

BRIEF REPORTS

CULTURE-RESPONSIVE ONE-SESSION TREATMENT FOR PHOBIC ASIAN AMERICANS: A PILOT STUDY

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In this pilot trial, 15 phobic Asian Americans were randomly assigned to standard one-session treatment (OST-S), culturally adapted one-session treatment (OST-CA), or manualized self-help. At posttreatment, OST (combined standard and culturally adapted) led to greater reductions in phobic avoidance and anxiety than self-help. Moreover, analyses comparing the two active treatments showed trends favoring OST-CA over OST-S. Results suggest that Asian Americans may benefit most from empirically supported treatments that consider Asian cultural values.

Keywords: Asian, cultural adaptation, exposure therapy, phobia

Asian Americans are virtually absent from the psychotherapy outcome literature (Leong & Lau,

2001; Miranda et al., 2005; Sue, Zane, & Young, 1994), and no randomized clinical trials have focused on Asian Americans with anxiety-related problems. This is a significant oversight given that Asians are among the fastest growing-ethnic groups in the United States (U.S. Department of Health & Human Services, 2001) who may evidence relatively high levels of social anxiety (Okazaki, 1997). Research on culture-responsive clinical practice with Asian Americans is also limited. Although much is written about how to address Asian cultural values in the counseling process (e.g., Chen & Davenport, 2005; Kim, Atkinson, & Umemoto, 2001), this work is mostly anecdotal and rarely derived from empirical research on Asian American populations.

In this study, we address this gap in the literature by evaluating a culturally adapted version of one-session treatment (OST; Ost & Ollendick, 1999) for Asian Americans with phobias. OST is a brief exposure- and modeling-based treatment that occurs within a single 3-hour session. Although OST is efficacious for phobic children and adults (Ost, 1996; Ost, Svensson, Hellstrom, & Lindwall, 2001), no clinical trials have included Asian American participants. To evaluate the effects of cultural adaptation, participants were randomly assigned to standard OST (OST-S), culturally adapted OST (OST-CA), or manualized self-help.

Method

Participants

Participants for this study were recruited through announcements made during undergraduate courses at the University of Southern California, flyers, and word of mouth. The 15 individuals who met inclusion criteria (e.g., English fluent, phobic symptoms) were scheduled for an initial assessment. Nearly all participants (93%) met three or more diagnostic criteria for simple

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phobia based on the Anxiety Disorders Interview Schedule (*ADIS-IV*; Brown, DiNardo, & Barlow, 1994). Eighty percent reported a primary fear of spiders, and the remainder was fearful of crickets, worms, or dead fish.

Sixty percent identified as Chinese or Taiwanese American, 7% Korean American, 13% Japanese American, 7% Vietnamese American, and 13% multiethnic Asian. Nearly half (47%) were born outside the United States, with 10.1 years being the mean age of immigration to the United States (range: 1 to 18 years). On the Suinn-Lew Asian Self-Identity Acculturation Scale, 47% described themselves as “bicultural,” 27% as “mostly Asian,” 13% as “mostly Westernized,” and 13% as “very Westernized.”

Participants were primarily female (67%) undergraduate (80%) students. The mean age (23.5 years) was skewed upward because of participation by a 74-year-old Japanese American male. Omitting this participant, the average age was only 19.9 years.

Design

Immediately before the Time 1 (T1) assessment, participants were randomly assigned to OST-S ($n = 4$; 100% female), OST-CA ($n = 5$; 40% female), or self-help control ($n = 6$; 67% female). OST-S consisted of the unadapted version of OST as described by Ost and Ollendick (1999). Treatment consisted of gradual, therapist-directed exposure to anxiety-arousing stimuli for a maximum of 3 hours. OST-CA followed an identical protocol but supplemented with seven culture-responsive adaptations that involved modest changes in both intervention content (e.g., emphasizing and facilitating emotional control) and service delivery (e.g., maximizing therapist directives/commands) (Huey & Pan, 2005).¹ Adaptations were derived primarily from contemporary research on the clinical, cognitive, and social psychology of East Asian populations, in addition to recommendations offered by scholars who study Asian American mental health issues. Participants assigned to the self-help condition were simply given a condensed version of a manual titled *Mastery of Your Specific Phobia* (Antony, Craske, & Barlow, 1995) and instructed to read through the manual and follow all steps which seemed appropriate given the nature of their particular phobia(s).

