Published in final edited form as:

J Anxiety Disord. 2008 ; 22(2): 301–309. doi:10.1016/j.janxdis.2007.02.006.

Use of skills learned in CBT for fear of flying: Managing flying anxiety after September 11th

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Abstract

Although there is evidence that cognitive behavioral therapy (CBT) is effective in the treatment for fear of flying (FOF), there are no studies that specifically examine which skills taught in treatment are being used by clients after treatment is completed. This study examines whether participants report using skills taught in treatment for FOF after treatment is completed and whether the reported use of these skills is associated with reduced flying anxiety in the face of fear-relevant event, the September 11th terrorist attacks, and over the long-term. One hundred fifteen participants were randomly assigned to and completed eight sessions of individual CBT treatment for FOF. Fifty-five participants were reassessed in June 2002, an average of 2.3 years after treatment. Surveys were also collected from thirty-three individuals who did not receive treatment for FOF. Results indicated that treatment completers were more likely to report using skills taught in treatment than individuals who had not received treatment. In addition, self-reported use of skills among previously treated individuals was associated with lower levels of flying anxiety. These findings suggest that use of skills taught in CBT treatment is associated with reduced flying anxiety in the face of a fear-relevant event and over the long term.

Keywords

Use of skills; CBT; Fear of flying

Introduction

Whereas there are several studies demonstrating the long-term effectiveness of cognitive behavioral therapy (CBT) for fear of flying (FOF), to our knowledge, there are no studies that specifically examine which skills taught in treatment are utilized by clients who experience FOF. The lack of research linking use of skills to long-term treatment outcome for FOF is an important gap in the literature given that CBT emphasizes teaching clients transferable skills (Hollon, 2003). Moreover, competence with such therapy skills is presumed to contribute to long-term positive treatment outcomes. The current study examines whether skills taught in treatment for FOF are used by participants after treatment is completed in the face of a fear-relevant event, the September 11th terrorist attacks and is associated with reduced flying anxiety over the long-term.

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Cognitive-behavioral therapy is effective in the treatment for FOF, a common experience estimated to affect 25 million adults in the United States and nearly 10-40% of the adults in industrialized countries (Arnason, 1987; Ekeberg, 1991; Nordlund, 1983; Deran & Whitaker, 1982). A variety of CBT methods (e.g. systematic desensitization, flooding, implosion, and relaxation) has been found to yield reductions in flying anxiety after treatment (Beckham et al., 1990; Denholtz & Mann, 1975; Haug et al., 1987; Howard et al., 1983; Ost et al., 1997; Solyom et al., 1973; Van Gerwen et al., 2004). In general, these studies utilized cognitive behavioral approaches to treatment, incorporating a combination of psychoeducation, cognitive restructuring, and some form of exposure. More recently, use of virtual reality as a tool in treating individuals with flying anxiety has been examined and has demonstrated positive post-treatment outcomes in case studies (North et al., 1997; Rothbaum et al., 1996; Smith et al., 1999; Wiederhold et al., 1998), as well as both uncontrolled (Botella et al., 2004) and controlled (Maltby, 2002; Rothbaum et al., 2000, Rothbaum et al., 2006) trials.

There are few research studies examining long-term CBT treatment outcomes for FOF and the results from such studies are mixed. Several studies of treatments using in-vivo and virtual reality exposure have reported maintenance of treatment gains for at least one year (Doctor et al., 1990, Rothbaum et al., 2002, Rothbaum et al., 2006). One study found that treatment gains were maintained at 3-year follow-up after virtual reality exposure (VRE) treatment (Wiederhold & Wiederhold, 2003). However, this study had a very small sample size (N=28), and participants' self-report of flying after treatment was the only outcome measure. In addition, in a well-controlled study comparing the effects of VRE and placebo in the treatment of FOF (Maltby et al., 2002), treatment gains for participants in the VRE group were not maintained at 6-month follow-up.

Recently, Anderson and her colleagues (2006) examined the long-term efficacy of CBT for clients with FOF, after Sept 11th. These individuals originally participated in two well-controlled, randomized clinical trials for the treatment of FOF (Rothbaum et al., 2000; Rothbaum et al., 2006) that compared virtual reality exposure to standard exposure in-vivo treatments. Results from this follow-up study showed that treatment gains were maintained, or improved upon, an average of 2.3 years after treatment for both virtual reality and standard exposure (Anderson et al., 2006) providing some evidence for the long-term benefit of CBT for FOF, and sustainability after a significant fear-relevant event.

