Initial Distress and Change through Therapy among Transgender and Gender Non-Conforming Racial and Ethnic Minorities

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Abstract

Transgender and gender non-conforming (TGNC) people of color experience stressors unique to both TGNC and racial/ethnic minority communities that lead to disparities in mental health. Guided by minority stress and intersectionality theories, we examined initial anxiety and depression as well as changes in symptoms of 41,691 clients from the Center for Collegiate Mental Health 2012-2016 dataset, to understand disparities that may exist in distress and therapeutic response between TGNC and cisgender clients. We also examined the intersection of gender and racial/ethnic identities to note how these trends differ for TGNC people of color.

Results from hierarchical linear modeling indicate greater symptom severity among TGNC clients yet a slower remission of symptoms of depression and anxiety. No significant interaction effects were found, but main effects held with TGNC clients of color experiencing more distress than any other group. TGNC clients utilized on average 2.5 sessions of therapy more than cisgender clients.

Keywords: Transgender, People of Color, Anxiety, Depression, Therapeutic Outcomes
Initial Distress and Therapeutic Outcomes among Transgender and Gender Non-Conforming People of Color

In recent years, transgender and gender nonconforming (TGNC) individuals—those whose gender identity differs from the sex assigned to them at birth (Hendricks & Testa, 2012)—have become more visible in popular media, and gender identity has been included in at least thirty states’ anti-discrimination laws (Movement Advancement Project, 2017). Both research and practice-oriented psychologists are becoming increasingly aware of the unique stressors encountered by TGNC individuals, particularly TGNC people of color, and the health disparities that exist between TGNC and cisgender individuals (Bouman, Davey, Meyer, Witcomb, & Arcelus, 2016; Budge, Thai, Tebbe, & Howard, 2016; Grant et al., 2010; Sun et al., 2016; Testa et al., 2012). Nonetheless, many TGNC individuals continue to report negative experiences in counseling due to uninformed or underinformed practitioners (APA, 2015; Applegarth & Nuttall, 2016), and many have great difficulty accessing competent services (dickey, Budge, Katz-Wise, & Garza, 2016). TGNC people of color may be at a further disadvantage in accessing competent therapeutic services (Aubuchon-Endsley, Callahan, & Scott, 2014; Cort et al., 2012) while experiencing greater rates of victimization than TGNC or people of color alone (National Coalition of Antiviolence Programs, 2010).

Although it is clear that TGNC individuals—and in particular TGNC people of color—experience more distress than their White and cisgender counterparts and have a more difficult time accessing competent therapeutic services, it is unclear how well therapy meets their needs once a therapeutic relationship has been established. The present study examines a United States national sample of treatment-seeking college students to understand the influence that gender identity, racial/ethnic identity, and their interaction may have on both the initial distress clients
report when beginning therapy and how quickly that distress subsides. Understanding these trends may provide insight into the magnitude of identity-based disparities and how these disparities may or may not be mitigated through treatment. Implications may also emerge for how therapists can work to create a more equitable environment both in and outside of the therapy room.

We situate our understanding of the mental health implications of holding gender and racial/ethnic minority identities in minority stress and intersectionality theories, both of which focus on the role of systems of power and privilege in explaining health disparities. The minority stress theory (Meyer, 2003) and gender minority stress and resilience theory (Hendricks & Testa, 2012) posit that health disparities are best understood as the result of consistent discrimination, which lead to increased hypervigilance and internalized negative views of self. Intersectionality theory holds that multiple, oppressed identities may interact within individuals vis-à-vis societal privilege and/or oppression such that individuals with intersecting identities have experiences distinct from those who share only one identity (Cole, 2009; Crenshaw, 1989). Intersectionality may also suggest that individual with multiple, historically oppressed identities may evidence more distress than individuals with either a single or no oppressed identity, because of the effects of systemic oppression and not due to any characteristic of the identity itself.

**Mental Health Implications of Holding a TGNC Identity**

Transgender and gender non-conforming individuals experience higher rates of anxiety disorders, depression, body dysmorphia, and other psychological disorders than do cisgender individuals (Author Citation; Bouman et al., 2016; Bouman et al., 2017; Reisner, Katz-Wise, Gordon, Corliss, & Austin, 2016; Testa et al., 2012). Gender non-conforming individuals may further experience additional discrimination relative to transgender individuals (Harrison, Grant, & Herman, 2012). This collective experience of minority stress is perpetuated by societal norms
that reinforce the gender binary and mischaracterize or “otherize” those whose experience falls outside of traditional gender norms (Hendricks & Testa, 2012). As such, TGNC individuals may experience greater distress than cisgender individuals primarily due to increased experiences of discrimination, resultant hypervigilance, and internalized transnegative beliefs that result from living in a cisnormative societal context (Hendricks & Testa, 2012).

Due at least in part to increased distress from experiencing an oppressed identity, counseling may be a particularly important recourse for many TGNC individuals (Hunt, 2014). TGNC individuals seek therapy to address this distress as well as for common mental health issues and personal growth (Benson, 2013; Rachlin, 2002). Many also seek therapy to obtain access to hormone replacement therapy or surgeries (Coleman, 2012). In doing so, many TGNC individuals have negative experiences with mental health providers (Mizock & Lundquist, 2016) and commonly report anxiety about finding a trans-affirming therapist, feeling the need to educate clinicians about TGNC issues, and experiencing gender-related discrimination in therapy (Applegarth & Nuttall, 2016; Bess & Stabb, 2009; Benson, 2013). Although the relation of TGNC individuals’ experiences in therapy to therapeutic outcomes has yet to be systematically examined, it is plausible that discriminatory experiences with providers on both an individual and community level could negatively impact the therapeutic alliance and diminish the efficacy of counseling (Nadal, Davidoff, Davis, & Wong, 2014; Owen, Tao, Imel, Wampold, & Rodolfa, 2014).

