

Religious x Sexual Identity: An Intersectional, Longitudinal Examination of Change in Therapy

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Abstract

A burgeoning interest in intersectionality has led to the need for more quantitative, intersectional research. The current study employs an intersectional framework to understand how well counselors are meeting the needs of Lesbian, Gay, Bisexual, Queer, Questioning (LGBQQ) and religious clients by examining clients' initial levels of anxiety and depression and changes in these measures through therapy. Data from 12,825 participants from the Center for Collegiate Mental Health 2012-2014 data set were analyzed. Results from hierarchical linear modeling indicate lower baseline anxiety and depression among religious clients and faster rates of change of anxiety symptoms among non-religious clients. LGBQQ clients presented with higher initial anxiety and depression, but there were no differences in rates of change of anxiety and depression between heterosexual and LGBQQ clients. Significant but minimal interaction effects between religious and sexual identities were found, indicating a need for further research. Counselors are encouraged to be mindful of these disparities in therapy.

Keywords: intersectionality, LGBQQ, religion/spirituality, anxiety, depression

Religious and Sexual Identities: An Intersectional, Longitudinal Examination of Change in
Therapy

With the recent legalization of same-sex marriage in the United States and political arguments about religious freedom, much attention has been placed on the intersection of religious and sexual identities. In sexual identity research, most quantitative studies present a narrow understanding of the ways that sexual identity—including others' reactions to a client's sexual identity—may shape clients' experiences in therapy, focusing on the implications of providing reparative therapy or affirmative therapy (Dehlin, Galliher, Bradshaw, Hyde, & Crowell, 2015) or the possible benefits of matching sexual identity between clients and counselors (Kelley, 2015). Here, sexual identity is best understood as personally selected labels used to convey perceptions and meanings about one's sexuality (Savin-Williams, 2006). With regards to religion, a large number of studies focus on the effectiveness of spiritually-based treatments or the need for religiously sympathetic therapy (e.g., Rosmarin, Pargament, Pirutinsky, & Mahoney, 2010), but few to none discuss how religious clients fare in therapy relative to non-religious individuals. Further, while researchers have shown that the experiences of marginalized individuals at the varying intersections of identities may be notably different than the experiences of individuals marginalized along only one of these identities (Else-Quest & Hyde, 2016), the mental health of religious (or non-religious) sexual minorities is largely unknown (Dehlin et al., 2015). As far as we are aware, there has yet to be a comparative investigation of how lesbian, gay, bisexual, queer, and questioning (LGBQQ) clients fare in psychotherapy compared to heterosexual clients, how religious clients fare compared to non-religious clients, or the ways in which the intersection of these two identities relate to therapeutic outcomes. The present study aims to explore these questions.

Intersectionality

Intersectionality is a theoretical or analytic approach that simultaneously considers multiple categories of identity, difference, and disadvantage (Cole, 2009). Popularized in psychology by Kimberlé Crenshaw (1989), intersectional approaches have three main considerations: the experience and meaning of belonging to multiple intertwined social categories, an examination of power and inequality, and a recognition of the potential fluidity of social categories both at individual and systemic levels (Else-Quest & Hyde, 2016). For example, within an intersectional framework, the experiences of a gay, black woman cannot be explained singularly by her sexual identity, ethnicity, or gender as she may experience her sexual identity much differently than a gay, white woman or her gender differently than a straight, black woman. Consequently, attention to the unique experience of individuals at this particular intersection, as well as the way that historical systems of power and social constructions of identity impact experience is imperative for a full understanding. In the present study, we take an intersectional approach to the study of religious and sexual identities in addition to the singular experiences of religious and sexual minority individuals.

The Experience of LGBQQ Individuals in Therapy

Despite increasing acceptance of sexual minorities, LGBQQ individuals continue to be targets of oppression and victimization more so than their heterosexual counterparts (Meyer, 2003). These experiences of stigma and discrimination may translate to increasing levels of anxiety and depression for LGBQQ individuals, likely due to minority stress (Meyer, 2003).

While many LGBQQ individuals seek therapy for distress, some may be dissuaded due to psychology's historically conflicted relationship with non-heterosexual identities. Affirmative therapy is currently the "gold" standard in client treatment (Perez, DeBord, & Bieschke, 2000);

however, homosexuality was initially pathologized, and only recently were sexual orientation change efforts formally denounced (APA Task Force, 2009). Thus, many LGBTQ individuals may continue to feel hesitancy toward mental health providers due to the historical discrimination against sexual minorities.

Many mental health providers express not feeling properly prepared to work with this population (Anhalt, Morris, Scotti, & Cohen, 2003). In graduate programs, trainees receive little training in understanding LGB-related concerns (Phillips & Fischer, 1998), and many clinicians report a lack of experience in LGB-related issues (Eubanks-Carter, Burckell, & Goldfried, 2005), which may lead counselors to either dismiss or over-focus on sexuality-related issues (Kelley, 2015). Consequently, doing so may further perpetuate expectations of stigma and discrimination in therapy and is especially problematic given that LGBTQ individuals, including many college students (McAleavey, Castonguay, & Locke, 2011), typically seek mental health services at a higher rate than the general population (Cochran, Sullivan, Mays, 2003). Currently, there are no studies comparing the rates of change of psychological symptoms in therapy of LGBTQ and heterosexual clients, which may help provide more information about how these clients experience therapy.

The Experience of Religious Individuals in Therapy

Though overall rates of religious affiliation have declined in recent years (Pew Research Center, 2015), most emerging adults report some degree of religiousness with 79% of college students reporting belief in God and even more reporting attendance of religious services (81%; Astin et al., 2003). Further, many American cultural norms are rooted in Christian traditions (e.g., Monday-Friday workweek, paid time off for the Christmas holiday). Individuals from “culturally dominant,” or what we will refer to as “privileged,” Christian religions report lower

levels of psychological distress than do individuals identifying as Muslim, Buddhist, or Hindu or religiously unaffiliated (Lefevor, Park, & Pederson, 2016). While religious individuals irrespective of denomination largely report more positive mental health than non-religious individuals (Bonelli & Koenig, 2013), it is nonetheless noteworthy that individuals from historically oppressed religious identities—including identities such as atheist, agnostic, or unaffiliated—tend to experience more psychological distress than individuals with historically privileged religious identities, perhaps due to the experience of increased stressors that Christian individuals do not experience (Bowman & Small, 2012).