What may account for the sustainability of treatment gains? Although there is clear evidence that CBT provides short-term gains for FOF and some evidence that these gains are enduring, the components underlying these enduring effects are unclear. Skill acquisition has been identified as one important component of CBT treatment, along with changes in cognition, enhanced coping, and exposure (Prins & Ollendick, 2003). CBT's emphasis on skill learning is based on cognitive theories of self-regulation and motivation, and on the assumption that clients are problem-solvers and self-motivators (Brewin, 1996). A general assumption of CBT is that "prior learning is currently having maladaptive consequences, and that the purpose of therapy is to reduce distress or unwanted behavior by undoing this learning or by providing new, more adaptive learning experiences" (Brewin, 1996, p. 34). Presumably, the skills learned in treatment contribute to adaptive learning experiences, as well as the maintenance of such adaptive learning.

Thus, CBT therapists deliberately work to build skills among their clients by emphasizing active participation and psychoeducation so that clients may become their own therapist once treatment is terminated (Beck, 1995; Hollon, 2003). The aim is for clients to develop transferable skills that can be used to cope with new problems that arise after the end of therapy (Westbrook & Hill, 1998), and increase the probability that they will have effective tools at

their disposal when they are needed in the future in order to manage emotional responses to stress (Barber & DeRubeis, 1989; Hollon, 2003).

Despite the emphasis CBT places on teaching clients skills (Westbrook & Hill, 1998), for anxiety disorders there is a dearth of studies looking at relations between skills taught in therapy, their use once treatment has ended and its association with positive treatment outcomes. No studies could be identified that specifically examine the use of skills learned in treatment and long-term outcomes for FOF. However, research on social phobia and depression suggests that clients who systematically apply what they have learned in therapy are more likely to make progress in treatment (e.g., Persons, Burns, & Perloff, 1988), as well as maintain their treatment gains in the long-term (e.g., Edelman, & Chambless, 1995; Helbig & Fehm, 2004; Young Weinberger, & Beck, 2001). In addition, research shows associations between the amount of practice clients engage in during treatment and the benefits they achieve from exposure therapy (Barlow, O'Brien, & Last, 1984; Michelson, Mavissakalian, Marchione, Dancu, & Greenwald, 1986). Finally, a recent study found that increased coping skills were significant long-term predictors of treatment outcomes for alcohol dependence (Litt, Kadden, Cooney, & Kabela, 2003).

Given the lack of research examining whether clients report using skills learned in therapy after treatment, and associations between use of skills and positive long-term outcomes for FOF, the purpose of this study is to examine whether participants previously treated for FOF with CBT report using skills learned in treatment to manage flying anxiety after a fear-relevant event. We also examine whether self-reported use of skills learned in treatment is associated with flying anxiety over the long-term. In the current study, clients were taught three skills in treatment, namely, breathing retraining, talking back to negative thoughts, and continuing to fly. Specific theoretical underpinnings for these skills include cognitive change as a result of adaptive self-talk (e.g., Meichenbaum, 1977) and habituation to the feared stimulus by means of exposure (Foa & Kozak, 1986). We hypothesize that: 1) participants who received treatment for FOF will more likely report using skills taught in treatment than a comparison group of non-anxious individuals who have not received treatment for FOF, 2) participants treated with CBT for FOF will be more likely to report using skills learned in treatment ("taking relaxing breaths," "talking back to negative thoughts," and "continuing to fly") than skills not learned in treatment ("trying to put it out of my mind/distracting myself", "talking to friends and family," "gathering information about increased security measures," and "listening to the media") to manage flying anxiety after September 11th and 3) among treatment completers, those who report using skills taught in treatment will show lower levels of flying anxiety after September 11th than those who reported not using skills taught in treatment.

Methods

Participants

All individuals who completed treatment for the fear of flying across two studies (n=115) were contacted by mail in June, 2002. In order to attempt to recruit a demographically matched convenience comparison group, treatment completers were sent two copies of the surveys with two postage-paid return envelopes and were asked to complete one survey and to give the second survey to a friend who had never had treatment for the fear of flying (comparison group). Potential participants were asked not to complete the questionnaires together. Participation by comparison group participants was anonymous, as no identifying information beyond basic demographics (current age, sex, race, marital status, income level) was collected.

