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Religious Affiliation's Association with Suicidality across Sexual Orientations and Gender Identities

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Abstract: The objective was to replicate and extend earlier findings examining the intersection of sexual orientation and religious affiliation predicting suicidality. Current analyses used updated data and extended prior work by examining how affiliation relates to suicidality for transgender individuals. Data were collected in 2021 from 46,562 adolescents and were representative of Utah adolescents in grades 8, 10, and 12. In regressions, affiliation predicted suicidality and subsequent models added demographics, family functioning, drug use, feeling socially integrated, and interaction terms between sexual orientation, gender identity, and affiliation. In baseline models, affiliation was related to fewer mental health difficulties. When including drug use and family functioning, most differences became non-significant. This did not differ for sexual minorities. Interactions between affiliation and gender identity were significant. Cisgender males had the fewest mental health difficulties. When other differences were significant, transgender individuals had the highest mental health difficulties. There were no differences for transgender individuals across affiliation except those affiliated with "Other" religions had less depression than those "not affiliated." However, "Other affiliated" females were higher in suicide attempts than the "not affiliated" and Latter-day Saint males were lower in ideation than the "not affiliated." Findings largely replicate prior work. In final models, religious affiliation was unrelated to mental health for sexual or gender minorities; though "Other affiliation" related to protection for transgender individuals. The proposition that religious affiliation is negative for sexual or gender minorities was not supported. Longitudinal research is required to determine how affiliation may impact mental health.

Keywords: suicide; sexual orientation; transgender; religious affiliation

1. Introduction

There has been a longstanding question of how religion/spirituality (R/S) influences adolescent wellbeing with most studies indicating that R/S is associated with positive outcomes for adolescents (Hardy et al. 2019). Indeed, one of the first modern social science questions was how religion related to suicidality (e.g., suicidal thoughts, plans, attempts, dying by suicide), with Emile Durkheim in 1897 positing religious affiliation would be predictive of suicide rates (Durkheim 1897). Since then, numerous studies have, on balance, found R/S related to lower suicidality (Stack and Kposowa 2016).

The interpersonal theory of suicide (Joiner 2005) is useful in theorizing why R/S may relate to lower suicidality. In this theory, three key components in an individual's likelihood of dying by suicide are (1) perceived burdensomeness (the perception of being a burden to others; includes feelings of shame), (2) thwarted belongingness (the perception of being unable to belong to social groups), and (3) hopelessness (that the perceived burdensomeness and thwarted belongingness will never end). Applying this theory to R/S (see Dyer et al. 2020), religions often provide social capital and social support for individuals during difficulties (Stack and Kposowa 2011). Further, feelings of shame (perceived burdensomeness) may be curtailed in religions that have beliefs about individuals' having infinite worth and there being spiritual mechanisms to "redeem" those who have done wrong. As Stack (1983)

suggests: "One's earthly problems may be more endurable if one believes that God knows about them and cares" (p. 364). Regarding hopelessness, religions often provide a kind of "ultimate" hope that although things may be difficult now, there is, ultimately, peace to be had. Again as Stack suggests: "Humans are beset with desires and disappointments which cannot be convincingly compensated by worldly means. Only by invoking the power of the gods, of the supernatural, can plausible promises of solutions be extended" (p. 125).

At the same time, certain aspects of R/S are related to lower wellbeing. For instance, research has found mental health worse for those who experience conflicts (whether personal or interpersonal) within the context of R/S (Bockrath et al. 2022). Obsessive compulsive disorder may manifest in the R/S context (referred to as scrupulosity) with some religious behaviors becoming compulsive and/or fear of sinning becomes overwhelming, leading to a detriment to mental health (Abramowitz and Hellberg 2020).

