR and WLC), a measure of trust and mistrust in God was utilized. As described above, trust in God is a psycho-religious construct that involves the following three core beliefs about the Divine: (1) God is omniscient (i.e., has constant regard for all worldly affairs); (2) God is omnipotent (i.e., is the ultimate power in the universe); and (3) God is omnibenevolent (i.e., all-merciful, generous and righteous). By contrast, mistrust in God stems from the belief that God is ignorant, impotent and malevolent. To assess for these two dimensions, we initially developed 24-items to measure both trust (11 items) and mistrust in God (13 items), based on previous research (Rosmarin, Pargament and Mahoney, 2009; Rosmarin, Krumrei and Andersson, 2009). To ensure that scale

items and instructions were consistent with Jewish religious values, we consulted three Jewish authorities (ordained rabbis and/or professionals in religious organizations) and all suggestions for revision were incorporated.

Participants' pre-treatment responses to the trust and mistrust in God items were subjected to a principal components factor analysis with Direct Oblimin (oblique) rotation. Four factors with eigenvalues greater than 1.0 emerged, accounting for 67.9% of the scale variance. The fourth factor (eigenvalue = 1.02) was not interpretable however, and so a three factor solution was utilized. Based on the emerging pattern matrix, four items with low factor loadings ($> .40$) were dropped from the item bank. None of the remaining 20-items (11 trust and 9 mistrust in God) negatively loaded on their respective factors or cross-loaded on another factor. All of the remaining 11 trust in God items (e.g., God attends to my needs; God watches over me) loaded on the first factor whereas mistrust in God items were divided between the two remaining factors. These two latter factors related to beliefs about God's ignorance/malevolence (e.g., God ignores me; God hates me), and impotence (e.g., Bad things happen despite God's will), respectively. This three factor structure is consistent with previous research (Rosmarin, Krumrei and Andersson, 2009) and serves as further evidence of the Trust/Mistrust in God scale's construct validity. As was done previously (Rosmarin, Krumrei and Andersson, 2009) to provide for a parsimonious and clinically relevant evaluation of mistrust in God, the two mistrust factors were combined into a single 9-item subscale. Both the trust in God (TIG) and mistrust in God (MIG) subscales demonstrated moderate to high levels of internal consistency (TIG $\alpha = .94$; MIG $\alpha = .80$). Items and factor loadings are presented in Table 3, and all 24 trust/mistrust in God candidate items are presented in Appendix E.

Jewish Religious Coping

It was hypothesized that trust in God may promote positive religious coping by promoting the utilization of spiritual support (e.g., feeling connected to God) in times of distress. Trust in God may further reduce negative religious coping, specifically Divine spiritual struggles. Therefore, the JCOPE, a 16-item measure Jewish religious coping strategies (Rosmarin, Pargament, Krumrei & Flannelly, 2009) was utilized in the current study. The JCOPE contains two subscales measuring positive (12-items) and negative (4-items) methods of religious coping among Jews. Respondents are asked to rate how frequently they generally engage in religious methods of coping with stressful problems on a 5-point Likert-type scale (anchors ranging from “Never” to “Always”). For the purposes of this study, scale instructions were revised to assess religious coping over the past week. Support for the scale’s reliability and validity has been found in a community sample (Rosmarin, Pargament, Krumrei & Flannelly, 2009), and internal consistencies in this sample were moderate to high (negative subscale α s ranging from .75 to .79, positive subscale α s ranging from .86 to .89).

Gratitude

Gratitude was assessed by the Gratitude Questionnaire (GQ; McCullough, Emmons & Tsang, 2002). The GQ is a 6-item self-report measure of the disposition to experience a state of gratitude. Respondents are asked to indicate the degree to which they generally agree with 6 items using 7-point Likert scale (ranging from “Strongly disagree” to “Strongly agree”), with higher scores on the measure indicate higher levels of personal gratitude. However, for the purposes of this study the scale instructions were revised to assess gratitude over the past week. Previous research has established that the GQ has good internal reliability and construct validity (McCullough, Emmons & Tsang, 2002). The internal consistency of the scale in this sample was high (α s ranging from .85 to .86)

Analytic Plan

First, to determine whether treatment groups were equivalent at pre-treatment, I compared socio-demographic, religious, and pre-treatment levels of primary, secondary and spiritual outcome variables across all three study groups. Second, I examined demographic and religious differences between SI-CBT and PMR treatment completers and study dropouts to determine potential biases due to attrition. Third, I compared treatment credibility, expectancies, satisfaction, and completion rates between the SI-CBT and PMR groups. Fourth, treatment outcomes were examined. To assess for within and between-group differences in primary, secondary, and spiritual outcome variables, I conducted a series of mixed design, 3 (group) by 2 (time: pre- to post-treatment, and pre-treatment to follow-up) repeated measures ANOVAs (Analyses of Variance). To determine the sources of effects, significant group x time interactions were followed up with one way, between group ANCOVAs (Analyses of Covariance) and post-hoc tests (Bonferroni) on post-treatment and follow-up scores, controlling for pre-treatment scores. Fifth, within-groups Cohen's d statistics were calculated to determine effect sizes from pre- to post-treatment and pre-treatment to follow-up, for each variable in all three study groups. Finally, I conducted a treatment matching analysis to compare whether primary treatment outcomes were impacted differentially by Orthodox affiliation in the active treatment conditions (SI-CBT and PMR). Bonferroni corrections were applied when conducting multiple comparisons. A calculation of achieved power was conducted using the computer software program G*Power (Faul, Erdfelder, Lang & Buchner, 2007). In the study sample ($n = 125$), for repeated measures ANOVAs over three points of time with three treatment groups, power was calculated to be 1.00 to detect effects of $d = .50$ at $p < .01$. Power did not decrease for the sample on the basis of completion of the follow-up assessment ($n = 96$).

RESULTS

Participant Flow and Attrition

In total, 488 individuals expressed an interest in the study by visiting the on-line portal, giving consent to participate and completing the screening procedure (see Figure 2). Of these, 225 were excluded because they (a) did not report a minimal level of current stress and worry; (b) had started, stopped or made changes to dosages of psychotropic medication less than eight weeks prior; (c) reported current plans to self-harm, diagnoses of mania, psychosis, substance abuse, a previous traumatic brain injury (TBI) resulting in loss of consciousness, or a current life threatening illness; or (d) contact was lost prior to randomization. The remaining 261 participants were randomized to the SI-CBT group ($n = 83$), the PMR group ($n = 106$) or the WLC group ($n = 72$). Contact was lost with 65 participants who did not complete the pre-treatment (baseline) assessment. Of the remaining 202 participants, 77 participants did not complete the post-treatment assessment, and an additional 29 participants did not complete the follow-up assessment. Thus, analyses were conducted with 125 participants who completed the pre- and post-treatment assessments, of which 96 participants also completed the follow-up assessment.

Demographic Characteristics and Baseline Values of Treatment Groups

Socio-demographic and general religious characteristics as well as recent life stressors were equivalent in the three study groups ($F(121)$ ranging from .34 to 1.99, *ns*, for age, income, life changes, and general religiousness; $\chi^2(1)$ ranging from .11 to 5.39, *ns*, for gender, marital status, college degree or higher education, current employment, and Orthodoxy; see Table 1), except that WLC participants had more children than PMR participants ($p < .05$). Pre-treatment levels of primary (stress and worry), secondary (depression, intolerance of uncertainty) and spiritual (trust/mistrust in God, positive/negative religious coping, gratitude) outcome variables were also equivalent ($F(2, 121)$ ranging from .15 to 3.2, *ns*).

Mean pre-treatment levels of stress, worry and depression in the sample were greater than 2 *SD* above community norms (Cohen & Williamson, 1988; Gillis, Haaga & Ford, 1995; Radloff, 1977), indicating near-clinical levels of symptoms. Pre-treatment intolerance of uncertainty was within 1 *SD* of that reported by community samples (Carleton, Norton & Asmundson, 2007). Pre-treatment levels of positive religious coping were slightly lower than 1 *SD* below the mean reported in a recent community investigation (Rosmarin, Pargament, Krumrei and Flannelly, 2009), and negative religious coping was slightly higher than 1 *SD* above the mean, suggesting that the sample may have been spiritually struggling overall.

Comparison of SI-CBT and PMR Treatment Completers and Dropouts

Analyses were conducted to compare SI-CBT and PMR treatment completers to study dropouts. Participants who completed more than half of the program (seven or more treatment sessions) were considered to be treatment completers. The dropout rate in this study (SI-CBT 8/36 = 12%; PMR 21/42 = 50%; Total 29/78 = 37%) was similar to other controlled trials of internet-based interventions which did not involve any therapist contact (e.g., Strom, Pettersson, & Andersson, 2000). There were fewer dropouts in the SI-CBT group ($\chi^2(1) = 6.4, p = .01$) compared to the PMR group. Completers and drop-outs were equivalent on all demographic variables ($t(76)$ ranging from .04 to 4.64, *ns*, for age, number of children, income, and life changes; $\chi^2(1)$ ranging from .22 to 2.56, *ns*, for gender, marital status, college degree or higher education, and current employment). Completers and dropouts were also equivalent in terms of Orthodox affiliation ($\chi^2(1) = .66, ns$) but completers reported slightly higher levels of general religiousness $t(76) = 4.44, p < .05$). Pre-treatment levels of stress, worry, intolerance of uncertainty, trust/mistrust in God, positive/negative religious coping, and gratitude were also equivalent ($t(76)$ ranging from .58 to 6.61, *ns*), however dropouts reported higher levels of

depression ($t(76) = 9.53, p < .01$). Additional analyses revealed that differences in depression were specific to the PMR group ($t(40) = 12.21, p < .001$); SI-CBT dropouts and completers reported equivalent levels of depression at the pre-treatment assessment.

Treatment Credibility, Expectancy, Satisfaction and Completion: SI-CBT vs. PMR

Consistent with my hypothesis, the SI-CBT group reported a higher level of belief in the program's credibility ($t(116) = 2.7, p < .01$) and was more likely to expect treatment gains prior to treatment ($t(119) = 2.7, p < .01$; see Table 4) compared to the PMR group. There were a greater number of treatment completers in the SI-CBT group ($n = 33$) compared to the PMR group ($n = 21$), ($\chi^2(1) = 4.65, p < .05$). At the post-treatment assessment, the SI-CBT group reported higher levels of satisfaction with the treatment program than the PMR group ($t(73) = 3.9, p < .001$).

Treatment Outcome Analyses

Treatment outcome analyses were conducted using all participants who provided data at the post-treatment assessment, irrespective of the number of treatment sessions completed. Pre-treatment, post-treatment and follow-up means and standard deviations and effect sizes for all study variables are presented in Table 5 and a graphic representation of primary treatment outcomes in all three study groups can be found in Figures 3 and 4.

A series of mixed design, 3 (group) by 2 (time: pre- to post-treatment, and pre-treatment to follow-up) repeated measures ANOVAs were conducted. From pre- to post-treatment, significant group x time interactions emerged for stress ($F(2, 121) = 3.73, p < .05, \eta^2 = .06$), worry ($F(2, 118) = 7.20, p < .001, \eta^2 = .11$), intolerance of uncertainty ($F(2, 117) = 6.90, p < .001, \eta^2 = .11$), mistrust in God ($F(2, 117) = 3.79, p < .05, \eta^2 = .06$), and positive religious coping ($F(2, 117) = 3.61, p < .05, \eta^2 = .06$). The remaining group x time interactions were not

significant; however main effects were significant such that depression ($F(2, 117) = 18.63, p < .001, \eta^2 = .14$) and negative religious coping ($F(2, 117) = 15.30, p < .001, \eta^2 = .12$) decreased, and trust in God ($F(2, 117) = 8.73, p < .005, \eta^2 = .07$) and gratitude ($F(2, 117) = 7.31, p < .01, \eta^2 = .06$) increased equally for all groups.

At follow-up, group x time interactions remained significant for stress ($F(2, 92) = 5.82, p < .005, \eta^2 = .11$), worry ($F(2, 91) = 12.15, p < .001, \eta^2 = .21$), intolerance to uncertainty ($F(2, 87) = 3.72, p < .05, \eta^2 = .08$) and positive religious coping ($F(2, 87) = 3.39, p < .05, \eta^2 = .07$). Main effects for time remained significant for depression ($F(2, 89) = 25.88, p < .001, \eta^2 = .23$), negative religious coping ($F(2, 87) = 22.26, p < .001, \eta^2 = .20$), and gratitude ($F(2, 87) = 9.49, p < .005, \eta^2 = .10$).

To identify the sources of significant interaction effects, a series of one way ANCOVAs and post-hoc tests (Bonferroni) were conducted on post-treatment and follow-up scores controlling for pre-treatment scores. With regards to stress, groups did not significantly differ at post-treatment. However, the SI-CBT group reported lower levels of stress ($p < .01$) than the WLC group at follow-up, whereas the PMR and WLC groups reported equivalent stress levels. With regards to worry, the SI-CBT group reported lower scores than the WLC group at post-treatment ($p < .01$), whereas the PMR and WLC groups were again equivalent. At follow-up, both the SI-CBT ($p < .001$) and PMR ($p < .05$) groups reported greater decreases in worry than the WLC group. The difference between SI-CBT and PMR groups approached significance ($p = .06$), with the SI-CBT group reporting greater treatment gains. With regards to intolerance of uncertainty, the SI-CBT group reported greater reductions than both the PMR ($p < .05$) and WLC groups ($p < .001$) at post-treatment, whereas the PMR and WLC groups were equivalent. At follow-up, SI-CBT group scores remained different from WLC group scores ($p < .05$) but were

equivalent to PMR group scores. With regards to mistrust in God, the SI-CBT group reported a greater decrease than the PMR group at post-treatment ($p < .001$) and follow-up ($p < .05$). Again, PMR and WLC groups remained equivalent. And finally, with regards to positive religious coping, the SI-CBT group reported higher levels of positive religious coping than both the PMR ($p < .01$) and WLC ($p < .05$) groups at post-treatment, and the SI-CBT group scores remained higher than WLC group scores ($p < .01$) at follow-up.

Treatment effects for primary outcomes were large in all three study conditions. In particular, SI-CBT participants reported a greater than 1.25 *SD* decrease in stress and worry at post-treatment, and a greater than 1.75 *SD* decrease in these variables at follow-up. PMR participants reported a greater than 1 *SD* decrease in stress at both post-treatment and follow-up, and a similar decrease in worry at post-treatment. Treatment effects for secondary outcomes were also large in the SI-CBT condition, with participants reporting a greater than .75 *SD* reduction in depression and a greater than 1.25 *SD* reduction in intolerance to uncertainty. These effects for PMR and WLC participants were in the moderate range (-0.35 to -0.65). In terms of spiritual outcomes, SI-CBT participants reported moderate treatment gains (greater than .5 *SD*) in trust in God, positive religious coping, and gratitude, and moderate decreases (greater than .5 *SD*) in mistrust in God, and negative religious coping at the follow-up assessment. Notably, positive religious coping decreased substantially among PMR and WLC participants from pre- to post-treatment. The magnitude of spiritual changes at follow-up were small (-0.33 to 0.22) for PMR and WLC participants.

Religion as a Predictor of Treatment Outcomes

To examine whether Orthodox affiliation moderated the relationship between treatment group and primary outcomes (stress and worry), moderation analyses (Aiken & West, 1991)

were conducted with hierarchical regression using the active treatment groups (SI-CBT and PMR). It was observed that 37.1% of SI-CBT participants and 41.7% of PMR participants were non-Orthodox. In each analysis, pre-treatment values were entered as predictors of treatment outcomes in Model 1. Orthodoxy (Orthodox vs. Non-Orthodox) and treatment group (SI-CBT vs. PMR) were then dummy coded and entered individually as predictors in Model 2, and the multiplicative interaction of Orthodoxy and treatment group was added in Model 3. The interaction of Orthodoxy and group (Model 3) was not a significant predictor of treatment outcomes in these analyses (r^2 change ranging from .00 to .02). Thus, Orthodox and non-Orthodox Jews were equally likely to report treatment gains in the SI-CBT and PMR groups.

DISCUSSION

In the present study, the efficacy of a spiritually integrated, cognitive behavioral treatment program was examined in a large sample of Jews suffering from elevated levels of stress and worry. To my knowledge, this is the first study to investigate the efficacy of a SIT delivered in an electronic format, and the first study to evaluate a SIT in the Jewish community. It is furthermore one of the first attempts to evaluate a SIT designed to target anxiety-related difficulties.

Results of this investigation offer initial support for the efficacy of SI-CBT in the Jewish community. Participants in the SI-CBT group reported significant reductions stress, worry, depression and intolerance to uncertainty. SI-CBT participants further reported significantly increased trust in God, gratitude, and use of positive religious coping, and decreased mistrust in God and use of negative religious coping. Effect sizes were large for primary and secondary outcomes and moderate for spiritual outcomes. Furthermore, symptom improvement in the SI-CBT group was clinically significant. At pre-treatment, participants in the SI-CBT group

reported near-clinical levels of stress and worry ($>2 SD$ above community norms) and at post-treatment and 6-8 week follow-up reported levels were in the normal range ($<1 SD$ above community norms).

Results also suggest that SI-CBT may be more efficacious than PMR for some individuals within the Jewish community. The SI-CBT group reported greater treatment gains in both primary outcomes (stress and worry), one of two secondary outcomes (intolerance of uncertainty), and two of five spiritual outcomes (positive religious coping and mistrust in God) compared to WLC participants. Surprisingly, PMR and WLC participants did not differ on these outcomes. It is also noteworthy that there was evidence of subjective preference for SI-CBT over conventional treatment (PMR) in the sample. Specifically, SI-CBT participants reported higher levels of belief in treatment credibility, greater expectations from treatment, more treatment satisfaction, and they were more likely to complete treatment than PMR participants. While this was predicted in the current study and is consistent with previous research suggesting that religious individuals prefer spiritually integrated to conventional treatment (Lindgren & Coursey, 1995; Puchalski, Larson & Lu 2001), it is possible that these specific factors drove the differences in treatment effects in the current study, and further research should aim to clarify this possibility. These findings as a whole suggest that SI-CBT is an important treatment option for Jewish individuals who are interested in spirituality and consider such treatment to be credible a priori. However, SI-CBT may not be appropriate for some individuals within the Jewish community.