To have participated in the original treatment studies, individuals met current DSM-IV criteria for either specific phobia, situational type (i.e., FOF), panic disorder with agoraphobia in which flying was the feared stimulus, or agoraphobia without a history of panic disorder, in which

flying was the feared stimulus, as measured by the *Structured Clinical Interview for the DSM-IV* (SCID; First, Spitzer, Gibbon, & Williams, 1995). All assessments were conducted by a licensed psychologist, who was blind to the type of treatment received. A subset of interviews was rated by another licensed psychologist, achieving a kappa coefficient of .94, indicating excellent inter-rater reliability (Rothbaum et al., 2006).

Of the 115 potential participants who completed treatment across the two trials, 7 participants' packets were returned unopened, and current addresses were unable to be located. Of the 108 potential treatment respondents, 55 individuals completed the questionnaires (51% retention). The majority of these respondents to the questionnaires received a primary diagnosis of specific phobia, situational type (flying; 87%, $n=48$). The remaining respondents received a primary diagnosis of panic disorder with agoraphobia (11%, $n=6$) and agoraphobia (2%, $n=1$). With regard to co-morbidity, sixty percent received one current diagnosis ($n=33$), 26% ($n=14$) received two diagnoses, 13% ($n=7$) received three diagnoses, and 2% ($n=1$) received four diagnoses.

Of the 108 potential comparison group respondents, 33 individuals completed the questionnaires (31% retention). Respondents were excluded if they reported direct exposure to the September 11th terrorist attacks. Comparison group participants were excluded if they had previous treatment for fear of flying. One comparison group respondent was excluded due to prior treatment for fear of flying and one treatment respondent was excluded due to direct exposure to the September 11th terrorist attacks. Treatment completers and comparison group participants did not differ across age, education, marital status, race, and income. Respondents were on average 40 years of age, well-educated (on average 17 years of schooling), married (59%), Caucasian (92%), and middle-to-upper-income (71% reported >\$50K/year).

Treatment

All treatment and follow-up assessments for the original treatment studies were completed prior to September 11th, 2001. The treatment was identical for each of the two trials, which is detailed elsewhere (Rothbaum et al., 2000; Rothbaum et al., 2006). In brief, participants were randomly assigned to VRE or SE for 8 individual sessions over 6 weeks. Treatment consisted of four sessions of anxiety management training (for both groups), including breathing relaxation, cognitive restructuring, and thought-stopping, followed either by exposure to a virtual airplane (VRE) or an actual airplane at the airport (SE), according to a treatment manual. VRE was conducted in a therapist's office according to a treatment manual (Rothbaum & Hodges, 1997). Patients wore a head-mounted display with stereo earphones that provided visual and audio cues consistent with being inside the passenger compartment of an airplane. During VRE sessions, participants could taxi, take-off, fly in calm and turbulent weather and land in the virtual airplane. SE was conducted at the airport and was spent exposing patients to pre-flight stimuli (e.g., ticketing), to an elevated coordination center tower, and to sitting on a stationary airplane.

Measures

Flying Anxiety—The *Questionnaire on Attitudes Toward Flying* (QAF, Howard, Murphy & Clarke, 1983) assesses various aspects of FOF including: longevity of FOF, treatment history, and attitudes concerning flying. It includes a 36-item subsection that asks the participant to rate level of fear toward different flying situations (e.g., “The noise of the engine suddenly increases”) using a 0-10 scale. The range of scores is 0-360, with higher scores representing higher levels of anxiety. Test-retest reliability has been reported as .92, and split-half reliability as .99. The *QAF-Fear Item* (QAF-Fear) is a single item taken from the QAF, which asks the participant to rate current fear of flying from 0 (“no fear”) to 10 (“the most extreme amount of fear that is possible for you to feel”). It is used as a face-valid measure of FOF.

The *Fear of Flying Inventory* (FFI, Scott, 1987) is a 33-item measure assessing fear of flying intensity, in which participants rate how much they would be distressed by various aspects of flying (e.g., “Take-off”) on a scale of 0 (“not at all”) to 8 (“very severely disturbing”). Scores range from 0-264. Scott (1987) has reported test-retest reliability for 15 wait-list patients as .92, and has demonstrated its sensitivity to change after treatment. Both the FFI and the QAF are correlated with clinician-administered measures of flying anxiety (Rothbaum et al., 2000).

