The Pennsylvania State University

The Graduate School

THE LINK BETWEEN BASELINE SUICIDALITY AND ALLIANCE THROUGH CLIENT MODERATORS: THE ROLE OF RACE AND ETHNICITY, GENDER, AND SEXUAL ORIENTATION

A Thesis in

Psychology

by

Katherine Davis

Submitted in Partial Fulfillment

of the Requirements

for the Degree of

Master of Science

August 2021

The thesis of Katherine Davis was reviewed and approved by the following:

Louis G. Castonguay

Professor of Psychology

Thesis Adviser

Jose A. Soto

Associate Professor of Psychology

Jeffrey A. Hayes

Professor of Education (Counselor Education)

Professor of Psychology

Kristin A. Buss

Professor of Psychology and Human Development and Family Studies

Psychology Department Head

Abstract

The therapeutic alliance has emerged as a transtheoretical clinical predictor, accounting for 7.5% of variance in psychotherapy outcomes. Suicidal clients face a unique risk when it comes to alliance formation as alliance is an inherently interpersonal construct and suicidality is often accompanied by deficits in interpersonal variables. Members of marginalized racial/ethnic, gender, and sexual minority groups also tend to face unique disparities when it comes to mental health process and outcome, specifically regarding alliance formation, because of a variety of interpersonal factors. This study examines whether there is an association between suicidality and alliance and whether that potential association varies as a function of marginalized identity in a college student population. Presence of suicidality at baseline was negatively associated with average alliance scores, showing that clients who presented for treatment with any level of suicidality had lower average alliance scores with their therapist at their first session than clients who had no level of suicidality. Membership in a marginalized identity group did not moderate the negative association between suicidality and alliance. However, a significant main effect between marginalized status and alliance was observed. Secondary analyses revealed a significant simple effect of marginalized race/ethnicity on average alliance score. Overall effect sizes were very small, possibly due to limited range of the alliance instrument. Potential clinical implications of these findings are discussed.

Keywords: therapeutic alliance, disparities, marginalization, social identities, suicidality, psychotherapy outcome, collegiate mental health

Table of Contents

List of Tables

List of Figures

Introduction

The therapeutic alliance, generally defined as agreement on tasks and goals of therapy in the presence of a collaborative and affective bond between therapist and client (Bordin, 1979), has emerged as a transtheoretical predictor of outcome. A recently updated meta-analysis of 306 studies supported this relationship across populations, treatments, and conditions, with alliance accounting for 7.5% of the variance in psychotherapy outcomes (Flückiger et al., 2019). What has received less attention, however, are the client characteristics which impact alliance formation before treatment has begun. Variation in clients' abilities to form strong alliances can be due to certain characteristics which aid or disrupt establishment of a strong relationship (Constantino et al., 2010). Understanding the predictive potential of these client characteristics is therefore critical to case formulation and treatment planning.

Examining clients' pre-treatment characteristics may be particularly warranted considering clinicians' questionable ability to forecast their clients' outcomes. Because empirical evidence suggests that clinicians are inconsistent at predicting who will deteriorate during treatment (Hannan, Harmon, Smart, & Sutton, 2005), it might indeed be beneficial to have access to information that will help them anticipate which clients will meet challenges in forming an alliance, as they may then be able to reduce the potential impact of poor alliance on other aspects of mental health process and outcome.

Identifying clients who are at risk for weak alliance even before the beginning of therapy may also encourage therapists to pay particular attention to individual components of the alliance, such as the establishment of the bond, and to mutual agreement and review of goals and tasks. Such therapeutic focus, irrespective of the therapist's theoretical orientation, may increase client motivation, expectation, and engagement in therapy, which in turn could reduce the probability of drop-out and poor outcomes (Swift et al., 2012).

Client Characteristics Relevant to Alliance Formation

A limited number of client variables have been identified as predictors of the alliance in previous empirical work. For example, a recent meta-analysis found that clients who are more severely distressed at intake were more likely to form a poor alliance, as defined by the presence of alliance ruptures (Larsson et al., 2018). In a study conducted with clients presenting for depression, anxiety, and personality disorders in an outpatient setting, Hersoug et al. (2013) found that the tendency to establish certain patterns of relationships, clients' expectancies for outcome, and personality pathology all predicted early alliance. Specifically, good interpersonal relationship tendencies were associated with higher alliance quality, higher expectancy scores predicted stronger early alliance, and patients with more personality pathology yielded poorer early alliance quality. Attributes like these could be gathered routinely at baseline and may be practically useful to providers.

As the therapeutic alliance is an inherently dyadic construct, it seems that other variables which also disrupt or negatively impact interpersonal connection may be associated with its formation. Suicidality may be an especially pertinent predictor in the formation of the alliance, given both its clinical relevance and its connection to interpersonal disruption. Loneliness, social withdrawal, interpersonal struggle, or absence of significant relationships have long been understood to play a direct role in suicidality within a broad sociological approach (e.g., Trout, 1980). As proposed in the interpersonal theory of suicide (Joiner, 2007), social isolation is the most consistent and robust risk factor for suicide. According to this model, perceived burdensomeness and thwarted belongingness increase the risk of suicidality when simultaneously present, especially if the individual believes that these factors are unlikely to change (Van Orden et al., 2010).