**Being a Person of Color as a TGNC Individual**

Individuals with intersecting minority identities have distinct experiences from those who share only one minority identity (Cole, 2009). Taken separately, TGNC individuals and people of color are approximately two times as likely as cisgender and White individuals to be physically or
sexually assaulted or to experience discrimination; however, TGNC people of color are approximately two and a half times as likely to be assaulted or experience discrimination than cisgender White individuals (NCAP, 2010). Historically, people of color have been diagnosed with psychological disorders at much higher rates (Cort et al., 2012; McClain et al., 2016), sought treatment less frequently (Cheng, Kwan, Sevig, 2013), begun treatment with more of distress (Ayalon & Gum, 2011; Brown, Schulberg, Sacco, Perel, & Houck, 1999), and experienced equal or less symptom remission (Aubuchon-Endsley et al., 2014; Brown et al., 1999; Hayes, McAleavey, Castonguay, & Locke, 2016; Ince, Riper, van’t Hof, & Cuijpers, 2014; Kim, Park, La, Chang, Zane, 2016) than White individuals. These health disparities are likely due to the effects of racism and systemic inequities experienced by people of color (Lewis & Grzanka, 2016). TGNC individuals who also identify as a racial/ethnic minority are likely to evidence similar outcomes due to their racial/ethnic minority identity as well as the synergistic effects of possessing multiple marginalized identities (Cole, 2009).

Needs assessments of TGNC people of color have indicated that TGNC people of color may experience a marked lack of family support, access to financial and medical resources, and access to knowledgeable and informed professionals due to their unique intersection of identities (Singh & McKleroy, 2011; Xavier, Bobbin, Singer, & Budd, 2005; Wilson et al., 2015). Holding intersectional identities may isolate TGNC people of color from both TGNC and communities of color, which may lead to higher levels of depression and anxiety for TGNC people of color (Bazargan & Galvan, 2012; Budge et al. 2016; Sun et al., 2016). For example, a Black transwoman may be rejected by a Black community for not performing femininity as expected and be rejected by a predominantly White LGBTQ community that has essentialist understandings of race and/or gender.
Given the impact of discrimination in treatment-seeking TGNC individuals and people of color (Hunt, 2014; Ince et al., 2014), it is likely that TGNC people of color experience even greater difficulty locating a competent therapist and reaching therapeutic goals (Dispenza & O’Hara, 2016). Though substantial research has examined health disparities based on gender and racial/ethnic identities separately (Chou, Asnaani, & Hofmann, 2012; Moradi et al., 2016), very little quantitative work has examined the intersection of these identities. It remains unclear how much additional distress TGNC individuals and TGNC people of color typically present with to treatment and how quickly this distress may be mitigated by counseling. Better understanding these trends may help provide greater knowledge and skills for therapists who are seeking competency in working with TGNC individuals (Dispenza & O’Hara, 2016).

**Research Questions**

The present study addresses the lack of quantitative research examining health disparities and counseling outcomes among individuals with intersecting racial/ethnic and gender minority identities by investigating differences in baseline distress and rates of change of distress by gender identity, racial/ethnic identity, and their intersection. We operationalize distress as depression and anxiety as these are clients’ most common presenting concerns among our population of study (college students; CCMH, 2018) and as previous studies of TGNC mental health have focused on depression and anxiety (Bouman et al., 2017; Reisner et al., 2016). We chose to examine the intersection between racial/ethnic and gender identity as there is a growing literature about the experiences of TGNC people of color but few large-scale, quantitative studies, and we wished to understand the way racial/ethnic identity may contribute to the systemic discrimination experienced by TGNC individuals. Although other variables such as age or socioeconomic status likely would have added additional explanatory power to our study, we did
not include them as our collegiate sample is characteristically skewed on both variables. To wit, the majority of college students are between 18-25 years old, and socioeconomic status may be in flux among college students as education itself is an often-used metric of socioeconomic status.

Taken together, intersectionality (Crenshaw, 1989) and conceptions of gender minority stress (Hendricks & Testa, 2012) posit that individuals with multiple, historically oppressed identities may experience additional health disparities beyond those with a single or no oppressed identity as a result of systemic discrimination. To investigate this claim, we ask (1) do TGNC individuals differ from cisgender individuals in their initial depression and anxiety and the rates of change of those symptoms through therapy? (2) do people of color and White individuals differ in their initial depression and anxiety and rates of change of those symptoms through therapy? and (3) are there interaction effects for initial depression and anxiety and the rates of change of these symptoms?

Method

Data were analyzed from the Center for Collegiate Mental Health (CCMH) 2012-2016 database. The CCMH is a practice-research network of 487 college counseling centers in the United States, England, and Canada. Centers that contributed data to the repository received individual institutional review board approval and did so as part of routine practice.

