Predictors of Outcome of Dream Work for East Asian Volunteer Clients: Dream Factors, Attachment Anxiety, Asian Values, and Therapist Input

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Eighty-eight East Asian volunteers were paired with 6 East Asian therapists who provided low or high input in single-dream sessions. Volunteer clients with poor initial functioning on the target problem associated with their dreams and high self-efficacy for working with dreams profited more from dream sessions than did their counterparts. Although no main effects were found for therapist input, volunteer clients who scored higher on attachment anxiety had better outcome in the low-input condition, whereas clients who scored lower on attachment anxiety had better outcome in the high-input condition. Volunteer clients with lower Asian values evaluated low-input sessions more positively, whereas volunteer clients with higher Asian values evaluated high-input sessions more positively. Implications for dream work and future research are suggested.

**Keywords:** dream work, attachment, Asian values, therapist input

Van De Castle (1994) noted that books about dreams appeared in China as early as 1020 B.C. He found at least two dream dictionaries that provided interpretations for different dream images (e.g., “to dream of an orchard bowed down...
with fruit portends that one will have numerous children and grandchildren”. Similarly, in ancient times in Japan, dreams were used to navigate politics and to govern (Tsuruta, 2005). Dream incubation in temples was widely practiced in ancient times in both China and Japan. Tsuruta (2005) noted that in modern times dreams are considered to be more personal than they were in ancient times. Anecdotal evidence suggests that dreams are currently widely respected in East Asian cultures, with reliance on dream dictionaries and a belief that dreams foretell the future.

We found only one study that examined attitudes toward dreams and the effects of dream work in an Asian sample. In a sample of 546 Taiwanese college students, Tien, Lin, and Chen (2006) recently reported that participants who were willing to have a dream session had more positive attitudes toward dreams than those who were not willing to have a dream session (on the Attitudes Toward Dreams—Revised; Hill et al., 2001): Those willing to have a dream session scored a mean of 3.48 (SD = 0.70), whereas those not willing to have a dream session scored a mean of 3.07 (SD = 0.69). Those Taiwanese students who were willing to have a dream session, however, had less positive attitudes than a mixed-ethnicity American sample of volunteer clients in Hill et al. (2001; \( M = 3.66, \) SD = 0.80, \( d = .24 \), small effect size). Interestingly, 31% of Taiwanese students indicated a willingness to participate in a dream session, which is equivalent to the 32% who volunteered in an American sample (Hill, Diemer, & Heaton, 1997). In addition, Tien et al. found that Taiwanese volunteer clients who participated in one to three dream sessions using the Hill dream model significantly improved in their attitudes toward dreams (\( d = .69 \), medium effect size), whereas those in a wait-list control condition did not change (\( d = .12 \)). These results suggest that Asian university students are just as willing to talk about dreams as American university students and that their attitudes toward dreams scores increase if they work on their dreams in a therapeutic setting.

We suspect, indeed, that it might be easier for East Asians to talk about dreams than about overtly personal issues because of the cultural values for emotional restraint and reluctance to share personal issues (D. W. Sue & Sue, 2003). Talking about dreams may provoke less shame than sharing highly charged personal and familial issues in a therapeutic setting.

Given the tendency of ethnic minority clients to drop out of treatment, suggestions have been made that therapists should make more effort to tailor treatments to fit the needs of the client (S. Sue & Zane, 1987). For the present study, we tried to match components of dream work to the purported needs of East Asian clients. The purpose of the current study, then, was to investigate the effects of individual differences among East Asian clients and the effects of treatment strategies in dream work on the efficacy of dream work with East Asian clients. First, we turn to a review of dream work and then look at variables that may influence the effects of dream work with East Asian clients.

**DREAM WORK IN THERAPY**

Hill (1996, 2004) posited an integrative three-stage model of dream work in which the therapist works collaboratively with the client to explore individual...
dream images (exploration stage), attain insight about the dream (insight stage),
and then make decisions about what to do in waking life on the basis of the
meaning of the dream (action stage). The model is collaborative, in that the
therapist serves as a guide to the process but is not the expert on the dream or
its interpretation. Within the model, therapists have wide latitude in terms of
whether to offer interpretations and action ideas related to the dream versus
encouraging clients to come up with their own interpretations and action ideas.
Empirical evidence suggests that the Hill dream model is effective in terms of
client evaluations of sessions, insight gains into discussed dreams, and gains in
action ideas related to the discussed dreams (see review in Hill & Goates, 2004).
We do not know, however, how the model works with clients from different racial and ethnic backgrounds. Of interest to the present study was to apply the
model to clients of East Asian descent.