Religious individuals are often hesitant to seek help from mental health professionals (Wang, Berglund, Olfson, & Kessler, 2004). This trend may be explained by client skepticism of secular counselors' ability to address religious concerns (Mayers, Leavery, Vallianatou, & Barker, 2007), concern that non-religious counselors will dismiss religious beliefs (Keating & Fretz, 1990), and potential worldview mismatch between non-religious counselors and religious clients (Yarhouse & Johnson, 2013). However, it is unclear how much these or other factors affect the outcomes of religious clients in therapy. The existing literature on religion and psychotherapy focuses on themes such as the need for religiously sympathetic therapy, the effectiveness of spiritually-based treatments, and the effects of religiously-accommodative interventions (e.g., Rosmarin et al., 2010), leaving the general efficacy of psychotherapy for religious clients unresolved.

The Intersection of Religion and Sexual Identity

Individuals navigating intersecting identities often have experiences unlike individuals in either of the distinct identity groups (Else-Quest & Hyde, 2016). This may be especially true for individuals who identify as religious and LGBQQ. We recognize that neither religious nor sexual

identities are homogenous categories. Consequently, there are seemingly infinite ways that these identities could intersect, with each intersection producing a different lived experience and potentially different mental health-related outcomes.

Generally, religion is linked with positive mental health outcomes (Bonelli & Koenig, 2013), but the picture for religious, LGBQQ individuals remains unclear (Barnes & Meyer, 2012). Examining the role of power/oppression, the intertwined nature of intersecting identities, and the social construction of identity (Cole, 2009) may provide some insight into this phenomenon. Typically, identifying with historically privileged groups (i.e., Christian affiliation, heterosexual identity) is marked by relative ease and lower risk of distress as one navigates a society primarily organized to accommodate their experience. Identifying with a historically oppressed or minority identity (e.g., LGBQQ, atheist, Buddhist), in contrast, is often marked by discrimination, victimization, and rejection as an outcome of “deviation” from the “norm” (Meyer, 2003). Further, an individual with multiple historically oppressed identities may experience an additive measure of discrimination. For example, a gay Muslim may experience oppression and discrimination in spaces that may be affirming for other Muslims (e.g., a mosque) for not being straight and in spaces that may be affirming for other sexual minorities (e.g., an LGBTQ center) for being a person of faith. Similarly, therapeutic interventions designed specifically for individuals of a particular identity may not be equally efficacious for individuals with intersecting identities. To continue the previous example, while coming out has historically been linked to positive mental health benefits among LGBQQ individuals (Juster, Smith, Ouellet, Sindi, & Lupien, 2013), this may not be the case for a gay Muslim, for whom coming out may also lead to estrangement from family, friends, and culture. Similarly, religious interventions, which have been found to be generally efficacious for religious individuals (e.g.,

prayer, scriptural study; Rosmarin et al., 2010), may be ineffective as they may lead to increased discontentment toward a God who may be thought to prohibit same-sex sexual behavior. Due to the unique social construction of the individual and interpersonal nature of identity development, individuals may differ radically from each other, adding further variation.

The experiences of religious LGBQQ individuals in psychotherapy may very well differ from those of individuals who share only one of the two marginalized identities, especially given that psychologists are historically seen as critical of religion (Pate & Bondi, 1992) but LGBQQ affirming (Bilgrave & Deluty, 2002). We might expect that LGBQQ religious individuals have slower rates of change of symptoms in therapy than either their religious or LGBQQ counterparts. Currently, however, there are no studies comparing the experiences in therapy of LGBQQ religious individuals to either LGBQQ or religious individuals and thus intersectional research is needed to better understand potential differences.

Research Questions

The present study was guided by the question: How well are the needs of religious and LGBQQ clients being met by current counseling services? Guided by intersectionality theory and gaps in current knowledge, we divided our primary question into three smaller questions. We asked 1) How distressed do LGBQQ clients present to treatment and how do they fare in therapy? 2) How distressed do religious clients present for treatment and how do they fare in therapy? 3) Is there any interaction between religion and sexual identities in initial severity and rates of change in therapy?

Methods

Data for this study were collected through the Center for Collegiate Mental Health (CCMH), a national practice research network of over 400 college counseling centers.

Participating centers collected data as part of routine practice, each with their own independent review board approval. All clients from 2012-2014 were eligible for inclusion.

Participants

Clients. Of the 178,221 unique clients in the 2012-2014 dataset, 12,825 met initial inclusion criteria. To be included, clients must have provided information on religious and sexual identities as well as three separate CCAPS scores. Due to differences in the frequency of administration of the CCAPS at different centers and low rates of therapy attendance, 154,755 clients were excluded. A further 10,641 clients did not provide information on religious or sexual identity. The included clients attended an average of 10.58 sessions ($SD = 7.65$) and had an average of 5.36 CCAPS administrations ($SD = 4.04$) associated with those sessions. Client demographics are reported in *Table 1*. Clients were nested within 84 university counseling centers. The average number of clients seen per center was 152.68 ($SD = 173.71$) with a range of 2-886.

Measures

Counseling Center Assessment of Psychological Symptoms-34 (CCAPS). The CCAPS is a multidimensional self-report instrument intended to measure psychological distress in college counseling centers (Locke et al., 2012). The CCAPS measures distress in seven domains: Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Alcohol Use, and Hostility. The CCAPS subscale scores have shown acceptable convergent and discriminant validity, and adequate test-retest reliability, with 1- and 2-week reliability ranging from .71 to .88. The present study utilized the depression and generalized anxiety subscales, which have reported reliabilities of .88 and .83 and show adequate convergent

validity with the Beck Depression Inventory and Beck Anxiety Inventory respectively (Locke et al., 2012).

