Therapeutic Alliance Mediates the Effect of Directive Treatment on Subsyndromal Depression for Asian and European American Students

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Abstract

Objective: The therapeutic alliance has long been advanced as a common factor for improving outcomes across psychotherapies. Directive therapies appear to lead to stronger therapeutic alliance, with some evidence suggesting that directive strategies are particularly effective for East Asian populations. In the present study, we examined the role of therapeutic alliance as a mediator of the effect of a brief directive intervention on depression, and explored whether ethnicity and cultural values moderated this relationship. Methods: Eighty Asian and European American college students with subsyndromal depression were randomly assigned to a directive or non-directive treatment session. Depression was assessed at pre-treatment and at 1-month and 6-month follow-up, and alliance was assessed immediately after the treatment session. Results: As predicted, therapeutic alliance mediated the relationship between directive (vs non-directive) treatment and reduced depression at both follow-up periods. However, ethnicity and cultural values did not moderate mediation effects at either time point. Conclusions: Results from this study provide support for the importance of the therapeutic alliance for European American and Asian American populations, even in a brief, one-session intervention. Because there were no ethnic or cultural differences in the mediating role of therapeutic alliance, this might suggest the universal importance of alliance across diverse clinical populations.

Keywords: therapeutic alliance; directiveness; subsyndromal depression; Asian Americans; acculturation

Public Significance Statement: This study investigated the therapeutic alliance as a mechanism of change explaining directive treatment effects with Asian and European Americans. Alliance mediated therapeutic effects across ethnic and cultural identities, suggesting its universal importance across diverse populations.
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The therapeutic or working alliance has been defined as the affective and mutually collaborative bond between patient and practitioner (Arnow & Steidtmann, 2014). Many therapies have emphasized the importance of a strong therapeutic alliance since the emergence of Rogerian therapy in the 1940s, which centered around concepts such as genuineness, unconditional positive regard, and therapist empathy (Rogers, 1957). Indeed, meta-analytic research across hundreds of studies shows a moderate, but robust association between therapeutic alliance and symptom reduction (Horvath et al., 2011; Flückiger et al., 2020). Although alliance effects hold across a diverse array of studies (Green, 2005; Horvath et al., 2011; Krupnick, et al., 1996), there is some debate about the role of treatment modality on the therapeutic alliance.

Specifically, treatment directiveness (i.e., a structured approach to conducting therapy sessions) appears to have an effect on therapeutic alliance, although research shows conflicting results. Some studies find that directive therapies, such as cognitive behavioral therapy, lead to more positive therapist-client relationships than non-directive therapies (Loeb et al., 2005; Wettersten et al., 2005). Other studies find that fundamental components of non-directive therapies, such as affirmation, mutual understanding, and egalitarian relationships are related to stronger working alliances (Ackerman & Hilsenroth, 2003; Al-Darmaki & Kivlighan, 1993). Yet, meta-analyses of randomized controlled trials (RCTs) reveal no significant relationship between therapy type and therapeutic relationship (Flückiger et al., 2012; Flückiger et al., 2018).

Prior research suggests that Asian Americans prefer and benefit more from directive therapies over non-directive therapies (Atkinson et al., 1978; Cao, 2008; Kuo et al., 2011; Li &
Kim, 2004; Shonfeld-Ringel, 2001; Waxer, 1989). These preferences might be rooted in East Asian cultural imperatives to attend to hierarchy in social relations and defer to those in positions of power (Chen & Davenport, 2005; Hodges & Oei, 2007; Lin, 2002). Consequently, therapists who effectively assert their authority during a session might appear more credible and trustworthy to Asian American patients, leading to a stronger working alliance (Kim et al., 2002), which might in turn increase treatment engagement and efficacy (Pan et al., 2011).

However, the data is mixed for European Americans. Some studies show that European Americans prefer non-directive strategies (Miller et al., 1993; Lee & Mixson, 1995; Waxer, 1989) and that client-centered therapies are efficacious with this group, even when compared to directive therapies such as CBT (e.g., Carlbring et al., 2010; Stiles et al., 2008; Stiles et al., 2006). In contrast, other evidence shows that directive (vs. non-directive) therapies are in fact more effective with predominantly European American samples (e.g., Barbe et al., 2004; Stoffers et al., 2012; Yulish et al., 2017).