In planning this study, we thought about what factors might predict whether
East Asian clients would profit from dream work. In reviewing the literature, we
focused on several promising variables: dream-related variables (dream salience,
level of functioning in the problems reflected in the dream, and self-efficacy for
working with dreams), therapist input, and individual differences relevant to East
Asians (attachment anxiety and Asian values).

DREAM-RELATED VARIABLES

Dream-related variables have been found to predict the outcome of dream
work (although these have been tested only in primarily European American samples). More specifically, dream salience and level of functioning on the target
problem reflected in dreams have been found to predict session outcome, perhaps
because clients are more motivated to work on dreams that are powerful and
memorable and that reflect distress in underlying problems than less salient dreams
(Hill et al., 2006). A dream-related variable that has not yet been studied is client
self-efficacy for working with dreams. On the basis of Bandura (1969, 1997), if a
person feels confident that she or he has the ability to work with dreams, that
person would be more likely to engage in dream work. Hence, we speculated that
dream salience, initial functioning on the target problem, and self-efficacy for
working with dreams would influence the outcome of dream sessions for East Asian
clients.

LEVEL OF THERAPIST INPUT

Many have suggested that Asian clients should be treated with a directive
approach. For example, Atkinson, Maruyama, and Matsui (1978) noted that Asian
clients tend to prefer therapists to be active, provide guidance, and structure
sessions rather than nondirective because they are more familiar with structured
relationships. Furthermore, others (Fuligni et al., 1999; O’Reilly, Tokuno, & Ebata,
1986) have suggested that Asians tend to value behaving well and assisting, sup-
porting, and respecting more than they value being self-directed or autonomous
and independent (especially as compared with Western values), which might lead to their preference for directive counseling.

Some empirical research has investigated the hypothesis that Asians prefer a directive counseling approach. In Li and Kim (2004), Asian American clients rated therapists in a directive as opposed to a nondirective condition as more empathic and cross-culturally competent; clients also reported stronger working alliances and greater session depth for the directive than for the nondirective condition. In Atkinson and Matsushita (1991), Japanese American students listened to a tape recording of a simulated counseling session in which the counselor (identified as either Japanese American or White American) was either directive or nondirective. The Japanese American counselor using a directive approach was rated as most attractive and useful; participants were also more willing to see the directive Japanese American counselor than the other counselors. We note, however, that these two studies assessed preference for and satisfaction with a directive versus nondirective approach, and thus leave unclear whether clients actually benefit more from or change more from either of the two approaches. More evidence is needed, then, to determine whether clients actually profit more from a directive than a nondirective counseling approach or whether they just prefer a directive approach.

The most relevant study to the directive–nondirective distinction in the dream area is that by Hill, Rochlen, Zack, McCready, and Dematatis (2003). They compared the outcome of single dream sessions in a mixed-ethnicity sample when therapists delivered an empathy-only condition (i.e., offered questions, restatements, reflections of feelings, and an empathic attitude and encouraged clients to come up with their own interpretations and action ideas) or an empathy + input condition (i.e., therapists provided at least one interpretation and one action idea in addition to the empathy components). Hill et al. found no differences in postsession client ratings of the quality of sessions and dream-specific gains for the two conditions. Clients gained more action ideas, however, from working with the therapists in the empathy-only condition, an intriguing finding that suggests that therapists should not be too directive. In a qualitative analysis of the data, Hill et al. found that subsets of 8% of the clients in the empathy-only condition and 14% in the empathy + input condition indicated on open-ended questions that what they found most helpful was the therapist input (e.g., “How someone looking at it from the outside saw it”, p. 217). Thus, it may be that some clients prefer and profit from therapist input more than do others. Unfortunately, the Hill et al. study provided no clues about why some clients prefer input, whereas others do not.

If, as suggested by the literature, Asian clients prefer a directive approach and want to work with more active therapists, we would expect that they would profit more from an empathy + input condition than from an empathy-only condition. As we pondered the labels for these conditions, however, we questioned whether empathy and empathy + input were really the proper terms for these conditions. The label for the empathy condition did not seem quite appropriate because this condition did have some therapist input. The more relevant dimension appeared to be the amount of input. Hence, for the present study, we used the terms low input and high input for our more nondirective and more directive conditions, respectively.
We speculated that attachment anxiety might be a relevant construct for East Asians. Attachment theory postulates that caregiver–infant attachment is crucial for the survival of infants and is a vital component of human experience from infancy through death (Bowlby, 1969). People form attachment patterns (or internal working models) in infancy and carry these over to other important relationships (e.g., romantic relationships [Brennan, Clark, & Shaver, 1998] and therapeutic relationships [Mallinckrodt, Gantt, & Coble, 1995]).