In completing the CCAPS, clients are asked to rate themselves over the past two weeks on a Likert scale, from 0 (*not at all like me*) to 4 (*extremely like me*). Each subscale is scored by taking the average of the questions that load onto that subscale. As such, higher subscale scores indicate more distress, with scores ranging from 0 to 4. Because this dataset comes from multiple institutions with different procedures around assessment, the frequency with which the CCAPS is administered varies by university counseling center based on center policy. Consequently, some clients may have a CCAPS corresponding to every session, while other clients may have one at every third session or at other intervals during treatment.

Standardized Data Set (SDS). The SDS collects information on demographics, academics, and mental health history and is most often administered at the beginning of treatment. For the present study, two questions from the SDS were considered: clients' religious identity and clients' sexual identity. Response options for each question are shown in *Table 1*.

Procedure

Sexual identity was dichotomized into heterosexual and LGBQQ, coded as -1 and 1 respectively. Religious identity was coded into three categories: Dominant religious (D-R; Christian, Catholic), Non-dominant religious (ND-R; Muslim, Hindu, Buddhist, Jewish), and Non-dominant unaffiliated (ND-U; agnostic, atheist, no preference). These three categories were contrast coded with an orthogonal contrast-coding scheme into two variables (see Judd, McClelland, & Ryan, 2011). The first variable compared dominant to non-dominant groups, with D-R being coded as 2 and ND-R and ND-U being coded as -1. The second variable compared the two non-dominant groups, with ND-R being coded as 1, ND-U coded as -1, and D-R coded as 0.

We tested models with and without “no preference” included in the unaffiliated group and found the results to be the same, so we have retained “no preference” in the ND-U category.

Interactions between religious and sexual identities were tested by multiplying the contrast codes for each variable, creating interactions between both religious contrasts. In models with contrast-coded variables, the intercept represents the average of the initial depression or anxiety scores for each group, which in most cases approximates the grand mean.

Each client’s data were first broken into courses of therapy representing unique episodes of treatment. An episode or course of treatment was defined by having more than 90 days between appointments. Only a client’s first course of treatment was eligible for inclusion in order to maintain independence of observations at the client level. CCAPS depression and anxiety scores were matched with the clients’ next therapy session, up to three days after the depression or anxiety score was provided, though measures were typically administered the day of treatment. Sessions greater than 20 were removed so that outlying clients with many sessions did not skew results when modeling change trajectories.

Statistical Analysis

In order to examine our hypotheses, we used hierarchical linear modeling (HLM) with the “nlme” package (Pinheiro, Bates, DebRoy, Sarkar, & R Development Core Team, 2013) in the R programming language (version 3.2.3; R Development Core Team, 2014) using maximum likelihood estimation. HLM allowed us to evaluate the outcomes of interest while appropriately accounting for the nesting inherent in the data, as CCAPS scores are nested within clients, and clients are nested within university counseling centers. HLM can also handle differing frequency of outcome assessment, which was important, as clients completed the CCAPS at differing intervals during treatment. Thus, the models included three levels: depression and anxiety scores

within clients (level 1), clients within university counseling centers (level 2), and centers (level 3).

At the session level (level 1), each client's depression or anxiety score was modeled as a function of the corresponding session number. We chose to model time in the HLM as session number, as opposed to days since initial appointment, in order to evaluate the effect of additional appointments, or doses of treatment (see Howard, Kopta, Kraus, & Orlinsky, 1986). Session number was centered on a client's first session. Consequently, the intercept in our statistical models represents a client's baseline depression or anxiety score. At the client level (level 2), we model client sexual identity, religious identity, and their interaction as predictors of client initial distress (intercept) and client rate of change (slope). We include center at level 3 to account for nesting but do not model predictors at that level.

Additionally, random effects of intercept and time were included at both the client and center level. Random effects allow for differences in initial distress and rate of change between clients and centers, as well as allowing for the calculation of the percentage of variance accounted for by both clients and centers, which is reported below. We report both variance accounted for as a percentage of total variance and as a percentage of slope variance (Lutz, Leon, Martinovich, Lyons & Stiles, 2007).

A model building approach was used to test the significance of predictors entered into the model. Predictors were entered in sequence, first testing sexual identity, then religious identity, then an interaction between religious and sexual identities. In each case, variables were tested as predictors of both the intercept (initial Depression or Anxiety score) and slope (rate of change in scores). Model comparison at each step was done using a likelihood-ratio test (LRT) comparing a model with additional predictors to the previous model without the predictors to see if the

additional predictors improve model fit (Bolker et al., 2009). The LRT tests the null hypothesis that the two nested models do not have significantly different model fit. This is modeled as a Chi-square distribution with degrees of freedom equal to the difference in parameters estimated between the two models. We also report the Akaike Information Criteria (AIC), in which lower values indicate better model fit (McCoach & Black, 2008).

A combination of model fit and significance of predictors was used to determine which predictors to retain in subsequent models. If the set of fixed effects tested significantly improved model fit according to the LRT and decreased AIC, individual effects with significant t values were retained. Subsequent models were then compared using the LRT to the previous model with only the significant retained predictors. This was done so that the models would be nested and could thus be compared with a likelihood ratio test. A conservative significance level of $p < .01$ was selected for the likelihood-ratio test and tests of individual predictors due to the large sample size. Additionally, variance accounted for by each set of predictors tested is reported to contextualize the size of effects. Variance accounted for is calculated 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).

Results

Because the frequency of CCAPS administration during treatment varies, we first tested whether this frequency varies systematically by either of our variables of interest. We found that the frequency of CCAPS did not vary significantly by sexual ($F = .063, p = .802$) or religious identity ($F = .013, p = .911$).

Depression

Parameter estimates, null-hypothesis significance tests, and fit statistics are shown in *Table 2*. Predictors that did not significantly improve model were not included in subsequent models. We do not include notation for level 3 (center), as there are no predictors at that level, and only the intercept, and in later models the slope, is allowed to vary at random, while all other variables are fixed at this level.