Over the past several years questions have also emerged regarding the intersection of R/S and suicidality for sexual and gender minorities. Research consistently finds LGBTQ+ (lesbian, gay, bisexual, transgender, queer, and other sexual and gender minorities) adolescents at higher risk for depression, anxiety, and suicidality than heterosexual and cisgender youth. It is often argued that R/S, especially associated with conservative religions who teach against same-sex sexual behavior, may be a risk factor for LGBTQ+ individuals (e.g., Beagan and Hattie 2015). However, there is much contradictory evidence in the research (Dyer 2022). Some studies have found a negative relationship between R/S and wellbeing for sexual minorities (Gibbs 2015) while others have found positive associations (Lytle et al. 2015). Though a recent meta-analyses found "a small but positive overall relationship between R/S and health among sexual minorities" (Lefevor et al. 2021, p. 8).

One challenge in research involving LGBTQ+ individuals, especially in relation to R/S, is obtaining a representative or semi-random sample. However, a recent study investigated the intersection of LGBTQ+ adolescent wellbeing and religious affiliation using a large representative sample (Dyer et al. 2022b). This study used the 2019 Utah Student Health and Risk Prevention (SHARP) survey administered to 86,346 Utah adolescents, 7205 who identified as LGBQ ("Q" indicating "Questioning"). Religious affiliation was the primary independent variable with Catholics, Protestants, Latter-day Saints, Other, and None as categories. How Latter-day Saint LGBQ youth fared was of particular interest given the Church of Jesus Christ of Latter-day Saint's conservative views of sexuality (McGraw et al. 2020). Utah was also of interest as it sits in the middle of the "suicide belt", a grouping of states that has consistently higher than average suicide rates in the United States (Case and Deaton 2017) yet with little suicide research in this region. The findings from Dyer et al. (2022b) largely matched meta-analysis findings (Lefevor et al. 2021) where religious affiliation was associated with lower depression and suicidality for sexual minority adolescents. However, when Dyer and colleagues added controls, drug use, and family connections to the model, most differences across religious affiliations became non-significant.

One limitation of this study was that transgender individuals were not considered as a unique group. Although research shows transgender adolescents, like sexual minority adolescents, are at risk for mental health challenges, transgender individuals are often at much higher risk. The National Alliance on Mental Illness summary estimated that LGB adults had rates of mental health conditions that were over double that of heterosexuals. For transgender individuals, the rate of mental health conditions was nearly four times higher than cisgender individuals (LGBTQI n.d.; Connolly et al. 2016; Tankersley et al. 2021).

Although some studies have examined the impact of affiliation on the suicidality of sexual minorities, they typically do not investigate whether gender moderates the relationships. Indeed, there are few studies that explore how religious affiliation may relate to suicidality for transgender individuals, especially adolescents. In transgender adults, one study pointed to the conflicting nature of the findings: "Some studies have found that

religious practices and beliefs are positively associated with suicidal thoughts or behaviors among [transgender] individuals (Gibbs 2015), while other studies have found a negative association (Grossman et al. 2016) or no relationship (Yüksel et al. 2017)" (Rabasco and Andover 2021, p. 472). Thus, this is an area needing much more research, particularly research using representative samples.

2. Current Study

The study by Dyer et al. (2022b) used 2019 SHARP data and the purpose of this study is to replicate those findings with the most recent 2021 SHARP data. The current study extended the previous work by examining if findings differ based on whether the adolescent is cisgender male (male), cisgender female (female), or transgender (data do not indicate whether they are a transgender male or female). Given data were collected during the COVID-19 ("COVID") pandemic, it will be examined if findings hold during a time of higher stress. As with Dyer et al. (2022b) all affiliation differences are examined, though Latter-day Saint differences are highlighted given interest in LGBTQ health in this sexually conservative religion (McGraw et al. 2020).