In general, the T1 assessment was scheduled

within 1 week of the initial screening. The Time 2 (T2) assessment was scheduled one week following the intervention session.

Measures

Demographics. At T1 only, information about age, gender, race/ethnicity, place of birth, and age of immigration was obtained using a questionnaire developed for this study.

Phobic anxiety and avoidance. The simple phobia section of the *ADIS-IV* was used to evaluate phobia symptoms derived from the *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition; *DSM-IV*; American Psychiatric Association, 1994). Two measures of phobic anxiety were derived from this scale. The *panic symptom count* was obtained by summing the total number of panic attack symptoms (e.g., trembling or shaking, fear of dying) experienced when encountering the feared situation. Also, a *fear/avoidance symptoms* score was derived by averaging responses to items assessing fear and avoidance in response to the feared situation.

The behavioral approach test (BAT) assessed participant avoidance of the phobic situation and associated anxiety. Using spiders as an example, the behavioral test involves a series of 12 steps ranging from 1 (*entering the testing room*) to 12 (*holding the spider for at least 20 seconds*). At the point where the test is terminated, the participant is asked for his subjective units of distress (SUDs) rating (i.e., *final SUDs*). After the BAT, the therapist also rated the severity of the participant's anxiety response (i.e., *clinician severity rating*) on a 0 to 8 scale.

General fear. The Fear Survey Schedule III (FSS-III; Wolpe & Lang, 1964) was used to assess general fears of varying objects and situations. Participants were required to rate their level of fear to 108 items (e.g., speaking in public, dentists) on a 5-point scale.

Catastrophic thinking. The Fearful Thoughts Questionnaire (FTQ; Antony et al., 1995) assessed the client's anticipated catastrophic thoughts when encountering the feared object or situation (e.g., “I will die”). The 8 items are rated on an 11-point scale.

Asian cultural identification. At T1 only, partic-

¹ A supplemental manual describing these cultural adaptations is available upon request from the first author.

ipants completed the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Ahuna, & Khoo, 1992), a 21-item measure containing questions about different aspects of Asian acculturation. Participants rated items on a 5-point scale, with high scores indicating low Asian identification and high acculturation to Western culture, and low scores indicating high Asian identification and low acculturation to Western culture. Scores in the middle range reflect biculturalism.

Therapist Background

The therapist was a 25-year-old male Asian American graduate student in clinical psychology (the second author). He had no previous experience as a therapist, but was trained and supervised by the first author, a clinical psychologist with 10 years of clinical experience. The supervisor viewed 70% of sessions from an adjacent room and provided direct feedback to the therapist via an audio transceiver.

Results

Pretreatment Differences

All pretreatment dependent variables were analyzed using one-way analysis of variance (ANOVA) tests. No significant group differences were found for any variable. Also, no group differences were found by age, gender, or acculturation status.

Is OST Efficacious With Phobic Asian Americans?

To test whether treatment was better than no treatment, the two OST groups were combined and compared with self-help for pre/post comparisons. Treatment effects for each dependent variable were tested through a series of analysis of covariance (ANCOVA) tests, with pretreatment scores as covariates. Significant treatment effects were found for panic symptom count, $F(1, 12) = 17.13, p < .01$; fear/avoidance, $F(1, 12) = 7.33, p < .05$; behavioral approach, $F(1, 12) = 43.00, p < .001$; and clinician severity, $F(1, 12) = 33.13, p < .001$. A marginally significant effect was found for final SUDs, $F(1, 12) = 3.83, p < .10$. In each case, OST was superior to self-help in reducing symptoms. No treatment effects were found for general fear or catastrophic thinking.

Does Culture-Responsive Treatment Offer Unique Benefits?

Next, to test the specific impact of cultural adaptation, the three conditions were compared using ANCOVA tests, again with pretreatment scores as covariates. When significant treatment differences were found, Tukey's least significant difference (LSD) comparisons were used to test for specific group differences. After controlling for pretreatment scores, there were significant effects for panic symptom count, $F(2, 11) = 8.50, p < .01$; behavioral approach, $F(2, 11) = 28.55, p < .001$; clinician severity, $F(2, 11) = 18.52, p < .001$; and catastrophic thinking, $F(2, 11) = 4.18, p < .05$. Marginally significant treatment effects were found for fear/avoidance, $F(2, 11) = 3.43, p < .10$; and final SUDs, $F(2, 11) = 3.76, p < .10$.