Some empirical results have suggested that attachment anxiety is a salient construct for Asians. For example, Wang and Mallinckrodt (2006) found that compared with American students, Taiwanese students believed that the ideal romantic attachment involved high levels of anxiety. Similarly, Wei, Russell, Mallinckrodt, and Zakalik (2004) found that Asian American college students experienced greater attachment anxiety than did their Caucasian peers.

We postulate that attachment anxiety relates to how much Asian Americans benefit from therapist input in dream sessions. Given that the Asians tend to value social harmony and interdependence (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000), an East Asian client’s culturally based desire to seek acceptance might be exacerbated by attachment anxiety. Although we expect an interaction between attachment anxiety and therapist input in terms of outcome, we cannot predict the direction of the interaction because of the lack of empirical literature.

Asian Values and Therapist Input

Several researchers have suggested that clients’ preferences and ratings of different types of therapy are influenced more by Asian values than by ethnicity per se (Kim & Atkinson, 2002; Kim, Li, & Liang, 2002). According to Kim, Atkinson, and Yang (1999), salient cultural values for Asian Americans include collectivism, conformity to society’s norms, emotional restraint, achievement for family recognition, modesty, and devotion to parents and authorities. In a therapy setting, clients with high Asian values might experience stigma about seeking help and thus might be reluctant to share personal problems with therapists. Furthermore, given that Asians with high Asian values would probably defer to authority, they might relate better to therapists who provide direction and guidance (Kim & Atkinson, 2002; Kim et al., 2003). Hence, we speculated that East Asian clients with high Asian values might benefit more from high than low therapist input.

Mixed results have been found in the empirical research regarding the influence of Asian values on the process and outcome of therapy. Kim et al. (2002) found that Asian American clients with high adherence to Asian values rated therapists who encouraged them to express emotion as more cross-culturally competent than did clients whose therapists encouraged them to express cognition. Similarly, Kim and Atkinson (2002) found that Asian American clients with high adherence to Asian cultural norms rated Asian American therapists as more empathic and trustworthy, whereas Asian American clients with low adherence to
Asian values rated European American therapists as more empathic. By contrast, Li and Kim (2004) found no evidence that clients’ level of Asian values influenced ratings of counselor credibility, working alliance, and session evaluation in directive or nondirective counseling. Similarly, Kim et al. (2003) found no evidence that level of Asian values affected clients’ ratings of counselor self-disclosure. Hence, more research is needed to understand the influence of Asian values on therapy process and outcome.

PURPOSES OF THE PRESENT STUDY

For this study, we hypothesized that dream-related variables (dream salience, initial level of functioning on the target problem reflected in the dream, and initial self-efficacy for working with dreams) would influence the outcome of dream sessions with East Asian clients given that dream-related variables have been found to predict outcome in other samples. Furthermore, we hypothesized that attachment anxiety, Asian values, treatment condition (low vs. high input), and the interaction between attachment anxiety and treatment condition as well as the interaction between Asian values and treatment condition would predict the outcome of dream sessions above and beyond the dream-related variables.

Because we wanted to control as many variables as possible, we only included clients and therapists who were of East Asian descent (i.e., Chinese, Taiwanese, Korean, and Japanese). In addition, we used single sessions of dream work with volunteers for several reasons. First, using single sessions allowed us more control (given the lack of interference from external events that occur between sessions in ongoing therapy) for testing basic questions related to therapeutic interventions. Second, using volunteers who each had a dream that they wanted to understand allowed us to have a motivated sample with real concerns and eliminated ethical concerns about imposing unwanted interventions on clients in ongoing therapy. Third, recruiting a large sample of East Asian clients in ongoing therapy would be very difficult, so it seemed reasonable to start by conducting an initial exploratory analog study with college students who had salient dreams that they were willing to discuss (henceforth called volunteer clients because they were coming for therapeutic gains). Finally, previous work has shown that clients benefit substantially from working on dreams in single sessions (see review in Hill & Goates, 2004), so using single sessions seemed like a reasonable method for this investigation.

METHOD

Design

We conducted an experimental laboratory study in which East Asian clients and therapists were randomly assigned to a low or high therapist input condition for one dream session. Outcome variables were session evaluation, perceived gains from dream work, changes in functioning on the target problem, and changes in self-efficacy for working with dreams. Predictor variables were dream salience, initial level of functioning on the target problem reflected in the dream, initial level
of self-efficacy for working with dreams, anxious attachment style, Asian values, and treatment condition. In addition, two interactions (Attachment Anxiety \( \times \) Treatment Condition and Asian Values \( \times \) Treatment Condition) were tested separately.

An a priori power analysis for simultaneous regression (Cohen, 1988) indicated that for a sample of 88 with seven predictors (six independent variables plus one interaction term), the power to detect significant steps of a regression is .713 when a medium effect size \( (f^2 = .15) \) and a .05 Type I error rate are assumed. If the effect size for any given step in the regression is medium \( (f^2 = .15) \), then 76 participants are needed to detect a medium-sized interaction term \( (sr^2 = .09) \). Hence, a sample of 88 gave us enough power to detect medium to large effects.