Use of Skills—The *Fear of Flying after September 11th, 2001* questionnaire was developed for the purposes of this study. This questionnaire asks individuals to indicate “whether you used any of the following anxiety management skills after September 11th to deal with anxiety about airplane travel.” The skills specifically taught during treatment included: “taking relaxing breaths”; “talking back to negative thoughts”; and “continuing to fly.” Other skills not taught in treatment included: “trying to put it out of my mind/distracting myself”; “talking to friends and family”; “gathering information about increased security measures”; and “listening to the media.” Individuals were asked to indicate all that applied.

Results

Treatment and Comparison Group

In order to address the first hypothesis, multiple chi-square analyses were conducted to assess if the proportion of individuals who endorsed using specific skills differed in the treatment versus the comparison group. Of the skills taught in treatment, individuals who completed CBT were significantly more likely to have taken “relaxing breaths” ($\chi^2 (1, N = 88) = 10.52, p < .01$) and to have “talked back to their negative thoughts” ($\chi^2 (1, N = 88) = 5.95, p < .05$) to deal with their anxiety than individuals in the comparison group. No significant differences were found between treatment completers and the comparison group on “continuing to fly.” Of the skills not taught in treatment, no significant differences were found between treatment completers and the comparison group on “trying to put it out of my mind/distracting myself,” “talking to friends and family,” “gathering information about increased security measures,” or “listening to the media” ($p > .05$). Table I. shows the percentage of treatment completers and the comparisons using the various skills.

Use of Skills and Anxiety Levels among Treatment Completers

To address the second hypothesis, a paired samples t-test was conducted to assess whether clients treated with CBT for FOF used anxiety management skills taught in therapy more than other potential anxiety management skills that were not taught in therapy. More specifically, the average number of skills taught in treatment that was used by the clients was compared to the mean of skills not taught in treatment. The results indicate that skills taught in treatment (“taking relaxing breaths,” “talking back to negative thoughts,” and “continuing to fly”) were significantly more utilized than skills not taught in treatment (“trying to put it out of my mind,” “talking to friends and family,” “gathering information about increased security measures,” “listening to the media”), $t (50) = 5.60, p < .01$. Furthermore, among those respondents who previously had completed treatment in the original treatment outcome studies, psychiatric comorbidity was not related to self-reported use of skills taught in treatment $F (3,48) = .39, p > .05$.

Finally, to address the third hypothesis, separate hierarchical multiple regression analyses were conducted to assess the relation between potential anxiety management skills, including those taught and not taught in treatment, and fear of flying anxiety after Sept 11th (FFI, QAF, QAF-fear). “Gathering information about increased security measures” and “listening to media” not taught in treatment were excluded from these analyses due to low rates of endorsement.

Preliminary analyses revealed a significant association between post-treatment anxiety scores on the FFI, QAF, and QAF-fear and post-September 11th anxiety scores ($r = .48, .51, .29, p < .05$). As such, post-treatment anxiety scores were statistically controlled in all subsequent analyses.

For each regression, the post-treatment anxiety score was entered in Step 1 (e.g., Post FFI) and the anxiety management skill was entered in step 2 (e.g., “relaxing breaths”). The post-September 11th anxiety score was entered as the dependent variable (e.g., Sept. 11th FFI). Consequently, 15 separate regressions were run. As such, a Bonferroni correction was conducted to address the multiple comparisons made, which required a p-value ($\alpha = .05$) less than .003 for significance.

“Talking back to negative thoughts” significantly predicted FFI ($F(1, 48) = 11.88, p < .003$), QAF ($F(1, 49) = 12.65, p < .003$), and QAF-fear ($F(1, 47) = 5.55, p < .05$) (Table II.). Above the effect of post-treatment anxiety scores, “talking back to negative thoughts” accounted for 16%, 16%, and 10% of the variance in FFI, QAF, QAF-fear scores, respectively. Similarly, “continuing to fly” significantly predicted FFI ($F(1, 47) = 13.04, p < .003$), QAF ($F(1, 48) = 20.00, p < .003$), and QAF-fear ($F(1, 46) = 17.76, p < .003$) (Table III.). Above and beyond the variance accounted for by post-treatment anxiety scores, “continuing to fly” accounted for 17%, 22%, and 25% of the variance in FFI, QAF, and QAF-fear scores, respectively. For all measures, “talking back to negative thoughts” and “continuing to fly” were associated with lower levels of anxiety (Table III.). In contrast, “taking relaxing breaths,” a skill taught in treatment was not associated with post September 11th flying anxiety. All skills not taught in treatment including, “trying to put it out of my mind/distracting myself” and “talking to friends and family” were not significantly associated with post-September 11th anxiety scores on any of the measures ($p > .05$).