Model 1, an unconditional means model or null model, does not include any predictors:

$$\text{Level 1: } Depression_{tij} = \beta_{0ij} + e_{tij}$$

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

In model 1, $Depression_{tij}$ represents the depression score at time t for client i at center j . The intercept in this model (δ_{00j}) indicates that the mean depression scores for all clients was 1.49. Additionally, random intercepts at the client (U_{0ij}) level were included, allowing each client to have a unique deviation from the average depression score, in addition to a residual variance term (e_{tij}). Before adding predictors, we used the null model to calculate intraclass correlations for variance accounted for by clients and centers. As a percentage of total variance, differences between centers accounted for 2.1% of the total variance in depression scores, while differences between clients within centers accounted for 64.0% of the total variance in depression scores.

Model 2, an unconditional growth model, models depression scores as a function of session number with no predictors of either a client's starting level of Depression (intercept) or how quickly their depression scores change during treatment (slope):

$$\text{Level 1: } Depression_{tij} = \beta_{0ij} + \beta_{1ij}(session_{tij}) + e_{tij}$$

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

$$\beta_{1ij} = \delta_{10j} + U_{1ij}$$

At this step, different shapes of change were tested, including a log transformation of session number, and a quadratic and cubic change pattern. A log transformation provided the best fit for the data ($AIC_{\log} = 128279.6$ & $-2LL_{\log} = -64130.8$; $AIC_{\text{quad}} = 128979.5$ & $-2LL_{\text{quad}} = -64479.7$; $AIC_{\text{cubic}} = 128627.6$ & $-2LL_{\text{cubic}} = -64302.8$), so session number was log transformed in all subsequent models. The log transformation of session number models a negatively accelerating curve, with the amount of change between sessions decreasing as session number increases (see Finch, Lambert, & Schaalje, 2001). The intercept in this model (δ_{00j}), now representing the mean depression score at time 0, indicates that the mean initial depression score was 1.83. The negative log transformed session number (δ_{10j}) indicates that on average, clients' depression scores decrease with each additional session, showing improvement.

In addition to a random intercept, a random effect of session number was added at both the client (U_{1ij}) and center level to allow clients and centers to have their own unique deviations around the average change. Model 2 was used to calculate the percentage of slope variance accounted for by clients and centers. As a percentage of slope variance, differences between centers account for 4.2% of the variance in client rate of change, while differences between clients within centers accounts for 95.8% of differences in rate of change.

Models 3, 4, and 5 tested the sequential addition of sexual identity, religion, and their interaction. Model 3 shows the effect of sexual identity on both initial depression scores and rate of change:

$$\text{Level 1: } Depression_{tij} = \beta_{0ij} + \beta_{1ij}(session_{tij}) + e_{tij}$$

$$\text{Level 2: } \beta_{0ij} = \delta_{00j} + \delta_{01j}(\text{sexual identity}_{ij}) + U_{0ij}$$

$$\beta_{1ij} = \delta_{10j} + \delta_{11j}(\text{sexual identity}_{ij}) + U_{1ij}$$

Confirming prior research, LGBQQ clients presented with higher initial Depression than heterosexual clients (δ_{01j} ; $t = 8.09$, $p < .001$). LGBQQ and heterosexual clients did not, however, differ in their rate of change of depression scores during therapy, modeled by the interaction between session number and sexual identity (δ_{11j} ; $t = -.57$, $p = .563$). Taken together, sexual identity and its interaction with session number improved model fit ($\chi^2(2) = 86.33$, $p < .001$); however, because the effect of sexual identity on rate of change was not significant, only the effect of sexual identity on initial depression score was retained in subsequent models. Although the effect of sexual identity on initial depression score was significant, it explained only .54% of the variance in initial depression, indicating that the effect is quite small.

Model 4 shows the effect of religious identity on initial depression scores and rate of change with the inclusion of the two contrast coded religion variables:

$$\text{Level 1: } Depression_{tij} = \beta_{0ij} + \beta_{1ij}(session_{tij}) + e_{tij}$$

$$\text{Level 2: } \beta_{0ij} = \delta_{00j} + \delta_{01j}(\text{sexual identity}_{ij}) + \delta_{02j}(\text{religion1}_{ij}) + \delta_{03j}(\text{religion2}_{ij}) + U_{0ij}$$

$$\beta_{1ij} = \delta_{10j} + \delta_{11j}(\text{religion1}_{ij}) + \delta_{12j}(\text{religion2}_{ij}) + U_{1ij}$$

The first religious contrast, coded to compare along themes of privilege and power, compares D-R clients to ND-R and ND-U clients. This contrast indicated a difference between these two groups, with D-R clients having lower initial depression scores than ND-R and ND-U clients (δ_{02j} ; $t = -8.98$, $p < .001$). These two groups did not, however, differ on their rate of change during therapy (δ_{11j} ; $t = -.72$, $p = .470$). The second religious contrast compared ND-R clients to ND-U clients and indicated that ND-R clients presented with lower depression scores than ND-U clients (δ_{03j} ; $t = 3.13$, $p = .002$). These two groups did not differ on their rate of change during therapy (δ_{12j} ; $t = -.32$, $p = .745$). The addition of the religious identity contrasts as predictors of both intercept and slope significantly improved model fit ($\chi^2(4) = 151.92$, $p < .001$). Religious

identity explained .76% of the variance in initial depression, again, representing a small amount of variance explained. Taken together, ND-U sexual minority clients had the highest predicted initial depression score (2.09), followed by ND-R sexual minority clients (2.01), D-R sexual minority clients (1.87), ND-U heterosexual clients (1.79), ND-R heterosexual clients, and D-R heterosexual clients (1.57).