The results of this investigation have a number of general implications. First, SI-CBT was tailored to the needs and interests of a sub-population by grounding the intervention in traditional Jewish thought and collaborating with community leaders in the application of this

model. This culturally-sensitive approach to treatment design may have contributed to subjective preference for SI-CBT over PMR, an established, empirically-supported intervention for stress and worry. Cultural sensitivity may further have increased participant interest and motivation and facilitated treatment compliance (e.g., completion of a greater number of sessions). This investigation therefore underscores the importance of integrating culturally-salient idioms and practices into CBT. Second, SI-CBT directly addressed the maladaptive religious cognitions associated with mistrust in God. It is notable that SI-CBT participants reported a greater decrease in mistrust in God and intolerance to uncertainty in this study compared to PMR and WLC. As suggested above, the core religious beliefs associated with mistrust in God may exacerbate intolerance to uncertainty among believers by engendering perceptions of threat and appraisals of danger, and this may in turn increase stress and worry. This calls attention to the importance of directly assessing for and addressing maladaptive beliefs and cognitions across spiritual as well as intrapersonal, interpersonal, and global domains, when creating case formulations and practicing CBT with religious individuals. Moreover, the results of this study suggest that it is possible to use a skill-based cognitive behavioral approach to restructure such beliefs within a relatively short (2-week) time-limited treatment program. Third, SI-CBT may have helped facilitate positive and adaptive forms of spirituality by encouraging the utilization of positive religious coping (e.g., engaging in enjoyable religious activities, seeking support from clergy, prayer) to a greater extent than PMR or WLC. This highlights the importance of tailoring behavioral activation strategies within a CBT framework to involve positive spiritual activities when serving the religiously inclined. Fourth, it is interesting that affiliation with Orthodoxy was unrelated to treatment outcomes in the SI-CBT group. As stated above, while SI-CBT is likely not appropriate for all Jewish individuals, particularly those who are nontheists or have nontraditional views of God, this suggests that interest in and applicability of SI-CBT in the

Jewish community may not be limited to the Orthodox. Finally, this study has implications for the dissemination of CBT to religious communities. Despite the lack of any monetary or other tangible compensation and the utilization of a fairly minimal solicitation strategy, over 450 Jewish individuals from around the globe visited the study website to determine their eligibility to participate in the study. This high level of interest indicates a need from within the Jewish community for treatments that target stress and worry, and further suggests that greater sensitivity to spirituality may assist in disseminating empirically-supported treatments. More broadly speaking, given the widespread interest in spirituality and religion within the general population (Gallup Poll, May 10-13, 2007; Gallup Poll, May 8-11, 2008), and the fact that the vast majority of individuals seeking psychological treatments in North America profess some form of spiritual or religious belief (Robb, 2001; Rose, Westefeld, & Ansley, 2001), integration of spirituality into treatment may be an important step in broadening the demand for CBT en masse.

This study has a number of important limitations that must be noted. It was imperative for this study to utilize internet-based administration in order to overcome barriers related to stigma towards mental health services in the Jewish community, and the corresponding need to protect anonymity. However, internet-only administration of SI-CBT necessitated the sole reliance on self-report in the current study and therefore clinician-administered and observational measures of symptoms were not obtainable. Reliance on the internet may also have precluded the involvement of more cloistered factions within the Orthodox community as these sub-sects do not generally utilize the internet (Barzilai-Nahon & Barzilai, 2005). Furthermore, the generalizability of findings to face-to-face implementation of SI-CBT is not known. While one previous investigation found that non-religious therapists were superior to religious therapists in

the administration of CBT with religious content (Propst, et al., 1992), it is possible that therapist religiousness or other factors may impact effective use of SI-CBT in the Jewish community in a clinical setting. Furthermore, as noted above, SI-CBT may not be appropriate for Jews who are nontheists or have nontraditional views of God. Additionally, while safeguards were implemented to increase the likelihood of correct use of PMR (e.g., participants were instructed to turn away from their computer monitors and close their eyes during practice), to my knowledge, only one previous study has investigated the efficacy of internet-based administration of relaxation (Trautmann & Kroner-Herwig, in press). Future research should investigate the implementation of SI-CBT in conventional psychotherapy settings and examine its comparative efficacy to a broader set of treatment options. In the meantime, this study offers initial evidence to suggest that SITs have utility for the relief of suffering within religious communities, and that they are deserving of our attention and worthy of further investigation.

Table 1 – Demographic and religious characteristics of the study sample (n = 125) by treatment group.

Variable	SI-CBT (n = 36)	PMR (n = 42)	WLC (n = 47)	Total (n = 125)
<i>Age</i>	39.7 (13.6)	42.0 (14.3)	43.2 (12.9)	41.8 (13.6)
Gender				
<i>Female (%)</i>	69.4	76.2	82.6	76.6
Marital Status				
<i>Single (%)</i>	27.8	26.2	13.0	21.8
<i>Married (%)</i>	63.9	47.6	65.2	58.9
<i>Divorced (%)</i>	5.6	19.0	19.6	15.3
<i>Widowed (%)</i>	2.8	4.8	0.0	2.4
<i>Other (%)</i>	0.0	2.4	2.2	1.6
<i>Number of children</i>	1.6 (1.5)	1.5 (1.4)	2.4 (1.7)	1.9 (1.6)
<i>College degree or higher (%)</i>	84.5	82.4	81.7	82.9
<i>Employed (%)</i>	36.1	35.7	39.1	37.1
<i>Income</i> ¹	2.3 (1.8)	1.9 (1.8)	2.4 (1.8)	2.2 (1.8)
<i>Life Change</i> ²	4.2 (2.4)	4.3 (2.6)	4.7 (2.8)	4.4 (2.6)
<i>Orthodox Affiliation (%)</i>	62.9	58.3	71.7	63.9
<i>General Religiousness</i> ²	29.6 (5.7)	26.8 (6.6)	28.2 (6.2)	28.2 (6.2)

Notes: All values taken from baseline (pre-treatment) assessment. All values within each row are equivalent ($p < .05$); ¹Coded as 0 = less than \$25,000, 1 = \$25,001-50,000, 2 = \$50,001-75,000, 3 = \$75,001-100,000, 4 = \$100,001-130,000, 5 = more than \$130,000; ²See text for scoring information.

Table 2 – Study measures.

Measure	Pre-Treatment	Post-Treatment	Follow-Up
Participant Information			
<i>Demographics</i>	Y	N	N
<i>Life Change</i>	Y	N	N
<i>General Religiousness</i>	Y	N	N
Treatment			
<i>Treatment Credibility*</i>	Y	N	N
<i>Treatment Expectancy*</i>	Y	N	N
<i>Treatment Satisfaction</i>	N	Y	N
Primary Outcomes			
<i>Stress</i>	Y	Y	Y
<i>Worry</i>	Y	Y	Y
Secondary Outcomes			
<i>Depression</i>	Y	Y	Y
<i>Intolerance of Uncertainty</i>	Y	Y	Y
Spiritual Outcomes			
<i>Trust and Mistrust in God</i>	Y	Y	Y
<i>Jewish Religious Coping</i>	Y	Y	Y
<i>Gratitude</i>	Y	Y	Y

Notes: *Measures of treatment credibility and expectancies were completed after watching the 10-minute orientation video to the treatment program and prior to the start of the treatment period. This video was viewed by participants after the completion of the pre-treatment assessment.

Table 3 – Trust/Mistrust in God Items and Factor Loadings.

Item	Factor Loadings		
	Factor 1	Factor 2	Factor 3
1) God attends to my needs (item 1)	.82	.04	-.04
2) God watches over me (item 2)	.83	-.02	.00
3) God knows what my needs are (item 5)	.76	.00	-.12
4) God knows what's harmful for me (item 6)	.81	.11	-.12
5) God is in complete control (item 9)	.71	.18	-.31
6) Nothing can happen without God's assistance (item 13)	.63	.07	-.23
7) I can't be successful without God's help (item 14)	.64	.26	-.15
8) God loves me immensely (item 17)	.82	-.22	.23
9) God cares about my deepest concerns (item 18)	.82	-.21	.22
10) No matter how bad things may seem, God's kindness to me never ceases (item 21)	.85	-.15	.11
11) God is generous to me even when I don't deserve it (item 22)	.77	-.12	-.13
12) God ignores me (item 3)	-.20	.52	-.01
13) God doesn't care about me (item 19)	-.20	.69	.03
14) God hates me (item 20)	-.07	.70	-.13
15) God is unkind to me for no reason (item 23)	-.01	.80	.16
16) God treats me unfairly (item 24)	.02	.81	.20
17) There are other powers at work in the world aside from God (item 10)	.00	.10	.80
Continued ...			

Table 3, Continued ...

Item	Factor Loadings		
	Factor 1	Factor 2	Factor 3
18) Sometimes, things happen by chance (item 11)	-.25	-.06	.62
19) God is not in total control (item 12)	-.05	-.19	.56
20) Bad things happen despite God's will (item 16)	-.04	.20	.62
21) God doesn't take notice of my activities (item 4)	-.04	.28	-.02
22) I don't need God (item 7)	-.05	.27	-.01
23) God does not know what's best for me (item 8)	.03	-.02	-.08
24) God is ignorant of my needs (item 15)	-.18	.14	.18
<i>Eigenvalues</i>	10.58	2.86	1.84
<i>% of Variance</i>	44.1%	11.9%	7.7%

Notes: Factor loadings based on from rotated (Direct Oblimin) solution pattern matrix. Loadings of retained items are in boldface. Four items (#s 4, 7, 8, and 15) were eliminated due to low factor loadings.

Table 4 – Treatment credibility, expectancies, satisfaction and completion rates.

Variable	SI-CBT	PMR
<i>Credibility</i> ¹	0.6 ^a (2.7)	-0.7 ^b (2.5)
<i>Expectancy</i> ¹	0.5 ^a (2.7)	-0.7 ^b (2.4)
<i>Satisfaction</i> ²	17.2 ^a (5.5)	13.3 ^b (4.6)
<i>Number of treatment completers</i> ³	33.0 ^a	21.0 ^b

Notes: Within rows, numbers that share a common superscript do not differ significantly at $p < .01$; ¹Measures completed prior to start of treatment period, but after viewing of a 10-minute orientation video describing participants' treatment condition. Scores represent standardized values (in accordance with scale instructions); ²Measure completed at post-treatment assessment; ³Participants who completed more than half of the program (seven or more sessions).

Table 5 – Pre-treatment, post-treatment, follow-up values and effect sizes.

Variable	SI-CBT			PMR			WLC		
	Time 1 (<i>n</i> = 36)	Time 2 (<i>n</i> = 36)	Time 3 (<i>n</i> = 26)	Time 1 (<i>n</i> = 42)	Time 2 (<i>n</i> = 42)	Time 3 (<i>n</i> = 29)	Time 1 (<i>n</i> = 47)	Time 2 (<i>n</i> = 47)	Time 3 (<i>n</i> = 37)
Primary Outcomes									
<i>Stress</i>	36.8 (5.6)	29.1 (6.8) -1.37	26.1 (9.7) -1.90	37.4 (6.7)	29.5 (7.3) -1.12	29.4 (9.0) -1.10	36.0 (5.7)	31.9 (7.1) -0.77	31.3 (6.1) -0.88
<i>Worry</i>	66.8 (7.7)	52.3 (10.3) -1.83	52.4 (11.8) -1.90	66.2 (10.0)	54.5 (9.3) -1.12	57.8 (10.2) -1.10	64.4 (10.5)	57.3 (11.8) -0.70	63.9 (11.3) -0.04
Secondary Outcomes									
<i>Dep.</i>	27.4 (7.8)	21.9 (8.3) -0.81	21.3 (9.1) -0.89	27.0 (9.7)	23.8 (9.4) -0.48	22.2 (7.0) -0.65	26.4 (6.4)	24.9 (7.0) -0.35	22.9 (6.9) -0.65
<i>IUS</i>	28.6 (7.5)	19.0 (7.6) -1.36	18.7 (8.7) -1.40	29.4 (10.5)	23.7 (9.8) -0.49	23.9 (8.5) -0.47	25.9 (10.0)	23.3 (7.6) -0.35	23.1 (9.2) -0.39

Continued ...

Table 5, Continued ...

Variable	SI-CBT			PMR			WLC		
	Time 1 (<i>n</i> = 36)	Time 2 (<i>n</i> = 34)	Time 3 (<i>n</i> = 26)	Time 1 (<i>n</i> = 42)	Time 2 (<i>n</i> = 42)	Time 3 (<i>n</i> = 29)	Time 1 (<i>n</i> = 47)	Time 2 (<i>n</i> = 47)	Time 3 (<i>n</i> = 37)
Spiritual Outcomes									
<i>TIG</i>	33.5 (9.0)	37.3 (7.9) 0.61	36.8 (10.0) 0.56	29.5 (11.2)	31.0 (11.3) 0.08	29.1 (12.0) -0.07	32.7 (9.1)	33.1 (10.5) 0.30	32.6 (10.4) 0.08
<i>MIG</i>	6.1 (5.4)	4.1 (4.3) -0.52	4.2 (5.2) -0.51	7.6 (6.7)	8.6 (7.3) 0.20	8.5 (6.5) 0.20	5.9 (5.4)	6.2 (5.0) -0.07	4.7 (4.2) -0.35
<i>P-JCOPE</i>	40.6 (9.1)	36.7 (5.9) -0.09	43.5 (8.9) 0.60	38.9 (8.4)	31.8 (7.0) -0.78	36.8 (8.4) -0.24	42.4 (7.6)	34.3 (6.7) -0.89	41.4 (7.8) -0.05
<i>N-JCOPE</i>	8.7 (3.5)	7.7 (2.7) -0.36	7.0 (3.3) -0.55	10.7 (4.5)	9.8 (4.1) -0.05	9.1 (3.8) -0.20	8.8 (3.8)	8.0 (3.5) -0.33	8.2 (2.7) -0.28
<i>Gratitude</i>	33.4 (7.3)	36.0 (6.0) 0.46	36.2 (6.7) 0.49	31.3 (7.3)	32.6 (7.4) 0.03	33.8 (6.9) 0.19	33.9 (5.9)	34.7 (6.1) 0.21	34.8 (6.0) 0.22

Notes: Means are followed by *SDs* in parentheses, and within-group effect sizes (Cohen's *d*) are presented below where applicable; Dep. = depression; IUS = intolerance of uncertainty; TIG = trust in God; MIG = mistrust in God; P-JCOPE = positive religious coping; N-JCOPE = negative religious coping.

Figure 1 – Components of the SI-CBT program.

Component	Description
<i>Introduction</i>	Participants are informed of the purpose of the program (to increase trust in God) and given an overview of the activities to come.
<i>Stories</i>	Participants are presented with inspiring anecdotes highlighting the core beliefs of trust in God and suggesting that perceived stressors may be blessings in disguise.
<i>Passages</i>	Participants are presented with four short passages that describe and define trust in God and its core beliefs adapted from the words of Jewish sages and teachers, written over the past 2000 years.
<i>Exercise #1</i>	Participants are asked to think of a person they trust and to imagine that this person was sent by God as a messenger to provide help.
<i>Exercise #2</i>	Participants are asked to think of an item they value dearly (e.g. a body part, a family member) and try to imagine that it is a gift from God.
<i>Exercise #3</i>	Participants are asked to think about a stressful time in the past when things turned out better than expected, and then contemplate God's role in the event.
<i>Exercise #4</i>	Participants are asked to try to feel increased trust in God when engaging in daily activities (e.g. going to the refrigerator, standing up).
<i>Prayer</i>	Participants are asked to pray for help in increasing their level of trust in God using whatever words feel comfortable and meaningful.

Figure 2 – Flowchart of Study Participants.