To address discrepancies in the literature, the present study investigated the role of therapeutic alliance in the efficacy of directive (vs. non-directive) treatment with two different ethnic groups. Specifically, we explored whether therapeutic alliance mediated the relationship between treatment condition and symptom reduction in an intervention trial for subsyndromal depression with Asian and European Americans. In the original trial, Pan et al. (2019) examined differences in outcomes between directive and non-directive therapeutic styles. Although they found intervention effects on working alliance, questions regarding the subsequent effects of alliance on depressive symptoms were not addressed. We hypothesize that working alliance will mediate the relationship between directive (vs. non-directive) therapy and depression outcomes at 1-month and 6-month follow-up. In addition, given evidence for the differential effectiveness...
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of directiveness for Asian vs. European Americans (Pan et al., 2019), and emerging evidence that therapeutic processes can vary across cultural groups (e.g., Sayegh et al., 2019), we expect ethnicity to moderate the mediating effects of alliance on the relationship between treatment style and depressive outcomes. In particular, we expect the mediating effects of alliance to be stronger for Asian Americans than for European Americans.

However, treating Asian Americans as a single, homogeneous group can be problematic, as generational status, acculturation, and cultural values can impact behaviors and cognitions (Atkinson et al., 1990; Gim et al., 1991; Gim et al., 1990). For example, less acculturated Asian Americans with greater adherence to East Asian cultural values view authority figures as more credible than highly acculturated Asian Americans (Atkinson et al., 1990), suggesting that the effectiveness of directive treatment with Asians may vary depending on cultural values. Other research shows that variations in adherence to East Asian cultural values may affect outcomes for European Americans as well (Park & Kim, 2008; Wang & Huey, 2020). As a result, we expect that cultural values will also moderate mediation effects, such that working alliance effects will be strongest for participants who adhere most to East Asian cultural values, regardless of ethnic background. To our knowledge, no other studies have assessed whether alliance as a treatment mechanism varies as a function of ethnicity and cultural identity.

Method

Participants

The current study is a secondary analysis of a randomized trial comparing brief directive and non-directive treatments for subsyndromal depression in Asian and European Americans (Pan et al., 2019). Participants were 18 years of age or older, self-identified as either Asian or European American, and fluent in English. The mean age of participants was 21.6 years, and
they were primarily female (78.8%). Of those who identified as Asian American, the majority were bilingual (82.5%); 70% were Chinese, 10% Korean, 7.5% Taiwanese, 5% Vietnamese, and 7.5% other Asian. In addition, participants had to score between 14-28 on the Beck Depression Inventory (BDI), which is indicative of subsyndromal depression. All demographic information was collected at baseline (see Pan et al. [2019] for additional screening, inclusion, and exclusion criteria).

Ultimately, 120 participants (60 Asian American and 60 European American) were randomly assigned to one of three conditions: Directive intervention (DI), non-directive intervention (NI), or placebo control. Participants were assessed immediately prior to treatment (T1), one month later (T2), and six months following the intervention (T3). Informed consent was obtained for all participants. Because our primary interests were in the directive vs. non-directive comparison, we excluded the control condition from this study, and thus included only participants from the two active conditions (40 Asian Americans, 40 European Americans) in our mediation analyses.

**Treatment Conditions**

Based on guidelines delineated by Geisner et al. (2006), our intervention consisted of psychoeducation and tailored feedback addressing participants’ baseline depression and coping (Pan et al., 2019). Participants received a single, 20-minute treatment session conducted by master’s level psychology graduate students at a university clinic. Similar forms of brief, one-session interventions have been found to be effective in reducing symptom severity across diverse studies (e.g., Luciano et al., 2019; Pan et al., 2011; Samson & Tanner-Smith, 2015).

For our study, the only difference between the conditions related to the therapist’s intervention style. In the DI condition, therapists utilized predominantly directive strategies, such
as guiding the conversation, giving instructions, clarifying for specifics, and making interpretations (Atkinson & Matsushita, 1991; Hagebak & Parker, 1969; Li & Kim, 2004).