Model 5 tested an interaction between sexual identity and religion on initial depression:

$$\text{Level 1: } Depression_{tij} = \beta_{0ij} + \beta_{1ij}(\text{session}_{tij}) + e_{tij}$$

$$\begin{aligned} \text{Level 2: } \beta_{0ij} = & \delta_{00j} + \delta_{01j}(\text{sexual identity}_{ij}) + \delta_{02j}(\text{religion1}_{ij}) + \delta_{03j}(\text{religion2}_{ij}) \\ & + \delta_{04j}(\text{sexual identity}_{ij} * \text{religion1}_{ij}) + \delta_{05j}(\text{sexual identity}_{ij} * \text{religion2}_{ij}) \\ & + U_{0ij} \end{aligned}$$

$$\beta_{1ij} = \delta_{10j} + U_{1ij}$$

Interactions predicting rates of change were not tested, as neither variable on its own was significantly related to rates of change. Interaction terms for baseline depression scores were not significant, indicating that the effect of religious identity on initial depression scores does not differ by sexual identity and vice versa. Specifically, the difference between LGBQQ and heterosexual clients does not differ between D-R clients and ND-R or ND-U clients (δ_{04j} ; $t = 1.44$, $p = .151$). Similarly, the difference between LGBQQ and heterosexual clients does not differ between ND-R and ND-U clients (δ_{05j} ; $t = -.20$, $p = .838$). The interaction terms did not improve model fit ($\chi^2(2) = 2.09$, $p = .352$). Taken together, sexual and religious identities explain 1.29% of the variance in initial depression scores, after including session number, and none of the variance in rate of change in depression scores.

Anxiety

Table 3 presents coefficients and fit statistics for successive models predicting Anxiety. Model equations for Anxiety were largely the same as for Depression and are consequently only presented again when they diverge. The intercept in model 1 indicates that the mean anxiety score was 1.76. Variance components in model 1 indicate that differences between centers account for 1.4% of the total variance in anxiety scores, while differences between clients within centers account for 66.3% of the total variance in anxiety scores.

Model 2 indicated that the mean initial anxiety score was 2.03. The coefficient for session number was again negative, indicating an overall trend of improvement during treatment. Tests of different shape of change again suggested that a log transformation again provided the best fit for the data ($AIC_{\log} = 121787.9$ & $-2LL_{\log} = -60884.97$; $AIC_{\text{quad}} = 122379.8$ & $-2LL_{\text{quad}} = -61179.8$; $AIC_{\text{cubic}} = 128470.7$ & $-2LL_{\text{cubic}} = -64228.3$), so session number was log transformed in all subsequent models. A random effect of session number was added at both the client and center level and used to calculate the percentage of slope variance accounted for by clients and centers. As a percentage of slope variance, differences between centers account for 4.7% of the variance in client rate of change, while differences between clients within centers accounts 95.3% of differences in rate of change.

Models 3, 4, and 5 tested the sequential addition of sexual identity, religious identity, and their interaction. Model 3 shows the effect of sexual identity on initial anxiety scores and rate of change in anxiety scores. This model indicated that LGBQQ clients presented with higher initial Anxiety than heterosexual clients ($t = 5.40, p < .001$). LGBQQ and heterosexual clients did not, however, differ in their rate of change of anxiety scores during therapy ($t = 1.11, p = .269$).

Taken together, sexual identity and its interaction with session number improved model fit as

demonstrated by the significant reduction in -2LL ($\chi^2(2) = 52.31, p < .001$) and AIC. Sexual identity explained .24% of the variance in initial anxiety scores.

Model 4 shows the effect of religious identity on initial anxiety scores and rate of change with the inclusion of the two contrast coded religious identity variables. The first contrast indicated that D-R clients have lower initial anxiety scores than ND-R and ND-U clients ($t = -5.08, p < .001$). These two groups did not, however, differ on their rate of change during therapy ($t = -1.43, p = .154$). The second religious contrast showed no significant difference in initial anxiety between ND-R clients and ND-U clients ($t = 1.12, p = .262$). These two groups did, however, differ on their rate of change during therapy, with ND-R showing more rapid change ($t = -3.14, p = .002$). The addition of religious identity significantly improved model fit ($\chi^2(4) = 60.35, p < .001$). Religious identity explained .76% of the variance in initial anxiety, representing a small amount of variance explained. The effect of sexual identity on initial Anxiety remained significant after controlling for religion, so both religion contrast coded variables and sexual identity were retained in subsequent models.

Model 5 tested interactions between sexual identity and religion on initial anxiety, as well as on rate of change. The model here diverges from the Depression model 5, as different predictors were retained from the previous model:

$$\text{Level 1: } Anxiety_{tij} = \beta_{0ij} + \beta_{1ij}(session_{tij}) + e_{tij}$$

$$\begin{aligned} \text{Level 2: } \beta_{0ij} = & \delta_{00j} + \delta_{01j}(\text{sexual identity}_{ij}) + \delta_{02j}(\text{religion1}_{ij}) \\ & + \delta_{03j}(\text{sexual identity}_{ij} * \text{religion1}_{ij}) + \delta_{04j}(\text{sexual identity}_{ij} * \text{religion2}_{ij}) \\ & + U_{0ij} \end{aligned}$$

$$\begin{aligned} \beta_{1ij} = & \delta_{10j} + \delta_{11j}(\text{religion2}_{ij}) + \delta_{12j}(\text{sexual identity}_{ij} * \text{religion1}_{ij}) \\ & + \delta_{13j}(\text{sexual identity}_{ij} * \text{religion2}_{ij}) + U_{1ij} \end{aligned}$$

There was no significant interaction between the first religious identity contrast and sexual identity on initial anxiety scores, indicating that the effect of being a sexual minority was not stronger for D-R clients than for ND-R and ND-U clients (δ_{03j} ; $t = .01$, $p > .99$). There was, however, a significant interaction between the second religious identity contrast and sexual identity on initial anxiety, such that the direction of the difference between clients from non-dominant religions and non-religious clients depended on their sexual identity (δ_{04j} ; $t = 2.67$, $p = .008$). Specifically, within sexual minority clients, ND-R clients had higher predicted initial anxiety (2.28) than ND-U clients (2.12); however, within heterosexual clients, ND-U clients had higher predicted initial anxiety (2.02) than ND-R clients (1.86). D-R clients had the lowest anxiety scores within both the sexual minority group (2.08) and the heterosexual group (1.82).