Measures

Standardized Data Set (SDS). Clients’ gender and racial/ethnic identity were measured through the SDS, which gathers information on demographics, mental health history, and college-life variables and is most frequently administered on intake at participating centers. Response options for each question are shown in Table 1.
Counseling Center Assessment of Psychological Symptoms-34 (CCAPS). The CCAPS is a multidimensional measure of psychological distress designed for use in college counseling centers (Locke et al., 2012). Questions on the CCAPS ask clients to rate themselves on a given behavior over the last two weeks on a five-point Likert scale from 0 (not at all like me) to 4 (extremely like me) with each subscale averaging the scores of all items that load onto that scale. As such, higher scores indicate more distress. In this study, we use the Depression and Generalized Anxiety subscales, which show adequate internal consistency (α = .88 and .83 respectively), 1- and 2-week reliability (r = .87 and .86 respectively), and convergent validity with the Beck Depression Inventory and Beck Anxiety Inventory respectively (Locke et al., 2012). Both subscales have an elevated cut point above which corresponds to high distress in that domain. These elevated cut points indicate that clients above this score are more likely to meet criteria for a diagnosis of depression or anxiety. Because multiple institutions with varying procedures around assessment contributed data to the present dataset, the frequency of CCAPS administration varies within our sample, leading some clients to have a CCAPS score every session and others to have them at other intervals during treatment.

Sample

The 2012-2016 dataset included a total of 372,419 clients. Of these, 41,691 provided a gender identity, racial/ethnic identity, and three separate CCAPS scores and were included in subsequent analyses. This sample comprised clients from 137 college counseling centers, of which 136 were in the United States and 1 counseling center was in England. Clients attended an average of 11.23 sessions (SD = 9.03) and had an average of 5.71 CCAPS administrations (SD = 4.45). Client demographics are presented in Table 1. We created two subsamples, one with clients above the elevated cut point on the depression subscale of the CCAPS and the other with
clients above the elevated cut point on the anxiety subscale. This was done to ensure that we captured clients with clinically meaningful depression and anxiety so our models of change over the course of therapy are meaningful for each domain. This resulted in a final sample of 21,753 clients for depression analyses and 19,713 for anxiety analyses. Sessions attended and demographics for these subsamples were similar to those presented in Table 1.

Procedure

Gender and race/ethnicity were dichotomized into majority and minority identities to capture the differences in the experiences of individuals with dominant and oppressed identities (Cole, 2009). Gender identity was dichotomized into cisgender and TGNC, coded as 0 and 1 respectively. Racial/ethnic identity was similarly dichotomized into White and people of color and respectively coded as 0 and 1. An interaction between gender and racial/ethnic identity groups was created by multiplying our two contrast-coded identity group variables. In models with contrast-coded variables, the intercept can be interpreted as the mean baseline depression or anxiety for a given group.

Courses of treatment were defined as groups of appointments with no more than 90 days between appointments, and clients’ data were consequently segmented into distinct courses of treatment if applicable. To maintain independence of observations at a client level, only each client’s first course of treatment was used. CCAPS scores were matched with clients’ nearest therapy session, up to 3 days before or after administration due to variability in center procedure, though most frequently the CCAPS was administered the day of treatment.

Statistical Analysis

Hierarchical linear modeling (HLM) was employed to evaluate the effect of gender and racial identity on Depression and Anxiety scores during treatment in the subgroups above the
elevated cut on each subscale. HLM was selected to allow us to evaluate change in Depression and Anxiety during while accounting for nested sessions within clients. Data were analyzed in R (version 3.4.0; R Development Core Team, 2017) using maximum likelihood estimation with the “nlme” package (Pinheiro, Bates, DebRoy, Sarkar, & R Development Core Team, 2013). HLM also allowed us to account for different frequency of administration of CCAPS between clients, which results in data missing at random. CCAPS scores are missing at some sessions due to center policies around frequency of administration (e.g. administering the CCAPS every third session), not due to characteristics of the client or dependent variable. HLM accounts for such unbalanced data that is missing at random, and the likelihood estimation methods used provide valid inference under these conditions (Tseng, Elashoff, Li & Li, 2016).

The models included two levels: Depression and Anxiety (level 1) over time within clients (level 2). At the session level (level 1), we modeled Depression or Anxiety as a function of session number. We use session number to evaluate the effect of additional appointments or doses of treatment (Howard, Kopta, Kraus, & Orlinsky, 1986), centering session number on clients’ first session; the intercept in our models can be interpreted as clients’ baseline Depression or Anxiety. At the client level (level 2), we modeled clients’ gender identity, racial/ethnic identity, and their interaction as predictors of clients’ baseline Anxiety or Depression (intercept) and rate of change (slope). We also included random effects of intercept and session number at the client level. Random effects allow for differences in baseline and rates of change of Anxiety or Depression between clients as well as allowing for the calculation of the percentage of variance accounted for by client and client level predictors (Lutz, Leon, Martinovich, Lyons & Stiles, 2007).