Discussion

Given the lack of research examining whether clients report using skills learned in therapy, and associations between use of skills and positive long-term outcomes for FOF, the purpose of this study was to examine whether participants previously treated for FOF with CBT reported using skills learned in treatment (“talking back to negative thoughts,” “taking relaxing breaths,” and “continuing to fly”) to manage flying anxiety after a fear-relevant event. We also examined whether self-reported use of skills learned in treatment was associated with flying anxiety over the long-term.

Results suggested that individuals who completed CBT were significantly more likely to report using “talking back to negative thoughts” and “taking relaxing breaths” as anxiety management skills than individuals who had not received treatment. No differences were found between the groups on whether they continued to fly. In addition, no significant differences were found between the two groups for skills not taught in treatment (“trying to put it out of my mind/distracting myself,” “talking to friends and family,” “gathering information about increased security measures,” and “listening to media”).

The results also indicated that clients treated with CBT were more likely to report using skills taught in treatment than skills not taught in treatment to manage flying anxiety. Hierarchical multiple regression analyses revealed that of the skills taught in treatment, “talking back to negative thoughts” and “continuing to fly” accounted for significant variance in post-September 11th flying anxiety levels. However, “taking relaxing breaths,” and skills not taught in treatment (“trying to put it out of my mind/distracting myself,” “talking to friends and family,” and “gathering information about increased security measures” and “listening to

media”), did not account for a significant amount of variance in post-September 11th flying anxiety levels.

On the whole, these results provide support for the emphasis that CBT places on educating clients to become their own therapist by teaching them skills that can be used once treatment is terminated (Beck, 1995). Indeed, not only were clients more likely to report using skills taught in treatment than skills not taught in treatment to manage flying anxiety, two of the three skills taught in treatment (“talking back to negative thoughts” and “continuing to fly”) were associated with lower levels of flying anxiety after a fear-relevant event and in the long-term (an average of 2.3 years after treatment).

In this study, “continuing to fly” accounted for the greatest amount of variance in flying anxiety scores after September 11th (17-25%). However, of the three skills taught, this skill was endorsed the least by treatment completers (38%), though it is notable that it is equal to the rate at which it was endorsed by controls (39%). These findings highlight the importance of encouraging clients to engage in continued exposure after treatment is completed. An important question for researchers to address is how therapists can encourage clients to engage in exposure.

Of the three skills taught in treatment, “taking relaxing breaths” was a not significant predictor of flying anxiety. This finding is congruent with recent trends in the anxiety literature questioning the role of breathing retraining as an effective component of treatment protocols for anxiety disorders (e.g., Craske, Rowe, Lewin, & Noriega-Dimitri, 1997; Schmidt et al., 2000). Some researchers have suggested that breathing retraining acts as a safety behavior that interferes with corrective learning experiences, and may result in less complete recovery from treatment and a greater risk of relapse (Schmidt et al., 2000) within the emotional processing views of fear reduction (Foa & Kozak, 1986). In this study, “taking relaxing breaths” was not significantly associated with neither poorer treatment outcome, nor positive treatment outcomes. The fact that participants in this study most often endorse “taking relaxing breaths” most often highlights the importance of continued research on what functions as a safety behavior that inhibits recovery, versus what functions as an anxiety management technique that facilitates recovery.

The findings related to “taking relaxing breaths” also raise the question of how to differentiate between an anxiety management skill and a safety behavior. Indeed, given that relaxed breathing could interfere with the benefits of exposure for FOF, is it possible that cognitive restructuring could serve a similar purpose? It may be important to consider the function of such skills. For instance, a person may use “talking back to negative thoughts” to decrease their flying anxiety during an exposure or to construct a more realistic appraisal of the safety of flying apart from the context of exposure. These questions warrant additional research to better understand the mechanism by which traditional cognitive behavioral skills training bring about positive treatment change.

A major weakness of this study is the low rate of participant response. Less than half of the potential participants responded to the post-September 11th survey. To address similar issues with the same sample of treatment completers, Anderson et al., (2006), utilized multiple imputation procedures to address attrition and differences between survey responders and non-responders on pretreatment symptomatology. The pattern of findings prior to using the imputed data was identical, which suggests generalizability of findings from this sample. Unfortunately, we were not able to utilize these statistical procedures with this research question, as pre-treatment data on use of skills was not collected. Another limitation of this study is the reliance on self-report data. Although we agree with researchers that use of behavioral avoidance tests at each assessment point is ideal to substantiate self-report data of skill acquisition and retention

over time (Ost et al., 1997), a behavioral avoidance test was not feasible at the time these data were collected. Given this level of attrition and the reliance on self-report data, potential biases must be considered and the ability to generalize findings from this sample is limited.