**Participants**

**Therapists**

Six trained therapists participated (4 women, 2 men; 3 doctoral students in counseling psychology, 1 counseling psychology professor on sabbatical, 1 assistant professor of counseling psychology, and 1 staff psychologist at a counseling center); 3 were from Taiwan, 2 were from Korea, and 1 was a fourth-generation American of Japanese descent. Ages ranged from 25 to 42 \( (M = 33.00, SD = 6.00) \). Therapists had between 2 to 11 years of clinical experience \( (M = 6.17, SD = 3.60) \). Four had previous experience using the model; 2 did not (the average number of sessions using the model before training was 9.00 \( (SD = 12.82) \)). Using 5-point Likert scales ranging from 1 (low) to 5 (high), therapists indicated that they believed in and adhered an average of 4.00 \( (SD = 1.10) \) to humanistic–person-centered, 3.83 \( (SD = 0.98) \) to psychoanalytic–psychodynamic, and 2.92 \( (SD = 1.20) \) to cognitive and cognitive–behavioral theories. Three therapists preferred the low-input condition, and 3 (including both men) preferred the high-input condition. Therapists saw a total of 11 to 20 clients for this study, with approximately the same number in the low- and high-input conditions. All therapists are authors of this study.

**Clients**

Eighty-eight volunteers served as clients for this study (67 women and 21 men; 72 undergraduate students, 10 graduate students, 4 adults from the community, and 2 student status not indicated; ages ranged from 18 to 41, \( M = 21.91, SD = 4.67 \)). In terms of descent, there were 30 Korean, 25 Chinese, 17 Taiwanese, 6 Chinese–Taiwanese, 1 Japanese, and 9 who were at least half East Asian (the other half was generally another Asian country). In terms of generational status, 46 were first generation, 37 were second generation, 1 was third generation or higher, and 4 did not indicate generational status. Clients were unaware of the study hypotheses.
Judges

Eight (7 women and 1 man; 7 Asian and 1 Latina; ages ranged from 19 to 23, $M = 20.67$, $SD = 1.19$) undergraduate psychology majors served as judges for the study. They were unaware of the study hypotheses.

Measures

Demographic questionnaires asked clients and therapists about age, sex, country of origin, generational status, and year at the university.

Dream Salience (Hill et al., 2006) is a 5-item measure that assesses the importance of the dream to the client. All items (“Understanding this dream will help me understand my life better,” “This dream is trivial and NOT worth focusing on,” “This dream stirs up strong emotions in me,” “I spend a lot of time thinking about this dream,” and “This is an important dream”) used a 5-point scale (1 = strongly disagree to 5 = strongly agree). Hill et al. reported that a principal-axis factor analysis indicated a single factor accounting for 48% of the variance; all items loaded greater than .49. Scores are determined by averaging the ratings (after reversing the negatively worded item). The internal consistency (Cronbach’s alpha) for Hill et al. was .81; for this study, it was .80.

The Self-Efficacy for Working With Dreams measure was developed for this study. Using a format that is standard for items about specific self-efficacy, we used the stem “I am confident that I could. . .” for seven items: “explore the images in my dream,” “figure out the meaning of my dream,” “use my dream to make changes in my life,” “learn more about myself through my dream,” “solve the problem reflected in my dream,” “apply the dream to my waking life,” and “reexperience the feelings in my dream.” We used a 10-point scale ranging from 0 (no confidence at all) to 9 (complete confidence). In principal-axis factor analyses on the pre- and postscores, the KMO index was satisfactory (.83 and .86, respectively), the Bartlett chi-squares were significant (227.34 and 309.95, respectively), and there was one eigenvalue greater than 1 (4.07 and 4.13, respectively), suggesting a single factor accounting for 38.20% and 59.04% of the variance; all items loaded greater than .45; internal consistency alphas were .87 and .88, respectively. Change in self-efficacy was computed by subtracting pre- from postsession scores.

Target Problem assesses perceived level of the underlying problem reflected in the dream. Hill et al. (2006) developed the Target Problem by modifying the Target Complaints measure (Battle et al., 1965); Battle et al. (1965) reported test–retest reliability of .68 and found that the Target Complaints measure was highly correlated with other outcome measures. After a session, clients are asked to “write the primary problem, issue, concern that you think the dream is related to.” They then rate their current functioning and their presession functioning on this target problem using a scale ranging from 1 (worst possible functioning) to 13 (best possible functioning). This retrospective method is used because most clients cannot indicate the underlying target problem before working on their dreams during sessions. Target Problem Change (TP Change) is calculated by subtracting retrospective presession
ratings from postsession ratings, which Howard (1980) and Bray, Maxwell, and Howard (1984) found was a valid measure of pre–post change.