We constructed a series of models, testing the significance of the addition of each predictor. Predictors were entered in sequence as follows, gender identity, racial/ethnic identity,
and the interaction term. With each addition, both the significance of the intercept (baseline Depression or Anxiety) and slope (rate of change) were tested. We used a likelihood-ratio test (LRT) to compare models with additional predictors to previous models in order to evaluate model fit (Bolker et al., 2009). We also report the Akaike Information Criteria (AIC) and log-likelihood ratio in Tables 2 and 3, in which lower and higher values respectively indicate better model fit (McCoach & Black, 2008). We used a combination of model fit and the significance of the predictors to determine which to retain in subsequent models. If the LRT indicated an improvement in fit, then individual effects with significant $t$ values ($p < .01$ due to large sample size) were retained in future models. Subsequent models were then compared to previous models using only significant predictors, and the process was repeated. We calculated variance accounted for by subtracting the client level intercept variance in the model with additional predictors from the previous model without those predictors and dividing that by the variance in the model without the predictors (Raudenbush & Bryk, 2002). This variance is presented to contextualize the size of effects.

**Results**

We first examined the average number of sessions used across gender and racial/ethnic identities. Clients of color ($M = 11.41$, $SD = 9.19$) used slightly more sessions than White clients ($M = 11.01$, $SD = 9.00$; $d = .05$). TGNC clients ($M = 13.50$, $SD = 10.85$) used significantly and substantially more sessions than cisgender clients ($M = 11.09$, $SD = 8.99$; $d = .27$).

**Depression**

In the full sample, TGNC people of color evidenced the highest initial depression scores ($M = 2.19$, $SD = 1.03$), followed by White TGNC clients ($M = 2.06$, $SD = 1.00$), cisgender people of color ($M = 1.87$, $SD = 1.01$), and White cisgender clients ($M = 1.77$, $SD = 1.00$). The
magnitude of the differences between groups were small for gender (TGNC vs. cisgender $d = .29$) and small-to-insubstantial for racial/ethnic identity (White vs. people of color $d = .11$).

Using only the sample above the elevated cut on Depression, we tested the effects of gender, race/ethnicity, and their interaction on baseline Depression and change in Depression during treatment. We present parameter estimates, null-hypothesis significance tests, and fit statistics in Table 2. Model 1, an unconditional means model or null model, did not include any predictors:

$$\text{Level 1: Depression}_{ti} = \beta_{0i} + e_{ti}$$

$$\text{Level 2: } \beta_{0i} = \delta_{00} + U_{0i}$$

In model 1, Depression$_{ti}$ represents the depression score at time $t$ for client $i$. The intercept in this model ($\delta_{00}$) indicates that the mean depression scores for all clients was 1.94. We also included random intercepts at the client level ($U_{0i}$) to allow each client to have a unique deviation from the average depression score in addition to residual variance ($e_{ti}$). The intraclass correlations for the variance accounted for by clients for the null model was 39.6%, indicating that differences between clients accounted for 39.6% of variance in depression scores.

Model 2 was an unconditional growth model, modeling depression scores as a function of session number without predictors of either clients’ baseline Depression or the rate of change of their depression scores:

$$\text{Level 1: Depression}_{ti} = \beta_{0i} + \beta_{1i}(\text{session}_{ti}) + e_{ti}$$

$$\text{Level 2: } \beta_{0i} = \delta_{00} + U_{0i}$$

$$\beta_{1i} = \delta_{10} + U_{1i}$$

Following previous research on therapeutic outcomes, including research done using CCMH data (Lefevor, Janis, & Park, 2017), session number was consequently log transformed in all
subsequent models, with the log value modeling a negatively accelerating curve and the amount
of change between sessions decreasing as session number increases (see Finch, Lambert, &
Schaalje, 2001). The intercept in this model ($\delta_{00} = 1.94$) can be interpreted as the mean
depression score at time 0. The negative coefficient for log transformed session number ($\delta_{10}$)
indicates that on average, clients’ depression scores decreased with each additional session,
showing improvement. We also included a random effect of session number ($U_{1i}$) to allow clients
to vary uniquely around the average change.

In Models 3, 4, and 5, we tested the sequential addition of gender identity, racial/ethnic
identity, and their interaction. Model 3 shows the effect of gender identity on baseline Depression
and rates of change of depression scores:

Level 1: $\text{Depression}_{ti} = \beta_{0i} + \beta_{1i}(\text{session}_{ti}) + e_{ti}$

Level 2: $\beta_{0i} = \delta_{00} + \delta_{01}(\text{gender identity}_i) + U_{0i}$

$\beta_{1i} = \delta_{10} + \delta_{11}(\text{gender identity}_i) + U_{1i}$

In line with prior findings, TGNC clients evidenced higher initial Depression than cisgender
clients ($\delta_{01}; t = 5.89, p < .001$). Cisgender clients evidenced a more accelerated rate of change
than TGNC clients ($\delta_{11}; t = 4.08, p < .001$). Gender identity and its interaction with session
number significantly improved model fit ($\chi^2(2) = 77.91, p < .001$) and were consequently retained
in future models. Although the effects of gender on initial Depression and rates of change of
depression scores were significant, both effects were quite small with gender identity accounting
for only .30% of the variance in initial depression and .15% of the variance in rates of change of
depression scores.