In predicting rate of change, there was no significant interaction between the first religious identity contrast and sexual identity (δ_{12j} ; $t = -.69$, $p = .488$), indicating that in regards to rate of change, the effect of a client being a sexual minority does not differ between D-R client and either ND-R or ND-U clients. Taken together with the lack of main effect of sexual identity on rate of change, heterosexual and sexual minority D-R clients had the same predicted rate of change. There was, however, a significant interaction between the second religious identity contrast and sexual identity (δ_{13j} ; $t = -2.92$, $p = .004$). Within sexual minority clients, ND-R clients experienced a more rapid change in anxiety symptoms than ND-U clients; however, within heterosexual clients, ND-U clients experienced a quicker decrease in symptoms than ND-R clients. These interactions are depicted graphically in *Figure 1*. Although the addition of the interaction terms produced significant coefficients, the additions did not significantly improve model fit ($\chi^2(4) = 11.28$, $p = .023$) and should consequently be interpreted with caution. Taken

together, sexual and religious identities explain .53% of the variance in initial anxiety scores after including session number and .26% of the variance in rate of change in anxiety scores.

Discussion

The present study compared the rates of change of psychological symptoms in therapy based on sexual identity, religious identity, and the intersection of these identities, from an intersectional lens, to provide more information about how these clients experience therapy.

Sexual Identity

We found that LGBQQ clients exhibited greater distress than heterosexual clients at baseline assessment (McAleavey et al., 2011). This trend concords with previous research linking sexual minority identification to stigmatization in a heteronormative society (Meyer, 2003).

We found that LGBQQ and heterosexual clients had similar rates of change for both anxious and depressive symptoms in therapy. This finding suggests that both LGBQQ and heterosexual college students are able to receive comparable treatment. Nonetheless, it is unclear what factors account for the parity in treatment outcomes. For example, it is possible that LGBQQ clients may self-select to work with therapists known to be LGBQQ-affirming or that counseling centers may assign LGBQQ clients to therapists with expertise in sexual identity. Experimental research with randomized assignment and selection would be necessary to achieve greater clarity.

These findings are encouraging and at the same time somewhat surprising given the perceived lack of training many counselors experience when working with LGBQQ clients (Phillips & Fischer, 1998) and history of sexual orientation change efforts among many counselors. However, the findings may reflect general societal and professional trends toward

greater acceptance of and openness to sexual minority experience (APA Task Force, 2009).

Though sexual minorities have been historically oppressed and continue to experience the effects of discrimination and prejudice in many aspects of life, it is possible that therapy is largely a “safe space” for sexual minorities. We also note that the present effects explained a relatively small percentage of the total variance in symptoms at both baseline and throughout treatment, indicating that other factors may also affect the relationship between sexual identity and symptoms of depression and anxiety.

Religious Identity

We found that religious minority clients evidenced increased distress at baseline relative to Christian clients. This trend concords with previous research as religious individuals typically show better psychological health (Bonelli & Koenig, 2013) and religious affiliation tends to be a buffering factor against psychological distress (Rasic et al., 2009). In line with previous work and intersectionality theory (Crenshaw, 1989), privileged religious affiliation has been linked to less distress relative to minority or no religious affiliation (Lefevor et al., 2016), possibly due to the effects of historical oppression of religious minorities.

We observed differences in the rates of change of anxiety symptoms in therapy for clients from Christian religions compared to clients from other religions or not reporting religious affiliation. However, we did not observe differences in the rates of change of depressive symptoms between groups. These conflicted results suggest that it is possible that therapy “works” less well for Christian clients than for other clients. More research needs to be done to examine this possibility. Nonetheless, we offer a handful of explanations for the differential rates of change of anxiety symptoms.

It is possible that these results are an artifact of regression towards the mean rather than a valid phenomenon as religious minority clients reported higher levels of initial distress. However, similar baseline trends were noted for LGBQQ clients, without the concomitant differences in rates of change, which casts doubt on this explanation. It is also possible that there is a worldview mismatch between counselors, who are viewed as largely less religious than the general public (Bilgrave & Deluty, 2002; Larson, 1996; Smith & Orlinsky, 2004), and religious clients, which may affect therapeutic outcomes (Norcross & Lambert, 2011). Where many religious values center around obedience to authority, respect, and tradition, mental health values often focus on autonomy, independence, and justice (American Psychological Association, 2010), leading to conflict for some conservative Christians seeking mental health treatment (Dessel & Bolsen, 2014; Yarhouse & Johnson, 2013). Consequently, it may be more difficult for counselors to establish positive therapeutic alliances with their religious clients, especially in light of the distrust of therapy many religious clients hold (Mayers et al., 2007). Additionally, we note that the present effects explained a relatively small percentage of the total variance in symptoms at baseline and throughout treatment, indicating that other factors may also affect the relationship between religious identity and symptoms of depression and anxiety. More research is needed to understand these effects.

The Intersection of Sexual and Religious Identities

Given that many LGBQQ individuals who identify religiously seek treatment to change their same-sex attractions (Dehlin et al., 2015) and the mixed literature surrounding the well-being of LGBQQ religious individuals (Barnes & Meyer, 2012), we suspected that there may be a stronger interaction between sexual identity and religious affiliation. However, from an outcome perspective, our results indicated that there was largely not a synergistic effect for

religious and sexual identities, though main effects were present in those with intersecting identities. The only significant interaction found was for rates of change of anxiety symptoms; however, the effect sizes were small, and the addition of these variables did not significantly improve model fit. We offer a couple of plausible explanations of these findings, following intersectionality theory (Crenshaw, 1989).

Intersectionality may be best understood as an approach to research design and formulation rather than as a specific data analytic technique (Else-Quest & Hyde, 2016). Although examining interaction effects is a plausible exemplification of an intersectional approach, such an approach can also be seen in the interpretation of main effects. For example, LGBTQ individuals who did not identify as Christian evidenced the highest levels of initial anxiety and depression. It is likely that these symptoms were related to the unique synergy of holding minority religious and sexual identities. The data are limited to indicating only overall trends and not explaining the reasons why these distinctions may be the case.