The Experiences in Close Relationships Scale–Anxiety Subscale (ECRS–Anx; Brennan et al., 1998) measures the degree to which a person fears being rejected, neglected, or abandoned by romantic partners (e.g., “I worry that romantic partners won’t care about me as much as I care about them”). This measure has been used in other therapy studies (e.g., Mohr, Gelso, & Hill, 2005) under the assumption that people form internal working models of attachment relationships and generalize these to all close relationships. The ECRS–Anx is an 18-item self-report measure that uses a 7-point Likert scale ranging from 1 (disagree strongly) to 7 (agree strongly). Past research has found acceptable internal consistency (.88 to .91; Brennan et al., 1998; Mohr et al., 2005), high test–retest reliabilities over a 6-month interval (.68; Lopez & Gormley, 2002), and significant relationships with measures of interpersonal problems and core relationship conflicts (Mallinckrodt & Wei, 2005). The internal consistency alpha for the present study was .90.

The Asian American Values Scale–Multidimensional (AAVS-M; Kim, Li, & Ng, 2005) assesses Asian values. The AAVS-M contains 42 items (using a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree) in five subscales (Collectivism, Conformity to Norms, Emotional Self-Control, Family Recognition Through Achievement, and Humility), although the total scale was used for this study. The AAVS-M is an extension of the Asian Values Scale—Revised (Kim & Hong, 2004). The AAVS-M correlated positively with the original Asian Values Scale and negatively with attitudes toward seeking help. Internal consistency for the total score for Kim et al. (2005) ranged from .79 to .90; for the present study, it was .89.

The Session Evaluation Scale (SES; Hill & Kellems, 2002) assesses clients’ perceptions of session quality. The SES includes four items (e.g., “I thought this session was helpful”), rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Exploratory and confirmatory factor analyses revealed a single factor accounting for 77% of the variance; internal consistency was .91. As did Lent et al. (2006), we added an additional item (“Please rate the overall effectiveness of this session”) to increase the variability and reduce problems with a ceiling effect. Items are averaged (after reversing negatively worded items), such that higher scores reflect better session outcome. Internal consistency for Lent et al. was .86; for this study, it was .88.

Gains From Dream Interpretation (GDI; Heaton, Hill, Petersen, Rochlen, & Zack, 1998) assesses specific gains that clients report from dream sessions. The GDI was developed from responses to open-ended questions about what clients gained from dream sessions. It includes 14 items rated on a 9-point Likert scale ranging from 1 (disagree strongly) to 9 (agree strongly) arranged in three subscales (Exploration–Insight Gains, Action Gains, and Experiential Gains). Example items are “I was able to explore my dream thoroughly during the session,” “I will use things that I learned in this dream work in my life,” and “During the session, I was able to reexperience the feelings I had in the dream.” In Zack and Hill (1998), the GDI correlated with other measures of session quality, providing evidence of concurrent validity. The internal consistency for the total score in the Hill et al. (2006) study was .89; in the present study, it was .92.
Procedures

Training Therapists

Therapists read the first three chapters of Hill (2004), signed a consent form, and attended a 6-hr training workshop for the two conditions. Clara E. Hill coached the therapists in applying each condition in group dream sessions with different volunteer clients. Each therapist then conducted one practice session for each condition. Hill listened to all the practice sessions and provided feedback about adherence to the condition.

Recruiting Clients

Ninety-five volunteer clients were recruited from undergraduate classes, personal contacts, flyers posted on campus, and announcements in Asian student clubs. Potential clients were told that they had to be at least half East Asian and bring a typed copy of one dream that they were willing to discuss in the session. Students participating from psychology classes were given course credit for participating; others were given $5 for their participation; a few participated for no payment.

Presession

Volunteer clients signed a consent form and then provided a written copy of a dream. They next completed the AAVS-M, ECRS–Anx, Dream Salience, Self-Efficacy for Working With Dreams, and demographic measures in a random order. Clients and therapists were randomly assigned to the low-input or high-input conditions (keeping approximately similar numbers within conditions).

Procedures for Sessions

In both conditions, therapists tried to be empathic with clients. To begin sessions (which were audiobaped), the therapist explained confidentiality and briefly overviewed the model. Next, the therapist asked the client to tell the dream, went through the steps (description, reexperiencing, associations, and waking-life triggers) of the exploration stage for about five images (about 30–45 min), helped the client construct the meaning of the dream in the insight stage (about 15–25 min), and worked with the client to come up with action ideas in the action stage (about 10–15 min).