Model 4 shows the effect of racial/ethnic identity on initial Depression and rates of change
of depression scores:
Level 1: \( \text{Depression}_{ti} = \beta_{0i} + \beta_{1i}(\text{session}_{ti}) + e_{ti} \)

Level 2: \( \beta_{0i} = \delta_{00} + \delta_{01}(\text{gender identity}_i) + \delta_{02}(\text{race/ethnicity}_i) + U_{0i} \)
\( \beta_{1i} = \delta_{10} + \delta_{11}(\text{gender identity}_i) + \delta_{12}(\text{race/ethnicity}_i) + U_{1i} \)

In line with prior findings, clients of color evidenced significantly higher baseline Depression than White clients (\( \delta_{02}; t = 4.11, p < .001 \)). As would be expected based on prior counseling research and based on regression to the mean due to clients of color having higher levels of baseline distress (Finch et al., 2001), clients of color evidenced an accelerated rate of change of depression scores relative to White clients (\( \delta_{12}; t = -4.29, p < .001 \)). The addition of racial/ethnic identity significantly improved model fit (\( \chi^2(2) = 25.61, p < .001 \)), and consequently both predictors of intercept and slope were included in subsequent models. Though significant, the effects of racial/ethnic identity on initial Depression and rates of change of depression scores were quite small with racial/ethnic identity accounting for only .15% of the variance in initial depression and .16% of the variance in rates of change of depression scores.

Model 5 tested the interaction between gender identity and racial/ethnic identity on initial Depression and rates of change of depression scores:

Level 1: \( \text{Depression}_{ti} = \beta_{0i} + \beta_{1i}(\text{session}_{ti}) + e_{ti} \)

Level 2: \( \beta_{0i} = \delta_{00} + \delta_{01}(\text{gender identity}_i) + \delta_{02}(\text{race/ethnicity}_i) + \delta_{03}(\text{gender identity}_i \ast \text{race/ethnicity}_i) + U_{0i} \)
\( \beta_{1i} = \delta_{10} + \delta_{11}(\text{gender identity}_i) + \delta_{12}(\text{race/ethnicity}_i) + \delta_{13}(\text{gender identity}_i \ast \text{race/ethnicity}_i) + U_{1i} \)

The interaction between gender identity and racial/ethnic identity were not significant for both baseline Depression (\( \delta_{03}; t = 0.29, p = .77 \)) and rate of change (\( \delta_{13}; t = 1.32, p = .19 \)). The addition of interaction effects did not significantly improve model fit (\( \chi^2(2) = 2.38, p = .30 \)), and
consequently we consider Model 4 as our final model. Altogether, gender and racial/ethnic identities explain .45% of the variance in initial depression scores and .32% of the variance in rate of change of depression scores after including session number.

**Anxiety**

In the full sample, TGNC people of color evidenced the highest initial anxiety scores ($M = 2.38; SD = 1.03$), followed by White TGNC clients ($M = 2.22, SD = 0.98$), White cisgender clients ($M = 2.03, SD = 0.98$), and cisgender people of color ($M = 1.94, SD = 0.97$). The magnitude of the differences between groups was small for gender (TGNC vs. cisgender $d = .26$) and not substantial for racial/ethnic identity (White vs. people of color $d = -.01$).

*Table 3* presents coefficients and fit statistics for successive models predicting Anxiety in the subsample of clients above the elevated cutoff for Anxiety. Because model equations for Anxiety largely mirrored those for Depression, they are only presented insofar as they diverge. From Model 1, we see that the mean anxiety score was 2.32 and differences between clients accounted for 44.4% of the total variance in anxiety scores.

Model 2 indicated that the intercept for Anxiety was 2.87. Similar to the model for Depression, the coefficient for session number was negative, indicating an overall trend of improvement during treatment. We included in Model 2 a random effect of session number to allow clients to vary uniquely around the average change.

Models 3, 4, and 5 tested the sequential addition of gender identity, racial/ethnic identity, and their interaction. Model 3 shows the effect of gender identity on initial Anxiety and rate of change in anxiety scores. Similar to past research and findings for Depression, TGNC clients evidenced greater Anxiety than cisgender clients ($t = 3.47, p < .001$) and TGNC clients changed more slowly than cisgender clients on Anxiety symptoms ($t = 3.69, p < .001$). Gender identity and
its interaction with session number improved model fit ($\chi^2(2) = 36.01, p < .001$). Gender identity explained .09% of the variance in initial anxiety scores and .15% of the variance in rate of change.

Model 4 shows the effect of racial/ethnic identity on initial anxiety scores and rate of change. Unlike results for Depression, clients of color evidenced less Anxiety than White clients ($\delta_{02}; t = -2.99, p = .002$). Similar to Depression, clients of color showed more rapid change in Anxiety during therapy ($\delta_{12}; t = -3.93, p < .001$). Racial/ethnic identity and its interaction with session number improved model fit ($\chi^2(3) = 35.80, p < .001$). Racial/ethnic identity explained .07% of the variance in initial anxiety scores and .16% of the variance in rate of change.

Model 5 tested interactions between gender identity and racial/ethnic identity on initial Anxiety and rate of change of anxiety scores. The interaction between gender identity and racial/ethnic identity on baseline Anxiety was not significant ($\delta_{03}; t = .15, p = .88$) nor was the interaction with rate of change ($\delta_{13}; t = -.40, p = .69$). Taken together, gender and racial/ethnic identities explain .16% of the variance in initial anxiety scores after including session number and .32% of variance in rate of change.

**Discussion**

We found that gender identity and racial/ethnic identity were related to differences in initial client symptom severity and rate of change of these symptoms, though the interactions between these two variables were not significant.