To evaluate specific group differences, Tukey LSD tests were computed on the adjusted post-treatment means for all significant or marginally significant omnibus effects (see Table 1). Also, effect sizes (Cohen's d) comparing differences between groups on adjusted means (with the pooled posttreatment standard deviation as denominator) are reported in the final column of Table 1. An effect size of 0.20 is generally considered a "small" effect, 0.50 a "medium" effect, and 0.80 a "large" effect (Cohen, 1988). OST-S showed significantly greater behavioral approach than self-help; similarly, OST-CA showed significantly greater behavioral approach than self-help and marginally greater behavioral approach than OST-S. Final SUDs level was significantly lower for OST-CA than for self-help. Self-help showed significantly higher levels of clinician severity and panic symptoms than both OST conditions. Compared with self-help, fear/avoidance was significantly lower for OST-CA, but the difference was only marginally significant for OST-S. For catastrophic thinking, OST-CA was superior to both OST-S and self-help. Again, no treatment effects were found for general fear.

In terms of clinical significance, all OST-CA participants were able to hold the feared stimulus in their hands for at least 20 seconds at posttreatment (see Figure 1). In contrast, the typical OST-S participant was able to hold the feared object for less than 20 seconds at posttreatment, whereas on average, self-help participants were only able to approach the cage containing the feared animal.

TABLE 1. Multiple Comparison Tests on Adjusted Means at Posttreatment

| Variable | OST-S | OST-CA | Self-help | Group differences ^a | Effect size ^b |
|--------------------------------|-------|--------|-----------|---|--------------------------|
| Panic symptom count (ADIS) | 2.98 | 4.25 | 9.47 | OST-S < Self-help OST-CA < Self-help | 3.42/1.65/−0.40 |
| Fear/avoidance symptoms (ADIS) | 3.59 | 3.20 | 6.02 | OST-S < Self-help (<i>p</i> < .10) OST-CA < Self-help | 1.18/1.61/0.26 |
| Behavioral approach (BAT) | 10.04 | 11.15 | 7.02 | OST-S > Self-help OST-CA > Self-help OST-CA > OST-S (<i>p</i> < .10) | 1.11/1.70/1.13 |
| Clinician severity rating | 1.91 | 0.91 | 5.14 | OST-S < Self-help OST-CA < Self-help | 1.89/2.98/1.02 |
| Final SUDs (during BAT) | 44.40 | 15.88 | 55.84 | OST-CA < Self-help | 0.40/1.74/1.29 |
| General fear (FSS) | — | — | — | — | — |
| Catastrophic thinking (FTQ) | 3.35 | 0.58 | 3.04 | OST-CA < OST-S OST-CA < Self-help | −0.17/2.01/1.63 |

Note. OST-S = standard one-session treatment; OST-CA = culturally adapted one-session treatment; ADIS = Anxiety Disorders Interview Schedule; BAT = behavioral approach test; FSS = Fear Survey Schedule; FTQ = Fearful Thoughts Questionnaire; SUDs = subjective units of distress.

^a Unless otherwise noted, all differences are significant at *p* < .05, using Tukey LSD tests. The means are adjusted using ANCOVA tests with pretreatment scores as covariates. Dashes indicate that multiple comparisons were not made because the omnibus test was not significant. ^b Between-group effect size coefficients (Cohen's *d*) using adjusted means are presented in the following order: OST-S vs. self-help, OST-CA vs. self-help, and OST-CA vs. OST-S.

Discussion

In this study we assessed the comparative effects of standard and culture-responsive therapy for phobic Asian Americans. Not only was standard OST effective at reducing fear and avoidance in Asian Americans, but taking cultural values into account further augmented treatment effects. Indeed, effect size data suggested that the magnitude of difference between OST-CA and OST-S was often fairly large. Moreover, OST-CA was superior to manualized self-help

across six of seven outcome domains, whereas OST-S was only efficacious in four domains. Thus, results provide preliminary support for culture-responsiveness as a modest benefit beyond the effects of conventional exposure treatment.