In addition to suicidality, this study also examined depression. Unfortunately, when many large scale sociological surveys ask about suicide, the questions are often binary, not allowing for much variance. In the SHARP survey, it was simply asked whether or not the participant had seriously considered or attempted suicide in the 12 months (two separate questions). As has been suggested when using binary suicidality variables (Dyer 2022), we included another related measure which has more variance. In the current study we included a measure of depression to test whether findings are consistent across the binary measures of suicidality and this related construct measured on a continuous scale.

3. Methods

Data come from 46,526 8th, 10th, and 12th grades in the 2021 Utah SHARP survey (6th graders were not included as they were not asked their sexual orientation). Weights and stratification were used in all analyses making results representative of all Utah adolescents in grades 8, 10, and 12. The sample was 47.3% male, 51.4% female, and 1.2% transgender (n = 567) with 82.9% heterosexual, 1.9% gay/lesbian, 8.4% bisexual, and 6.7% unsure of their sexual orientation or "other" (LGBQ, "Q" being "questioning"; LGBQ n = 7867). Participants were an average of 15.5 years old (range 12–19). The sample was 74.9% white, 16.9% Hispanic. 1.7% Asian, 1.5% Hawaiian, 1.2% Black, along with those of other races including those who were multiracial.

All measures except COVID stressors were identical to Dyer et al. (2022b) (additional details can be found there). Suicide ideation was measured with the item: During the past 12 months, did you ever seriously consider attempting suicide? with responses (no = 0, yes = 1). A suicide attempt variable was created based on whether they had attempted suicide in the last 12 months (no = 0, yes = 1). Depression was measured with four items on a four-point Likert-type scale. To reduce measurement error, factor scores were used. The appropriate reliability measure for factor scores is maximal reliability (MR; Raykov 2012). Depression had good MR at 0.93.

Sexual orientation was measured by asking participants whether they were: Heterosexual (straight), Bisexual, Gay or Lesbian, Not sure. Regarding affiliation, participants could indicate they were Catholic, Protestant (such as Baptist, Presbyterians, or Lutherans), Jewish, Another religion, LDS (Mormon), and No religious preference ("None"). Given few Jewish participants (n = 100 or 0.25% of the sample), they were combined with other affiliations ("Other"). Protestants were included with Other given Dyer et al. (2022b), found few substantive differences between Other and Protestants.

Regarding family connections, participants who lived with both their mother and father (not including stepparents) were coded 1, while those who did not were coded 0. Three items were used to create a family conflict factor score with an MR of 0.90. Participants were asked whether anyone in their household had severe drug or alcohol problems with

a binary response no = 0, yes = 1. Participants were also asked if they had used any of several drugs and were coded 0 if they had never used any and coded 1–4 if they had used one to four or more of these drugs. Three variables measured social integration including whether the youth felt safe at school and how often they had been bullied in the last year.[1]

As these demographics may be associated with both religion and mental health, we controlled for highest education of any adult living in the home; the child's grade in school; race; how honest the participant was in completing the survey (single item, self-reported asking the degree to which they honest in their responses) and sexual orientation (which was subsequently used as a moderator of affiliation). We also controlled for the number of COVID stressors they experienced including skipping a meal due to not enough money for food, becoming anxious or depressed, and doing poorly in school (recent analyses with these data suggest religious individuals were less affected by the pandemic (Dyer et al. 2022a).

Analysis Plan

As with Dyer et al. (2022b), analyses proceed in a series of regression models. In the first model, the outcome was predicted only by religious affiliation. This provides baseline differences by religious affiliations. In subsequent steps, additional variables are included to examine whether they explain affiliations differences (if there are any differences). In the second step, controls were introduced. In the third step, drug use and family connections were introduced and in the fourth step, social integration was included. Finally, interactions between sexual orientation, gender identity, and affiliation were added. Significant interactions were retained. With each step it is noted the degree to which differences across affiliation are reduced or whether significant differences become non-significant. That is, at each step marginal proportions/means for each affiliation were calculated with differences between affiliations tested with a Bonferroni correction to adjust for multiple comparisons. Although Dyer et al. (2022b) conducted analyses separate for heterosexuals and LGBQ individuals, the current analyses accomplish the same analytic goal by testing interactions between affiliation and sexual orientation.