Conversely, in the NI condition, therapists utilized predominantly non-directive strategies, such as allowing the participant to guide the conversation, probing for affect, reflecting emotions, and restating (Atkinson & Matsushita, 1991; Hagebak & Parker, 1969; Li & Kim, 2004). Fidelity to treatment conditions was assessed by independent coders who rated the sessions for directive or non-directive content employed by the therapists. As expected, the DI condition was rated as significantly more directive than the NI condition, \( t(43) = 8.73, p < .01 \), and the NI condition as significantly more nondirective than the DI condition, \( t(43) = -3.59, p < .01 \).

**Measures**

*Working alliance*

Participants completed the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) immediately after the treatment session. The short form of the WAI (Falkenström et al., 2015; Hatcher & Gillaspy, 2006) consists of 12 questions assessing therapist-client alliance on a 7-point scale, with higher scores indicating a stronger working alliance. Sample questions include “We agree on what is important for me to work on” and “I believe the way we are working with my problem is correct.” The WAI has good convergent, discriminant, and predictive validity, and reliability (Horvath & Greenberg, 1989; Munder et al., 2010).

*Depression*

Participants completed both the Beck Depression Inventory (BDI) and the DSM-IV-based Depression Scale (DDS) at T1, T2, and T3. The BDI is a 21-item inventory assessing the frequency and severity of depressive symptoms (e.g., “sadness,” “loss of pleasure”, “past failure”) on a 4-point scale ranging from 0 to 3 (Beck, 1961). The BDI has good convergent,
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divergent, and construct validity, and internal consistency (Segal et al., 2008; Steer et al., 2000).
The DDS assesses all symptoms of major depressive disorder (MDD) as listed in the DSM-IV on
a 5-point scale, with higher scores indicating more severe depression (Cox & Enns, 1995; Cox et
al., 1999). Sample symptoms include “feeling depressed or down” and “feeling irritable or
angry.” The DDS has good convergent validity with the BDI (Geisner et al., 2006).

**Acculturation**

Participants completed the Asian American Values Scale-Multidimensional (AAVS-M; Kim et al., 2005) at T1. The AAVS-M is a 42-item scale measuring the degree to which
individuals adhere to East Asian traditional values on a 7-point scale. Sample items include
“one’s personal needs should be second to the needs of the group” and “the welfare of the group
should be put before that of the individual.” The AAVS-M demonstrates good validity and
reliability (Kim et al., 2005; Hong et al., 2005).

Participants also completed the 25-item European American Values Scale for Asian
Americans—Revised (EAVS-R; Hong et al., 2005) at T1. This scale measures participants’
adherence to European American values (e.g., “You can do anything you put your mind to” or
“A student does not always need to follow the teacher’s instructions”) on a 4-point scale, and
demonstrates good psychometric properties (Hong et al., 2005).

**Results**

**Preliminary Analyses**

As expected, Asian Americans scored significantly higher than European Americans on
the AAVS-M, \( t(78) = 2.25, p = .03 \), and European Americans scored higher than Asian
Americans on the EAVS-R, \( t(78) = -3.06, p < .01 \). Of the 80 participants, 95% completed the 1-
month follow-up assessment, and 65% completed the 6-month assessment. There were no
significant differences in initial depression or working alliance ratings between follow-up completers and those lost at follow-up.

The two depression variables were significantly correlated at T1, $r = .53, p < .01$, T2, $r = .90, p < .01$, and T3, $r = .93, p < .01$. Thus, to simplify analysis and interpretation, we combined BDI and DDS scores at each assessment period by standardizing both variables then averaging to create a composite “Depression” variable\(^1\). Table 1 displays the means and standard deviations by condition for the WAI, AAVS-M, and EAVS-R at T1, and composite depression at T1, T2, and T3.