In the low-input condition, therapists primarily used probes, restatements, and reflections (and did not use suggestions for exploration, interpretations, or action ideas) throughout the entire session. In addition, when the therapist overviewed the model, he or she asked the client whether any one stage should be stressed. Therapists also asked clients to choose the images to be explored and to summarize what they covered in the exploration stage. At the end of sessions, therapists invited clients to talk about their reactions to the session.
In the high-input condition, therapists chose the images to be explored in the exploration stage and provided a summary at the end of the exploration stage. In addition to using probes, restatements, and reflections throughout the session, therapists offered at least one to two ideas for exploration of the dream (i.e., possible feelings, associations, etc., using “If it were my dream, I would feel ____” or “If it were my dream, I would associate ____”), one to two interpretations in the insight stage, and one to two action ideas in the action stage. At the end of sessions, therapists encouraged clients to carry out the action ideas.

Postsession Data

After sessions, clients completed the SES, GDI, TP Change, and self-efficacy measures in a random order.

Manipulation Check

After listening to the entire audiotape (for which condition was masked), two judges made a decision about whether the session was low or high input. If the two judges disagreed, one or two additional judges listened to the tape. Sessions were only retained if two of three judges or three of four judges accurately categorized the condition. The judges also rated the overall level of therapist input (as indicated by therapists choosing the images to be explored, suggesting how they might feel if it were their dream, offering interpretations, and suggesting action ideas) using a 9-point scale ranging from 1 (low input) to 9 (high input). The average among judges was significantly lower for the low-input condition \( (M = 3.10, SD = 1.39) \) than for the high-input condition \( (M = 7.19, SD = 0.76) \), \( t(71.38) = 17.24, p < .001 \), \( d = 2.62 \), using a \( t \) test for unequal variances (Levene’s test indicated that the variance was higher in the low-input condition than in the high-input condition, \( F[1, 84] = 4.05, p < .05 \)).

Selection of Final Cases

Of the 95 sessions conducted, 3 were dropped because of nonadherence and 4 were dropped because of incomplete data. Hence, 88 sessions (47 low input and 41 high input) were retained for the analyses.

RESULTS

Preliminary Analyses

Means and standard deviations for all measures are shown in Table 1. In addition, correlations among all measures are shown in Table 1. A multivariate analysis of variance conducted for therapist effects across all four outcome variables was not significant (Wilks’s \( \lambda = .727 \), \( p = .16 \), \( \eta^2 = .077 \)), and none of the
univariate analyses for outcome variables were significant—TP Change, \( F(5, 82) = 1.30, p = .27 \), SE Change, \( F(5, 82) = 2.23, p = .06, \) GDI, \( F(5, 82) = 0.86, p = .51 \)—so therapist effects were not considered in the remainder of the analyses.

Prediction of Outcome

Two hierarchical regression analyses were performed for each outcome variable. Predictors were entered in the following sequence: (a) dream salience, initial target problem functioning, and initial self-efficacy for working with dreams; (b) attachment anxiety; (c) Asian values; and (d) treatment condition. The final step for the first regression analysis involved the interaction between attachment anxiety and treatment condition; the final step for the second regression analysis involved the interaction between Asian values and treatment condition. No other interactions were tested because of limited statistical power and because they were of less interest to the present study. Dream-related variables were entered first because they accounted for significant variance in session outcome in Hill et al. (2006) and because we wanted to determine whether attachment anxiety, Asian values, and treatment condition and the interactions added above and beyond dream-related variables. We added attachment anxiety second because attachment develops early in life. We added Asian values third because we assumed that values develop over the life span. We added the treatment condition next because this was the experimental manipulation. Finally, we added the interaction effects after the main effects, as is typical in regression analyses.

The main effects were tested with a significance level (alpha) of .05. Because there tends to be less statistical power for testing interactions, particularly in field studies, Cohen (1988) suggested that researchers should “entertain the possibility of setting, a priori, larger \( \alpha \) values for the interaction tests than for the tests of main effects, usually .10 rather than .05” (p. 375). Thus, all interactions in the current study were tested using a .10 significance level. To reduce the possibility of
multicollinearity, the attachment anxiety and Asian values scores were mean centered before interaction terms were created.

Table 2 shows the results of the hierarchical regressions. The first three

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Note. Values of $B$, $SE$, $B$, and $\beta$ are derived from the last step of each regression analysis. TP = target problem; TX = treatment condition (low input vs. high input).

*a* $p = .054$ for this step, *b* $p = .076$ for this step.

*p < .05, **p < .01, ***p < .001.
columns of data show the statistics for the addition of each step. The last three columns show the statistics for each individual predictor variable controlling for all the others (at Step 5).