4. Results

Table 1 contains descriptives. Table 2 contains baseline rates/levels of suicidality and depression across religious affiliation, sexual orientation, and gender identity. Across sexual orientation and gender identity, Latter-day Saints were typically lower in suicidality and depression than other affiliations expect for transgender individuals who were typically no different across religious affiliation. Catholics were also typically lower than Others and Nones except for in suicide attempts. There were few differences between Other and None.

Table 3 contains marginal means of the outcomes for each model. Results closely parallel findings by Dyer et al. (2022b). Initial models found Latter-day Saints having better mental health than all other religious affiliations and Catholics having lower suicide ideation and depression than Others and Nones. Catholics were identical to Nones in attempts but lower than Others. In adding the controls (Model 2), significant differences held except Catholics and Others no longer differed in depression. Although differences between Latter-day Saints and all others continued to be significant, differences were substantially lower (often by half or more). When adding drug use and family connections (Model 3), the only significant differences that remained were Latter-day Saints being lower in suicide ideation and attempts than Nones. No other affiliation differences were significant. When adding social integration (Model 5), Latter-day Saints were no longer significantly different from Nones in suicide ideation.

Table 1. Correlations, means, and standard deviations (n = 46,562).

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	S. Ideation [a]	-																				
2	S. Attempt [b]	0.52	-																			
3	Depression	0.61	0.38	-																		
4	LDS	−0.20	−0.17	−0.26	-																	
5	Catholic	0.00	0.03	0.04	−0.34	-																
6	Other	0.07	0.07	0.08	−0.32	−0.07	-															
7	None	0.18	0.13	0.23	−0.74	−0.16	−0.15	-														
8	Hetero	−0.26	−0.19	−0.31	0.29	0.01	−0.07	−0.29	-													
9	Male	−0.14	−0.10	−0.25	0.03	0.00	−0.02	−0.02	0.21	-												
10	Female	0.11	0.08	0.22	−0.01	0.01	0.01	0.00	−0.16	−0.98	-											
11	Transgender	0.13	0.10	0.13	−0.11	−0.02	0.07	0.10	−0.23	−0.11	−0.11	-										
12	Mother/Father	−0.12	−0.11	−0.16	0.27	−0.05	−0.08	−0.24	0.13	0.03	−0.02	−0.06	-									
13	Fam. Conflict [c]	0.32	0.23	0.46	−0.20	0.02	0.06	0.17	−0.20	−0.11	0.09	0.08	−0.15	-								
14	A. drug use [d]	0.30	0.29	0.34	−0.38	0.11	0.12	0.29	−0.19	−0.05	0.04	0.06	−0.24	0.27	-							
15	F. drug use [e]	0.22	0.17	0.27	−0.27	0.04	0.09	0.23	−0.15	−0.09	0.07	0.06	−0.27	0.28	0.32	-						
16	Sick w/COVID	0.02	0.01	0.03	0.06	0.01	−0.01	−0.06	0.04	−0.02	0.02	−0.01	0.03	0.02	0.02	0.02	-					
17	COVID Stress	0.32	0.21	0.42	−0.12	−0.01	0.06	0.11	−0.19	−0.21	0.19	0.08	−0.10	0.37	0.19	0.21	0.08	-				
18	Safe at School	−0.29	−0.23	−0.41	0.21	−0.03	−0.07	−0.18	0.21	0.10	−0.08	−0.11	0.10	−0.27	−0.23	−0.17	0.00	−0.23	-			
19	Safe in Neigh	−0.22	−0.17	−0.31	0.21	−0.06	−0.07	−0.16	0.16	0.09	−0.07	−0.08	0.13	−0.26	−0.18	−0.16	0.01	−0.19	0.39	-		
20	Bullied	0.22	0.16	0.34	−0.07	−0.01	0.03	0.07	−0.20	−0.24	0.22	0.11	−0.05	0.20	0.06	0.10	0.01	0.22	−0.29	−0.19	-	
21	Race (White)	−0.06	−0.09	−0.11	0.31	−0.32	−0.14	−0.09	0.08	0.01	−0.01	−0.01	0.15	−0.08	−0.17	−0.09	0.01	−0.02	0.09	0.13	0.00	-
	Mean	0.18	0.07	2.02	0.61	0.07	0.06	0.26	0.81	0.47	0.51	0.12	0.78	2.00	0.61	0.31	0.28	0.65	3.33	3.46	1.84	0.77
	SD	0.39	0.26	0.91	0.49	0.25	0.24	0.44	0.37	0.50	0.50	0.11	0.41	0.73	1.20	0.46	0.45	1.00	0.75	0.78	0.88	0.42