**Mediation Analyses**

First, we assessed the mediating role of working alliance on the relationship between treatment condition (directive vs. non-directive) and T2 depression (Figure 1), controlling for T1 depression. As recommended by Preacher and Hayes (2008), we performed a bootstrapped mediation analysis with 5000 iterations of random sampling with replacement, using the PROCESS macro for SPSS (Hayes, 2012). The effect of treatment condition on working alliance (path $a$), $B = .53$, $t(72) = 2.83$, $p = .006$, and the effect of working alliance on T2 depression (path $b$), $B = -.44$, $t(71) = -3.88$, $p = .0002$, were both significant. However, there was no direct effect of condition on T2 depression (path $c$), $B = -.05$, $t(71) = -.23$, $p = .82$.

Although traditional requirements for mediation require paths $a$, $b$, and $c$ to be significant in order for mediation to occur (Baron & Kenny, 1986), many statisticians now agree that a significant direct effect (path $c$) is unnecessary for mediation. Instead, the focus has shifted towards the indirect effect of the independent variable on the dependent variable through the

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\(^1\) Additional analyses revealed that separating composite depression into BDI and DDS outcome variables yields no differences in results.
mediator, or \( ab \) (Hayes & Rockwood, 2017; Zhao et al., 2010). Based on Hayes and Rockwood’s (2017) mediation framework, the test of the indirect effect was significant, \( a*b = -0.26, SE = 0.12, CI_{95\%} = [-0.56, -0.08] \). In addition, the effect size, assessed using the partially standardized indirect effect, was significant, \( ab_{ps} = -0.27, SE = 0.12, CI_{95\%} = [-0.53, -0.07] \), indicating that working alliance mediated the relationship between condition and T2 depression.

We also assessed whether working alliance mediated the relationship between condition and T3 depression, again using the PROCESS macro for mediation, bootstrapped 5000 times (Figure 2). The effect of treatment condition on working alliance (path \( a \)), \( B = 0.53, t(49) = 2.34, p = .02 \), and the effect of working alliance on T2 depression (path \( b \)), \( B = -0.40, t(48) = -2.52, p = .015 \) were both significant. Similar to T2, the direct effect of treatment condition on T3 depression (path \( c \)) was not significant, \( B = -0.06, t(48) = -0.22, p = .83 \), but the indirect effect via bootstrapping was, \( a*b = -0.21, SE = 0.13, CI_{95\%} = [-0.59, -0.03] \). The partially standardized indirect effect was also significant, \( ab_{ps} = -0.22, SE = 0.14, CI_{95\%} = [-0.59, -0.03] \), indicating that working alliance mediated the relationship between condition and T3 depression.

A moderated mediation analysis was conducted to assess whether the mediating role of alliance differed between Asian and European Americans, using the PROCESS macro for SPSS (Hayes, 2012). When bootstrapped for 5000 iterations, no significant moderated mediation effect of ethnicity was found at T2 or T3 (with T1 depression as a covariate), \( CI_{95\%} = [-0.69, 0.14]; [-0.89, 0.08] \). Finally, we tested for cultural values as a moderator, but found no significant difference in the mediating effects of alliance by AAVS-M scores, \( CI_{95\%} = [-0.17, 0.17]; [-0.27, 0.07] \), or EAVS-R scores, \( CI_{95\%} = [-0.07, 0.02]; [-0.04, 0.04] \), at either time period.

**Discussion**
In the current study, we examined the mediating role of therapeutic alliance on the relationship between directive treatment and outcome in Asian and European Americans with subsyndromal depression. As hypothesized, we found that directive (vs. non-directive) therapy led to higher alliance, which in turn lead to decreased depression, suggesting that directive therapy has an indirect effect on depression through the alliance pathway. These results are consistent with previous literature showing that directiveness is associated with improvements in the working alliance between therapist and client (Loeb et al., 2005; Wettersten et al., 2005), and that a stronger alliance predicts better therapy outcomes (Barber et al., 2002; Loeb, et al., 2005; Zilcha-Mano et al., 2014).

Despite evidence that longer treatments are related to stronger therapeutic alliance and better outcomes (Eaton et al., 1998; Erekson, 2013; Falkenstrom et al., 2013; Howard et al., 1986), our results indicated that higher alliance ratings were related to positive outcomes, even in the context of a single 20-minute session. This illustrates the importance of establishing rapport between therapist and patient in brief or limited-time therapies, and further supports the idea of working alliance as a critical element in effective treatments, regardless of length.