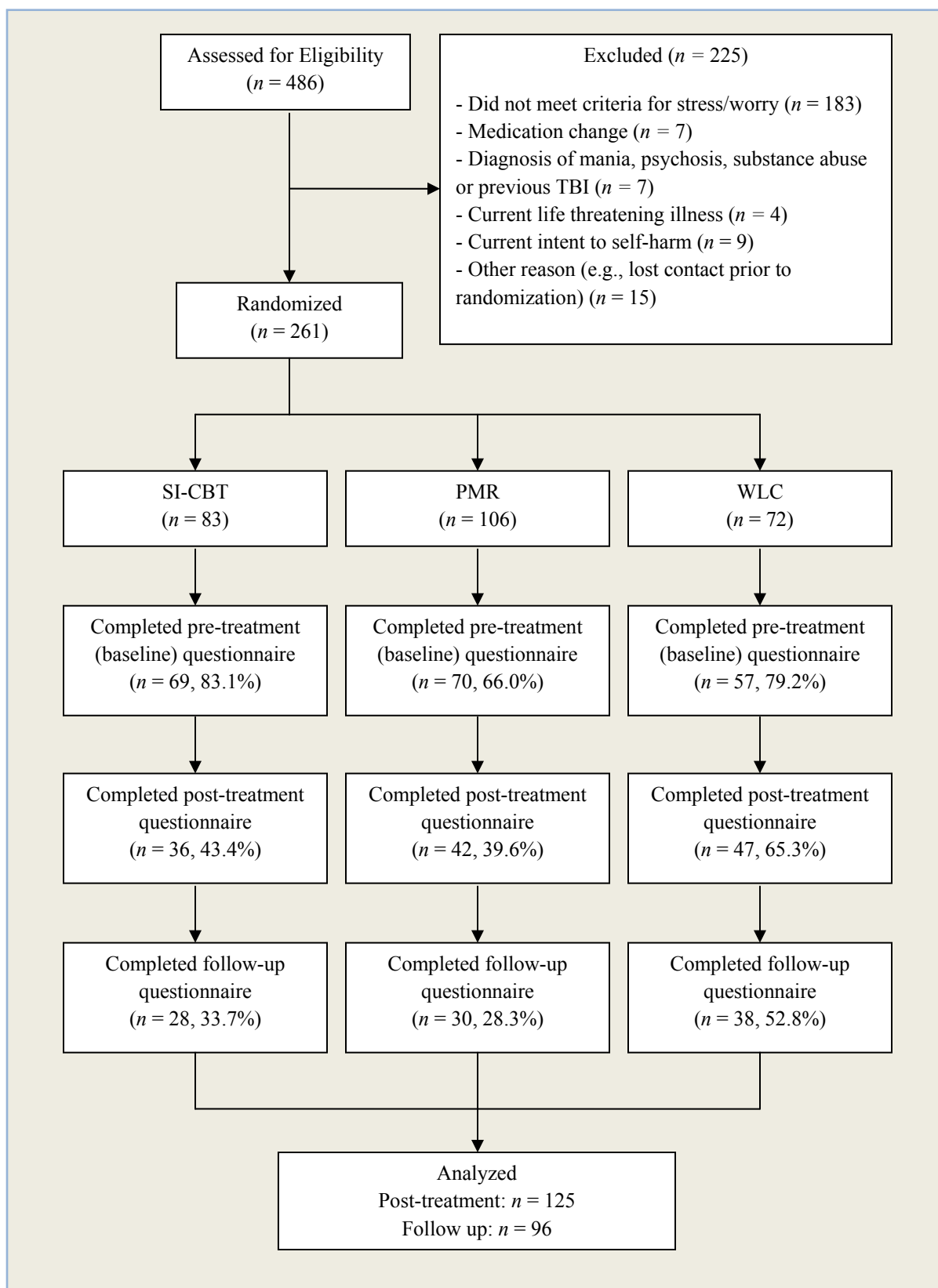


Figure 3 –Treatment Outcomes: Stress

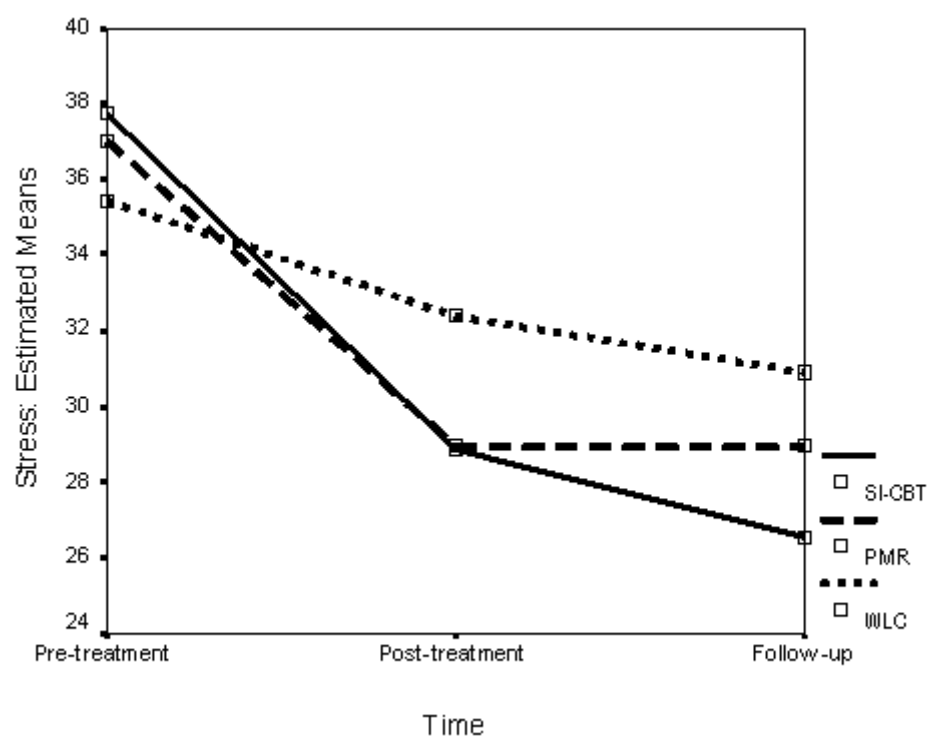
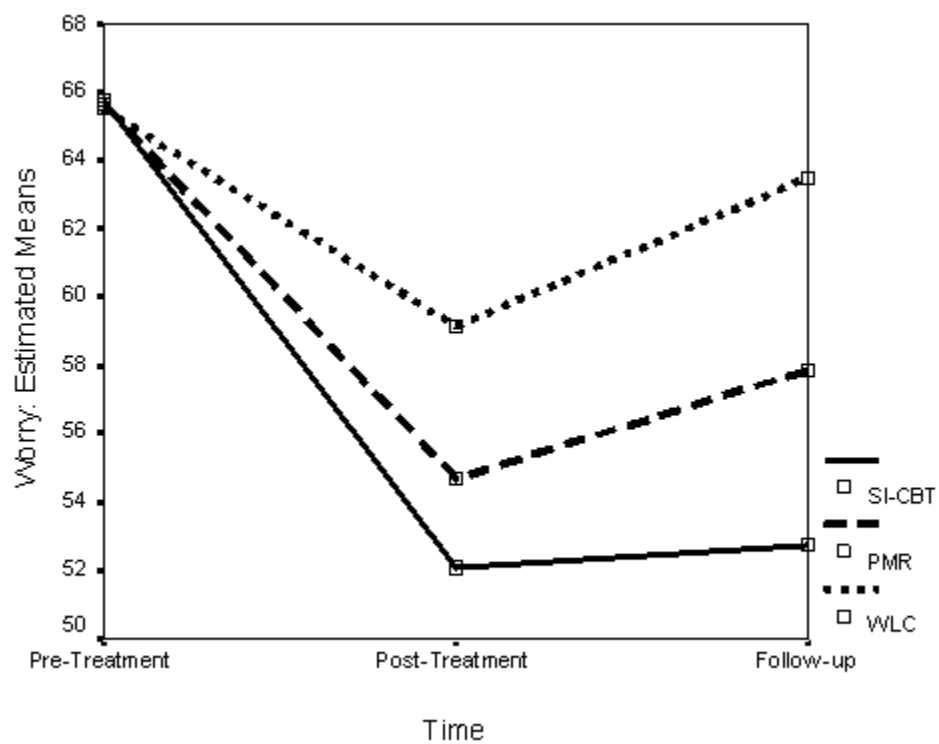


Figure 4 – Treatment Outcomes: Worry



REFERENCES

- Aiken LS, & West SG (1991) *Multiple regression: Testing and interpreting interactions*. Newbury Park, London: Sage.
- Andersson, G., Carlbring, P., Holmstrom, A., Sparthar, E., Furmark, T., Nilsson-Ihrfelt, E., Buhrman, M. & Ekselius, L. (2006). Internet-Based Self-Help With Therapist Feedback and In Vivo Group Exposure for Social Phobia: A Randomized Controlled Trial. *Journal of Consulting and Clinical Psychology*, 74(4), 677-686.
- Attkisson, C. C. & Greenfield, T. K. (1999). The UCSF Client Satisfaction Scales I: The Client Satisfaction Questionnaire-8. In M.E. Marush (Ed.), *The use of psychological testing for treatment planning and outcomes assessment (2nd Edition)* (pp. 1333-1346). Mahwah, NJ: Lawrence Erlbaum Associates.
- Avants, K.S., Beitel, M. & Margolin, A. (2005). Making the shift from 'addict self' to 'spiritual self': Results from a stage I study of Spiritual Self-Schema (3-S) therapy for the treatment of addiction and HIV risk behavior. *Mental Health, Religion & Culture*, 8(3), 167-177.
- Barlow, D.H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd Ed.). New York: Guilford Press.
- Barzilai-Nahon, K. & Barzilai, G. (2005) Technology: The Internet and religious fundamentalism. *Information Society*, 21, 25-40.
- Bernstein, D. A., & Borkovec, T.D. (1973). *Progressive relaxation training: A manual for the helping professions*. Champaign, IL: Research Press.

Bernstein, D.A., & Carlson, C.R. (1993). Progressive relaxation: Abbreviated methods. In P.M. Lehrer & Robert L. Woolfolk (Eds.), *Principles and practice of stress management* (2nd Ed.). New York: Guilford Press.

Borkovec, T.D., Newman, M.G., Pincus A.L. & Lytle, R. (2002). A component analysis of cognitive-behavioral therapy for generalized anxiety disorder and the role of interpersonal problems. *Journal of Consulting and Clinical Psychology*, 70(2), 288-298.

Brosschot, J. F., Van Dijk, E. & Thayer, J. F. (2007). Daily worry is related to low heart rate variability during waking and the subsequent nocturnal sleep period. *International Journal of Psychophysiology*, 63(1), 39-47.

Brown, T.A. (2003). Confirmatory factor analysis of the Penn State Worry Questionnaire: Multiple factors or method effects? *Behavior Research and Therapy*, 41(12), 1411-1426.

Buchanan, T. (2003). Internet-based questionnaire assessment: Appropriate use in clinical contexts. *Cognitive Behaviour Therapy*, 32(3), 100-109

Carlbring, P. & Andersson, G. (2006). Internet and psychological treatment: How well can they be combined? *Computers in Human Behavior*, 22, 545–553.

Carleton, N.R., Norton, P.J. & Asmundson, G. (2007). Fearing the unknown: A short version of the Intolerance of Uncertainty Scale. *Journal of Anxiety Disorders* 21(1), 105-117.

Carlson, C.R. & Hoyle, R.H. (1993). Efficacy of abbreviated progressive muscle relaxation training: A quantitative review of behavioral medicine research. *Journal of Consulting and Clinical Psychology*, 61(6), 1059-1067.

Cohen, S., & Williamson, G.M. (1988). Perceived stress in a probability sample of the United States. In *The social psychology of health* (31-67). Thousand Oaks, CA: Sage Publications.

Cohen, S., Kamarck, T. & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.

Cole, B.S. (2005). Spiritually-focused psychotherapy for people diagnosed with cancer: A pilot outcome study. *Mental Health, Religion & Culture*, 8(3), 217-226.

De Wilde, E.F. & Hendriks, V.M. (2005). The Client Satisfaction Questionnaire: Psychometric properties in a Dutch addict population. *European Addiction Research*, 11(4), 157-162.

Deville, G.J. & Borkovec, T.D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy*, 31, 73-86.

Dugas, M. J., Freeston, M. H., & Ladouceur, R. (1997). Intolerance of uncertainty and problem orientation in worry. *Cognitive Therapy and Research*, 21, 593-606.

Emmons, R., & McCullough, M.E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, 84(2), 377-389

Eysenck, H.J. (1988). Personality, stress and cancer: Prediction and prophylaxis. *British Journal of Medical Psychology*, 61(1), 57-75.

Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.

Gallup Poll. (2007-2008). [Graph illustration of the results from the religion section of the 2007 and 2008 Gallup Poll on Religion]. Retrieved on December 1, 2008 from <http://www.gallup.com/poll/1690/Religion.aspx>.

Gillis, M.M., Haaga, D.A.F., & Ford, G.T. (1995). Normative values for the Beck Anxiety Inventory, Fear Questionnaire, Penn State Worry Questionnaire, and Social Phobia and Anxiety Inventory. *Psychological Assessment*, 7(4), 450-455.

Greenberg, D. (1991). Is psychotherapy possible with unbelievers? The care of the ultra-orthodox community. *Israel Journal of Psychiatry and Related Sciences*, 28(4), 19-30.

Heilman, S.C., and Witztum, E. (1997). Value-sensitive therapy: Learning from ultra-orthodox patients. *American Journal of Psychotherapy*, 51(4), 522-541.

Ibn Pekuda, B. (1996). *Duties of the Heart* (Y. Feldman, Trans.). Northvale, NJ: Jason Aronson. (Original work published circa 1080).

Johnson, W. B., & Ridley, C. R. (1992). Brief Christian and non-Christian rational-emotive therapy with depressed Christian clients: An exploratory study. *Counseling and Values*, 36, 220-229.

Johnson, W. B., DeVries, R., Ridley, C. R., Pettorini, D., & Peterson, D. R. (1994). The comparative efficacy of Christian and secular rational-emotive therapy with Christian clients. *Journal of Psychology and Theology*, 22, 130-140.

Lindgren, K.N. & Coursey, R.D. (1995). Spirituality and serious mental illness: A two-part study. *Psychosocial Rehabilitation Journal*, 18(3), 93-111.

Margolese, H.C. (1998). Engaging in psychotherapy with the Orthodox Jew: A critical review. *American Journal of Psychotherapy*, 52(1), 37-53.

McCorkle, B.H., Bohn, C., Hughes, T. & Kim, D. (2005). "Sacred Moments": Social anxiety in a larger perspective. *Mental Health, Religion & Culture*, 8(3), 227-238.

McCullough, M.E. (1999). Research on religion-accomodative counseling: Review and meta-analysis. *Journal of Counseling Psychology*, 46(1), 92-98.

McCullough, M.E., Emmons, R.A.; Tsang, J.A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82(1), 112-127.

McEwen, B.S. (1998). Seminars in medicine of the Beth Israel Deaconess Medical Center: Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338(3), 171-179.

Meyer, T. J., Miller M.L., Metzger R.L. and Borkovec T.D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research & Therapy*, 28: 6, 487-495.

Moos, R.H., Cronkite, R.C. and Finney, J.W. (1990). *Health and Daily Living Form*. Palo Alto, CA: Mind Garden.

Nielsen, S. L. (2001). Accommodating religion and integrating religious material during rational emotive behavior therapy. *Cognitive and Behavioral Practice*, 8(1), 34-39.

Nielsen, S. L., Johnson, W. B., & Ellis, A. (2001). *Counseling and psychotherapy with religious persons: A rational-emotive behavior therapy approach*. Mahway, New Jersey: Lawrence Erlbaum Associates.

Oman, D., Hedberg, J. & Thoresen, C. E. (2006). Passage Meditation Reduces Perceived Stress in Health Professionals: A Randomized, Controlled Trial. *Journal of Consulting and Clinical Psychology*, 74(4), 714-719

Orme, J. G., Reis, J., & Herz, E. J. (1986). Factorial and discriminant validity of the Center for Epidemiological Studies Depression (CES-D) Scale. *Journal of Clinical Psychology*, 42, 28-33.

Paradis, C.M., Friedman, S., Hatch, M. and Ackerman, R. (1997). Orthodox Jews. In Friedman, S. (Ed.), *Cultural issues in the treatment of anxiety* (130-153). New York: Guilford Press.

Pargament, K.I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York: Guilford Press.

Pargament, K.I. (2007). *Spiritually integrated psychotherapy: Understanding and addressing the sacred*. New York: Guilford Press.

Pargament, K.I., Murray-Swank, N.A. & Tarakeshwar, N. (2005). Editorial: An empirically-based rationale for a spiritually integrated psychotherapy. *Mental Health, Religion & Culture*, 8(3), 155-165.

Pargament, K.I., Murray-Swank, N.A., Magyar, G.M. & Ano, G.G. (2005). Spiritual Struggle: A Phenomenon of Interest to Psychology and Religion. In Miller, W.R. & Delaney,

H.D. (Eds.). *Judeo-Christian perspectives on psychology: Human nature, motivation, and change* (245-268). Washington, DC: American Psychological Association.

Paulson-Karlsson, G., Nevenon, L. & Engstrom, I. (2006). Anorexia nervosa: Treatment satisfaction. *Journal of Family Therapy*, 28(3), 293-306.

Pecheur, D.R., & Edwards, K.J. (1984). A comparison of secular and religious versions of cognitive therapy with depressed Christian college students. *Journal of Psychology and Theology*, 12, 45-54.

Pirutinsky, S., Rosmarin, D.H., & Pargament, K. I. (2009). Community attitudes towards culture-influenced mental illness: Scrupulosity vs. non-religious OCD among Orthodox Jews. *Journal of Community Psychology*, 37(8), 949-958.

Pluess, M., Conrad, A., & Wilhelm, F.H. (2009). Muscle tension in generalized anxiety disorder: a critical review of the literature. *Journal of Anxiety Disorders*, 23(1), 1-11.

Propst, R.L. (1980). The comparative efficacy of religious and nonreligious imagery for the treatment of mild depression in religious individuals. *Cognitive Therapy and Research*, 4, 167-178.

Propst, L. R., Ostrom, R., Watkins, P., Dean, T. & Mashburn (1992). Comparative efficacy of religious and nonreligious cognitive behavioral therapy for the treatment of clinical depression in religious individuals. *Journal of Consulting and Clinical Psychology*, 60(1), 94-103.

Puchalski, C.M., Larson, D.B. & Lu, F.G. (2001). Spirituality in psychiatry residency training programs. *International Review of Psychiatry*, 13(2), 131-138.

Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.

Rausch, S. M., Gramling, S.E. & Auerbach, S.M. (2006). Effects of a Single Session of Large-Group Meditation and Progressive Muscle Relaxation Training on Stress Reduction, Reactivity, and Recovery. *International Journal of Stress Management, 13*(3), 273-290.

Ritterband, L. M., Cox, D.J., Walker, L. S., Kovatchev, B., McKnight, L., Patel, K., Borowitz, S. & Sutphen, J. (2003). An Internet intervention as adjunctive therapy for pediatric encopresis. *Journal of Consulting and Clinical Psychology, 71*(5), 910-917.

Robb, H. B. III (1988). *How to stop driving yourself crazy with help from Christian scriptures*. New York: Albert Ellis Institute.

Robb, H. B. III (2001). Facilitating rational emotive behavior therapy by including religious beliefs. *Cognitive and Behavioral Practice, 8*(1), 29-34.

Rose, E. M., Westefeld, J. S., & Ansely, T. N. (2001). Spiritual issues in counseling: Clients' beliefs and preferences. *Journal of Counseling Psychology, 48*(1), 61-71.

Rosmarin, D.H., Krumrei, E.J. & Andersson, G. (2009). Religion as a predictor of psychological distress in two religious communities. *Cognitive Behaviour Therapy, 38*(1), 54-64.

Rosmarin, D.H., Pargament, K.I, Krumrei, E.J. & Flannelly, K.J. (2009). Religious coping among Jews: Development and initial validation of the JCOPE. *Journal of Clinical Psychology, 65*:7, 1-14.

Rosmarin, D.H., Pargament, K.I., & Mahoney, A. (2009). The role of religiousness in anxiety, depression and happiness in a Jewish community sample: A preliminary investigation. *Mental Health Religion and Culture*, 12(2), 97-113.