As part of a systematic review, Dunster-Page et al. (2017) reported that four studies found a strong correlation between strength of alliance and suicidal thoughts, such that stronger alliance at the first session was correlated with lower suicidality at 12- and 24-month follow up, thereby suggesting the importance of developing and reinforcing a therapeutic alliance with suicidal patients. These studies, however, were conducted only in outpatient adults, potentially limiting the generalizability of the findings in terms of client age and treatment settings.

It is well established that young adults have high rates of suicidality, with 10% of college students in particular endorsing serious consideration of suicide (Westefeld et al., 2005; Wilcox et al., 2010). These rates are on the rise, showing slight escalation every year of the past decade (Center for Collegiate Mental Health, 2020). As mentioned above, although previous studies have established that suicidality is linked with poor alliance, these investigations have been focused on general adult populations; it may therefore be important to examine this variable in a college student population.

Marginalized identity status is a client characteristic that may serve an important role in determining the link between suicidality and alliance. Previous research has suggested that clients with marginalized status are likely to face certain hindrances to strong alliance formation. Racial microaggressions, or the experience of both direct and indirect discriminatory communication, have been found to be negatively associated with working alliance in racial/ethnic minority populations (Constantine, 2007; Owen et al., 2011). The working alliances of sexual minority clients have been shown to be weaker in the context of unhelpful situations like distrust and disconnection as shown in the context of a qualitative analysis (Israel et al., 2008). A study by Chao et al. (2012) has also showed a strong association between client-clinician ethnic match and working alliance. However, the current study appears to be the only

investigation that examines whether clients with marginalized status are at risk of forming a poor alliance regardless of therapist demographics. As such, the association between client social identity predictors and working alliance deserves more empirical attention.

There has also been a widely observed relationship between marginalized status and suicidal behavior, which has been explained by isolation, the absence of acceptance, or missing social support system (Bockting, 2008; Goldfried, 2001). For example, surveys of lesbian, gay, bisexual, and transgender (LGBT) individuals in the U.S. have consistently shown an elevated risk for suicidal ideation, attempts, and completed suicides (Almazan et al., 2014; Haas et al., 2010; King et al., 2008).

Mixed findings have emerged with regards to racial/ethnic minorities and rates of suicidality. A study of U.S. college students found that a low detection rate for psychiatric problems leads to elevated rates of suicide attempts particularly with students from ethnic minority backgrounds (Chen et al., 2019). Heightened experiences of prejudice, alienation, stereotypes, and identity confusion can produce chronic adverse mental health effects in these individuals. Similarly, minority stress, or the excessive burden of stress to which stigmatized individuals are exposed, exacerbates rates of mental illness in marginalized communities (Meyer, 2003). However, other research has found no effects for race/ethnicity on suicidality among college students (Hayes et al., 2019). It is thus unclear at this point if and how race/ethnicity is related to suicidality within a college population. Additional research seems indicated to further examine this relationship, as well as to investigate whether belonging to racial/ethnic minorities and other marginalized populations is a potential moderator of the relationship between suicidality and alliance.

Current Study

The current study aims to address gaps in the literature regarding client factors that predict alliance by examining whether pre-treatment suicidality is associated with early alliance quality (measured after the first session), and if this association is moderated by marginalized identity status. The associations these variables have with alliance formation is not yet well understood and deserves more empirical attention. These characteristics, likely information available to clinicians at intake, may provide valuable information for alliance formation and other psychotherapy process and outcome variables.

Because suicidality and alliance has been substantially studied only in a general adult population, utilizing a college population for the current study offers a unique contribution to the existing literature. Furthermore, the study focuses on a college population because it is at risk for rising suicidality, demographically diverse, and treatment-seeking. The study also aims at investigating its empirical questions in a naturalistic setting, i.e., as part of the mental health care routinely provided in a university counseling center. Findings from such natural settings are often more externally valid and applicable than those from controlled settings (Hayes et al., 2016). Specifically, conducting research in routine care may allow for the results to be actionable, by providing empirical support for an assessment of warning signs that providers might be able to incorporate in their day-to-day practice.

The present study examined two hypotheses: a) that clients endorsing suicidality at baseline will report lower overall alliance scores when compared with those who do not and b) that marginalized identity status will significantly moderate the relationship between suicidality and alliance such that the negative association will be stronger for clients with at least one marginalized identity. Although the link with outcome will not be examined in this investigation, substantial evidence shows that early alliance is a robust predictor of treatment gains.

Methods

Participants

All clients in the dataset were treatment-seeking undergraduate and graduate students. The mean age of clients was 21.54 years old (*SD* = 3.23). The majority of participants identified themselves as white (62.96% white and 36.87% non-white), heterosexual or straight (79.79% heterosexual or straight and 20.22% non-heterosexual or straight) women (60.85% selected "Woman", 37.18% selected "Man", 0.99% selected "Transgender", and .99% chose to self-identify past the available options). The indicated current academic status slightly favored seniors on average but was divided evenly for the most part otherwise. Further breakdown of these demographic variables is reported in Table 1.

Measures

Session Alliance Inventory. Clients' perceptions of the alliance were measured using the Session Alliance Inventory (SAI; Falkenström et al., 2015), which is a 6-item alliance measure based on the Working Alliance Inventory – Short form Revised (WAI-SR; Hatcher & Gillaspy, 2006). This short version of the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) was built to be easily administered and completed at each session. Each item is scored on a 6-point Likert-scale ranging from 0 (*not at all*) to 5 (*completely*). Higher scores reflect more positive client ratings of the alliance with their therapist. An overall item score was generated by averaging the six item scores on the SAI, based on results of Falkenström et al. (2015), showing that a general alliance factor accounts for most of the shared variance among the six items. Longitudinal measurement invariance analyses showed excellent internal consistency reliability (between .89 and .94 for the composite sum or mean of the six items in the three original samples

used in Falkenström et al. (2015)). Clients were still included in the case of missing data on the items of their SAI, provided there were fewer than three items missing.

Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62; Locke et al., 2011). Presenting suicidality was captured using the CCAPS-62, a multidimensional measure of psychological symptoms in the college student population with excellent psychometric properties (Locke et al., 2012). For the present study, suicidality (the primary variable of interest) was measured by dichotomizing a single item of the CCAPS-62 item, "I have thoughts of ending my life". Specifically, all responses greater than 0 were collapsed into a positively endorsed response set and all responses of 0 were kept as is to denote the presence or absence of reported suicidality, respectively.

Standardized Data Set. Individuals with a marginalized identity were identified using the Standardized Data Set (SDS; Center for Collegiate Mental Health, 2019), an instrument administered once at intake which measures demographics, cultural identity information, and mental health history. The items on the SDS capturing marginalized identity in constructs of race/ethnicity, gender, and sexual orientation were dichotomized to differentiate between marginalized and non-marginalized clients. Clients endorsing the "White" option on the race/ethnicity item were dichotomized from those who did not. For the item on the SDS indicating gender, clients chose from the following options: "Man", "Woman", "Transgender", and a fourth option to self-identify if none of the first three options accurately captured their gender identity. Clients specifically endorsing either the "Transgender" or "self-identify" option on the gender item were dichotomized from clients who endorsed the "Man" or "Woman" option for inclusion in the marginalized group. Clients endorsing the "Heterosexual / Straight" option on the sexual orientation item were dichotomized from clients who did not. To operationalize the

marginalized status variable, clients indicating that they were non-white, transgender or self-identifying, or non-heterosexual were then grouped into a composite marginalized group.

Clients were included if they indicated marginalized status on one or more of the three identity variables. Given the large discrepancy in sample size between clients who endorsed any one of the marginalized identities and those who did not, all clients who endorsed any marginalized identity were consolidated into one marginalized group. Endorsing multiple marginalized variables carries implications for intersectional experiences. The impact of membership in multiple marginalized groups as opposed to just one is a meaningful and important question, but not one that will be investigated in the current study.

Procedure

This study utilized data collected from a large northeastern university counseling center between June of 2019 and March of 2020. All clients receiving treatment at this center routinely complete a battery of instruments before each session. As part of this battery, the client's report of the alliance refers to the previous session. At least one study using this procedure found the correlation between alliance and outcome to be consistent with the average reported in a previous meta-analysis (Weiss et al., 2014).

To be included in this study, clients had to have completed both a measure for symptoms and a measure for demographics, administered at their first therapy session. They also had to have received at least two sessions of psychotherapy to ensure they could provide an assessment of the alliance of the first treatment session. Examining the quality of overall alliance at the first session was chosen to ensure as little temporal distance as possible between endorsement of suicidality and subsequent alliance formation. These first two inclusion criteria yielded an initial sample of 11,744 students. To be included, clients also had to have data present on all relevant

variables (reducing the sample to 7391 clients), and only those with data at the intended time point were included, i.e., the first session for symptoms and demographic measures and the second session for the alliance. This left 1420 clients as the final study sample size.

Statistical Analyses

The research questions were addressed through multiple linear regression in two models of statistical analyses. Model 1 evaluated the effect of baseline suicidality on first session alliance score by testing the strength of the association between suicidality and average alliance score at the first session. Model 2 assessed marginalized identity status as a moderator variable in the second linear regression model, which tested the interaction between marginalized identity status and average alliance as well as the main effect of marginalized identity status. The following equations represent the two models:

$$Alliance_i = \beta_0 + \beta_1(Suicidality) + \varepsilon_i$$

$$Alliance_i = \beta_0 + \beta_1(Suicidality) + \beta_2(Marg.Id) + \beta_3(Suicidality * Marg.Id) + \varepsilon_i$$

After conducting an a priori power analysis using G*Power 3.1 software (Faul et al., 2009), the suggested sufficient sample size for this study to reach statistical power (1- β) of .80 is 85. Because more than 1,000 participants were included, effect sizes will be used to determine the strength of these relationships in addition to evaluating p values at a threshold of 0.05.

Results

Assessing the association between baseline suicidality and alliance at first session, the first model was significant (b = -0.17, $t(1418)$ = -3.42, p = 0.001, 95% CI [-0.26, -0.71]). Results suggest that, relative to individuals who do not report suicidality at baseline, individuals who do tend to show lower average alliance scores (see means for each group in Table 2). As a predictor, baseline suicidality explained about 0.8% of the variation in average alliance score.

There was also a significant main effect of marginalized group membership on average alliance score (b = -0.14, t(1416) = -2.14, p = 0.03, 95% CI [-0.26, -0.01]), with an overall model fit of R^2 = .003, indicating that clients who belonged to a marginalized group had lower average alliance scores, regardless of suicidality.