It is also possible that the lack of significant interaction effects was affected by the difficulty in measuring religious and sexual identities. We recognize that there is substantial diversity within categories of religious and sexual identity (e.g., within Christians, within gay men) that may not have been captured by our present study variables. Allowing open-ended responses for religious and sexual identity, including questions about frequency or intensity of religious practice, and including questions about the relative centrality of sexual identity in an individual's conception of self may further illustrate differences. Further research needs to be conducted to better understand this interaction (or lack thereof).

Implications for Counselors

The results of this study have important implications for practicing counselors. First, though LGBQQ clients fare as well in therapy as heterosexual clients, they typically present with higher initial levels of distress. Increased understanding of the nature of the elevated distress—which may include sexual minorities’ experience with prejudice, discrimination, and internalized homonegativity (Meyer, 2003)—may aid counselors in better serving this population. Next, though religious clients present with typically lower levels of initial distress than non-religious clients, religious clients improve more slowly in therapy relative to their non-religious counterparts. An increased understanding of the unique challenges faced by non-religious clients (Lefevor et al., 2016) may aid counselors to help address the increased levels of distress evidenced by non-religious clients. Further, recognizing potential worldview differences and the difficulty of many religious clients in trusting mental health professionals (Mayers et al., 2007) may enable counselors to better serve their religious clients. Finally, though there were few interaction effects found between sexual identity and religious affiliation, counselors should be mindful of the way in which these identities may intersect to affect clients’ lived experiences.

Limitations, Conclusions, and Future Directions

The present study included a large, multi-site sample that extends previous work on the relationship between sexual identity, religious identity, and their intersection and therapeutic outcomes by comparing initial levels of distress and rates of change among clients. Nonetheless, there are limitations to the generalizability of our findings that should be considered. The sample consisted of emerging adults who received treatment at college counseling centers. Though our sample is large and the participants are multinational, it is not a representative sample. Consequently, interpretation of these findings may be limited to the experiences of clients at college counseling centers as significant differences in initial distress and rates of change may be

more or less sizeable in different contexts. Due to our choice of analytic methods, our variables were dichotomized, blurring distinctions within categories. We acknowledge that both sexual and religious identities are far more nuanced than we were able to represent and hope that future studies include more nuanced variables. Further, there may be much variation within categories of sexual and religious identity that was not accounted for (e.g., liberal vs. conservative) due to study variables. Future studies should use more overt assessments of values and worldview to better understand these possible nuances. More research is also needed that explores the experiences of religious individuals in therapy and the varying ways that sexual and religious identities may intersect.

To our knowledge, this is the first empirical investigation of the effects of sexual identity, religious identity, and their intersection on clients' initial distress and rates of change in therapy. Data were obtained from a large, national sample of clients who were observed in a naturalistic setting. We found that LGBQQ clients, though experiencing increased initial distress, experienced a change in levels of anxious and depressive symptoms at the same rate in therapy as heterosexual clients. We also found that though religious clients experienced less initial distress, they experienced slower rates of change of anxious symptoms in therapy relative to non-religious clients while experiencing similar rates of change of depressive symptoms. Some interaction effects were found for rates of change of anxious symptoms and no interaction effects were observed for rates of change of depressive symptoms or baseline distress. We propose counselor worldview and values as a potential explanation for the relative parity of experience of LGBQQ and heterosexual clients as well as for the imparity of experience between religious and non-religious clients. More research with better-defined study variables is needed to understand the experiences of clients at the intersection of religious and sexual identity.

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Table 1
Demographics for all Participants

Variable	
Client <i>N</i>	12,825
Gender identity	
Female	67.1%
Male	31.9%
Transgender	0.4%
Self-identify	0.6%
Race/ethnicity	
White	71.9%
African American/Black	8.6%
Hispanic/Latino/a	8.2%
Asian/Asian American	5.1%
Multiracial	4.2%
American Indian or Alaskan Native	0.3%
Native Hawaiian or Pacific Islander	0.3%
Self-identify	1.4%
Academic status	
Freshman/First year	18.9%
Sophomore	19.4%
Junior	23.2%
Senior	21.4%
Graduate/other	17.2%
Sexual orientation	
Heterosexual	85.5%
Lesbian	1.9%
Gay	2.9%
Bisexual	4.6%
Questioning	2.7%
Self-identify	2.4%
Religious or spiritual preference	
Agnostic	13.5%
Atheist	9.6%
Buddhist	1.0%
Catholic	19.3%
Christian	33.5%
Hindu	0.7%
Jewish	2.3%
Muslim	1.0%
No preference	19.2%

Table 2

Fixed and random effect estimates from a series of hierarchical linear models in which religious and sexual identity predict clients' initial depression score and rate of change (N = 12,825)

		Parameter estimates (SE)				
		Model 1	Model 2	Model 3	Model 4	Model 5
<i>Fixed effects</i>						
	Intercept	1.49*** (.02)	1.83*** (.02)	1.80*** (.02)	1.84*** (.02)	1.84*** (.02)
	Session		-0.28*** (.01)	-0.28*** (.01)	-0.28*** (.01)	-0.28*** (.01)
	Sexual identity			0.21*** (.03)	0.15** (.02)	0.15*** (.02)
	Session X sexual identity			-0.01 (.01)	-	-
	Religion1: D-R vs ND-R & ND-U				-0.06*** (.01)	-0.06*** (.01)
	Religion2: ND-R vs ND-U				-0.04*** (.01)	-0.04*** (.01)
	Session X religion1: D-R vs ND-R & ND-U				0.00 (.00)	-
	Session X religion2: ND-R vs ND-U				0.00 (.01)	-
	Sexual identity X religion1: D-R vs ND-R & ND-U					0.02 (.01)
	Sexual identity X religion2: ND-R & ND-U					-0.01 (.03)
<i>Random effects</i>						
	Residual	0.317	0.207	0.207	0.207	0.207
	Level 1- Intercept	0.605	0.929	0.924	0.917	0.916
	Level 1- Session		0.112	0.112	0.112	0.112
	Level 2- Intercept	0.023	0.022	0.021	0.020	0.020
	Level 2- Session		0.005	0.005	0.005	0.005
<i>Goodness of fit</i>						
	-2LL	-73487.6	-64130.8	-64087.7	-64012.0	-64011.2
	AIC	147008.4	128279.6	128197.3	128051.9	128050.5

Note. Model 1 is unconditional means model. Model 2 is unconditional growth model. Model 3 adds the effect of sexual identity on intercept and slope. Model 4 adds the effect of religion on intercept and slope. Model 5 adds the effect of an interaction between sexual identity and religion on the intercept. D-R = Dominant religious, ND-R = Non-dominant religious, ND-U = Non-dominant unaffiliated. *** $p < .001$; ** $p < .01$; * $p < .05$. - indicates that the fixed effect was not retained due to non-significance.