Rosmarin, D.H., Pargament, K.I., & Robb, H., (in press). Introduction to Special Series: Spiritual and Religious Issues in Behavior Change. *Cognitive and Behavioral Practice*.

Rye, M.S., Pargament, K.I., Pan, W., Yingling, D.W., Shogren, K.A. & Ito, M. (2005). Can group interventions facilitate forgiveness of an ex-spouse? A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 73(5), 880-892.

Sandberg, S., Paton, J.Y., Ahola, S., McCann, D.C., McGuinness, D., Hillary, C.R., & Oja, H. (2000). The role of acute and chronic stress in asthma attacks in children. *The Lancet*, 356, 982-987.

Sell, K.L. & Goldsmith, W. M. (1988). Concerns about professional counseling: An exploration of five factors and the role of Christian orthodoxy. *Journal of Psychology and Christianity*, 7(3), 5-21.

Smith, T. B., Bartz, J., & Richards, P. S. (2007). Outcomes of religious and spiritual adaptations to psychotherapy: A meta-analytic review. *Psychotherapy Research*, 17(6), 643-655.

Strom, L, Pettersson, R., & Andersson, G. (2004). Internet-Based Treatment for Insomnia: A Controlled Evaluation. *Journal of Consulting and Clinical Psychology*, 72(1), 113-120.

Strom, L, Pettersson, R., & Andersson, G. (2000). A controlled trial of self-help treatment of recurrent headache conducted via the Internet. *Journal of Consulting and Clinical*

Psychology, 68(4), 722-727. Wachholtz A.B., & Pargament, K.I. (2008). Migraines and meditation: does spirituality matter? *Journal of behavioral medicine*, 31(4), 351-66.

Trautmann, E. & Kroner-Herwig, B. (in press). A randomized controlled trial of internet-based self-help training for recurrent headache in childhood and adolescence. *Behaviour Research and Therapy*.

Wales, J.K. (1995). Does psychological stress cause diabetes? *Diabetes Medicine*, 12(2), 109-12.

Winzelberg, A.J., Eppstein, D., Eldredge, K.L., Wilfley, D., Dasmahapatra, R., Dev, P. & Taylor, C.B (2000). Effectiveness of an Internet-based program for reducing risk factors for eating disorders. *Journal of Consulting and Clinical Psychology*, 68(2), 346-350.

Worthington, E.L., Kurusu, T.A., McCollough, M.E. & Sandage, S.J. (1996). Empirical research on religion and psychotherapeutic processes and outcomes: A 10-year review and research prospectus. *Psychological Bulletin*, 119(3), 448-487.

APPENDIX A – SOLICITATION MATERIALS

Advertisement and Web-Video Text

Do you WORRY too much? Do you feel STRESSED?

- Do you often feel restless or irritable?
 - Are you easily fatigued?
- Do you have a lot of muscle tension?
- Do you have trouble getting to sleep at night?

If so, you may be eligible to receive free on-line treatment by participating in a research study!

Please visit www.jpsych.com for more information, or contact David H. Rosmarin at 647 834 1836 or drosmar@bgsu.edu

Note: This is a randomized controlled study in which there is a 1/3 chance of being assigned to (1) conventional, (2) spiritually-based or (3) no treatment. After completion of the study, ALL participants will have unlimited access to the on-line treatment of their choice for 12 months. Bowling Green State University Human Subjects Review Board Project # H08D158GE7.

Solicitation Email – Individuals

Shalom,

My name is David Hillel Rosmarin and I am a graduate student of Clinical Psychology at Bowling Green State University. For my dissertation, I am evaluating the effectiveness of two different treatments for stress and worry among Jews, delivered via the internet. If you are a Jewish individual over the age of 18 who is currently experiencing difficulties with stress and/or worry, you may be eligible to participate in this study which will enable you to receive free internet-based treatment!

Please click on the URL Link below and consider participating in this study:

www.jpsych.com

This research is being conducted under the supervision of faculty member Dr. Ken Pargament in the department of Psychology, at Bowling Green State University. If you have any questions or comments about the study please contact one of us personally:

David H. Rosmarin - drosmar@bgsu.edu – (647) 834 1836

Kenneth I. Pargament - kpargam@bgsu.edu – (419) 372 2301

The success of this research is dependent on the voluntary participation of Jews from around the globe. So, please feel free to forward this information to others who may be interested!

Thank you and take care,

David H. Rosmarin, MA

Clinical Psychology Ph.D Candidate
Department of Psychology
Bowling Green State University
Bowling Green, OH 43403-0232
Mobile Phone: 647 834 1836
Email: drosmar@bgsu.edu
Website: www.jpsych.com

Solicitation Email – Organizations

Shalom,

My name is David Hillel Rosmarin and I am a graduate student of Clinical Psychology at Bowling Green State University. For my dissertation, I am evaluating the effectiveness of two different treatments for stress and worry among Jews, delivered via the internet. Any Jewish individual over the age of 18 who is currently experiencing difficulties with stress and/or worry, may be eligible to participate in this study which will enable them to receive free internet-based treatment.

Please click on the URL link below for more information about this study:

www.jpsych.com

This research is being conducted under the supervision of faculty member Dr. Ken Pargament in the department of Psychology, at Bowling Green State University. If you have any questions or comments about the study please contact one of us personally:

David H. Rosmarin - drosmar@bgsu.edu – (647) 834 1836

Kenneth I. Pargament - kpargam@bgsu.edu – (419) 372 2301

The success of this research is dependent on the voluntary participation of Jews from around the globe. So, please forward this information to individuals in your community who may be interested!

Thank you and take care,

David H. Rosmarin, MA

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APPENDIX B – INFORMED CONSENT FORM

Purpose & Benefits

Thank you for your interest in this research study! My name is David Hillel Rosmarin – I am a doctoral candidate in the Department of Psychology, Bowling Green State University and this project is being conducted for my dissertation in clinical psychology. This study hopes to evaluate the effectiveness of two different treatments for stress and worry among Jews, delivered via the internet. To our knowledge, no studies have been conducted on this subject and therefore this research may be of great benefit to Jews living with stress and worry.

What is involved?

If you choose to participate in the study, you will first be given a 10-minute “screening” questionnaire in which your eligibility for the study will be determined. If you are eligible to participate, you will be randomly assigned to one of the following three groups (described below): (1) spiritually-based treatment; (2) conventional treatment; or (3) no treatment. Participants in all conditions will be asked to complete three on-line assessments. The first assessment will be completed before the treatment period, the second will be completed at the end of the treatment period, and the third assessment will be completed 6-8 weeks following the end of the treatment period. Each assessment will take approximately 30-40 minutes to complete. As well, treatments will take about 30 minutes each day, for 14 days. Therefore, the total time to participate in this study will range from 1-10 hours, depending on which group you are randomly assigned to. After you complete the study, including all three assessments, you will have unlimited on-line access to the treatment group of your choice (spiritually-based or conventional) for one year (365 days). Participation in this study is completely voluntary. Thus, if you decide to participate, you may change your mind later and end your involvement at any time without

penalty or explanation. It is estimated that 40-50 Jews will participate in each study group, yielding a total of 120-150 participants in the study.

Spiritually-Based Treatment

The spiritually-based treatment used in this study, entitled “Increase Your Trust in God,” was developed in conjunction with Jewish community leaders and experts in rabbinic texts (including Rabbis Leib Kelemen & Noach Orleweck). The program, which is presented in an audio-video format, contains four components: (1) an introduction; (2) readings about Trust in God, (3) four specific exercises to build Trust in God, and (4) prayer. The purpose of the program is to strengthen the perspective that God is completely knowing, powerful, kind and loving, using ideas and tools that others have found useful. The program is not designed to solve all spiritual issues or lead to absolute trust in God, rather it is a specific time-limited treatment designed to increase your faith. To orient participants to the “Increase your Trust in God” program, participants who are randomly assigned to this treatment group will view a 10 minute orientation video a single time before beginning treatment, which will describe the content of the treatment and a brief explanation of why it may be helpful.

Conventional Treatment

The conventional treatment used in this study is called “Progressive Muscle Relaxation” (PMR). This program, which is presented audibly (not visually), involves the systematic tensing and relaxing 16 different muscle groups (e.g. arms, legs, thighs, abdomen, chest, shoulders, neck and face). To orient participants to PMR, participants who are randomly assigned to receive this treatment will view a 10 minute orientation video a single time before beginning treatment, which will describe the content of the treatment and a brief explanation of why it may be helpful.

No treatment

Those who are assigned to the “no treatment” group will not receive any treatment during the course of this study. But, as mentioned above, participants in this group will have access to both the spiritually-based and conventional treatments for one year after they finish participation in the study (i.e., complete the three on-line questionnaires as scheduled).

Who may participate?

To be eligible for this study, you must:

- Be 18 years of age or older
- Be fluent in English
- Wait 8 weeks after making any changes in medications to treat anxiety, depression or any other psychological problem
- Not have any history of mania, schizophrenia, substance abuse/dependence, or a traumatic brain injury
- Not currently have a life threatening illness
- IF YOU ARE CURRENTLY TAKING MEDICATIONS TO TREAT A PSYCHOLOGICAL CONDITION – Commit to maintain a stable dose of medications during the 2-week treatment period and throughout the 6-8-week follow-up period
- IF YOU ARE CURRENTLY RECEIVING PSYCHOTHERAPY – Commit to withhold from any additional psychotherapy or counseling during the 2-week treatment period (Note: you may participate in other psychotherapy during the 6-8-week follow-up period)

Benefits of Participation

If you are randomly assigned to the spiritually-based or conventional treatment groups, you will immediately obtain a potentially beneficial treatment for stress and anxiety at no cost during the treatment period. Additionally, after completion of the study and all assessments, you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year (365 days) no matter which group you are randomly assigned to. Furthermore, all assessments and treatments in this study will be conducted over the internet and therefore you will not have face-to-face contact with a therapist. This will enable you to receive

treatment at a time and place that is convenient for you, and to remain anonymous if you wish (see below).

Risks of Participation

Both treatments used in this study (spiritually-based and conventional) have been designed to decrease stress and worry and are expected to pose minimal risk to participants. However, the following issues may arise: If you are randomly assigned to receive spiritually-based treatment, it is possible that you may think of religious/spiritual questions and issues that you haven't thought of before, and this may lead to spiritual struggles. This may cause some people to experience an increase in stress and/or worry, or other negative emotions. If you are randomly assigned to receive conventional treatment (PMR), it is possible that you will experience an increase in anxiety as you become more aware of your body tension. Also, on rare occasion, people who use PMR experience pain, heart palpitations and muscle twitching. Additionally, if you are randomly assigned to the no treatment condition, you will not receive any treatment for 2 weeks and your symptoms may worsen during this time. Furthermore, participants in all conditions will be asked to refrain from engaging in any additional psychotherapy during the 2-week treatment period, and from making any changes in psychotropic medications during both the 2-week treatment period and 6-8-week follow-up period. While participation in this study is not anticipated to lead to any serious health risk, in case of injury or a severely adverse reaction, please contact David H. Rosmarin at (647) 834 1836 or your local hospital emergency department.

Your rights as a participant

- 1) If you choose to participate in this study, you will be asked for a valid email address in order to facilitate communication with you throughout the study. However, no other identifying

information will be requested. Please note that email is not 100% secure and may be intercepted by others. Should you wish to remain anonymous in your participation, you may create a separate email address for the purposes of your participation in this study.

- 2) Additionally, reasonable efforts will be taken to ensure that all data collected will be kept confidential, including the use of a password protected database on a secure internet server. However, please note that some employers use software that tracks web pages visited and keystrokes made. Therefore, you may wish to participate in this study using a home or public computer. If not, we recommend that you clear your computer's browser cache and page history following each assessment and treatment in order to protect your privacy.
- 3) As stated above, should you consent to participate at this point you may withdraw from the study at any time. You may further refuse to take part in any activity in which you feel uncomfortable.
- 4) As a participant, you will have the right to have all questions concerning the study answered by the researcher (see contact information below)
- 5) As a participant, you may request a summary or copy of the results of the study. Should you wish to retain a copy of this consent document, please print it now.

Researcher Contact Information

This research is being conducted under the supervision of faculty member Dr. Kenneth I. Pargament in the department of Psychology, at Bowling Green State University. If you have any questions or comments about the study please contact one of us personally: David H. Rosmarin - drosmar@bgsu.edu – (647) 834 1836; Kenneth I. Pargament - kpargam@bgsu.edu – (419) 372 2301. You may also contact Bowling Green State University's Human Subjects Review Board at (419) 372 7716 or hsrb@bgnet.bgsu.edu if any problems or concerns arise during the course of your participation in this study.

Thank you again for your interest in this study. Please click [HERE](#) to proceed to the on-line screening questionnaire which will determine whether you are eligible to participate in this study.

Sincerely,

[David H. Rosmarin](#)

Clinical Psychology PhD Candidate
Department of Psychology
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Bowling Green, OH 43403
Email: drosmar@bgsu.edu
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APPENDIX C – SCREENING QUESTIONNAIRE

Initial Items

- 1) What is your age? [____]
- 2) Are you Jewish? [Y/N]
- 3) Are you fluent in the English language? [Y/N]
- 4) In the past 8 weeks, have you started, stopped, or had any change in dosage of medication to treat anxiety, depression or another psychological condition? [Y/N]
- 5) If yes, which medication(s) did this involve and when did the change occur? [____]
- 6) Do you currently have any plans or intentions to harm yourself? [Y/N]
- 7) Have you ever been diagnosed with mania, schizophrenia, or substance abuse/dependence?
[Y/N]
- 8) Have you ever experienced a traumatic brain injury that resulted in the loss of consciousness and/or cognitive impairment? [Y/N]
- 9) Do you currently have a life threatening illness? [Y/N]
- 10) IF YOU ARE NOT CURRENTLY TAKING ANY MEDICATIONS TO TREAT ANXIETY, DEPRESSION OR ANOTHER PSYCHOLOGICAL CONDITION, PLEASE SKIP THIS QUESTION: If you enter this study, do you commit to maintain a stable dose of psychotropic medication while participating in treatment (2-weeks) and throughout the follow-up period (6-weeks)? [Y/N]
- 11) If you enter this study, do you commit to withholding from engaging in any other psychotherapy or counseling during the 2-week treatment period? [Y/N]
- 12) If you enter this study, are you willing to be randomly assigned to either a spiritual or conventional internet-based treatment for stress and worry? [Y/N]

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by clicking *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way, rather indicate the alternative that seems like a reasonable estimate. For each question choose from the following alternatives:

0 – Never ; 1 – Almost Never; 2 – Sometimes; 3 –Fairly Often; 4 – Very Often

- 1) In the last month, how often have you been upset because of something that happened unexpectedly?
- 2) In the last month, how often have you felt that you were unable to control the important things in your life?
- 3) In the last month, how often have you felt nervous and “stressed”?
- 4) In the last month, how often have you dealt successfully with day to day problems and annoyances?
- 5) In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?
- 6) In the last month, how often have you felt confident about your ability to handle your personal problems?
- 7) In the last month, how often have you felt that things were going your way?
- 8) In the last month, how often have you found that you could not cope with all the things that you had to do?
- 9) In the last month, how often have you been able to control irritations in your life?
- 10) In the last month, how often have you felt that you were on top of things?
- 11) In the last month, how often have you been angered because of things that happened that were outside your control?

- 12) In the last month, how often have you found yourself thinking about things that you have to accomplish?
- 13) In the last month, how often have you been able to control the way you spend your time?
- 14) In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

[NOTE: Reverse Score items 4, 5, 6, 7, 9, 10 & 13]

Penn State Worry Questionnaire

Please select the number that best describes how typical or characteristic each item is of you.

1 – Not at all typical; 2; 3 – Somewhat typical; 4; 5 – Very typical

- 1) If I don't have enough time to do everything I don't worry about it.
- 2) My worries overwhelm me.
- 3) I don't tend to worry about things.
- 4) Many situations make me worry.
- 5) I know I shouldn't worry about things, but I just can't help it
- 6) When I am under pressure I worry a lot.
- 7) I am always worrying about something.
- 8) I find it easy to dismiss worrisome thoughts.
- 9) As soon as I finish one task, I start to worry about everything else I have to do.
- 10) I never worry about anything.
- 11) When there is nothing more I can do about a concern, I don't worry about it anymore.
- 12) I've been a worrier all my life.
- 13) I notice that I have been worrying about things.
- 14) Once I start worrying, I can't stop.
- 15) I worry all the time.
- 16) I worry about projects until they are done.

[NOTE: Reverse Score Items 1, 3, 8, 10 & 11]

APPENDIX D – EMAIL COMMUNICATION WITH STUDY PARTICIPANTS

Initial Email – Eligible Participants – TIG Group

Dear Participant,

Congratulations! You are eligible to participate in this study. You have been randomized to receive the spiritually-based treatment program, which is entitled “Increase Your Trust in God.” As a participant, you will receive this treatment, on-line, for 30 minutes each day for a period of 2 weeks. Please click [here](#) to complete the pre-treatment assessment. This will take approximately 30-45 minutes.

After you complete the pre-treatment assessment you will be asked to watch an 8-minute orientation video which will tell you about your treatment program, and then you will be able to start your treatment. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Please note that you will receive periodic emails with instructions and reminders throughout your participation in this study.

Thank you and take care,

David H. Rosmarin, MA

Clinical Psychology Ph.D Candidate
Department of Psychology
Bowling Green State University
Bowling Green, OH 43403-0232
Mobile Phone: 647 834 1836
Email: drosmar@bgsu.edu
Website: www.jpsych.com

NOTE: You’ve received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Initial Email – Eligible Participants – PMR Group

Dear Participant,

Congratulations! You are eligible to participate in this study. You have been randomized to receive the conventional treatment program, which is called Progressive Muscle Relaxation (PMR). As a participant, you will receive this treatment, on-line, for 30 minutes each day for a period of 2 weeks. Please click [here](#) to complete the pre-treatment assessment. This will take approximately 30-45 minutes.