The interaction model, in contrast, was not significant, showing that the negative relationship between presenting suicidality and average alliance score was not significantly moderated by inclusion in a marginalized group (b = -0.2, t(1416) = -0.15, p = 0.88, 95% CI [-0.21, 0.18]). Given the significant main effect of marginalized identity status on alliance, post-hoc exploratory analyses were conducted to examine this impact in greater depth by testing two additional models: a moderated association model conducted to appraise the effect at each level of the composite moderator variable and a main effects model. Exploratory analyses found no significant interaction between suicidality and any of the three levels making up the composite variable of "marginalized identity": Race/ethnicity, (b = 0.03, t(1416) = 0.27, p = 0.79, 95% CI [-0.17, 0. 23]; gender, (b = -0.49, t(1416) = -1.37, p = 0.17, 95% CI [-1.19, 0.21]; and sexual orientation, (b = -0.08, t(1416) = -0.67, p = 0.51, 95% CI [-0.32, 0.16].

To assess the unique contribution of each of the three composite variables, each was tested as a predictor variable in the following model:

$$Alliance_i = \beta_0 + \beta_1(Suicidality) + \beta_2(RaceEthn) + \beta_3(Gender) + \beta_4(SexOrien) + \varepsilon_i$$

The means are reported in Table 3. As presented in Table 4, the model showed that the composite variable of marginalized identity was significant only at the level of race/ethnicity (b = -0.12, t(1415) = -2.11, p = 0.04, 95% CI [-0.21, -0.01]), indicating that clients who belonged to a marginalized race/ethnicity (non-white individuals) had lower average alliance scores when compared to non-marginalized clients. However, they did not show a significant difference at the

level of marginalized gender, (b = 0.09, t(1415) = 0.50, p = 0.62, 95% CI [0.26, 0.44] or at the level of marginalized sexual orientation, (b = -0.06, t(1415) = -0.90, p = 0.37, 95% CI [-0.18, 0.07].

Discussion

The present study examined whether baseline suicidality is related to the quality of early alliance, and if such a relationship is moderated by marginalized status with respect to racial/ethnic, gender, or sexual orientation minority status in a college population. Consistent with the first hypothesis, the results suggest that individuals who report suicidality at baseline tend to have lower average alliance scores compared with those who do not. Inconsistent with the second hypothesis, however, the results show that the association between suicidality at baseline and alliance scores did not vary as a function of marginalized status. The results further suggest that members of marginalized identity groups tend to have lower average alliance scores compared with those who are not, although post-hoc analyses suggest that this might only be the case for racial/ethnic minority status. However, it is important to note that the effect size of this relationship was small.

The minimal effect sizes of the significant associations between the predictor variables and the outcome variable of working alliance could be explained by a pronounced ceiling effect (Owen et al., 2016). A boxplot and histogram were inspected to assess such an effect. Indeed, a limited range of overall alliance scores may have attenuated the power of the analyses in both models. As shown by the means reported in Table 3, the average client in the dataset had an overall alliance score of 4.24 (SD = 0.91), which is very close to the maximum score of the instrument.

The significant finding that baseline suicidality is associated with lower alliance, although minimal, is consistent with past research on suicidality and alliance in a non-college population (Dunster-Page et al., 2017). Issues related to social isolation may play a role in this relationship. Perhaps because of interpersonal difficulty, disconnection, or the absence of meaningful relationships, clients who are suicidal may have difficulty in building a bond with their therapist. Social isolation has indeed demonstrated a strong connection with suicidality (Joiner, 2007; Van Orden et al., 2010).

The negative relationship between marginalized status and alliance scores is consistent with past research on the effects of minority stress on mental healthcare process and outcome. However, two out of three marginalized groups (both gender and sexual orientation minority clients) did not show significantly lower overall alliance scores and the effect size for racial/ethnic minority clients was minimal. Past research in college students of marginalized groups has shown variability in conclusions with regard to symptom reduction and other outcomes. In addition to the ceiling effect previously described, certain factors such as the development of resiliency and other coping skills may reduce the risk of poor alliance formation in marginalized client populations (Meyer, 2003). With this being said, although there is no body of evidence showing a direct link between marginalization and lower alliance, many studies have shown that clients undergoing minority stress are more at risk for factors that *do* decrease alliance scores, such as racial microaggressions, distrust, and unhelpful situations (Constantine, 2007; Israel et al., 2008; Owen et al., 2011).

Perhaps there are specific reasons why clients in marginalized groups are at risk for weaker alliance, such as other difficulties or diagnoses. Social isolation may not play a role in this link, as it does for suicidal clients. Instead, the stigma associated with membership in a

marginalized group could be relevant. The post-hoc exploratory analyses show that the link between marginalization status and lower alliance may be particularly potent for racial/ethnic minority clients. These clients may be dealing with intensified stigma, discrimination, and microaggressions, as their identities are more associated with outward appearance like skin color and therefore often more visible than with gender or sexual orientation minority clients. However, it is important to note that the limited number of non-cisgender participants may have also obscured differences between marginalized gender identity and lower alliance scores. Future research will need to explore the mechanisms of the link between marginalized identity and weaker alliance. Considering the small magnitude of such a link in this study, however, it may be beneficial for therapists to acknowledge and take into account the resiliency, support systems, and coping mechanisms that may have prevented a stronger association within the current study.

Lastly, there was no interaction between marginalized identity and suicidality in predicting alliance. Contrary to the second hypothesis, it appears that being marginalized (with regard to race/ethnicity, gender, or sexual identity) does not exacerbate the difficulty that suicidal clients seem to have in establishing a strong alliance early in treatment. While this finding is clinically encouraging, it is possible that the restricted range of the alliance scores observed in this and other studies (see Baldwin & Goldberg, in press) might have prevented the detection of an interaction effect. The most parsimonious interpretation, however, is that while both suicidality and marginalized status are negatively linked with alliance, the potential effects of these variables are independent.