**TGNC Mental Health**

In models for both depression and anxiety, transgender and gender non-conforming (TNGC) clients evidenced significantly and substantially more distress than cisgender clients, consistent with previous literature (Bouman et al., 2017; Testa et al., 2012). Given the substantially increased levels of initial distress experienced by TGNC individuals, we expected
that TGNC individuals would evidence a greater reduction in symptoms than cisgender clients due to regression to the mean (Finch et al. 2001); however, we found that TGNC individuals’ symptoms of depression and anxiety remitted more slowly than did cisgender clients’ symptoms. Further, TGNC clients utilized on average 2.5 sessions more than cisgender clients did and left therapy manifesting more symptoms of depression and anxiety.

These trends may reflect the minority stress that gender minorities experience within a cisnormative social context that oppresses gender minority experience through overt discrimination, creation of an anticipation of future rejection, and instilment of transnegative beliefs (Hendricks & Testa, 2012; Meyer, 2003). Even though therapy may be effective in reducing TGNC clients’ presenting symptoms, other symptoms are likely to arise due to continual exposure to stressors, which may make sustainable symptom reduction more difficult (Alessi & Martin, 2018). Further, many approaches to reducing symptoms of depression or anxiety involve helping clients reframe their distress and challenge distorted thoughts about the world. However, without adaptation, these interventions may be less effective for TGNC individuals given that perceptions of isolation or danger may be factual and not the effect of distorted cognition (Austin, Craig, & Alessi, 2017).

Alternatively, the increased treatment utilization and decreased responsiveness may be reflective of TGNC individuals unique experience of counseling. It is possible that problematic patterns occurring within the therapeutic encounter may lead to decreased ability to mitigate distress. Many TGNC individuals feel fear or reluctance toward psychotherapists (Applegarth & Nuttall, 2016) due to experience with therapists who hold pathologizing or negative views of non-binary gender identification (Bess & Stabb, 2009). TGNC clients report therapists engaging in several less severe but equally problematic practices such as focusing too much or too little on
gender, expecting their clients to educate them, and overgeneralizing based on gender (Mizock & Lundquist, 2016). As such, TGNC clients frequently report managing therapists’ ignorance and/or transphobia within therapy (Benson, 2013), which may render therapy less likely to be effective. It is also possible that as TGNC individuals begin work in therapy around gender exploration and transition, they may become increasingly distraught due to the time, cost, and emotional energy required to transition and consequently both use more sessions and evidence slower remission of symptoms.

**The Mental Health of TGNC People of Color**

Racial/ethnic minorities generally evidenced significant but not substantial differences in initial depression and anxiety than White individuals and similar rates of symptom reduction. Though trends in initial distress are at odds with literature noting increased mental health disparities between White individuals and people of color (Cort et al., 2012; McClain et al., 2016), trends in symptom reduction concord with recent research noting an increasing parity in treatment outcomes between people of color and White clients (Brown et al., 1999; Hayes et al., 2016; Ince et al., 2014). TGNC people of color experienced more distress than any other group, followed by White TGNC clients, followed by cisgender clients. Although interaction effects were not significant, this trend indicates that both gender and racial/ethnic identity may be important in understanding initial distress. This finding supports previous research rooted in intersectionality finding synergistic effects of oppression among individuals with multiple minority identities (Author Citation; Crenshaw, 1989; Lefevor et al., 2017).

TGNC people of color are more likely to experience violence and other minority stressors than TGNC or people of color individuals taken alone are (NCAP, 2010). TGNC people of color are also less likely to receive medical attention from incidents resulting from discrimination
(Grant et al., 2010) and are more likely to develop depression from these experiences (Jefferson, Neilands, & Sevelius, 2013). We strongly caution against any interpretation of our findings as reflecting deficiencies in TGNC individuals or people of color. Rather, this research adds to a growing body of research emphasizing the systemic difficulties encountered by TGNC people of color and calls for sociocultural changes to reduce discrimination and violence toward TGNC people of color (Budge et al., 2016; Singh, 2013; Singh & McKleroy, 2011).

**Implications for Practice and Training**

Therapists in college counseling centers are particularly well positioned to address the disparities in baseline distress uncovered in our analyses. As our data indicated that TGNC and particularly TGNC students of color begin therapy with more distress than cisgender and White students, counseling psychologists in counseling centers may effectively advocate in ways that may reduce this inequity. For example, counselors may advocate with the Registrar to simplify name changes, with administration to ensure gender-inclusive restrooms are available on campus, and with Student Affairs to ensure that TGNC students may be assigned appropriate housing. Additionally, counseling psychologists in counseling centers can engage in outreach with faculty, staff, and students to educate students about TGNC identities and experiences to reduce transphobia.

Counseling psychologists involved in training—particularly in college counseling centers—are also well positioned to address disparities in rates of symptom change uncovered in our analyses through personal growth and training clinicians. As it is possible that therapist factors affected the reduced efficacy of therapy for TGNC clients, we encourage counseling psychologists to develop a better personal understanding of the systemic oppression of TGNC identities and common concerns of TGNC individuals (e.g. Austin et al., 2017). We recommend
that therapists familiarize themselves with common therapeutic mistakes made with TGNC individuals, including exaggerating or minimizing the focus on gender, making unwarranted generalizations, and expecting the client to educate the therapist (Mizock & Lundquist, 2016; c.f., Applegarth & Nuttall, 2016; Benson, 2013). We further encourage training directors to purposively incorporate material about TGNC identities and experiences in trainings about diversity and multiculturalism using approachable research articles (e.g., Applegarth & Nuttall, 2016; Benson, 2013; Mizock & Lundquist, 2016). We also encourage counseling psychologists responsible for training to help trainees challenge beliefs about gender essentialism and recognize how gender may be displayed across various racial/ethnic backgrounds.