After you complete the pre-treatment assessment you will be asked to watch an 8-minute orientation video which will tell you about your treatment program, and then you will be able to start your treatment. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Please note that you will receive periodic emails with instructions and reminders throughout your participation in this study.

Thank you and take care,

David H. Rosmarin, MA

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Website: www.jpsych.com

NOTE: You've received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Initial Email – Eligible Participants – WLC Group

Dear Participant,

Congratulations! You are eligible to participate in this study. You have been randomized to the “no-treatment” control condition. This means that you will not receive any active treatment during the course of this study (8-10 weeks). However, after completion of the study and all assessments, you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year. Please click [here](#) to complete the pre-treatment assessment. This will take approximately 30-45 minutes.

After you complete the pre-treatment assessment you will be asked to watch an 8-minute orientation video which will tell you about your treatment program, and then you will be able to start your treatment. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Please note that you will receive periodic emails with instructions and reminders throughout your participation in this study.

Thank you and take care,

David H. Rosmarin, MA

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Website: www.jpsych.com

NOTE: You’ve received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Initial Email – Ineligible Participants

Dear Participant,

I am sorry to inform you that you are not eligible to participate in this study. There could be many reasons for this, including:

- You may not have enough stress and/or worry
- You may have a history of psychological difficulties that is too severe for this brief (2-week) program
- You may have made changes to psychotropic medications in the past 8 weeks

Whatever the reason, I do apologize that you are not eligible to participate in this study and receive the on-line treatments that we are evaluating. If you are still interested in receiving assistance for stress and/or worry, you may wish to consult one of the following organizations:

- Anxiety Disorders Association of America (click [here](#))
- Association of Cognitive and Behavioral Therapies (click [here](#))
- American Institute of Stress (click [here](#))
- NEFESH International (click [here](#))

Or one of the following self-help resources:

- 10 Simple Solutions to Stress (click [here](#))
- Anxious 9-to-5 (click [here](#))
- 10 Simple Solutions to Worry (click [here](#))
- The Worry Trap (click [here](#))

Thank you for your interest in this study and take care,

David H. Rosmarin, MA

 Clinical Psychology Ph.D Candidate
 Department of Psychology
 Bowling Green State University
 Bowling Green, OH 43403-0232
 Mobile Phone: 647 834 1836
 Email: drosmar@bgsu.edu
 Website: www.jpsych.com

Information Email about Treatment Period – TIG Group

Dear Participant,

You have successfully completed the pre-treatment assessment! In order to commence your treatment, please click [here](#) in order to watch an 8-minute orientation video. This video will describe the content of the treatment you will receive, and a brief explanation of why it may be helpful.

After watching the video, you will be able to start your treatment. You will have on-line access to the 30-minute “Increase Your Trust in God” program once each calendar day (12:00am-11:59pm) for a period of two weeks (14 days). You are asked to complete this program each day during the treatment period, however if you miss a day or two don’t worry or stress about it! Please note that you will have to login to the study website using your username and password each time you participate in treatment. As well, you will receive a daily email reminder throughout the treatment period.

Please remember that in order to participate in this study we ask that you not engage in any other psychotherapy during the 2-week treatment period. So, if you are currently seeing a psychotherapist, please wait until it is ok for you to take 2 weeks off of treatment before participating in this study. Additionally, if you are currently receiving medication treatments for any psychological difficulty, we ask that you not make any changes to your medications (e.g. type or dosage) throughout both the 2-week treatment period and 6-8 week follow-up period.

Thank you and take care,

David H. Rosmarin, MA

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 Bowling Green State University
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NOTE: You’ve received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Information Email about Treatment Period – PMR group

Dear Participant,

You have successfully completed the pre-treatment assessment! In order to commence your treatment, please click [here](#) in order to watch an 8-minute orientation video. This video will describe the content of the treatment you will receive, and a brief explanation of why it may be helpful.

After watching the video, you will be able to start your treatment. You will have on-line access to the 30-minute “Progressive Muscle Relaxation” program once each calendar day (12:00am-11:59pm) for a period of two weeks (14 days). You are asked to complete this program each day during the treatment period, however if you miss a day or two don’t worry or stress about it! In order to do the treatment, you will have to login to the study website using your username and password. As well, you will receive a daily email reminder throughout the treatment period.

Please remember that in order to participate in this study we ask that you not engage in any other psychotherapy during the 2-week treatment period. So, if you are currently seeing a psychotherapist, please wait until it is ok for you to take 2 weeks off of treatment before participating in this study. Additionally, if you are currently receiving medication treatments for any psychological difficulty, we ask that you not make any changes to your medications (e.g. type or dosage) throughout both the 2-week treatment period and 6-8 week follow-up period.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You’ve received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Information Email about Treatment Period – WLC group

Dear Participant,

You have successfully completed the pre-treatment assessment! Since you have been randomized to the “no treatment” control condition, you will not receive any treatment during the following 2 weeks. However, after completion of the study and all assessments, you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year.

Please remember that in order to participate in this study we ask that you not engage in any other psychotherapy for the next 2-weeks. So, if you are currently seeing a psychotherapist, please wait until it is ok for you to take 2 weeks off of treatment before participating in this study. Additionally, if you are currently receiving medication treatments for any psychological difficulty, we ask that you not make any changes to your medications (e.g. type or dosage) throughout both the next 2 weeks and the 6-8 week follow-up period.

You will receive an email reminder 14 days from now prompting you to complete your next assessment.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You’ve received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Daily Reminder Email about Treatment Period – TIG and PMR Groups

Dear Participant,

This email is just a friendly reminder to complete your treatment today – if you have already done so, please disregard this message. You started your treatment on _____ and your treatment period will end on _____. If you have any questions or comments, please feel free to contact me personally.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You've received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Post-Treatment Assessment Email – All Groups

Dear Participant,

Two weeks have passed and your treatment period for this study is now over. If you were receiving active treatment (spiritually-based or conventional) you will no longer have access to the on-line treatment. Please click [here](#) to complete the second study assessment. This will take approximately 30-45 minutes.

Please note that after completing this assessment as well as one additional assessment (6-8 weeks from now), you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You've received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Daily Reminder Email – Post-Treatment Assessment – All Groups

Dear Participant,

A few days ago you were sent an email stating that you have successfully completed the treatment period of this study, and asking you to complete the second study assessment. Please click [here](#) to complete this assessment; this will take approximately 30-45 minutes.

Please note that after completing this assessment as well as one additional assessment (6-8 weeks from now), you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You've received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Follow-Up Assessment Email – All Groups

Dear Participant,

Six weeks have passed and your follow-up period for this study is now over. There is one final assessment which will complete your participation in this study. Please click [here](#) to complete this assessment; this will take approximately 30-45 minutes.

Please note that after completing this assessment, you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You've received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Daily Reminder Email – Follow-Up Assessment – All Groups

Dear Participant,

A few days ago you were sent an email stating that your follow-up period for this study is now over, and asking you to complete the third and final study assessment. Please click [here](#) to complete this assessment; this will take approximately 30-45 minutes.

Please note that after completing this assessment, you will have unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year. If you have any questions or comments, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Thank you and take care,

David H. Rosmarin, MA

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NOTE: You've received this message because you have signed up to participate in a treatment study. If you have discontinued your participation in the study or received this message in error, please click [here](#) to stop receiving these messages.

Final Email to Participants – All Groups

Dear Participant,

You have successfully completed the third and final assessment and all of the requirements to participate in this study. Thank you very much for all your help! We hope that it has been an enjoyable, informative and helpful experience for you.

You now are entitled to unlimited access to the on-line treatment of your choice (spiritually-based or conventional) for one year. In order to access ongoing treatment, you will have to login to the study website using your username and password.

If you are still interested in receiving assistance for stress and/or worry, you may wish to consult one of the following organizations:

- Anxiety Disorders Association of America (click [here](#))
- Association of Cognitive and Behavioral Therapies (click [here](#))
- American Institute of Stress (click [here](#))
- NEFESH International (click [here](#))

Or one of the following self-help resources:

- 10 Simple Solutions to Stress (click [here](#))
- Anxious 9-to-5 (click [here](#))
- 10 Simple Solutions to Worry (click [here](#))
- The Worry Trap (click [here](#))

If you have any questions or comments about this study, or about your access to ongoing treatment, please contact me at: drosmar@bgsu.edu or (647) 834 1836.

Thank you again and take care,

David H. Rosmarin, MA

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 Website: www.jpsych.com

Email to Study Drop-outs

Dear Participant,

You have received this message because you have indicated that you are no longer participating in this study. If you change your mind, please visit the study website (click [here](#)) at any time.

If you are still interested in receiving assistance for stress and/or worry, you may wish to consult one of the following organizations:

- Anxiety Disorders Association of America (click [here](#))
- Association of Cognitive and Behavioral Therapies (click [here](#))
- American Institute of Stress (click [here](#))
- NEFESH International (click [here](#))

Or one of the following self-help resources:

- 10 Simple Solutions to Stress (click [here](#))
- Anxious 9-to-5 (click [here](#))
- 10 Simple Solutions to Worry (click [here](#))
- The Worry Trap (click [here](#))

Thank you and take care,

David H. Rosmarin, MA

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APPENDIX E – ASSESSMENTS

Demographic Items (pre-treatment only)

- 1) What is your age? [____]
- 2) What is your gender? [M/F]
- 3) What is your marital status? [Single, Married, Common Law, Divorced, Widowed, Other]
- 4) How many children do you have? [____]
- 5) What is the highest level of education you finished [Some high school, High school, Some college/university, College diploma or university degree, Masters degree, Professional degree, Doctoral degree]
- 6) Are you currently employed? [Y/N]
- 7) What is your approximate current annual, gross household income? [less than \$25.000, \$25.001-50.000, \$50.001-75.000, \$75.001-100.000, \$100.001-130.000, more than \$130.000]

Life Change Events Subscale from the Health and Daily Living Form (pre-treatment only)

Here is a list of events that may happen to anyone. Read each event and indicate whether you experienced it DURING THE LAST 12 MONTHS.

- 1) Moved to a new residence
- 2) Your graduation from school or training program
- 3) You lost something of sentimental value
- 4) Death of a close friend
- 5) Trouble with friends or neighbors
- 6) Engagement
- 7) Marriage
- 8) Separation
- 9) Marital reconciliation
- 10) Divorce
- 11) Birth of a child in your immediate family
- 12) Trouble with in-laws
- 13) Your own serious illness or injury
- 14) Serious illness or injury of a family member
- 15) Death of a spouse
- 16) Death of an immediate family member (other than spouse)
- 17) Trouble with superiors at work
- 18) Laid off or fired from a job
- 19) Unemployed for a month or more
- 20) Had a greatly increased workload
- 21) Promotion at work

- 22) Took a better (new) job
- 23) Income increased substantially (20%)
- 24) Income decreased substantially (20%)
- 25) Went deeply into debt
- 26) Your children left home (e.g. for school, military service)
- 27) A child or other relative moved into household
- 28) Legal problems
- 29) Alcohol or drug problems
- 30) Assaulted or robbed

General Religiousness Items (pre-treatment only)

- 1) Do you believe in God? [Y/N]
- 2) How religious do you consider yourself to be? [Very religious, Moderately religious, Slightly religious, Not religious at all]
- 3) How spiritual do you consider yourself to be? [Very spiritual, Moderately spiritual, Slightly spiritual, Not spiritual at all]
- 4) Are you a member of a synagogue? [Y/N]
- 5) How has your level of religious activity (e.g. prayer, Synagogue attendance, religious study) changed compared to five years ago? [Increased Substantially, Increased Somewhat, Stayed the Same, Decreased Somewhat, Decreased Substantially]
- 6) How important is being Jewish to you? [Very Important, Somewhat Important, Not Very Important, Not Important at All]
- 7) How do you feel about being Jewish? [Very positively, Somewhat positively, Indifferently, Somewhat Negatively, Very Negatively]
- 8) How often do you speak to God or pray? [Several Times a Day, Once a Day, A Few Times a Week, Once a Week, A Few Times a Month, Once a Month, A Few Times a Year, Once a Year or Less, Never]
- 9) How often do you attend religious services? [Several Times a Day, Once a Day, A Few Times a Week, Once a Week, A Few Times a Month, Once a Month, A Few Times a Year, Once a Year or Less, Never]
- 10) How often do you read religious literature, or attend a religious sermon or lecture? [Several Times a Day, Once a Day, A Few Times a Week, Once a Week, A Few Times a Month, Once a Month, A Few Times a Year, Once a Year or Less, Never]

11) What is your Jewish religious affiliation? [Hassidic, Yeshiva Orthodox, Modern Orthodox, Conservative, Reform, Reconstructionist, Other (Jewish), Not Jewish]

Treatment Credibility and Expectancy

We would like you to indicate below how much you believe, *right now*, that the treatment you will receive will help to reduce your stress and worry. Belief usually has two aspects to it: (1) what one *thinks* will happen and (2) what one *feels* will happen. Sometimes these are similar, but sometimes they are different. Please answer the questions below. In the first set, answer in terms of what you *think*. In the second set answer in terms of what you really and truly *feel*.

Set I

1. At this point, how logical does the therapy offered to you seem?

1	2	3	4	5	6	7	8	9
not at all logical			somewhat logical			very logical		

2. At this point, how successful do you think this treatment will be in reducing your stress and worry?

1	2	3	4	5	6	7	8	9
not at all useful			somewhat useful			very useful		

3. How confident would you be in recommending this treatment to a friend who experiences similar problems?

1	2	3	4	5	6	7	8	9
not at all confident			somewhat confident			very confident		

4. By the end of the treatment period, how much improvement in your stress and worry do you think will occur?

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

Set II

For this set, close your eyes for a few moments, and try to identify what you really *feel* about the therapy and its likely success. Then answer the following questions.

1. At this point, how much do you really *feel* that this treatment will help you to reduce your stress and worry?

1	2	3	4	5	6	7	8	9
not at all			somewhat			very much		

2. By the end of the therapy period, how much improvement in your stress and worry do you really *feel* will occur?

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

Client Satisfaction Questionnaire (post-treatment only)

Please help us improve our program by answering some questions about the services you have received. We are interested in your honest opinions, whether they are positive or negative. Please answer all of the questions. We also welcome your comments and suggestions.

- 1) How would you rate the quality of our program? [Excellent; Good; Fair; Poor]
- 2) Did you get the kind of program that you wanted? [Yes, definitely; Yes, generally; No, not really; No, definitely not]
- 3) To what extent has our program met your needs? [Almost all of my needs have been met; Most of my needs have been met; Only a few of my needs have been met; None of my needs have been met]
- 4) If a friend were in need of similar help, would you recommend our program to him or her? [Yes, definitely; Yes, generally; No, not really; No, definitely not]
- 5) How satisfied are you with the amount of help you have received? [Very satisfied; Mostly satisfied; Indifferent or mildly dissatisfied; Quite dissatisfied]
- 6) Has our program helped you to deal more effectively with your problems? [Yes, it helped a great deal; Yes, it helped somewhat; No, it really didn't help; No, it seemed to make things worse]
- 7) In an overall, general sense, how satisfied are you with our program? [Very satisfied; Mostly satisfied; Indifferent or mildly dissatisfied; Quite dissatisfied]
- 8) If you were to seek help again, would you come back to our program? [Yes, definitely; Yes, generally; No, not really; No, definitely not]

Comments and Suggestions:

Psychotherapy and Psychotropic Medication

Pre-treatment

- 1) In the past 6 weeks, have you started, stopped, or had any change in dosage of medication to treat anxiety, depression or another psychological condition? [Y/N]

Post-treatment

- 1) Since your pre-test assessment on (insert date) have you engaged in any other psychotherapy or counseling? [Y/N]
- 2) Since your pre-test assessment on (insert date), have you started, stopped, or had any change in dosage in medication to treat anxiety, depression or another psychological condition?
[Y/N]

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by clicking *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way, rather indicate the alternative that seems like a reasonable estimate. For each question choose from the following alternatives:

0 – Never ; 1 – Almost Never; 2 – Sometimes; 3 –Fairly Often; 4 – Very Often

- 1) In the last week, how often have you been upset because of something that happened unexpectedly?
- 2) In the last week, how often have you felt that you were unable to control the important things in your life?
- 3) In the last week, how often have you felt nervous and “stressed”?
- 4) In the last week, how often have you dealt successfully with day to day problems and annoyances?
- 5) In the last week, how often have you felt that you were effectively coping with important changes that were occurring in your life?
- 6) In the last week, how often have you felt confident about your ability to handle your personal problems?
- 7) In the last week, how often have you felt that things were going your way?
- 8) In the last week, how often have you found that you could not cope with all the things that you had to do?
- 9) In the last week, how often have you been able to control irritations in your life?
- 10) In the last week, how often have you felt that you were on top of things?
- 11) In the last week, how often have you been angered because of things that happened that were outside your control?

- 12) In the last week, how often have you found yourself thinking about things that you have to accomplish?
- 13) In the last week, how often have you been able to control the way you spend your time?
- 14) In the last week, how often have you felt difficulties were piling up so high that you could not overcome them?

Penn State Worry Questionnaire

Please select the number that best describes how typical or characteristic each item is of you.

1 – Not at all typical; 2; 3 – Somewhat typical; 4; 5 – Very typical

- 1) If I don't have enough time to do everything I don't worry about it.
- 2) My worries overwhelm me.
- 3) I don't tend to worry about things.
- 4) Many situations make me worry.
- 5) I know I shouldn't worry about things, but I just can't help it
- 6) When I am under pressure I worry a lot.
- 7) I am always worrying about something.
- 8) I find it easy to dismiss worrisome thoughts.
- 9) As soon as I finish one task, I start to worry about everything else I have to do.
- 10) I never worry about anything.
- 11) When there is nothing more I can do about a concern, I don't worry about it anymore.
- 12) I've been a worrier all my life.
- 13) I notice that I have been worrying about things.
- 14) Once I start worrying, I can't stop.
- 15) I worry all the time.
- 16) I worry about projects until they are done.