Contrary to our hypothesis, however, there were no significant differences in mediation effects between Asian and European Americans. Previous literature shows that Asian Americans benefit more from directive treatment approaches than non-directive ones (Li & Kim, 2004; Shonfeld-Ringel, 2001; Atkinson et al., 1978; Waxer, 1989), whereas findings are mixed for European Americans (Krupnick et al., 1996; Miller et al. 1993; Lee & Mixson, 1995; Waxer, 1989; Barbe et al., 2004), suggesting that directiveness may be an approach with particular salience for Asian Americans (Huey & Pan, 2006; Huey & Tilley, 2018; Pan et al., 2011). As a result, we expected that the mediating effect of alliance on the relationship between directiveness
and outcome would differ by ethnicity, such that mediation effects would be stronger for Asian vs. European Americans. However, our analyses found that alliance mediated the relationship between directive therapy and depression across ethnic groups.

In addition, we hypothesized that cultural values would moderate the mediating effects of alliance on outcome. There is evidence that adherence to East Asian cultural values can impact the behaviors and cognitions of both Asian and European Americans (Atkinson et al., 1990; Gim et al., 1990; Gim et al., 1991; Park & Kim, 2008). As a result, we expected that working alliance effects would be stronger for those who adhere more to East Asian values than for those who adhere less. But contrary to expectations, we found no significant moderating effect of cultural values. This suggests that working alliance is a significant mechanism across all participants, regardless of ethnicity or cultural identity.

Many researchers advocate for cultural competence when working with clients of diverse backgrounds, because cultural competence can improve working alliance, which in turn may improve clinical outcomes (e.g., Asnaani & Hofmann, 2012; Vasquez, 2007). However, few studies have examined the therapeutic alliance as a mechanism for improving treatment outcomes with cross-cultural samples (Flicker et al., 2008; Zeber et al., 2008). As noted earlier, this is the first study to examine the alliance as a potential treatment mechanism with two distinct cultural groups. Meta-analyses have found working alliance to be associated with positive outcomes across diverse studies (e.g., Flückiger et al., 2012; Horvath et al., 2011), and our results lend further support to arguments regarding the universal benefits of alliance.

However, our study only included Asian and European American participants with subsyndromal levels of depression, and it is unclear whether our findings generalize to other
ethnic groups or to clinical populations. Future studies should more thoroughly investigate the role of therapeutic alliance in treatment outcome studies with diverse ethnic and clinical samples.
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Table 1

Means and Standard Deviations for Working Alliance and Depression by Condition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time Point</th>
<th>DI</th>
<th></th>
<th>NI</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Working Alliance</td>
<td></td>
<td>63.20</td>
<td>10.02</td>
<td>56.97</td>
<td>11.26</td>
</tr>
<tr>
<td>AAVS-M</td>
<td></td>
<td>173.68</td>
<td>23.21</td>
<td>173.00</td>
<td>24.15</td>
</tr>
<tr>
<td>EAVS-R</td>
<td></td>
<td>72.75</td>
<td>4.98</td>
<td>72.50</td>
<td>5.67</td>
</tr>
<tr>
<td>Depression Composite</td>
<td>T1</td>
<td>.01</td>
<td>.81</td>
<td>.07</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>-.16</td>
<td>.80</td>
<td>.17</td>
<td>1.21</td>
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<tr>
<td></td>
<td>T3</td>
<td>-.11</td>
<td>.92</td>
<td>.24</td>
<td>1.17</td>
</tr>
</tbody>
</table>

Note. Unstandardized scores are reported for working alliance, AAVS-M, and EAVS-R. Standardized scores are reported for depression composite.
Figure 1

*Depiction of the mediation of working alliance between treatment and depression at T2.*

\[ B = .53^{**} \]

\[ B = -.44^{***} \]

\[ B = -.3 \]

*** $p < 0.001$.

** $p < 0.01$.

* $p < 0.05$. 
Figure 2

Depiction of the mediation of working alliance between treatment and depression at T3.

\[ B = 0.55^* \]

\[ B = -0.40^* \]

\[ B = -0.06 \]

*** \( p < 0.001 \).
** \( p < 0.01 \).
* \( p < 0.05 \).