Notes. Significant correlations are bolded ($p < 0.05$). [a]: Suicide ideation. [b]: Suicide attempt. [c]: Family Conflict. [d]: Adolescent drug use. [e]: Family drug use.

Table 2. Baseline rates/levels of suicide ideation, suicide attempt, and depression by sexual orientation and gender identity (n = 46,562).

	Latter-day Saint	Catholic	Other	None
Suicide Ideation				
Heterosexual	11.5% CON	15.1% LON	19.3% LC	19.6% LC
LGBQ	27.9% CON	35.1% LON	50.5% LC	45.2% LC
Female	15.6% CON	24.4% LON	33.8% LC	34.4% LC
Male	9.7% ON	11.4% ON	16.8% LC	19.8% LC
Transgender	55.1%	34.9%	65.5%	60.9%
Suicide Attempt				
Heterosexual	3.4% CON	6.6% L	8.7% L	7.3% L
LGBQ	9.9% CON	21.8% L	27.1% LN	17.6% LO
Female	4.9% CON	12.9% L	15.7% L	13.7% L
Male	2.8% CON	4.6% LON	8.8% LC	6.9% LC
Transgender	29.8%	37.8%	38.2%	24.5%
Depression				
Heterosexual	1.83 CON	2.04 LN	2.10 L	2.11 LC
LGBQ	2.32 CON	2.74 L	2.83 L	2.81 L
Female	2.02 CON	2.39 LON	2.49 LCN	2.58 LCO
Male	1.70 CON	1.89 LON	1.98 LC	2.05 LC
Transgender	2.83 O	2.90	3.22 L	3.16

Notes. Weights used. Superscripts indicate whether they are significantly different from: L = Latter-day Saints, C = Catholics, O = Other religions, N = No religion ($p < 0.05$).

Table 3. Marginal Percentages/Means for Seriously Considered Suicide, Attempted Suicide, and Depression (n = 46,506).