Beyond the specific implications that flow directly from the results of the present study, counseling psychologists may also benefit from a better understanding of more general findings surrounding TGNC identities and experiences. When working with TGNC people of color, we encourage counseling psychologists to be aware of the dynamics of power and privilege and how these may play out for TGNC clients of color. Therapists may benefit from becoming particularly attuned to the fact that local LGBTQ or communities of color may not be affirming places for TGNC people of color (Chang & Singh, 2016). Further, therapists should recognize that gender identity and expression vary significantly based on culture and not seek to impose their own or other views of gender on clients. Finally, counseling psychologists should be aware of the increased violence experienced by TGNC people of color and ensure that they are asking about violence/discrimination in therapy (e.g., Austin et al., 2017).

Counseling psychologists generally are also well positioned to respond to the inequities discussed given the field’s commitment to social justice and providing therapy for a diverse world. Many of the factors perpetuating higher rates of distress among TGNC clients and TGNC
clients of color are systemic in nature (Hendricks & Testa, 2012; Meyer, 2003) and involve more than students’ collegiate environments. As such, counseling psychologists can work to address institutionalized forms of discrimination and oppression on local, regional, and national levels. This effort may include advocating for changes in law or national policy regarding TGNC individuals, helping change or create paperwork at their place of work that allows individuals to report a variety of gender identities, and correcting others when improper pronouns are used.

**Limitations, Conclusions, and Further Directions**

To our knowledge, the current study is the first large-scale quantitative examining change in distress of TGNC individual and TGNC people of color individuals through therapy. Our results, however, are limited based on our sample and methodology. We could not assess the reasons clients entered therapy, which may have impacted outcomes. We used a treatment-seeking sample of college students, which is demographically different from general TGNC and TGNC people of color populations. Our sample likely had higher socioeconomic status and was drawn from colleges, which are largely liberal environments (Winkleby, Jatulis, Frank, & Fortmann, 1992), and as such may have had greater access to both mental health treatment and gender-specific support. Further, therapists who work in college counseling centers may be different than “therapists” more generally (e.g., have more access to training), which we were not able to control for. Consequently, the disparities noted may have been less pronounced than they may be in other contexts. Future research should address these shortcomings.

Our analysis plan imposed further limitations on the interpretations of our results. Clients’ gender and racial/ethnic identities were dichotomized to draw attention to the main effects of gender and racial/ethnic identity. This dichotomization, however, likely masked differences in distress within groups. Future research should examine various aspects of racial/ethnic identity
and gender identity, for example, looking for examples of mental health differences between men, women, transgender, and gender non-conforming individuals separately (c.f., Harrison et al., 2012). In our analysis, we relied entirely on racial/ethnic identity to examine intersectionality among TGNC individuals in order to understand the unique contribution of gender and racial/ethnic identity on distress. Though our study is intersectional (Cole, 2009) and focused on minority stress (Hendricks & Testa, 2012), our methodology and approach precluded us from measuring other important aspects of intersectionality or minority stress (see Lewis & Grzanka, 2016). Other identity factors such as age, socioeconomic status, immigration status/acculturation, and urbanicity—as well as other stigma factors such as discrimination, hypervigilance, and internalized transphobia—are also important to consider when examining the intersection of gender and racial/ethnic identity to better understand the sources of observed differences (Cerezo, Morales, Quintero, & Rothman, 2014) and should be explored in future studies.

Data from a sample of over 40,000 treatment seeking college students indicated significant and substantial differences in baseline distress between cisgender and TGNC individuals with TGNC people of color experiencing the greatest amount of distress. Analyses of change of distress indicated that TGNC clients’ symptoms of anxiety remitted more slowly than did cisgender clients’ symptoms, yielding a larger disparity in anxiety between cisgender and TGNC clients post-therapy than existed before therapy. Following gender minority stress and intersectionality theories, we suggest that the disparities noted are indicative of systemic discrimination that contributes to the oppression of TGNC individuals and people of color. We encourage counseling psychologists working with TGNC clients and especially TGNC clients of color to be conscious of the systemic oppression faced by their clients and to work with their clients to counter these effects.
Table 1. Participant Demographics

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client N</td>
<td>41,691</td>
</tr>
<tr>
<td>Age (mean ± SD)</td>
<td>22.63 (5.22)</td>
</tr>
<tr>
<td>Gender identity</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>65.9%</td>
</tr>
<tr>
<td>Male</td>
<td>32.5%</td>
</tr>
<tr>
<td>Transgender</td>
<td>0.5%</td>
</tr>
<tr>
<td>Self-identify</td>
<td>1.1%</td>
</tr>
<tr>
<td>Race/ethnicity</td>
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</tr>
<tr>
<td>White</td>
<td>70.4%</td>
</tr>
<tr>
<td>African American/Black</td>
<td>8.1%</td>
</tr>
<tr>
<td>Hispanic/Latino/a</td>
<td>8.6%</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>6.1%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>4.6%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>0.4%</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>0.2%</td>
</tr>
<tr>
<td>Self-identify</td>
<td>1.7%</td>
</tr>
<tr>
<td>Academic status</td>
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</tr>
<tr>
<td>Freshman/First year</td>
<td>19.4%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>18.6%</td>
</tr>
<tr>
<td>Junior</td>
<td>23.1%</td>
</tr>
<tr>
<td>Senior</td>
<td>20.3%</td>
</tr>
<tr>
<td>Graduate/other</td>
<td>18.6%</td>
</tr>
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</table>
### Table 2. Results of the Five Hierarchical Linear Models Predicting Initial Depression Score and Rate of Change

