

**A randomized controlled evaluation of spiritually-
integrated CBT for subclinical anxiety in an
international Jewish sample, delivered via the
internet**

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Sub-Clinical Anxiety: Stress & Worry

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- **Risk**
 - Health
 - Impairment
- **Evidence-based treatment**
 - Progressive Muscle Relaxation (PMR)
- **However ...**
 - Dissemination to religious communities is a challenge

Internet Based Treatment

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- **Growing evidence base**
 - Social phobia (Andersson et al., 2006)
 - Insomnia (Strom, Pettersson & Andersson, 2004)
 - Eating disorders (Winzelberg et al., 2000)
- **A promising format for religious individuals ...**
 - Private participation in treatment
 - Collaboration with spiritual/religious leaders
 - Internet use increasingly accepted even among more cloistered ultra-Orthodox Jews (Hack, 2007)

Trust/Mistrust in God

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- **Trust in God: the conviction that God takes care of one's best interests** (Ibn Pekuda, 1996)
- **Mistrust in God: the belief that God cannot or will not provide for one's wellbeing**
- **Ties to anxiety and depression**
 - Cognitive – perceptions of adversity
 - Behavioral - religious coping
 - Affective – spiritual emotions

The Present Study

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- **Objective**
 - To evaluate the comparative efficacy of a short-term spiritually integrated form of CBT for subclinical anxiety among Jews, delivered via the internet
- **Study Design**
 - RCT with 3 treatment groups (SI-CBT, PMR & WLC)
 - Self-report assessments at pre-treatment (T1), post-treatment (T2), and 6-8 week follow-up (T3)

Procedure

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- **Study Procedure**
 - Informed Consent
 - Assessment of eligibility
 - Randomization
 - Pre-treatment assessment
 - *Orientation videos (10-minutes)
 - *Assessment of treatment credibility and expectancies
 - *Treatment & Tracking of Use
 - * Handouts
 - All communications

(*SI-CBT and PMR groups only)

Recruitment & Eligibility

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- **Recruitment**
 - Approbation of ultra-Orthodox community leaders
 - Community organizations
- **Eligibility**
 - Jewish and 18 years+
 - Stress/Worry: PSS \geq 27 & PSWQ \geq 54
 - No current intent to self-harm
 - No diagnosis of mania, schizophrenia, substance abuse
 - No TBI or life threatening illnesses

Participants

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- **Religious Affiliation**
 - 5.6% Hassidic ($n = 7$)
 - 26.4% Yeshiva Orthodox ($n = 33$)
 - 33.6% Modern Orthodox ($n = 42$)
 - 16.0% Conservative ($n = 20$)
 - 8.8% Reform ($n = 11$)
 - 9.6% ($n = 12$) other Jewish affiliation
- **Demographics**
 - 41.8 (13.6) Mean Age
 - 76.6% Female
 - 82.9% College degree
 - 37.1% Employed
- **Nationality**
 - 65.3% USA ($n = 81$)
 - 13.7% Canada ($n = 17$)
 - 10.5% Israel ($n = 13$)
 - 6.4% Europe ($n = 8$)
 - 4.0% Australia ($n = 5$)

Interventions – SI-CBT

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- **Consultation with community leaders to identify strategies**
 - Cognitive – inspiring stories/excerpts from Jewish literature to instill perspectives involved in trust in God
 - Behavioral – spiritual exercises/prayer
- **Guided audio-video program**
- **Exemplar strategies**
 - Cognitive: “Everything is for the best”
 - Behavioral: Counting your blessings

Interventions – PMR

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- **Bernstein and Borkovec (1973)**
 - Tensing & relaxing of 16 muscle groups
- **Safeguards** (T. Borkovec, personal communication, Nov, 2007)
 - Audio-only (no video)
 - Participants asked to
 - ✦ Sit in a quiet place where disturbances unlikely
 - ✦ Turn off or away from computer monitor
 - ✦ Close their eyes while engaging in the program

Measures

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- **Primary Outcomes**
 - PSS & PSWQ
- **Secondary Outcomes**
 - CESD & IUS
- **Spiritual Outcomes**
 - TIG/MIG Scale & JCOPE
- **Perceptions of Treatment**
 - TEC & CSQ

Preliminary Analyses

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- **Sample check**
 - Power, randomization, attrition & adverse events
- **Treatment Completers (7+ sessions)**
 - SI-CBT ($n = 28/36$) > PMR ($n = 21/42$) ($\chi^2(1) = 6.4, p = .01$)
- **Treatment credibility (T1)**
 - SI-CBT > PMR ($t(116) = 2.7, p < .01$)
- **Treatment expectations (T1)**
 - SI-CBT > PMR ($t(119) = 2.7, p < .01$)
- **Treatment satisfaction (T2)**
 - SI-CBT > PMR ($t(73) = 3.9, p < .001$)

Treatment Outcomes

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Pre- to Post-Treatment

- **Significant interactions**
 - Worry – SI-CBT < WLC = PMR
 - Intolerance of Uncertainty – SI-CBT < WLC = PMR
 - Mistrust in God – SI-CBT < WLC = PMR
 - Positive Religious Coping – SI-CBT > WLC = PMR
- **Significant Main Effects (all groups equivalent)**
 - Stress, Depression, Negative Religious Coping, & Trust in God

Treatment Outcomes

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Pre-Treatment to Follow-Up

- Significant interactions
 - Stress – SI-CBT < WLC = PMR
 - Worry – SI-CBT < WLC = PMR
 - Intolerance of Uncertainty – SI-CBT < WLC = PMR
 - Mistrust in God – SI-CBT < WLC = PMR
 - Positive Religious Coping – SI-CBT > WLC = PMR
- Significant Main Effects (all groups equivalent)
 - Depression & Negative Religious Coping

Treatment Outcomes

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- Stress

The graph shows that SI-CBT (solid line with squares) shows the most significant decrease in stress from pre-treatment to follow-up, ending at approximately 26. PMR (dashed line with squares) and WLC (dotted line with squares) show smaller decreases, ending at approximately 29 and 31 respectively.

Treatment Outcomes

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- Worry

The graph shows that SI-CBT (solid line with squares) and PMR (dashed line with squares) both show a decrease in worry from pre-treatment to post-treatment, with SI-CBT ending at approximately 52 and PMR at 54. WLC (dotted line with squares) shows an increase in worry from post-treatment to follow-up, ending at approximately 64.

Treatment Outcomes

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- SI-CBT Effect Sizes (Cohen's *d*)

Variable	T2	T3
Stress	-1.37	-1.90
Worry	-1.83	-1.90
Depression	-0.81	-0.89
Intolerance of Uncertainty	-1.36	-1.40
Trust in God	0.61	0.56
Mistrust in God	-0.52	-0.51
Positive JCOPE	-0.09	0.60
Negative JCOPE	-0.36	-0.55

Discussion

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- Many firsts
- Re-cap of Results
 - General efficacy of SI-CBT
 - Comparative Efficacy of SI-CBT
 - Preference for SI-CBT over PMR
- Implications
- Limitations

Comments/Questions

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