Center for Epidemiological Studies Depression Scale

Please select the number of each statement which best describes how often you felt or behaved this way DURING THE PAST WEEK: 0 – Rarely or none of the time (less than 1 day); 1 – Some or a little of the time (1-2 days); 2 – Occasionally or a moderate amount of the time (3-4 days); 3 – Most or all of the time (5-7 days)

- 1) I was bothered by things that usually don't bother me.
- 2) I did not feel like eating; my appetite was poor.
- 3) I felt that I could not shake off the blues even with help from my family or friends.
- 4) I felt that I was just as good as other people.
- 5) I had trouble keeping my mind on what I was doing.
- 6) I felt depressed.
- 7) I felt that everything I did was an effort.
- 8) I felt hopeful about the future.
- 9) I thought my life had been a failure.
- 10) I felt fearful.
- 11) My sleep was restless.
- 12) I was happy.
- 13) I talked less than usual.
- 14) I felt lonely.
- 15) People were unfriendly.
- 16) I enjoyed life.
- 17) I had crying spells.
- 18) I felt sad.
- 19) I felt that people disliked me.
- 20) I could not get "going".

Intolerance of Uncertainty Scale

Please click on the number that best corresponds to how much each item has been characteristic of you over the past week.

1 – Not at all characteristic of me; 2 – A little characteristic of me; 3 – Somewhat characteristic of me; 4 – Very characteristic of me; 5 – Entirely characteristic of me

- 1) Unforeseen events upset me greatly.
- 2) It frustrates me not having all the information I need.
- 3) Uncertainty keeps me from living a full life.
- 4) One should always look ahead so as to avoid surprises.
- 5) A small unforeseen event can spoil everything, even with the best of planning.
- 6) When it's time to act, uncertainty paralyses me.
- 7) When I am uncertain I can't function very well.
- 8) I always want to know what the future has in store for me.
- 9) I can't stand being taken by surprise.
- 10) The smallest doubt can stop me from acting.
- 11) I should be able to organize everything in advance.
- 12) I must get away from all uncertain situations.

Trust/Mistrust in God Scale

The following statements are concerned with your beliefs about God (Higher Power, The Divine or The Creator). Sometimes, people's beliefs about God may be stronger, and sometimes they may be weaker. PLEASE INDICATE HOW STRONGLY YOU HAVE BELIEVED IN EACH STATEMENT OVER THE PAST WEEK. If you have not been thinking about these statements over the past week in particular, please indicate how strongly you *generally* believe in each one.

0 – Not at all; 1 – A little; 2 – Somewhat; 3 – A Lot; 4 – Very Much

- 1) God attends to my needs.
- 2) God watches over me.
- 3) God ignores me.
- 4) God doesn't take notice of my activities.
- 5) God knows what my needs are.
- 6) God knows what's harmful for me.
- 7) God is ignorant of my needs.
- 8) God does not know what's best for me.
- 9) God is in complete control.
- 10) There are other powers at work in the world aside from God.
- 11) Sometimes, things happen by chance.
- 12) God is not in total control.
- 13) Nothing can happen without God's assistance.
- 14) I can't be successful without God's help.
- 15) I don't need God.
- 16) Bad things happen despite God's will.
- 17) God loves me immensely.
- 18) God cares about my deepest concerns.

- 19) God doesn't care about me.
- 20) God hates me.
- 21) No matter how bad things may seem, God's kindness to me never ceases.
- 22) God is generous to me even when I don't deserve it.
- 23) God is unkind to me for no reason.
- 24) God treats me unfairly.

JCOPE: Jewish Religious Coping

Dealing with Stress: This questionnaire asks about different ways in which you might rely on religion to deal with stress. Please choose the answer that best describes how often you did the following things when you had a stressful problem over the past week.

1 – Never; 2 – Hardly; 3 – Ever Sometimes; 4 – Most of the Time; 5 – Always

WHEN I HAVE STRESSFUL PROBLEMS:

- 1) I asked G-d to forgive me for things I did wrong.
- 2) I got mad at G-d.
- 3) I tried to be an inspiration to others.
- 4) I tried to see how G-d may be trying to teach me something.
- 5) I thought about what Judaism has to say about how to handle the problem.
- 6) I did the best I could and knew the rest is G-d's will.
- 7) I looked forward to Shabbat.
- 8) I talked to my rabbi.
- 9) I looked for a stronger connection with G-d.
- 10) I questioned whether G-d could really do anything.
- 11) I prayed for the well-being of others.
- 12) I prayed for G-d's love and care.
- 13) I wondered if G-d cares about me
- 14) I tried to do Mitzvot (good deeds).
- 15) I tried to remember that my life is part of a larger spiritual force.
- 16) I questioned my religious beliefs, faith and practices.

Gratitude Questionnaire

Please indicate how much you've agreed with each statement over the past week.

1 – Strongly disagree; 2 – Disagree; 3 – Slightly disagree; 4 – Neutral; 5 – Slightly agree; 6 – Agree; 7 – Strongly agree

- 1) I have so much in life to be thankful for.
- 2) If I had to list everything that I felt grateful for, it would be a very long list.
- 3) When I look at the world, I don't see much to be grateful for.
- 4) I am grateful to a wide variety of people.
- 5) As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.
- 6) Long amounts of time can go by before I feel grateful to something or someone.

APPENDIX F – SI-CBT PROGRAM SCRIPT

Introduction

For the following 30 minutes, we will be doing a number of things to try to strengthen the perspective that God is completely knowing, powerful, good, kind and loving. Activities will include: (1) Reading a story; (2) Reading some short passages about trust in God; (3) Contemplating God's role in our relationships, our bodies, and certain life events; (4) Thanking God verbally for our blessings; (5) Relying on God for something in our lives; and (6) Prayer.

Please try your best to be open to these exercises even if they're not like anything you've done before. And most importantly, try to have fun and enjoy this program as much as possible. After all, most people don't get a chance to work on their relationship with God every day!

It is important to note that this program is not designed to solve all spiritual or psychological problems, or even lead to absolute trust in God. Rather, this is a time-limited attempt to *increase* our faith and trust. By the end of the program, we may end up at varying points along the way in our life-long journey of developing trust in God.

Also, there is nothing magical about this program – it will merely introduce you to some ancient techniques that have helped others to develop increased faith and trust. Therefore, it is very important to practice the exercises throughout your day, especially during times when you're feeling stressed or anxious. This may be tough to do at first, but try your best to use the techniques to work on your faith as you go about your daily life. And if you miss a day, don't give up. The more days you practice, the bigger the benefits will be.

Before we get started, please make sure that you are in a quiet place where no one will disturb you for the next 30 minutes.

Once you're ready, please adjust yourself so that you are sitting comfortably in your chair.

Now, let's take a few seconds to relax. One way to do this is to sit and take a few deep breaths.

Now, let's take another few seconds and try to feel that raising our level of trust in God is something that we would like to do. Let's think about how our lives may be better off if we were to trust God more than we currently do.

Stories

We will begin by reading a short story. Every two days throughout this program we will read a different story. These stories have been taken from classic Jewish sources and folk tales as well as modern anecdotes. The purpose of reading these stories is to review some examples of how helpful it can be to trust in God in times of trouble, although this may be very difficult to do.

Story 1 – Everything is for the Best

Rabbi Akiva was traveling far away from his home. His only possessions on the road were a rooster, a flame on a torch, and a donkey. The rooster would wake him up first thing each morning so that he could pray. The flame would allow him to navigate as well as study at night. And the donkey provided him with a reliable mode of transportation.

One evening, after a long and tiring day of traveling, Rabbi Akiva came across a town and searched for a place to sleep. He knocked on the door of a local inn. "Hello, might I have a place to sleep for the night?" he asked. But he was turned away because the inn was full. He knocked on another door, "Excuse me, but do you have a room in which I can stay?" but again,

there was no vacancy. Rabbi Akiva knocked on each and every inn throughout the city, but all of them were completely full.

The hour was late, and Rabbi Akiva realized that he would have to sleep in the cold and dark woods nearby. Rabbi Akiva was not sad or upset though. He knew that God was taking care of him, and he said “Everything that happens is for the best.”

A short while later, Rabbi Akiva was woken up by a terrible growling noise, a loud rooster cry and a deafening brae from a donkey. He was alarmed, but he lay still and stayed calm until the noise passed. After things had calmed down, Rabbi Akiva fumbled around his camp site in the dark, and he realized that a ferocious animal had just eaten his rooster and donkey! He would no longer be able to wake up early and he would have to travel on foot for the rest of his trip. Any ordinary person would have been very upset. But Rabbi Akiva had trust in God and he simply said, “Everything that happens is for the best” and he went back to sleep.

The next morning, Rabbi Akiva woke up and he prayed as usual. He then returned to the town to get some food and to see if he may come across a new mode of transportation. To his surprise, the town was completely empty – there wasn’t a soul in sight!

Rabbi Akiva searched around the town, and he realized that bandits had come in the middle of the night and ransacked the entire town. They had killed a number of people and taken the rest as captives in order to sell them as slaves!

Rabbi Akiva realized right away that an enormous miracle had happened to him. Had he stayed in the town, he may have been sold into slavery or killed. And, had his torch not blown out and had his rooster and donkey not been eaten, Rabbi Akiva may have been seen or heard by the bandits. Indeed, everything that happens is for the best!

Story 2 – The Worst that Could Happen

Feivel ran into his Rabbi's study. "Rabbi, it's terrible. My ox just died! Now I won't be able to plow my field! Isn't this the worst thing that could possibly happen to me?" "Maybe it is, and maybe it isn't" answered the Rabbi, as he stroked his beard.

Feivel left the Rabbi's house. "What he said is just harebrained" thought Feivel. "Of course this is the worst thing that could possibly happen to me!"

The next day, Feivel ran again into the Rabbi's study. "Rabbi, it's wonderful! Yesterday, on my way home, I found a beautiful horse walking in the forest. With my new horse I plowed my field twice as fast as I used to with my ox. Isn't this the best thing that could possibly happen to me?" "Maybe it is, and maybe it isn't" answered the Rabbi as he rubbed his forehead.

The next day, Feivel again ran into the Rabbi's study. "Rabbi, it is terrible! My son fell off my new horse and broke both his legs. The poor boy is in bed and in pain. Isn't this the worst thing that could possibly happen?!" "Maybe it is, and maybe it isn't" answered the Rabbi as he looked back into his book.

"Feivel left the Rabbi's house. "Is he ridiculous?" thought Feivel, "of course this is the worst thing that could happen to me!"

The next day, soldiers of the king came to Feivel's village. They took away all the little boys and forced them into the king's army. The only boy not taken was Feivel's son because his legs were broken.

Now Feivel understood the Rabbi's wise words. We don't always understand what God does, but everything that God does is for the best.

Story 3 – All's Sweet that Ends Sweet

My granddaughter Sarah suffers from diabetes and her parents must be constantly on guard to see that her blood sugar level stays within the normal range. Yet, after all is said and done, a little girl is a little girl and Sarah craves treats, so it's hard to watch her constantly. The hardships of handling this issue are complex, but as believers in God it is easier for us to face the challenge because we trust that God is behind everything, and that all that happens is for our ultimate good.

One day, Sarah didn't come home from school at the usual time. Her mother's concern grew with each passing minute until she finally left the house to check with friends and neighbors to see if they knew where Sarah was. A couple of inquiries revealed that Sarah had last been seen at the local grocery store. "Oh no" her mother thought "I hope she didn't give into her temptation to eat something sweet!"

Sarah's mother ran to the grocery store distraught "Hello Mrs. Schwartz" the cashier said. "Your daughter was just here with some friends. They were so helpful and you should be so proud. They were on their way home from school when they spotted me struggling to organize my shelves – our worker had called in sick today – and they came inside to give me a hand. I couldn't help but show my appreciation by giving each of them a chocolate bar."

That was all that Sarah's mother needed to hear. With her heart pounding like a sledgehammer she ran outside. She found Sarah in a nearby park. "Sarah!" she said as she looked at her daughter with an empty chocolate bar wrapper in her hand, "You know chocolate and candy can make you sick. It's fine for your friends but for you it's poison!" Sarah didn't answer and the two of them walked home silently.

When they entered the house, Sarah sat on the sofa. “Mommy, I don’t feel so good!” she said. Sarah’s mother then took out her glucose checker, placed a special strip into it and pricked Sarah’s finger to put some blood on the strip. My daughter waited with increasing fear dreading the machine to announce a dangerously high glucose level. Yet, to her surprise, the display’s final reading showed a lower-than-normal number.

It took a few moments to sink in, and then Sarah’s mother realized that Sarah’s blood sugar level was low. Had it not been for the chocolate bar that Sarah had eaten she may have lost consciousness, slipped into a coma, or even died! Tears of gratitude filled Sarah’s mother’s eyes. In an emotional phone call to the grocery store cashier, she described what had happened: “You may have saved my daughter’s life. Had you not given her that chocolate bar, who knows what may have happened.”

Story 4 – Miraculous Recovery

Two days after our son was born, the hospital pediatrician came to report a ‘minor’ problem. “Your newborn suffers from poor muscle tone” he said. “That is, his muscles are not fully developed and we will have to do some further testing.” At the time, my wife and I were not too concerned because we had been told similar things about our older daughter and, thank God, she had developed completely normally. We were under the impression that it was a fairly common problem that corrected itself in time.

We were mistaken. As the months passed and our baby grew, his muscle control worsened. He could barely support himself at all – at an age when babies begin to sit up, he was only able to raise his head. In addition, his joints were unusually flexible and his arms and legs would turn in directions that are normally impossible. The doctors at a local clinic did a good job of frightening us by declaring that these symptoms may be signs of mental retardation!

One woman cautioned us that our child had the same difficulties as her own child who today, in his teenage years, is still unable to sit up without being strapped to a wheelchair for support. We were scared and we did not know what the future would hold. But throughout this dark and difficult period, we kept our faith that God was taking care of us – we knew that everything would turn out okay in the end.

And then something terrible happened. The stairs up to our apartment were long, steep and narrow and we lived on the third floor. One morning, I picked up our stroller with my son strapped in and started up towards our apartment as usual. But about half way up, my flexible son suddenly slipped out of the straps and began to roll down the hard tile and concrete stairs! For a second I was in total shock as I stood there with an empty stroller in my arms. I heard him bumping against each step as he fell.

I ran down the stairs after him. When I finally reached him, he was lying motionless at the bottom of the staircase. I checked to see that he was breathing and I stroked him gently and spoke to him. A gigantic weight lifted off my shoulders when he started to cry. Picking him up carefully, I took him outside and my wife flagged a taxi to take us to the nearest emergency room. With fear and trembling, I prayed to God – “This child has suffered so much, PLEASE have mercy on him!”

On arrival at the hospital we were admitted immediately and the medical staff conducted an extensive examination. Amazingly, they found no fractures or internal bleeding, but our son did have a severe concussion. A full CAT scan confirmed that everything was normal.

Thinking about my son’s condition, I hesitantly asked the neurologist if there was any sign of brain damage. The doctor said “no” but agreed to check the CAT scan again after we

told him about our baby's medical history. He studied the scan carefully and answered decisively that the brain was in perfect shape. He then checked our baby's reflexes. To our mutual astonishment, he found our son to be responding normally.

From that day on, our baby began to turn over in his crib. His muscles grew stronger and his strange twisting stopped completely. In a short period of time, he was able to get up on his hands and knees and rock back and forth. Soon afterwards he was crawling and sitting up by himself. As if in a dream, we watched his body develop rapidly. With the passing weeks, a dramatic change came over my family's life. My son's fall was a trauma that had turned into a blessing.

Those days were a time of tremendous spiritual uplift for our family. We felt that we had clearly seen God's Hand with our own eyes. Today, every stage in our son's development – every step he takes – is accompanied by great excitement. Now that our son is three, and a healthy and charming child, we recognize the enormity of the miracle that happened to us. We are so very thankful to God for taking care of us in our time of need.

Story 5 – Rabbi Yaakov Kamenetzky Comes to America.

Rabbi Yaakov Kamenetzky lived in Europe with his wife and children, and he was very poor. Rabbi Yaakov wanted to find a job as the rabbi of a city. He heard about a certain city that was looking to hire a rabbi, and he applied for the job. But there was someone else who also wanted the position and the city hired him instead.

Rabbi Yaakov then heard of another city that needed a new rabbi. But this time as well the city chose someone else. Again and again, every time Rabbi Yaakov tried to get a job, someone else was chosen in his place!

Eventually, Rabbi Yaakov decided to look for a job in the United States. This meant that he would have to leave his family and travel by boat across the ocean alone, because he didn't have enough money for his wife and children to come with him. Rabbi Yaakov's family remained in Europe while he went to the United States to look for a job. Everyone was sad, but Rabbi Yaakov never complained. He had trust in God that everything would work out for the best.

In the United States, Rabbi Yaakov found a job as a rabbi in Seattle, Washington, and his new community collected enough money to bring his family over the ocean. While Rabbi Yaakov was happy that he had found a position, it was very difficult for him to uproot his family from their home in Europe and come to the United States.

Several years later, the Nazis came to power in Europe. They went from city to city, killing as many Jewish people as they could find. The Nazis went to all of the cities where Rabbi Yaakov had wanted to become a rabbi and they killed almost everyone living there, including the rabbis and their families. The Nazis couldn't kill Rabbi Yaakov and his family though, because they were living across the ocean, in the United States.

Over the years, Rabbi Yaakov Kamenetzky became one of the most prominent rabbis ever to live in the United States. His Torah scholarship became known internationally, and together with Rabbi Moshe Feinstein he led American Jewry in Jewish religious law. Today, years after his death, Rabbi Yaakov's writings and teachings are still studied and many of his descendants are leaders to the Jewish people.

So, it turns out that Rabbi Yaakov's "problem" of not finding a job in Europe not only saved his family's life, but became a blessing for millions of Jews across the world.

During World War II, many Jews in Europe ran away to countries where the Nazis were not in power. Some Jews managed to escape to England. England, however, was at war with Germany, and the British government feared that Jews emigrating from Germany were in fact German spies. So, some of the German Jews who came over were deported by the British government to Australia by ship.

On one of the ships, the British soldiers were especially cruel to the Jews. They made fun of them, restricted their access to the deck, and even stole from them!

After a few days at sea, a German submarine spotted the British ship and tried to sink it. The Germans shot a torpedo which skimmed the side of the hull, but did not explode or sink the ship.