One strength of this study is the methodological rigor employed in the original treatment studies upon which this investigation was based. The original treatment studies included participants with clinically significant levels of flying phobia, who were randomly assigned to well-defined treatment groups, completed standardized, psychometrically sound measures and were assessed by Independent Assessors.

This study, to our knowledge, is the first to show that individuals treated for FOF with CBT report that they continue to use the skills taught in treatment after treatment is completed. In addition, this study suggests that use of skills taught in CBT for FOF are associated with lower levels of flying anxiety in the face of a fear-relevant event and over the long-term. These are encouraging results for therapists who utilize short-term CBT for treatment of flying phobia and the clients with whom they work. It will be important for future research to assess whether or not this pattern of findings is true for short-term CBT for other anxiety disorders.

Acknowledgments

This study was supported by NIMH Grant #1-R43-MH64971-01, NIMH Grant #2-R42-MH58493-02, which funded the original treatment outcome studies. This study was also supported by an unrestricted education grant from Pfizer Pharmaceuticals Group #NY01 002466348, which funded the post-September 11th follow-up assessment.

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Table I

Percentage of Participants Using Various Skills after September 11th

Anxiety management skills	Treatment Completers (<i>n</i> = 55)	Comparison Group (<i>n</i> = 33)
Taught in Treatment		
“Taking relaxing breaths”	65%	33%
“Talking back to negative thoughts”	60%	36%
“Continuing to fly”	38%	39%
Not Taught in Treatment		
“Trying to put it out of mind my mind/distracting myself”	51%	36%
“Talking to friends and family”	33%	24%
“Gathering information about increased security measures”	20%	10%
“Listening to the media”	10%	15%

Table II
Summary Statistics for Hierarchical Multiple Regression Analyses

Outcome Variable	Predictor Variables	Change Statistics		Unstandardized Coefficient		Standardized Coefficient	
		F-test	R ²	b	SE of b	Beta	Beta
Talking Back to Neg. Thoughts	Sept. 11 th FFI						
	1. Post FFI	12.77**	.21	.56**	.14		.46
	2. Talking back	11.88**	.16	-.37.78**	10.96		-.40
	Sept. 11 th QAF						
Talking Back to Neg. Thoughts	1. Post QAF	15.83**	.24	.55**	.13		.48
	2. Talking back	12.65**	.16	-.58.83**	16.54		-.40
	Sept. 11 th QAF-fear						
	1. Post QAF-fear	5.42*	.10	.43*	.18		.32
Continuing to Fly	2. Talking back	5.55*	.10	-1.80*	.77		-.31
	Sept. 11 th FFI						
	1. Post FFI	12.05**	.20	.47**	.14		.38
	2. Flying	13.01**	.17	-.39.11**	10.83		-.42
Continuing to Fly	Sept. 11 th QAF						
	1. Post QAF	15.25**	.24	.42**	.13		.34
	2. Flying	20.00**	.22	-.72.05**	16.11		-.49
	Sept. 11 th QAF-fear						
	1. Post QAF-fear	5.09*	.10	.19*	.17		.14
Continuing to Fly	2. Flying	17.76**	.25	-3.10**	.73		-.53

Note. FFI = Fear of Flying Questionnaire. QAF = Questionnaire on Attitudes about Flying. QAF-fear = Questionnaire on Attitudes about Flying, Fear Item.

* alpha < .05.

** alpha < .003

Table IIIMean Post-September 11th Anxiety Scores for Treatment Completers

Measures	Talking Back to Neg. Thoughts Mean (SD)		Continuing to Fly Mean (SD)	
	Yes	No	Yes	No
FFI	61.39 (34.11)	98.72 (55.37)	49.24 (31.13)	93.97 (46.63)
QAF	99.01 (59.47)	160.74 (77.60)	71.81 (43.05)	157.70 (68.94)
QAF-fear	4.58 (2.26)	6.37 (3.44)	3.30 (1.98)	6.66 (2.64)

Note. FFI = Fear of Flying Questionnaire. QAF = Questionnaire on Attitudes about Flying. QAF-fear = Questionnaire on Attitudes about Flying, Fear Item.