	Model 1 Unconditional		Model 2 +Controls		Model 3 +Family Connections & Drug Use		Model 4 +Social Integration		Model 5 +Interactions	
Seriously Considered Suicide										
	% Considered	% diff. LDS [a]	% Considered	% diff. LDS	% Considered	% diff. LDS	% Considered	% diff. LDS	% Considered	% diff. LDS
Latter-day Saint	12.8%		12.8%		13.3%		12.9%		12.9%	
Catholic	18.5% [ON]	5.6% ***	16.4% [ON]	3.6% *	13.4%	0.7%	12.7%	−0.2%	12.6%	−0.2%
Other	27.5% [C]	14.7% ***	20.7% [C]	7.9% ***	15.7%	3.8%	14.5%	1.6%	14.2%	1.4%
None	28.5% [C]	15.6% ***	20.7% [C]	7.9% ***	15.5%	4.6% **	14.3%	1.4%	14.3%	1.5%
Suicide Attempt										
	% Attempted	% diff. LDS	% Attempted	% diff. LDS	% Attempted	% diff. LDS	% Attempted	% diff. LDS	% Attempted	% diff. LDS
Latter-day Saint	4.0%		3.9%		3.9%		3.7%		3.6%	
Catholic	9.2% [O]	5.2% ***	6.0% [O]	2.1% **	4.2%	0.2%	3.8%	0.2%	3.6%	0.0%
Other	13.5% [C]	9.6% ***	8.5% [C]	4.5% ***	5.2%	1.3%	4.6%	0.9%	4.7%	1.1%
None	10.9%	6.9% ***	6.7%	2.7% ***	3.9%	−0.0%	3.5%	−0.2%	3.6%	0.0%
Depression										
	Depression Level	diff. LDS	Depression Level	diff. LDS	Depression Level	diff. LDS	Depression Level	diff. LDS	Depression Level	diff. LDS
Latter-day Saint	1.87		1.97		2.02		2.03		2.03	
Catholic	2.16 [ON]	0.29 ***	2.09 [N]	0.12 ***	2.06	0.06	2.06	0.03	2.06	0.03
Other	2.29 [C]	0.43 ***	2.14	0.17 ***	2.06	0.08	2.05	0.02	2.05	0.02
None	2.35 [C]	0.49 ***	2.20 [C]	0.23 ***	2.12	0.17 ***	2.10	0.08 ***	2.10	0.07 ***

Notes. [a] Percentage different from Latter-day Saints within the model. ** $p < 0.01$. *** $p < 0.001$. The following superscripts indicate a significant difference (* $p < 0.05$) between one religion and another: [C] = Catholic, [O] = Other, [N] = None.

There were no significant interactions between affiliation and sexual orientation. That is, the effect of affiliation (which was non-significant) did not vary by sexual orientation. The interaction between affiliation and gender was significant for each outcome (see Figure 1). Gender differences were tested within each affiliation and across affiliations with the Bonferroni correction for the multiple comparisons. Regarding suicidal ideation within affiliation (Figure 1a), for Latter-day Saints, males were lower than females and transgender; females were lower than transgender. For Others, males were lower than females. For Nones, males were lower than females and transgender. Across affiliations, Latter-day Saint males were lower than None males. There were no gender differences across affiliation for females and transgender. Regarding suicide attempts within affiliation (Figure 1b), for Latter-day Saints, males were lower than females and transgender. For Catholics, males were lower than transgender. There were no gender differences for Others and Nones. Across affiliations, there were no differences for males and transgender. However, None females were lower than Other females.

For depression, the interaction between affiliation and gender was significant (Figure 1c). Within affiliation, for Latter-day Saints, males were lower than females and transgender. For Catholics, males were lower than females and transgender, and females were lower than transgender. For Others, males were lower than females. For Nones, males were lower than females and transgender. Females were lower than transgender. Across affiliations, there were no differences for males or for females. However, Other transgender were lower than None transgender.

Table 4 contain final regression models. Main effects mirror previous work with family conflict, drug use, and being bullied being positively related to suicidality and depression; feeling safe at school and in the neighborhood were negatively related to suicidality and depression. Becoming sick with COVID was positively related to suicide ideation and COVID stressors were positively related to all outcomes.
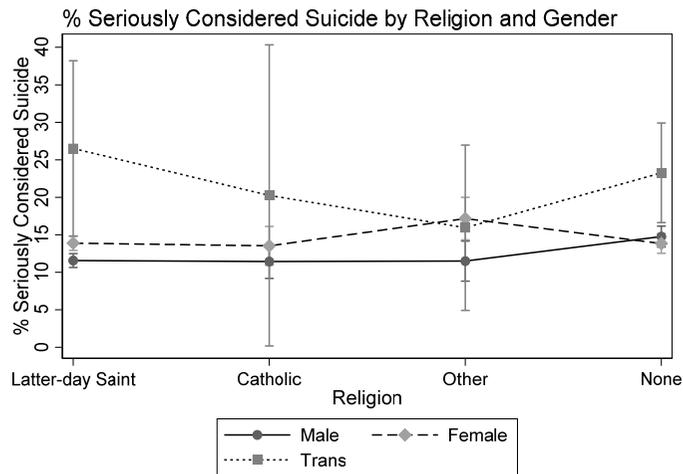
Within Affiliation

For Latter-day Saints: Males lower than females and trans. Females lower than trans.