When the British soldiers realized that they were being attacked by a German submarine, they became very angry at the German Jews aboard the ship and they proceeded to throw their suitcases into the ocean. All of the Jews' clothes, books and other possessions would be lost forever! The Jews on board were very sad and also very scared.

The German submarine was about to fire another torpedo at the British ship, but just as they were preparing the firing tube they noticed the suitcases in the water. The submarine sent out divers to bring in some of the suitcases. When they opened the suitcases, they found letters written in German and they realized that the British ship was carrying Germans. Not knowing that the Germans on board were in fact Jewish, the German submarine followed the English boat across the world to Australia, protecting it the entire way.

When the ship reached Australia, the Jews disembarked, and the British soldiers headed back to England. At this point though, the German submarine realized that there were no more

Germans on the ship, and only British soldiers remained on board. So, they fired another torpedo at the ship, and this time it sunk the boat!

While the Jews were miserable when their suitcases were thrown overboard, this was a tremendous blessing in disguise! Although the Jews lost all of their possessions, their lives were saved.

Story 7 – From Sbarro’s to Salvation

At about 2:00pm on August 9th, 2001, a 22-year old Palestinian carried out a suicide bombing at Sbarro’s restaurant in one of the busiest areas of downtown Jerusalem. A few minutes before the attack, an American business man from New York walked into the restaurant and placed an order. As he was waiting in line to pay for his lunch, he kept looking at his watch because he was late for his flight and he had to depart immediately for the airport.

An Israeli man was standing in front of him. “You look like you’re in a rush. Why don’t you go ahead of me in line?” The American business man responded “Thank you very much, as a matter of fact I’m running behind schedule and I have a plane to catch” and he went in front of him in the line up. The American then paid the cashier and ran out the door.

When he was less than 5 meters from the restaurant, he heard a loud explosion. He was knocked to the ground, but fortunately was not injured. When he realized what had happened, he got up and ran back into the restaurant. After a few minutes, he found the Israeli man who had given him his place in line. The Israeli man was in critical condition and needed immediate medical attention. The American business man stayed with him and tried to hold down his bleeding until the paramedics arrived.

When the paramedics came, the American went with the Israeli to the hospital and he stayed by his bedside until family members arrived. When the Israeli man's children finally came, the American said to them "I am alive because your father gave me his place in line. I live in New York and I have a successful business there. Please make sure that your father gets the best medical care you can find and I will cover whatever medical expenses your family incurs." He then gave the family his contact information and left.

A few weeks later, the American business man received a phone call from one of the Israeli man's son's who said "Our father is not doing well. We've been told that he needs to see a special surgeon in Boston. Can you help us?" He responded immediately, "Yes, I will be happy to help you. Boston is not far from New York where I live. I will make sure your father gets the procedure he needs and I will pay for everything. You don't have to worry about a thing."

The American business man made all of the arrangements for the Israeli man's surgery and he covered all of the family's travel and medical expenses. As well, on the day of the surgery, he flew to Boston to wait with the family and make sure the surgery was successful.

As it turned out, the date of that surgery was September 11th, 2001 and the American business man worked on in New York City on the 90th floor of the World Trade Centre.

Passages

Now it's time to read through some passages about trust in God. The ideas presented in these passages are very profound. So, we'll be reading them each day in order to give you a chance to digest them and contemplate them deeply.

These passages have been adapted from the words of Jewish sages and teachers that were written over the past 2000 years. These excerpts have inspired thousands of individuals just like us – they were written to help people feel more trust for God in their hearts, regardless of their present level of trust or knowledge.

Before we get to the passages, let's take a few seconds and try to feel trust in the authors of these passages. We realize that may be hard to do since you may never have met a bona fide Jewish sage before. However, let's try to imagine that these teachers were intelligent and reliable people – that they are qualified to talk about trust in God and that their words are worth reading. Also, let's try to imagine that the authors are kind and wise people who are trying to help us, and let's allow their words to penetrate us.

Passage 1

Trusting in God involves knowing in one's heart that everything is in God's hands. This means believing that God has the power to control or alter the laws of nature, and God's ability to rescue is unlimited. Therefore, when one trusts in God, help is always close by – even under the most threatening circumstances – for God, by definition, can do anything and nothing is impossible. Even when danger is imminent, one may remain hopeful by trusting that God can provide rescue from difficulty, and that help can come as swiftly as the blink of an eye.

That's the end of passage one. The following screen contains a summary of the passage. This may sound like an odd request, but please read each line out-loud. If you feel a bit weird about speaking to a computer screen, don't worry – a lot of people talk to themselves and are perfectly normal (trust us, we work in a psychology department!) If you feel very uncomfortable reading out-loud though, then just focus on each line as much as you can and make sure that you understand what it means before proceeding to the next line. Here's the summary ...

- Trusting in God involves believing that God is always in complete control because no power is greater than God.
- Therefore, for those who trust in God, help is close by even when things seem really bad.
- When life becomes difficult, one can remain hopeful by remembering these ideas and trusting in God.

Passage 2

Trusting in God entails recognizing that success and failure are not related to the efforts people make. This is because some people fail despite having made every possible preparation while others are tremendously successful without making any effort at all. By trusting in God, one believes that the critical factors determining success or failure are beyond human control and are really in God's hands.

The following screen contains a summary of passage two. Even if you didn't read out loud before, please try to verbalize the following summary using your vocal chords. However, if you would prefer to read to yourself then that's fine too.

- Trusting in God involves believing that success and failure are not related to human efforts.
- Some people fail after greatly exerting themselves while others are successful despite making inadequate efforts.
- Trusting in God means believing that the outcome of any situation is ultimately in God's hands.

Passage 3

At this point, some of you may be thinking something along the following lines, "If God is in charge and it's really true that our efforts aren't enough to make things happen, why do I

have to work at all? Why don't I just sit by the pool sipping margaritas for the rest of my life?" Well, passage three deals with this very question and it's presented on the following screen.

Trusting in God does not prevent a person from trying to make every personal effort possible. And conversely, taking initiative does not contradict the notion of trusting in God at all. In fact, it is good for one who trusts in God to take every precautionary measure in the physical realm that is possible! Throughout life, God puts us in situations that provide us with opportunities to grow. By choosing to get involved and make an effort to do good, we utilize these opportunities and become better people – we become closer to God.

Let's take a moment to paraphrase the passage before going on to the summary. In a nutshell, the author said that one who trusts in God does not simply stand by and let life happen. One who trusts will exert him or herself as much as possible in order to grow closer to God. By supporting a family, taking care of others, or even changing a diaper, one can constantly give of oneself and be God-like! However, one who trusts in God realizes that human efforts are never enough to actually make a change without God's help.

Here's the summary for passage three. Again, please try to say each line out loud if you're comfortable:

- There is no contradiction between exerting oneself for a task and trusting in God.
- One who trusts in God makes great efforts when provided with opportunities to do good in the world.
- Through taking initiative in doing good things, we can become closer to God.

Passage 4

There's another set of classic questions that some people raise when thinking about trust in God and it goes something like this: "How can I trust that God will take care of me if I feel unworthy? What should I do if I feel that I deserve to be punished for something I've done?" This is a very important issue and it deserves to be addressed seriously. Fortunately, Rabbi Yisrael Salanter wrote about this matter and his ideas can be found in passage four on the next screen.

God loves all of the creations and that includes you. You are worthy because God loves you and wants you to thrive and succeed. That means that you will receive whatever assistance you need to grow. Some people who aren't interested in growth might need to be pushed up against a wall, but anyone who is willing to push themselves doesn't need to be pushed by God. So, you can always trust that God will take care of you by sparing you from any unnecessary difficulties.

OK, that was a very deep passage and we definitely need to go over it. The summary is on the next slide.

- God loves you and wants you to thrive and succeed.
- God sometimes makes life difficult for people but this is only to motivate them to grow.
- So, If you are willing to push yourself God doesn't need to push you in this way.
- Either way, you can trust that God will not subject you to any unnecessary problems.

Exercises

Exercise 1

We hope that you've enjoyed reading through and thinking about the passages. Now we will move on to a series of exercises. These activities have been designed to help us to *build* a greater sense of trust in God. As you become more familiar with the exercises, try to do them

throughout your day as well as during this program – especially when you’re feeling worried or stressed.

Please take a moment to think of a person who you trust. This special individual may be a doctor, a teacher, a parent, a friend or any other person who you feel has taken care of us in our lives.

Now, take some time to think about why this person is trustworthy in your eyes. Think of what it is about this person that makes you trust in him/her.

Perhaps they are compassionate, empathetic and loving.

Maybe they are capable and strong and you’re confident that they can help you.

They may have knowledge about what your needs are.

Maybe they did something that you consider to be heroic.

When you’re ready, try to take another few seconds and see how it feels to think of this person as God’s messenger. Try to picture that God sent them to you, to help you somehow in your life.

Finally, take another moment or two and try to feel that God has tremendous love for you. Try to feel that God gave you the gift of this person’s presence in your life out of deep caring for your personal happiness and wellbeing.

Exercise 2

Now we’re going to try another exercise. Let’s try and muster up a sense of gratitude to God for some things that are very precious to us.

Please start by picking something from the list on the following screen. The item you pick should be something that you value very dearly – the more significant and important, the better.

Your hands or your legs

Your sense of sight or hearing

Your general health

A family member (e.g. spouse, parent or child)

A good friend

A teacher

Your home

Your job or vocation

Something else of great value

Now, this may be unpleasant to do, but please take a moment to picture what your life would be like without the item you chose from the list. Try to think about how your life may be different without the item. You may also wish to think about how having the item has made your life more convenient and happy.

Now, take another moment and try to think of the item as a gift from God. Imagine God giving you the item with the full knowledge of what it does for you in your life. Try to imagine that God knew how difficult your life would be without this item, and therefore God gave it to you so you could be happier.

Now, take another moment and try to feel that God has tremendous love for you personally. Try to feel that God gave you the item as an act of great love and care.

Finally, please take a moment to thank God verbally for taking care of you by giving you the gift of this item. Feel free to phrase your thanks whichever way you like, but the more specific and heartfelt you can be the better. If you'd prefer not to verbalize your thanks out loud, just try to work up as great a sense of appreciation to God for the item as you can.

Exercise 3

Let's do another exercise to try to build our trust in God. Please start by thinking about a stressful time in the past when things turned out ok in the end. It doesn't have to be an overt miracle – any experience that you had when you felt that things turned out better than you expected will be just fine.

Try to think about how you felt before the situation was resolved. Recall what was stressing you out at the time. What were the anticipated consequences you were concerned about?

Now, try to think about God's knowledge at the time you were stressed. Think about how God 'knew' that the situation would turn out ok in the end. What would it have been like for you to have that knowledge at the time?

Now, try to think about God's involvement the situation. What did God do to make the situation turn out OK? What might have happened had some random force been in charge and not God?

Finally, try to think about the outcome of the situation as a gift from God. Try to imagine that God loves you and cares about you deeply, and that is why God helped things to turn out ok in the end.

Exercise 4

For the fourth and final exercise in this program, we're going to try to develop our sense of trust in God in some basic life activities. The goal of this exercise is to feel increased trust in God. Here are some examples:

1) Try to feel trust in God that the next time you go to the refrigerator, there will be some food there for you to eat. Trust that God has kept your fridge running so that the food inside will be cool and fresh when you open the door.

2) Try to feel trust in God that the next time you flip a light-switch, the lights will turn on or off as you desire. Trust that God has kept the electrical system functioning and the circuitry and light bulb filaments intact so the system will operate as you want it to.

3) Try to feel trust in God that the next time you attempt to stand up, your body will be able to rise. Trust that God will enable your muscles, ligaments and bones to accomplish the task of getting out of your chair.

If none of these examples speak to you, feel free to come up with your own. However, whatever you choose should be something that an intelligent secular person would be confident in for “natural” reasons. One of the difficulties of trusting in God is that one must make all the efforts that will reasonably produce one's goals, and then know that it is really God making everything happen. It's a test! After you have every natural reason to believe that things will work out, can you think and feel that God is behind it all?

Also, it is possible that despite your trust in God, the outcome you desire won't actually happen. For example, your refrigerator may really not be working the next time you go to open it! If this occurs, try to think of a reason why this may have been in your best interests (e.g. maybe there was some rotten food in your fridge and you would have gotten sick had you eaten it) and try to feel trust that God made this happen for your best interests.

Please take a moment to try to feel trust in God for in area of your life.

Prayer

We're now done with our readings and exercises, but there's final thing to do. By this point in the program, it's probably apparent that increasing one's trust in God is not an easy thing to do. As such, it makes sense to ask for some assistance. So, we'd like to take a moment to pray to God to give us the guidance, wisdom, strength and courage to experience increased trust in God in our lives.

Using our own words, let's pray for an increase in our levels of trust in God. As we pray, let's try to realize that the task of increasing one's trust in God is a big one, and that it'd be nice to have some help from Up Above to accomplish it.

If prayer isn't a regular thing for you, that's perfectly fine. Just try your best to articulate your desires verbally by speaking softly and simply from the heart.

The End

Background Music ("Dad" by The O'Neill Brothers – permission for use granted on June 2, 2008)

This marks the end of the "Increase your Trust in God" program. We hope you've enjoyed it!

We would like to thank Melnick Studios for producing this audio-visual program (www.melnickstudios.com).

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David Hillel Rosmarin, M.A. & Kenneth I. Pargament, Ph.D.

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APPENDIX G – SI-CBT HANDOUT

Try to practice these exercises throughout your day, especially during times when you're feeling stressed or anxious. This may be tough to do at first, but try your best to use these ancient techniques to build your faith as you go about your daily life. And if you miss a day, don't give up. The more days you practice, the bigger the benefits will be.

Exercise 1 – Think of someone you trust. Think of what makes them trustworthy in your eyes. Think of them as God's messenger, being sent to help you in your life. Think of their presence in your life as a gift from God and try to feel that God loves you.

Exercise 2 – Think of something that you value very dearly in your life (e.g. your hands, your sense of sight, a family member). Picture what life would be like if you didn't have this in your life. Think of it as a gift from God and try to feel that God gave it to you as an act of great love and care. Muster up your appreciation and thank God verbally.

Exercise 3 – Think of a stressful time when things turned out better than you expected. Think of how you felt before the situation was resolved. Think about God's involvement in the situation and what may have occurred had a random force been in control instead. Think of the outcome as a gift from God and try to feel God's love for you.

Exercise 4 – Try to feel trust in God the next time you do a basic life activity (e.g. get food from the fridge, turn on/off a light switch, or stand up from your chair). After you have every natural reason to believe that things will work out ok, try to feel that it's really God behind it all.

APPENDIX H – SI-CBT ORIENTATION VIDEO SCRIPT

This video is about the “Increase Your Trust in God” program. It will present a description of the program as well as a brief explanation of how strengthening your faith in God may lead to reduced stress and worry.

I have a question for you. If you believed that there is an ultimate Being in the universe – let’s call that Being “God” – and that God were completely knowledgeable, powerful, loving and caring, do you think you would have more or less worry and stress in your life? How would these beliefs impact on your emotions? My guess is that you would feel a lot less worried and stressed. Here are a few reasons why.

First of all, wouldn’t you have less to worry about? If you really believed that God is always ‘in the know’, has the power to take care of every situation, and is always merciful, generous and righteous, then wouldn’t you have fewer concerns and less stress? Just imagine how your life would look if you could tap into these beliefs when you’re feeling anxious – you know, when you’re in the middle of multi-tasking fifteen projects and your mind is racing and your muscles are so tense that you’re considering hiring a full-time masseuse! Imagine what it would be like to be able to say the following on those days: “Although things seem crazy right now, I know that whatever happens is God’s will. So, while I’m going to do my best here, I have faith that everything will be ok in the end!”

Second, recent research has indicated that people who really dislike it when they can’t predict what’s going to happen, tend to worry a lot. This research suggests that if you’re the kind of person who really can’t stand it when you don’t know what’s coming next, you’re more likely to sit and worry than others. If you are one of these people, I would bet that you stand to benefit a lot from working on your faith in God. Think about it. Even if you can’t predict or control

what's going to happen in the future, wouldn't you sleep better at night if you believed that God was, ultimately, taking care of things? If you had this faith, would it matter to you anymore if you couldn't predict the future?

Here's another reason why faith could make you less stressed and worried. Sometimes life is difficult! People have genuinely hard times, and occasionally, there is truly nothing that anyone can do to make things better. During such times, if you were to draw strength from your faith and try to deepen your relationship with God, this may make you feel a lot better. I personally know someone who, whenever she stubs her foot she uses it as an opportunity to draw close to God. As she sits there with an icepack on her bruised toes she talks to God and says something like this: "God, I believe that I hurt myself for a reason and that you love me more than anything. So, although my foot hurts, I feel loved by you and I feel close to you." OK, she is a very special person and most of us may not ever be like her, but maybe we could feel a bit closer to God when things just aren't going right.

Here's one final reason, and then I'd like to tell you a bit about the "Increase Your Trust in God" program. Sometimes, life is really great. I'm sure you've had days when everything seems to be going your way – you know, days when you feel like you're walking on a cloud, you're super productive, and everyone around you is smiling and happy. How would these days be if you were to believe that, each step of the way, God was guiding your footsteps? Allow me to venture a guess that you would feel even happier about life on such days. Instead of just being "happy" with yourself or your dumb luck, you may feel that God is showering you with gifts. You may start to feel gratitude towards God, and this could bring you to tremendous spiritual closeness.

Because of these reasons, as well some research suggesting that trusting in God is associated with lower levels of stress and worry, we developed the “Increase Your Trust in God” program in conjunction with Jewish religious teachers and guides. We feel truly blessed to have created this program, and we are very excited that it may help a lot of people to have less stress and worry in their lives.