The findings have a number of clinical and training implications. On a general level, results point to the importance of focusing attention on client characteristics that are accessible before the first session as some of them might provide relevant information about the process

and outcome of treatment with particular clients. Pertaining to the findings of this study, knowing which clients are at risk for poor alliance might help clinicians when balancing alliance formation with other elements of treatment. Spending more time on diverse components of alliance formation, for example, communicating empathy and willingness to help, seeking agreement on short- and long-term goals of therapy, or providing clear rationale for treatment focus and intervention, may be warranted depending on the presenting profile of the client.

Given the fact that the alliance is, above all else, an interpersonal construct, its presence in the suicidal client's life as a supportive, nonjudgmental, and stable relationship may be critical in its development. The ability to develop such an alliance might therefore be viewed as a core competency in the care of clients at risk for suicide (Rudd et al., 2008). Supporting this assumption, past research suggests that building a strong therapeutic relationship with clients can have an impact on suicidality (Leenaars, 2006). From these previous findings and the results of the present study, one could tentatively posit that suicidality and the interpersonal struggles that are associated with it can lead to a strained alliance early on in treatment but that a strong alliance can later emerge later due to the heightened need for social support. However, because the present study only examines suicidality and alliance at one time point, further research is needed to clarify the relationship between these two constructs at baseline.

These findings may also have clinical applicability with respect to the therapists, the other halves of the therapeutic dyads. Clients presenting with suicidality at baseline may be in need of a strong alliance and stable relationship with a provider given the possibility that these connections are absent from their lives otherwise. The therapist's ability to offer such clients a safe and responsive confidant might provide a corrective experience to previous interpersonal difficulty. The large body of research on therapist effects might be relevant here, as it has

showed that the skill in establishing and maintaining a positive alliance is a factor that can explain why some therapists are more effective than others (Baldwin & Imel, 2013). It may be that therapists with particularly high alliance scores across their clinical load are more adept at forming collaborative and affiliative bonds with clients who are most at risk. This is supported by the findings showing that therapist effects are more prominent among clients who present with higher severity and impairment; high-risk clients have shown a bigger difference between therapist-level outcomes than low-risk clients (Saxon & Barkham, 2012). Matching more effective therapists with more alliance-vulnerable clients may thus reduce the risk of poor alliances from occurring, which in turn can translate to more client improvement. Further, identifying these therapists will not only assist in training therapists of different levels of experience in fostering good therapeutic relationships but will also help the field to better understand the nature and role of this relationship.

With respect to training, the findings may warrant a sharper focus on alliance-building with at-risk populations in graduate-level clinician development. Supervision that places importance on the foundation and continued support of alliance-building as a clinical strategy with clients who present with suicidality or marginalized identities, while recognizing the unique factors that may attenuate risk for poor alliance, may assist in this focus. Research has shown that structuring a clinical training program using a manual for alliance-fostering therapy, consisting of alliance-focused workshops and supervision, is a useful and effective method for teaching therapists how to improve their alliances (Crits-Cristoph et al., 2010). As argued further by Stiles and Horvath (2016), effective training in fostering strong working alliance steers student-therapists away from rigidity; as such, this treatment could increase therapist responsiveness, or the ability to “do the right thing at the right time”. Another way of improving

trainees' ability to develop working alliance could be by training clinicians to continually ascertain the level of focus on tasks, goals, and affective bond, which typically fluctuate during the course of treatment (Constantino et al., 2017). Incorporating clinically flexible techniques into clinical training may further enhance therapist skills in developing effective therapeutic bonds and, in turn, improve their ability to work with clients who present with suicidality or marginalized identities.

Future research with a focus on therapists' skills and training can help the field better understand the nature and role of the alliance in clinical practice. Although the importance of the alliance has achieved consensual status, much remains to be learned in terms of how to improve it. Future studies using alliance as an outcome variable may provide answers to complex questions related to how psychotherapy works – questions that have shown to be of particular interest to clinicians (e.g., Tasca et al., 2015; Young et al., 2019). Addressing these questions, especially in the context of naturalistic treatment settings, may be a fruitful strategy in attempting to close the gap between science and practice.

Limitations

A limitation of this study is the fact that the alliance was only measured from a client perspective. Further exploration of the questions addressed in this study might benefit from a therapist or a third-party observer of the alliance. In addition, the alliance and suicidality were assessed only once and only in the early phase of treatment. Repeated assessment of these variables could shed light on how they relate to, and potentially influence each other during the course of therapy. Moreover, the identity variables that were investigated as a potential moderator of their relationship only assessed the client's marginality status. Future research

should investigate whether therapist matching on these variables could have a stronger moderating impact.

While constructing a composite marginalized identity group ensured fairly even sample sizes, the individual social identities within that group were not equal. Uneven sample sizes can lead to unequal variance and violate assumptions in tests like ANOVA, increasing the chances of Type I error. Residual plots were examined and revealed that error variance was fairly equal among groups, both for the model with the composite marginalized group and for the model with the three individual identity groups.