<table>
<thead>
<tr>
<th>Parameter estimates (SE)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
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<td>2.59***</td>
<td>2.58***</td>
<td>2.57***</td>
<td>2.57***</td>
</tr>
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<td></td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>Session</td>
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<td>-.50***</td>
<td>-.49***</td>
<td>-.49***</td>
<td>-.49***</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>Gender identity</td>
<td>0.18***</td>
<td>0.18***</td>
<td>0.18***</td>
<td>0.18***</td>
<td>0.18***</td>
</tr>
<tr>
<td></td>
<td>(.03)</td>
<td>(.04)</td>
<td>(.04)</td>
<td>(.04)</td>
<td>(.04)</td>
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<tr>
<td>Gender identity X session</td>
<td>0.08***</td>
<td>0.08***</td>
<td>0.07**</td>
<td>0.07**</td>
<td>0.07**</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.02)</td>
<td>(.02)</td>
<td>(.02)</td>
<td>(.02)</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>0.04***</td>
<td>0.04***</td>
<td>0.04***</td>
<td>0.04***</td>
<td>0.04***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
</tr>
<tr>
<td>Race/Ethnicity X session</td>
<td>-0.03***</td>
<td>-0.03***</td>
<td>-0.03***</td>
<td>-0.03***</td>
<td>-0.03***</td>
</tr>
<tr>
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<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
</tr>
<tr>
<td>Gender identity X race/ethnicity</td>
<td>0.02</td>
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<td></td>
<td>(.07)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender identity X race/ethnicity X session</td>
<td>0.06</td>
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<tr>
<td></td>
<td>(.05)</td>
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**Random effects**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Residual</th>
<th>Level 1- Intercept</th>
<th>Level 1- Session</th>
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</thead>
<tbody>
<tr>
<td>Residual</td>
<td>0.328</td>
<td>0.500</td>
<td>0.099</td>
</tr>
<tr>
<td>Level 1- Intercept</td>
<td>0.271</td>
<td>0.209</td>
<td>0.098</td>
</tr>
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<td>Level 1- Session</td>
<td>0.271</td>
<td>0.208</td>
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<td></td>
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<td>0.271</td>
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**Goodness of fit**

<table>
<thead>
<tr>
<th>Parameter</th>
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<th>AIC</th>
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</thead>
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<tr>
<td>AIC</td>
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<td>-126372.2</td>
<td>252760.4</td>
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<td>-126358.2</td>
<td>252740.4</td>
</tr>
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</table>

Note. Model 1 is unconditional means model. Model 2 is unconditional growth model. Model 3 adds the effect of gender identity on intercept and slope. Model 4 adds the effect of race/ethnicity on intercept and slope. Model 5 adds the effect of an interaction between gender identity and race/ethnicity on the intercept and slope. *** p < .001; ** p < .01.
Table 3. Results of the Six Hierarchical Linear Models Predicting Initial Anxiety Score and Rate of Change

<table>
<thead>
<tr>
<th>Parameter estimates (SE)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed components</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>2.32***</td>
<td>2.87***</td>
<td>2.86***</td>
<td>2.86***</td>
<td>2.87***</td>
</tr>
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<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Session</td>
<td>-0.43***</td>
<td>-0.43***</td>
<td>-0.42***</td>
<td>-0.42***</td>
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<tr>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender identity</td>
<td>0.10***</td>
<td>0.10***</td>
<td>0.10**</td>
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<tr>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.03)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender identity X session</td>
<td>0.07***</td>
<td>0.07***</td>
<td>0.08***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>-0.03**</td>
<td>-0.03**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity X session</td>
<td>-0.03***</td>
<td>-0.03***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.00)</td>
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<td>Gender identity X</td>
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<td>-0.02</td>
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<tr>
<td>race/ethnicity</td>
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<td>(0.06)</td>
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<tr>
<td>Gender identity X</td>
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<td></td>
<td>-0.04</td>
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<tr>
<td>race/ethnicity X session</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Random components**    |         |         |         |         |         |
| Residual                 | 0.407   | 0.227   | 0.227   | 0.227   | 0.227   |
| Level 1- Intercept       | 0.325   | 0.173   | 0.173   | 0.173   | 0.173   |
| Level 1- Session         | 0.092   | 0.092   | 0.091   | 0.091   |         |

| **Goodness of fit**      |         |         |         |         |         |
| -2LL                     | -126328.2 | -103752.4 | -103734.4 | -103716.5 | -103716.4 |
| AIC                      | 252662.4 | 207516.8 | 207484.8 | 207453   | 207456.8 |

Note. Model 1 is unconditional means model. Model 2 is unconditional growth model. Model 3 adds the effect of gender identity on intercept and slope. Model 4 adds the effect of race/ethnicity on intercept and slope. Model 5 adds the effect of an interaction between gender identity and race/ethnicity on the intercept and slope. *** p < .001; ** p < .01.
References