Here’s what’s involved in the program. First, you’ll be asked to sit comfortably in your chair and to think about some of the ways that your life may be better if you were to have more trust in God. Next, you’ll be presented with a short story. Every two days throughout this treatment you’ll read a new story. After the story, you’ll read through four passages about the beliefs involved in trusting in God. These passages try to deal with some of the questions that people often have when they’re working on their faith. You know, questions like: If God is in control, does that mean I don’t have to do anything? If I do still have to work, why is that and what can I really accomplish? Can I trust in God if I’m a bad person? As you can see, we tried not to shy away from difficult issues, as we believe that people should be encouraged to think about and find compelling answers to them as they try to grow in their faith. The next segment of the program is probably the most fun – it contains four exercises, all taken from ancient Jewish teachings, designed to build a greater sense of trust in God. These exercises involve thinking of amazing people in your life as God’s messengers, thinking about blessings in your life and thanking God for them, thinking of challenging times in the past when you felt that God was helping you out, and trying to feel that God is directly involved in some of your basic life activities such as keeping your refrigerator running. In the final part of the program, you will be given an opportunity to pray to God to help you to increase the faith you have in your life – after

all, it's not an easy thing to increase trust in God, and we could all use some Divine help in the process. And that's it – that's the whole program. Let's conclude with a few important points:

The “Increase Your Trust in God” program is an audio-visual program that is about 30 minutes in length. In this study you will be asked to complete it every day for 2 weeks. Please make sure that when you do the program, you're sitting in a quiet room where no one will interrupt you. If you get interrupted, it's best if you start at the beginning of the program, but if this is going to stress you out just pause the video and start again from where you left off.

Learning to have Trust in God is a lot like developing any other skill – you have to practice! As much as we'd love there to be, there is nothing magical about the “Increase Your Trust in God” program – it will merely introduce you to some ancient techniques that have helped other people to develop their faith and trust in God. Thus, without your active cooperation and regular practicing, the procedures are of little use. In addition to doing the program every day, it is very important to practice the exercises throughout your day, especially during times when you're feeling stressed or anxious. This may be tough to do at first, but try your best to use the techniques to work on your faith as you go about your daily life. And if you miss a day, don't give up. The more days you practice, the bigger the benefits will be.

With the exception of the stories, the program will not change from day to day and so, you may find parts of the program to be repetitive by the end. Believe it or not, this was done intentionally – not because we're trying to bore you into feeling less stressed and worried, but because of the following basic principle of advertising: The more people are exposed to something – even if it's something that is familiar – the more they think about it. One of the main goals of this program is to have you thinking about God more during your day, and the best way that we could think of to do this is to present you with material over and over again.

Another reason for all the repetition is that the story and the passages we have chosen contain some very deep ideas and we genuinely think that it will be necessary to take a long time to digest them – we're still chewing on them ourselves!

In conclusion, we really hope that you enjoy this program and that it helps you to reduce the amount of stress and worry you have in your life!

APPENDIX I – PMR PROGRAM SCRIPT

Introduction

This program will review progressive muscle relaxation for 16 different muscle groups. The purpose of this program is to reduce your stress and worry by helping you to relax. Try to use these exercises throughout your day to relax yourself, particularly whenever you're feeling stressed or worried.

Before we begin, please make sure that you are in a quiet place where no one will disturb you for the next 26 minutes. If you are sitting at your computer, please turn your back to your computer monitor. If this isn't possible to do, please turn off your computer monitor during the exercise. Once you're ready, please adjust yourself so that you are feeling comfortable in your chair *[wait 10 seconds]*.

Now, please close your eyes and scan your body from head to toe, looking for signs of muscle tension *[wait 10 seconds]*. Let's begin.

Arms

Muscle Group #1. I would like to start with your right lower arm. Make a fist with your right hand, with your palm down, and pull your wrist up towards your arm. You should feel tension in your right lower arm *[wait 10 seconds]*. And relax.

Muscle Group #2. I would now like to focus on your left lower arm. Make a fist, with your left hand, with your palm facing down, and pull your wrist towards your arm. And hold *[wait 10 seconds]*. And relax.

I would now like to focus on both your lower arms. Make two fists, with your palms down, and pull wrists towards your arm *[wait 10 seconds]*. And relax.

Just let yourself become more relaxed. If you feel yourself becoming drowsy, that's fine too. As you think of relaxation and let go of your muscles, they will become more loose, heavy, and relaxed. Just let your muscles go, as you become more and more deeply relaxed [*wait 10 seconds*].

Muscle Group #3. I would now like to focus on your right upper arm. Tense your right bicep. With your arm by your side, pull your upper arm towards side without touching your rib cage. Try not to tense lower arm while you are doing this. Let lower arm hang loosely [*wait 10 seconds*]. And relax. Let your arm just rest on your lap as you feel the relaxation in your muscle.

Muscle Group #4. I would now like to focus on your left upper arm. Tense your left bicep. With arm by side, pull your left upper arm towards side without touching your rib cage [*wait 10 seconds*]. And relax.

I would now like to focus on both your upper arms. Tense both your biceps. With your arms by your sides, pull your upper arms toward your sides [*wait 10 seconds*]. And relax.

You are becoming sleepy and relaxed. You feel yourself settling in your chair as you become more and more deeply relaxed [*wait 20 seconds*].

Legs

Muscle Group #5. I would now like to focus on your right lower leg and foot. Extend your right lower leg so it's straight. Point toe upward toward your knee [*wait 10 seconds*]. And lower your right leg and relax.

Muscle Group #6. As your right leg rests on the floor, raise your left leg, focusing on your left lower leg and foot. Extend your leg so it's straight. Point your toe up towards your knee, feeling the tension in your left lower leg and foot *[wait 10 seconds]*. And relax.

I would now like to focus on both your lower legs and feet. Extend both your legs so they are straight. Point all your toes upward towards your knees, feeling the tension in your legs and feet *[wait 10 seconds]*. And relax.

You are becoming more and more relaxed. As you become more relaxed, you will feel yourself settling even deeper into your chair. All your muscles are becoming more and more comfortably relaxed. Loose. Heavy. And relaxed *[wait 20 seconds]*.

Thighs

Muscle Group #7. I would now like to focus on your thighs. Pull your knees together until your upper legs feel tense, and hold *[wait 10 seconds]*. And relax. The relaxation is growing deeper and still deeper.

Focusing on your thighs again, pull your knees together until your upper legs feel tense once again *[wait 10 seconds]*. And relax.

You are relaxed. Drowsy and relaxed. Your breathing is regular and calm. With each breath you take in, your relaxation increases and each time you exhale, you spread the relaxation throughout your body *[wait 20 seconds]*.

Abdomen

Muscle Group #8. I would now like to focus on your abdomen. Pull in stomach in towards your back, as if you were pulling your bellybutton towards your spine *[wait 10 seconds]*. And relax.

Focusing again on your abdomen, pull your belly towards your spine. And hold, feeling the tension in your stomach [*wait 10 seconds*]. And relax.

Note the pleasant feelings of warmth and heaviness that are coming into your body as your muscles relax completely. You will always be clearly aware of what you are doing and what I am saying as you become more deeply relaxed [*wait 20 seconds*].

Chest

Muscle Group #9. I would now like to focus on your chest and breathing. Take a deep breath and hold it for about 10 seconds [*wait 10 seconds*]. And relax.

Note the pleasant feelings of warmth and heaviness in your body as you become more and more deeply relaxed.

I would like to again focus on your chest and breathing. Take a deep breath and hold it again for about 10 seconds [*wait 10 seconds*]. And relax.

The relaxation is growing deeper and still deeper.

Shoulders and Neck

Muscle Group #10. I would now like to focus on your right shoulders and lower neck. Shrug your right shoulder, bringing it up until it touches your ear [*wait 10 seconds*]. And relax.

With each breath you take, your relaxation increases. Each time you exhale, you spread the relaxation throughout your body.

Muscle Group #11. I would now like to focus on your left shoulder and lower neck. Shrug your left shoulder, bringing it up towards your ear [*wait 10 seconds*]. And relax.

I would like to now focus on both your shoulders, and your lower neck. Shrug you're your shoulders, bringing your shoulders up until they touch your ears *[wait 10 seconds]*. And relax.

Note the very deep state of relaxation is moving through all areas of your body. You are becoming more and more comfortably relaxed. Drowsy and relaxed. You can feel the comfortable sensations of relaxation as you go in a deeper, and deeper state of relaxation *[wait 20 seconds]*.

Muscle Group #12. I would now like to focus on the back of your neck. Put your head back and press it against the back of your chair *[wait 10 seconds]*. And relax.

I would now like to focus again on the back of your neck. Put your head back again, and press it against the back of your chair *[wait 10 seconds]*. And relax.

Now, I want you to remain in your very relaxed state. I want you to begin to attend just to your breathing. Breathe through your nose. Notice the cool air as you breathe in, and the warm moist air as you exhale. Just continue to attend to your breathing. Now, each time you exhale, mentally repeat the word "relax". Inhale. Exhale. Relax. Inhale. Exhale. Relax.

The relaxation is growing deeper and still deeper. You are relaxed. Drowsy and relaxed. Your breathing is regular and relaxed. With each breath you take in, your relaxation increases and each time you exhale you spread the relaxation throughout your body *[wait 20 seconds]*.

Face

Muscle Group #13. I would now like to focus on your lips. Press your lips together tightly, without clenching your teeth of jaw *[wait 10 seconds]*. And relax.

And again, bring your attention to your lips. Press your lips together tightly, without clenching your teeth or jaw *[wait 10 seconds]*. And relax.

Note the pleasant feelings of warmth and heaviness that are coming into your body as your muscles relax completely *[wait 20 seconds]*.

Muscle Group #14. I would now like to focus on your eyes. Close eyes tightly, but not too tightly, especially if you're wearing contact lenses *[wait 10 seconds]*. And relax.

Again, close your eyes tightly *[wait 10 seconds]*. And relax.

Now the very deep state of relaxation is moving through all the areas of your body. You are becoming more and more comfortably relaxed. Drowsy and relaxed. You can feel the comfortable sensations of relaxation as you go in a deeper, and deeper state of relaxation *[wait 20 seconds]*.

Muscle Group #15. I would now like to focus on your lower forehead. Pull your eyebrows down, as though you were trying to get them to meet *[wait 10 seconds]*. And relax.

Pull your eyebrows down again, as though you were trying to get them to meet *[wait 10 seconds]*. And relax.

Continue breathing in through your nose, noticing the moist air as you exhale. Just continue to attend to your breathing, and each time you exhale, mentally repeat the word "relax". Inhale. Exhale. Relax. Inhale. Exhale. Relax *[wait 20 seconds]*.

Muscle Group #16. And now bring attention to your upper forehead. Raise your eyebrows and wrinkle your forehead *[wait 10 seconds]*. And relax.

And again, bringing attention to your upper forehead, raise your eyebrows and wrinkle your forehead [*wait 10 seconds*]. And relax.

Now the very deep state of relaxation is moving through all the muscles in your body. You are feeling drowsy, and relaxed. Just let them become more and more relaxed.

Conclusion

Now I am going to help you to achieve a deeper state of relaxation by counting from one to five. As I count, you will feel yourself becoming more and more deeply relaxed. Farther and farther down into a deep restful state of deep relaxation.

One ... you are going to become more deeply relaxed.

Two ... down, down into a very relaxed state.

Three ...

Four ... more and more relaxed

Five ... deeply relaxed.

Now I want you to remain in your very relaxed state, and attend to your breathing. Breathe through your nose. Notice the cool air as you breathe in, and then warm moist air as you exhale. Just continue to attend to your breathing.

Now each time you exhale, mentally repeat the word “relax”. Inhale, exhale, relax (pair with respiratory cycle)...Inhale, exhale, relax...

Now I am going to help you to return to your normal state of alert-fullness. In a little while, I shall begin counting backwards from five to one. You will gradually become more alert.

When I reach “two”, I want you to open your eyes. When I get to “one”, you will be entirely roused in your normal state of alert-fullness. Ready?

Five ...

Four ...you are becoming more and more alert, and you feel very refreshed.

Three ...

Two ... now your eyes are opened and your beginning to feel very alert, returning completely to your normal state

One ... *[wait 10 seconds]*

Remember to try to use these exercises frequently throughout your day. They can be especially helpful in helping you to relax whenever you're feeling stressed or worried. This concludes progressive muscle relaxation for 16 different muscle groups.

APPENDIX J – PMR HANDOUT

Try to use PMR on the following 16 different muscle groups throughout your day, particularly whenever you're feeling stressed or worried.

Muscle Group #1 – Right lower arm

Muscle Group #2 – Left lower arm

Muscle Group #3 – Right upper arm

Muscle Group #4 – Left upper arm

Muscle Group #5 – Right lower leg and foot

Muscle Group #6 – Left lower leg and foot

Muscle Group #7 – Thighs

Muscle Group #8 – Abdomen

Muscle Group #9 – Chest and breathing

Muscle Group #10 – Right shoulders and lower neck

Muscle Group #11 – Left shoulder and lower neck

Muscle Group #12 – Back of your neck

Muscle Group #13 – Lips

Muscle Group #14 – Eyes

Muscle Group #15 – Lower forehead

Muscle Group #16 – Upper forehead

APPENDIX K – PMR ORIENTATION VIDEO SCRIPT

This video will describe Progressive Muscle Relaxation and present a brief explanation of how it may help you to reduce stress and worry.

Progressive Muscle Relaxation, or PMR, is a procedure that is commonly used to reduce anxiety. PMR techniques were first developed in the 1930's by a physiologist named Edmund Jacobson, but in recent years these original techniques have been modified in order to make them simpler and more effective. Basically, PMR consists of learning to sequentially tense and then relax various groups of muscles throughout the body, while at the same time paying very close and careful attention to the feelings associated with both tension and relaxation. That is, in addition to teaching you how to relax, PMR will encourage you to learn to recognize tension and relaxation as they appear in everyday situations.

It is important to note that learning to relax is very much like learning any other kind of skill such as swimming, or golfing, or riding a bicycle. Thus, in order for you to get better at relaxing, you will have to practice doing it just as you would have to practice anything else. It is very important that you realize that progressive relaxation training involves learning on your part; there is nothing magical about the procedures. The treatment you receive in this study will not be doing anything to do – it will merely introduce you to techniques and direct your attention to various aspects of it, such as the presence of certain feelings in the muscles. Thus, without your active cooperation and regular practicing, the procedures are of little use.

In the course of PMR, you will be asked to tense and then relax various groups of muscles in your body. You may be wondering – if we want to produce relaxation, why would we start off by producing tension? The reason is that, first of all, everyone is always at some level of tension during his/her waking hours; if a person were not tense at all, he/she would simply fall

over! The amount of tension actually present in everyday life differs from individual to individual. Each person has reached some “adaptations level” – the amount of tension under which they operate day to day. The goal of PMR is to help you learn to reduce muscle tension in your body far below your “adaptations level” at any time you wish to do so. Because of the way our bodies work, reducing muscle tension results in shutting off a variety of other physiological processes – for example, it results in reducing your heart rate, breathing rate, and other bodily sensations that occur when you become anxious. Moreover, as our bodies calm down, thoughts slow down and become more clear and rational. As we learn, with practice, to focus our attention on pleasant relaxation feelings, it becomes less likely that we will focus our attention on anxious thoughts and images. However, in PMR, we want you to learn to produce large and very noticeable reductions in tension, and the best way to do this is first to produce a good deal of tension in the muscle group – that is, to raise the tension well above your “adaptations level,” and then, all at once, release that tension. The release creates a “momentum” which allows the muscles to drop well below their “adaptations level”. The effect is like that which we could produce with a pendulum that is hanging motionless in a vertical position. If we want it to swing far to the right, we could push it quite hard in that direction. It would be much easier, however, to start by pulling the pendulum in the opposite direction and then letting it go. It will swing well past the vertical point and continue in the direction we want it to go. Thus, tensing muscle groups prior to letting them relax is like giving you a running start toward deep relaxation through the momentum created by the tension release.

Another important advantage to creating and releasing tension is that it will give you a good chance to focus and become clearly aware of what tension really feels like in a number of different groups of muscles. The tensing procedure will make a vivid contrast between tension

and relaxation, and will give you an excellent opportunity to compare the two directly and appreciate the difference in feeling associated with each of these states. Indeed, the muscle tension-release method of producing relaxation has been found superior to a variety of different methods of relaxation, and that is why we have chosen this particular technique for you.

There is another important aspect to PMR. Although it often seems that we can be tense and anxious without any apparent cause, it turns out that there are many small signals in our lives that trigger anxiety responses, and these can build our anxiety levels higher and higher. So learning to reduce anxiety involves not only developing a potent relaxation response to counteract anxiety, but also learning to identify the various triggers of anxiety earlier and earlier. Thus, much of PMR involves learning to identify various triggers for anxiety, detect their earliest occurrence during the day, and quickly respond with relaxation whenever they occur. The earlier you can catch signals and respond with relaxation rather than anxiety, the more calm and relaxed you'll be throughout your day.

You'll notice that in PMR we often refer to the notion of "letting go" or "releasing." We produce relaxation in the muscle groups by first tensing the muscles and then "letting go of" or "releasing" that tension. The notion of "letting go" applies also to anything else that we might do to create anxiety. For example, attention to threatening objects or events in the environment can also be released, just as we let go of the muscle tension during progressive relaxation. Of course, this takes practice, since attention to anxious events is often automatic and habitual. However, if we practice letting go, and respond instead with a relaxation response, the habit of anxiety weakens and a more relaxed life-style becomes more habitual.

So, basically, PMR will teach you two things: (1) how to quickly recognize anxiety triggers, and (2) how to let go of them using the relaxation response. These skills, if practiced,

will result in increasing your ability to deeply relax and, if applied properly, can result in reducing general daily tension and anxiety as well as periodic stress reactions to daily events.

Let's conclude with the following important points:

- 1) In this study, you will be participating in PMR every day for about 30 minutes, for a period of 2 weeks. Please make sure that when you do PMR, you're in a quiet room where no one will interrupt you, and try to close your eyes during your practice. You may even want to use a reclining chair or a bed. If you get interrupted, it's best if you start at the beginning of the program, but if this is going to stress you out just pause the PMR audio and start again from where you left off.
- 2) As well, in addition to doing the program on a daily basis, it is very important to practice identifying tension and anxiety cues throughout your day, especially during times when you're feeling stressed or anxious. This may be tough to do at first, but try your best to relax your stress away using the procedures you learn in your PMR sessions.

We hope that you enjoy PMR and that it helps you to feel less stress and worried in your life!