As previously stated, the impact of intersectional social identities is also deserving of empirical attention. In an additive sense, clients who simultaneously belong to multiple marginalized groups experience stress in an even more intensified way than clients who are only members of one (Meyer, 2010). This phenomenon is known as the *double jeopardy* hypothesis, underscoring the excess stress with which LGBT people of color must cope. The context of power relations as they relate to racial/ethnic, gender, and sexual identity are highly relevant to social relationships (Shields, 2008). For some distressed clients, such as those struggling with suicidality, the accumulation of certain marginalized social identities could therefore have an impact on the relationship they establish with their therapists early in treatment as well. Past research on college student populations has shown mixed results, but clearly indicates that some disparities exist with respect to membership in multiple minority groups (Hayes et al., 2011). Future research will need to recognize intersectionality as a central issue and investigate its influence on alliance over and above the impact of any one social identity.

Finally, although the first SAI administration was used to capture each client's alliance for their first session, there was variability in amount of time between the first session (when

baseline information is collected) and the second session (when the alliance of the first session is measured). This could have precluded an estimation of the full strength of the relationship between suicidality and alliance.

Conclusion

This study aimed to test the relationships between baseline suicidality, alliance, and marginalized identity. Results found that clients who presented to a university counseling clinic with suicidality at baseline formed significantly lower alliances with their therapists, but this association was not moderated by membership in a marginalized group. Yet, clients who were members of marginalized groups also formed significantly lower alliances with their therapists. The current study observed these significant effects, but they were small and may be attenuated by a ceiling effect, which may have limited the degree and influenced the form of change observed in overall alliance scores. While it should be replicated and expanded upon, this study suggests that attention should be given to specific pre-treatment predictors of alliance, as well as to training and interventions that address their potential impact.

References

Almazan, E. P., Roettger, M. E., & Acosta, P. S. (2014). Measures of sexual minority status and suicide risk among young adults in the united states. *Archives of Suicide Research*, *18*(3), 274–281. https://doi.org/10.1080/13811118.2013.824832

Baldwin, S. A., & Imel, Z. E. (2013). Therapist effects: Findings and methods. In *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change* (6th ed.). John Wiley & Sons.

Bockting, W. O. (2008). Psychotherapy and the real-life experience: From gender dichotomy to gender diversity. */data/revues/11581360/00170004/08000728/*. https://www.em-consulte.com/en/article/195720

Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy*, *16*, 252–260. https://doi.org/10.1037/h0085885

Center for Collegiate Mental Health. (2019). *2018 Annual Report* (Publication No. STA 19-180). University Park, PA.

Center for Collegiate Mental Health. (2020). *2019 Annual Report*. University Park, PA: The Pennsylvania State University.

Chao, P. J., Steffen, J. J., & Heiby, E. M. (2012). The effects of working alliance and client-clinician ethnic match on recovery status. *Community Mental Health Journal*, *48*(1), 91–97. https://doi.org/10.1007/s10597-011-9423-8

Chen, J. A., Stevens, C., Wong, S. H. M., & Liu, C. H. (2019). Psychiatric symptoms and diagnoses among U.S. college students: A comparison by race and ethnicity. *Psychiatric Services*, *70*(6), 442–449. https://doi.org/10.1176/appi.ps.201800388

Constantine, M. G. (2007). Racial microaggressions against African American clients in cross-racial counseling relationships. *Journal of Counseling Psychology*, *54*(1), 1–16. https://doi.org/10.1037/0022-0167.54.1.1

Constantino, M., Castonguay, L. G., Zack, S. E., & DeGeorge, J. (2010). Engagement in psychotherapy: Factors contributing to the facilitation, demise, and restoration of the therapeutic alliance. In *Elusive alliance: Treatment engagement strategies with high-risk adolescents* (pp. 21–57). American Psychological Association.

Constantino, M. J., Morrison, N. R., Coyne, A. E., & Howard, T. (2017). Exploring therapeutic alliance training in clinical and counseling psychology graduate programs. *Training and Education in Professional Psychology*, *11*(4), 219–226. https://doi.org/10.1037/tep0000157

Crits-Cristoph, P., Crits-Christoph, K., & Gibbons, M. B. C. (2010). Training in alliance-fostering techniques. In *The therapeutic alliance: An evidence-based guide to practice* (pp. 304–319). Guilford Press.

Dunster-Page, C., Haddock, G., Wainwright, L., & Berry, K. (2017). The relationship between therapeutic alliance and patient's suicidal thoughts, self-harming behaviours and suicide attempts: A systematic review. *Journal of Affective Disorders*, *223*, 165–174. https://doi.org/10.1016/j.jad.2017.07.040

Falkenström, F., Hatcher, R. L., Skjulsvik, T., Larsson, M. H., & Holmqvist, R. (2015). Development and validation of a 6-item working alliance questionnaire for repeated administrations during psychotherapy. *Psychological Assessment*, *27*(1), 169–183. https://doi.org/10.1037/pas0000038

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149

Flückiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2019). Alliance in adult psychotherapy. In *Psychotherapy Relationships That Work* (3rd ed., Vol. 1, pp. 24–78). Oxford.

Goldfried, M. R. (2001). Integrating gay, lesbian, and bisexual issues into mainstream psychology. *American Psychologist*, *56*, 977–988.

Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D'Augelli, A. R., Silverman, M. M., Fisher, P. W., Hughes, T., Rosario, M., Russell, S. T., Malley, E., Reed, J., Litts, D. A., Haller, E., Sell, R. L., Remafedi, G., Bradford, J., Beautrais, A. L., … Clayton, P. J. (2010). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality*, *58*(1), 10–51. https://doi.org/10.1080/00918369.2011.534038

Hannan, C., Lambert, M. J., Harmon, C., Lars Nielsen, S., Smart, D. W., & Shimokawa, K. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology*, *61*(2), 155–163. https://doi.org/10.1002/jclp.20108

Hatcher, R. L., & Gillaspy, J. A. (2006). Development and validation of a revised short version of the Working Alliance Inventory. *Psychotherapy Research*, *16*(1), 12–25. https://doi.org/10.1080/10503300500352500

Hayes, J. A., Chun-Kennedy, C., Edens, A., & Locke, B. D. (2011). Do double minority students face double jeopardy? Testing minority stress theory. *Journal of College Counseling*, *14*(2), 117–126. https://doi.org/10.1002/j.2161-1882.2011.tb00267.x

Hayes, J. A., McAleavey, A. A., Castonguay, L. G., & Locke, B. D. (2016). Psychotherapists' outcomes with white and racial/ethnic minority clients: First, the good news. *Journal of Counseling Psychology*, *63*(3), 261–268. https://doi.org/10.1037/cou0000098

Hayes, J. A., Petrovich, J., Janis, R. A., Yang, Y., Castonguay, L. G., & Locke, B. D. (2019). Suicide among college students in psychotherapy: Individual predictors and latent classes. *Journal of Counseling Psychology*. https://doi.org/10.1037/cou0000384

Hersoug, A. G., Høglend, P., Gabbard, G. O., & Lorentzen, S. (2013). The combined predictive effect of patient characteristics and alliance on long-term dynamic and interpersonal functioning after dynamic psychotherapy. *Clinical Psychology & Psychotherapy*, *20*(4), 297–307. https://doi.org/10.1002/cpp.1770

Horvath, A. O., Flückiger, C., S., D., & Del Re, A. C. (2011). Alliance in individual psychotherapy. *Psychotherapy*, *48*(1), 9–16. https://doi.org/10.1037/a0022186

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology*, *36*(1), 223–233.

Israel, T., Gorcheva, R., Walther, W. A., Sulzner, J. M., & Cohen, J. (2008). Therapists' helpful and unhelpful situations with LGBT clients: An exploratory study. *Professional Psychology: Research and Practice*, *39*(3), 361–368. https://doi.org/10.1037/0735-7028.39.3.361

Joiner, T. E. (2007). *Why People Die by Suicide*. Harvard University Press.

King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, *8*(1), 70. https://doi.org/10.1186/1471-244X-8-70

Larsson, M. H., Falkenström, F., Andersson, G., & Holmqvist, R. (2018). Alliance ruptures and repairs in psychotherapy in primary care. *Psychotherapy Research*, *28*(1), 123–136. https://doi.org/10.1080/10503307.2016.1174345

Leenaars, A. A. (2006). Psychotherapy with suicidal people: The commonalities. *Archives of Suicide Research*, *10*(4), 305–322. https://doi.org/10.1080/13811110600790710

Locke, B. D., Buzolitz, J. S., Lei, P.-W., Boswell, J. F., McAleavey, A. A., Sevig, T. D., & Dowis, J. D. (2011). Development of the counseling center assessment of psychological symptoms-62 (CCAPS-62). *Journal of Counseling Psychology*, *58*(1), 97–109. https://doi.org/10.1037/a0021282

Locke, B. D., McAleavey, A. A., Zhao, Y., Lei, P.-W., Hayes, J. A., Castonguay, L. G., Li, H., Tate, R., & Lin, Y.-C. (2012). Development and Initial Validation of the Counseling Center Assessment of Psychological Symptoms–34. *Measurement and Evaluation in Counseling and Development*, *45*(3), 151–169. https://doi.org/10.1177/0748175611432642

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Meyer, I. H. (2010). Identity, stress, and resilience in lesbians, gay men, and bisexuals of color. *The Counseling Psychologist*, *38*(3), 442–454. https://doi.org/10.1177/0011000009351601

Owen, J., Imel, Z., Tao, K. W., Wampold, B., Smith, A., & Rodolfa, E. (2011). Cultural ruptures in short-term therapy: Working alliance as a mediator between clients' perceptions of

microaggressions and therapy outcomes. *Counselling and Psychotherapy Research*, *11*(3), 204–212. https://doi.org/10.1080/14733145.2010.491551

Owen, J., Miller, S. D., Seidel, J., & Chow, D. (2016). The working alliance in treatment of military adolescents. *Journal of Consulting and Clinical Psychology*, *84*(3), 200–210. https://doi.org/10.1037/ccp0000035

Rudd, M. D., Cukrowicz, K. C., & Bryan, C. J. (2008). Core competencies in suicide risk assessment and management: Implications for supervision. *Training and Education in Professional Psychology*, *2*(4), 219–228. https://doi.org/10.1037/1931-3918.2.4.219

Saxon, D., & Barkham, M. (2012). Patterns of therapist variability: Therapist effects and the contribution of patient severity and risk. *Journal of Consulting and Clinical Psychology*, *80*(4), 535–546. https://doi.org/10.1037/a0028898

Shields, S. A. (2008). Gender: An intersectionality perspective. *Sex Roles*, *59*(5–6), 301–311. https://doi.org/10.1007/s11199-008-9501-8

Swift, J. K., Greenberg, R. P., Whipple, J. L., & Kominiak, N. (2012). Practice recommendations for reducing premature termination in therapy. *Professional Psychology: Research and Practice*, *43*(4), 379–387. https://doi.org/10.1037/a0028291