Despite the potential importance of these findings, several limitations should be noted. First, given the pilot nature of this study, the sample size was quite small. Thus, nonsignificant findings for some outcomes may have resulted from

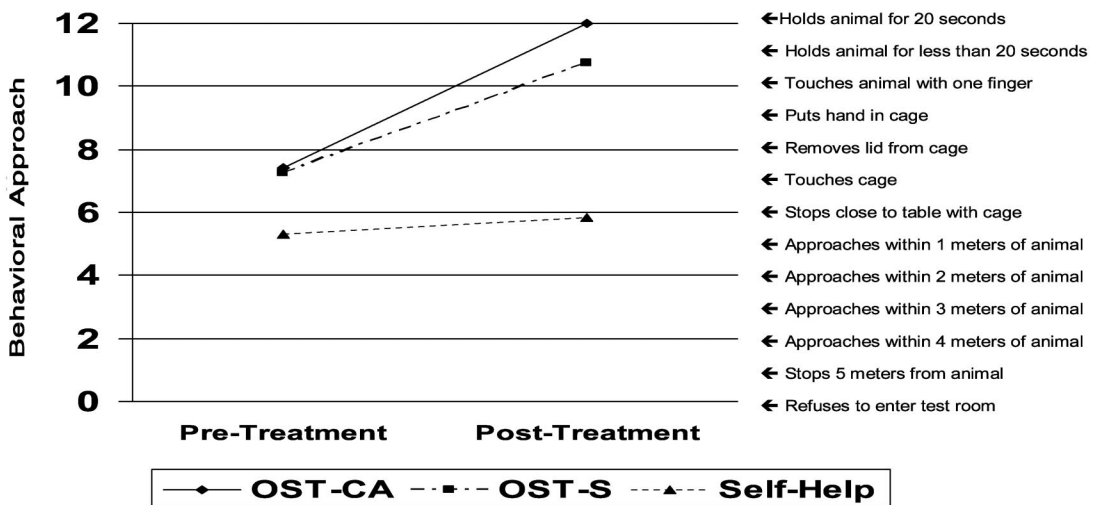


FIGURE 1. Mean performance on behavioral approach test, by treatment condition.

inadequate statistical power. Second, our sample consisted almost entirely of bicultural, Asian American college students with simple phobias. Consequently, these findings do not necessarily generalize to older, less acculturated Asian Americans, or patients with more serious mental health problems. Third, by targeting core “Asian values,” we run the risk of improperly homogenizing Asian Americans and not acknowledging the clear diversity among East Asians in terms of psychiatric diagnosis, symptom presentation, and treatment response (Gim, Atkinson, & Whiteley, 1990; Leong & Lau, 2001). Finally, the therapist was Asian American and may have had a stronger allegiance to OST-CA, and therefore biased results in favor of this condition.

Notwithstanding these limitations, our results point to several areas for future research. The most obvious need is for more research testing culture-responsiveness within the context of randomized trials. To our knowledge, this is the first randomized clinical trial to show additive effects of cultural adaptation in a sample with preexisting clinical problems. However, replication with a larger sample would increase confidence in the validity of these findings.

Future studies should also consider evaluating ethnicity and Asian acculturation as potential moderators of treatment effects. Although African Americans and Latinos often benefit as much from treatment as European Americans (Huey et al., 2004; Miranda et al., 2005; Silverman et al., 1999), it is unclear how Asians fare in relation to other ethnic groups. Relatedly, acculturation status seems to influence treatment outcomes for Latino patients (Martinez & Eddy, 2005; Telles et al., 1995) and should be investigated for Asians as well.

Moreover, given that OST is efficacious with Asian Americans, it is critical to understand why it works and whether treatment mechanisms are similar for standard and culturally modified treatments. With few exceptions (Huey, Henggeler, Brondino, & Pickrel, 2000; Lochman & Wells, 2002), previous research on treatment mediators and mechanisms has not focused on ethnic minorities. Without further elaboration of mechanisms of change, we may come to understand which treatments work well for ethnic minorities but not necessarily how or why they work. In future work we plan to evaluate such mechanisms and test whether they help explain the overall

efficacy of OST or the differential efficacy of culturally adapted versus standard OST.

Given the pilot nature of this work and modest outcome differences between the active treatments, we believe this study offers only tentative support for the additive value of culture-responsive methods. A stronger test would involve replication with a larger sample, follow-up assessment, and inclusion of European American participants for comparison. Thus, despite encouraging findings, results should be interpreted with caution. However, we do hope this study encourages additional research on the efficacy of culture-responsive clinical practice. Because cultural adaptation may already be the norm for prevention services and child clinical practice (Harper & Iwamasa, 2000; Schinke & Gardner, 2002), well-controlled evaluations are increasingly necessary to ensure that cultural sensitivity enhances therapy outcomes without imposing undue burden on mental health professionals (Lopez et al., 1989).

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