Table 3

Fixed and random effect estimates from a series of hierarchical linear models in which religious and sexual identity predict the clients' initial anxiety score and rate of change (N = 12,825)

	Parameter estimates (SE)				
	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Fixed components</i>					
Intercept	1.76*** (.02)	2.03*** (.02)	2.01*** (.02)	2.03*** (.02)	2.03*** (.02)
Session		-0.22*** (.01)	-0.22*** (.01)	-0.22*** (.01)	-0.22*** (.01)
Sexual identity			0.14*** (.03)	0.13*** (.03)	0.13*** (.02)
Session X sexual identity			0.01 (.01)	-	-
Religion1: D-R vs ND-R & ND-U				-0.03*** (.01)	-0.03*** (.01)
Religion2: ND-R vs ND-U				0.01 (.01)	-
Session X religion1: D-R vs ND-R & ND-U				0.00 (.00)	-
Session X religion2: ND-R vs ND-U				-0.02** (.01)	-0.01 (.00)
Sexual identity X religion1: D-R vs ND-R & ND-U					0.00 (.02)
Sexual identity X religion2: ND-R & ND-U					0.08** (.03)
Session X sexual identity X religion1: D-R vs ND-R & ND-U					0.00 (.00)
Session X sexual identity X religion2: ND-R vs ND-U					-0.04** (.01)
<i>Random components</i>					
Residual	0.309	0.182	0.182	0.182	0.182
Level 1- Intercept	0.633	0.873	0.871	0.869	0.868
Level 1- Session		0.098	0.098	0.098	0.098
Level 2- Intercept	0.013	0.012	0.011	0.011	0.011
Level 2- Session		0.005	0.005	0.005	0.005
<i>Goodness of fit</i>					
-2LL	-68401.7	-60885.0	-60858.8	-60829.2	-60825.23
AIC	136811.4	121787.9	121739.6	121686.5	121682.5

Note. Model 1 is unconditional means model. Model 2 is unconditional growth model. Model 3 adds the effect of sexual identity on intercept and slope. Model 4 adds the effect of religion on intercept and slope. Model 5 adds the effect of an interaction between sexual identity and religion on the intercept and slope. D-R = Dominant religious, ND-R = Non-dominant religious, ND-U = Non-dominant unaffiliated. *** p < .001; ** p < .01; * p < .05. - indicates that the fixed effect was not retained due to non-significance.

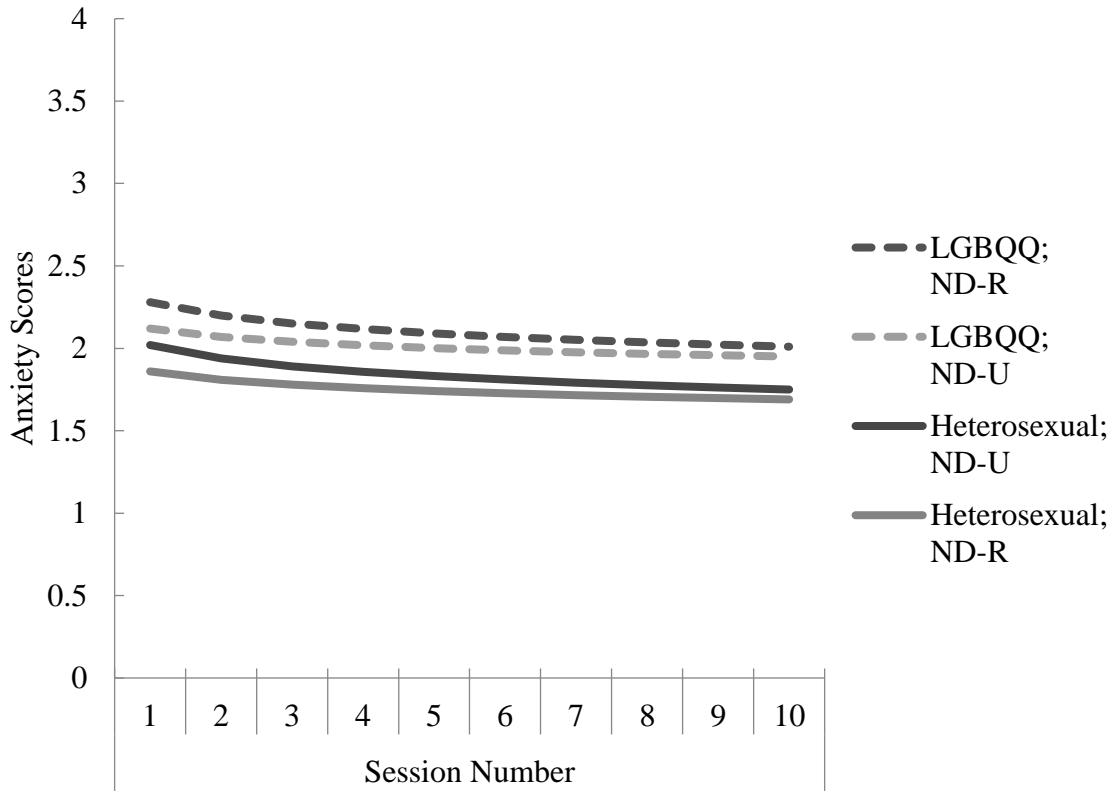


Figure 1. Predicted CCAPS Anxiety Scores by Session Number for Groups with Significant Differences

*Note. LGBTQQ = lesbian, gay, bisexual, queer, questioning; ND-R = non-dominant religious; ND-U = non-dominant unaffiliated