Trout, D. L. (1980). The Role of Social Isolation in Suicide. *Suicide and Life-Threatening Behavior*, *10*(1), 10–23. https://doi.org/10.1111/j.1943-278X.1980.tb00693.x

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S., Selby, E. A., & Joiner, T. E. (2010). The interpersonal theory of suicide. *Psychological Review*, *117*(2), 575–600. https://doi.org/10.1037/a0018697

Weiss, M., Kivity, Y., & Huppert, J. D. (2014). How does the therapeutic alliance develop throughout cognitive behavioral therapy for panic disorder? Sawtooth patterns, sudden

gains, and stabilization. *Psychotherapy Research*, *24*(3), 407–418. https://doi.org/10.1080/10503307.2013.868947

Westefeld, J. S., Homaifar, B., Spotts, J., Furr, S., Range, L., & Werth, J. L. (2005). Perceptions concerning college student suicide: Data from four universities. *Suicide and Life-Threatening Behavior*, *35*(6), 640–645. https://doi.org/10.1521/suli.2005.35.6.640

Wilcox, H. C., Arria, A. M., Caldeira, K. M., Vincent, K. B., Pinchevsky, G. M., & O'Grady, K. E. (2010). Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *Journal of Affective Disorders*, *127*(1–3), 287–294. https://doi.org/10.1016/j.jad.2010.04.017

Appendix A

Table 1.

Demographics for all clients

Variable	*M*	*SD*
Age (years)	21.54	3.23
	Percentage	
Gender		
Woman	60.85%	
Man	37.18%	
Transgender	0.99%	
Self-Identify	0.99%	
Race/ethnicity		
White	62.96%	
African American / Black	8.38%	
Hispanic / Latino/a	6.90%	
Asian American / Asian	14.37%	
Multi-racial	5.0%	
Self-identify	2.0%	
American Indian or Alaskan Native	0.21%	
Native Hawaiian or Pacific Islander	0.01%	
Sexual Orientation		
Heterosexual / Straight	79.79%	
Bisexual	11.13%	
Gay	2.04%	
Lesbian	1.20%	
Questioning	3.31%	
Self-identify	2.54%	
Current Academic Status		
Freshman/First year	19.44%	
Sophomore	17.04%	
Junior	22.39%	
Senior	24.72%	
Graduate/Professional degree student	15.56%	
Other	0.63%	

Note: "Self-identify" was included as an option for clients who wished to write in if previous options did not capture how they identified

Table 2.

Linear regression models

Model 1					
Suicidality	β_0	β	R^2	p-value	95% CI
	4.31	-0.17	.008	**.001***	[-0.26, -0.71]
Model 2					
Minority Group Membership	β_0	β	R^2	p-value	95% CI
	4.37	-0.14	.003	**.03***	[-0.26, -0.01]
Suicidality*Minority Group Membership		-0.2	.000	.88	[-0.21, 0.18]

Table 3.

Summary of predictor variables

Predictor	*n*	*M*	*SD*
Clients endorsing suicidality	594	4.14	0.95
Clients not endorsing suicidality	826	4.31	0.88
Marginalized Identity	694	4.16	0.94
Marginalized Race/Ethnicity	526	4.16	0.93
Marginalized Gender	28	4.29	0.74
Marginalized Sexual Orientation	287	4.18	0.92
Non-marginalized Identity	726	4.32	0.88
Non-marginalized Race/Ethnicity	894	4.29	0.90
Non-marginalized Gender	1392	4.29	0.92
Non-marginalized Sexual Orientation	1133	4.26	0.91

Table 4.

Exploratory analysis models

Model 1					
	β_0	β	t	p-value	95% CI
Race/Ethnicity	4.351	0.027	0.269	0.788	[-0.17, 0.27]
Gender	4.307	-0.487	-1.369	0.171	[1.19, 0.21]
Sexual Orientation	4.313	-0.081	-0.666	0.506	[-0.32, 0.16]
Model 2					
	β_0	β	t	p-value	95% CI
Main Effects Omnibus Model	4.353	-0.150	-2.105	**0.035***	[-0.01, 0.04]
		0.089	0.496	0.620	[-0.26, 0.44]
		-0.056	-0.897	0.370	[-0.18, 0.07]

Appendix B

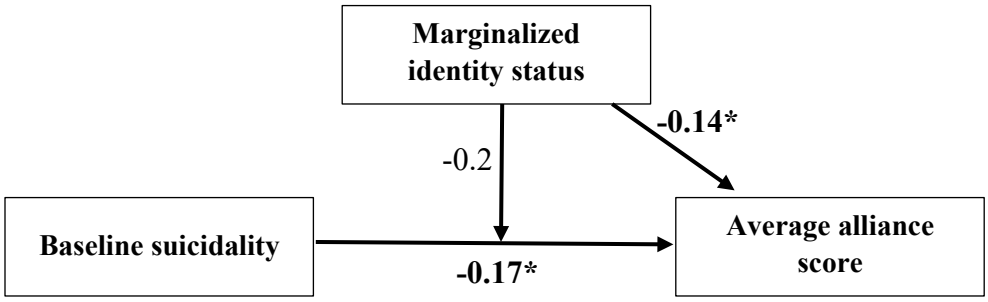

Figure 1. Marginalized Identity Status Moderation Model. The figure illustrates the results of the moderation model testing the interaction between baseline suicidality and average alliance score, depending on marginalized identity status. Path values are regression coefficients. Coefficients in boldface indicate significant findings; *$p < .05$.