For self-efficacy change, Step 1 (dream salience, initial target problem functioning, and initial self-efficacy for working with dreams) was significant. After controlling for the other variables, initial level of self-efficacy was the only significant predictor. Hence, people who initially had low self-efficacy gained the most self-efficacy for working with their dreams.

For TP Change, Step 1 (dream salience, initial target problem functioning, and initial self-efficacy for working with dreams) was significant, and Step 5 (Attachment Anxiety × Treatment Condition) was significant \((p = .054)\). After controlling for the other variables, then, initial target problem functioning, initial levels of self-efficacy, and Attachment Anxiety × Treatment were significant. To test the interaction, we conducted a post hoc test. After controlling for predictors entered in the earlier steps (i.e., dream salience, initial target problem functioning, initial self-efficacy, and Asian cultural value), the partial correlation between attachment anxiety and TP Change was .28 for the low-input condition and \(-.20\) for the high-input condition. After transforming these partial correlations into Fisher’s \(z\) values, the difference was significant \((z = 2.66, p < .05)\). Hence, more anxiously attached clients changed more on the target problem than did less anxiously attached clients in the low-input condition, whereas less anxiously attached clients changed more than did more anxiously attached clients in the high-input condition.

For SES, Step 1 (dream salience, initial target problem functioning, and initial self-efficacy for working with dreams) and Alternative Step 5 (Asian Values × Treatment Condition) were significant. After controlling for the other variables, significance was found for initial target problem functioning, initial level of self-efficacy, and the Asian Values × Treatment Condition interaction. To test the interaction, we conducted post hoc tests (as above). The partial correlations between Asian values and SES were \(-.23\) for the low-input condition and \(.28\) for the high-input condition; the difference was significant \((z = 2.28, p < .05)\). Hence, in the low-input condition clients with low Asian values evaluated sessions more positively than did clients with high Asian values, whereas in the high-input condition clients with high Asian values rated sessions more positively than did clients with low Asian values.

For GDI, Step 1 (dream salience, initial target problem functioning, and initial self-efficacy for working with dreams) and Step 5 (Attachment Anxiety × Treatment) were both significant. After controlling for the other variables, initial target problem functioning, initial levels of self-efficacy, and the Attachment Anxiety × Treatment Condition interaction were significant. To determine the nature of the interaction, post hoc analyses were conducted (as above). The partial correlation between attachment anxiety and GDI was \(.25\) for the low-input condition and \(-.33\) for the high-input condition; the difference was significant \((z = 2.66, p < .01)\). Hence, in the low-input condition more anxiously attached clients had higher GDI scores than did less anxiously attached clients, whereas in the high-input condition less anxiously attached clients had higher GDI scores than did more anxiously attached clients.
DISCUSSION

In this study of single dream sessions in which East Asian therapists offered low or high input to East Asian volunteer clients, we found no overall effects for level of input. We did, however, find that session outcome was related to dream-related variables, the interaction between attachment anxiety and treatment, and the interaction between Asian values and treatment. We discuss these findings next.

Dream-related variables accounted for most of the variance (16% to 57%) in session outcome. Hence, the biggest predictors of session outcome for East Asian clients (and for ethnically diverse clients in Hill et al., 2006) were variables specific to the dreams.

For example, one volunteer client dreamed of being shot by a gunman at her old high school. She felt betrayed because her boyfriend asked the gunman to shoot her instead of shooting him. Using the high-input condition, the therapist helped the client explore five images (high school, boyfriend, gunman, principal, and hospital). She identified the recent sniper attacks in the area as a waking-life trigger for this dream. She explored the idea of her boyfriend protecting and then betraying her and wondered whether she trusted others too much. In the insight stage, the client examined further the issues of trusting and being betrayed in her life. The therapist suggested that the client might be too trusting because she was afraid of being abandoned, but also noted that trusting too much led to the client feeling abandoned. The client agreed and went on to speculate that her abandonment fear was related to her feeling neglected as the middle of three children. The client also suggested that her religious beliefs helped her not be so afraid of death (the gunman in the dream). In the action stage, the client mentioned that she wanted to be more trusting and responded positively to the therapist’s suggestion that she seek counseling at the counseling center on campus.

This client fit the profile of people who profit from dream sessions. Before the session, she was confident of being able to explore and figure out the meaning of the dream (her presession rating on self-efficacy for working with dreams was 7.43 compared with the average of 4.89, $SD = 1.67, d = .66$), and she rated her initial functioning on the problem reflected in the dream (i.e., friendship and trust issues) as 5, which was lower than the average ($M = 6.80, SD = 2.49, d = .72$). Thus, the client’s high self-efficacy for working with dreams and low initial functioning on the target problem reflected in the dream may have provided her with motivation for working on and understanding her dream. Indeed, after the session, she rated her current functioning on the target problem as 12 (up 7 points compared with the average increase of 2.84, $SD = 2.59$). Her postsession score of 8.64 on the GDI was higher than average ($M = 7.07, SD = 1.16, d = 1.35$), although her SES score of 4.40 was no different than average ($M = 4.33, SD = .65, d = .11$).

The finding for the predictive power of retrospectively rated initial functioning on the target problem is similar to results found by Hill et al. (2006) for a mixed-ethnicity sample, indicating the importance of this variable across diverse samples. In addition, our new measure of self-efficacy for working with dreams predicted all four outcomes. These findings make sense given that, especially in a single session, clients need to feel that they can do the task of the session. These findings support the extensive literature on self-efficacy (see Bandura, 1969, 1997). Interestingly, we did not replicate the findings of Hill et al. (2006) for the predictive
power of dream salience in predicting session outcomes in the regression analyses. Given the significant correlation between dream salience and three of the four outcomes in the bivariate correlations, however, a more compelling explanation is that dream salience was related to session outcomes but did not add significantly to the prediction of outcomes above and beyond the other variables.

Our findings suggest that East Asians did not all respond similarly to therapist input. Specifically, it may be individual differences such as attachment anxiety and Asian values rather than therapist input that determine how East Asians will respond to dream work.

When clients showed higher levels of attachment anxiety, they changed more on the target problem reflected in their dreams and reported more gains from dream interpretation in the low-input condition. Hence, if clients fear being rejected, neglected, or abandoned, it may be better for therapists to encourage clients to come to their own interpretations and action ideas. In contrast, clients with lower levels of attachment anxiety changed more in the high-input condition, which suggests that they may profit more from therapist input. Perhaps such clients trust that the therapist will be there for them and can thus focus more on the content of the therapist input rather than on the uncertain interpersonal aspects of the therapeutic relationship. The results seem consistent with Hardy et al.’s (1999) findings that therapists responded to clients who had a preoccupied attachment style (usually high in attachment anxiety) with more affective and supportive interventions and to clients with a dismissing attachment style (usually low in attachment anxiety) with interpretations and more cognitive interventions.

In addition, clients with high Asian values evaluated sessions more positively in the high-input condition, suggesting that clients who value the traditional Asian values of collectivism, conformity to norms, emotional self-control, family recognition through achievement, and humility liked sessions better when therapists were more active. In contrast, clients with low Asian values evaluated sessions more positively in the low-input condition, suggesting that they preferred coming to their own interpretations and action ideas. Note that these results were for session evaluation rather than for the more behavioral measures of perceived gains or target problem change, suggesting that Asian values influenced comfort rather than behavior change. These results fit with the suggestions in the literature that Asian Americans prefer directive counseling (Kim et al., 2003; Kim & Atkinson, 2002).

**Limitations**

Because clients and therapists were all of East Asian descent, the findings related to attachment anxiety and Asian values should be generalized to other populations with caution. We have more confidence in the findings related to the dream-related variables given that they replicate Hill et al. (2006). In addition, we used volunteer clients who participated in single audiotaped dream sessions, so generalization to ongoing therapy is premature.

We must also be cautious about the interpretation of the findings with the retrospective preratings of the target problem given that clients did these ratings after the 90-min session; their opinions were probably somewhat different than they would have been before the session. We would note, however, that it is not possible
to obtain ratings before dream sessions because many clients do not know the meaning of their dream before working on them in sessions.

Finally, therapists were aware of the hypotheses and did both conditions, which controlled for therapist effects but could raise concerns about allegiance effects. We felt justified in this design because an equal number of therapists preferred the low- and high-input conditions, all were carefully trained, and only those sessions that were consistent with the assigned condition (as judged by external judges) were used, but we note it as a possible limitation.

**Implications for Practice and Research**

In conjunction with the findings of Tien et al. (2006), these results suggest that dream work with East Asians is a viable therapeutic venture, although of course results need to be replicated within ongoing therapy. The finding that dream-related variables were most strongly correlated with session outcomes suggests, however, that therapists should use dream work only when East Asian clients report troublesome dreams and have self-efficacy for working with their dreams. Another implication is that therapists should be cautious about using a lot of input with East Asian clients who are high on attachment anxiety. Such clients may benefit more from having therapists support them and encourage them to come up with their own ideas than from therapists offering interpretations and action ideas. On the other hand, therapists might want to consider giving more input to clients who have high Asian values because these clients are more likely to expect therapists to give input, although therapists should be aware that preference for high input does not necessarily translate to benefit from high input.

In terms of future research, this study could be replicated on an Asian sample in Asia, with Asian clients with therapists of other ethnicities, or with samples other than East Asian clients and therapists. Researchers also might examine the process of dream sessions in ongoing therapy with clients of different levels of attachment anxiety and Asian values.

**REFERENCES**