For Catholics: No gender differences.

For Other: Males lower than females.

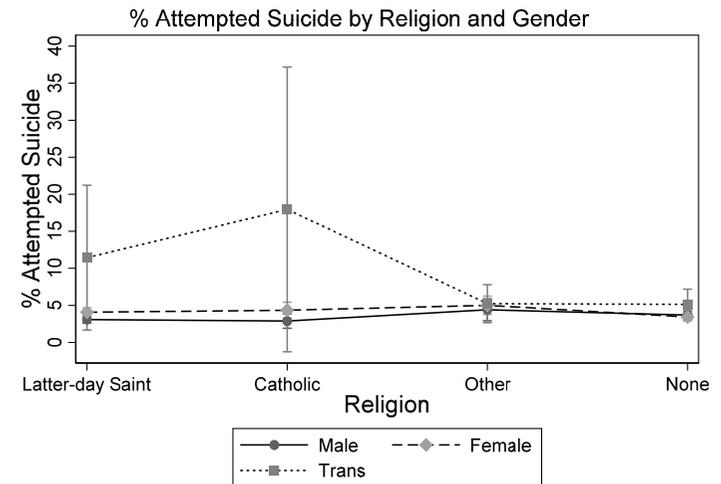For None: Males and females lower than trans

Across Affiliation

For Males: Latter-day Saint lower than None.

For Females: No differences across religion.

For Trans: No differences across religion.

(**a**)

Within Affiliation

For Latter-day Saints: Males lower than females and trans.

For Catholics: Males lower than trans

For Other: No gender differences.

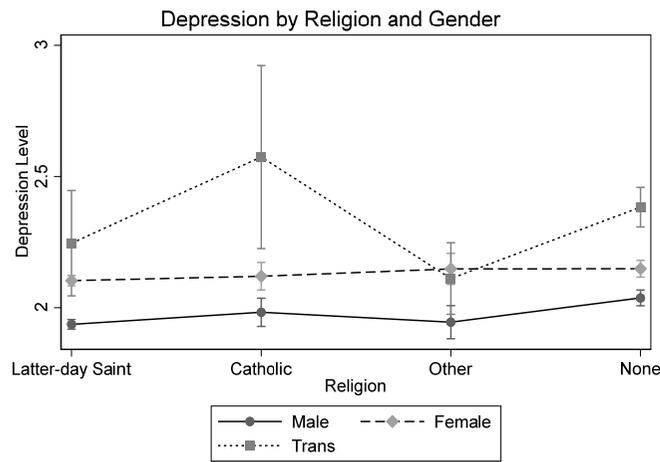For None: No gender differences.

Across Affiliation

For Males: No differences across religions.

For Females: None are lower than Other.

For Trans: No differences across religions.

(**b**)

Figure 1. *Cont.*

Within Affiliation

› For Latter-day Saints: Males lower than females and trans.
› For Catholics: Males lower than females and trans. Females lower than trans.
› For Other: Males lower than females.
› For None: Males lower than females and trans. Females lower than trans.

Across Affiliation

› For Males: No differences across religions.
› For Females: No differences across religions.
› For Trans: Other are lower than None.

(**c**)

Figure 1. Significant interactions between religion, sexual orientation, and gender identity. (n = 46,562). Note. Differences noted are statistically significant differences (at least $p < 0.05$). Bonferroni correction factor used for analyses.

Table 4. Regression parameters for final models (n = 46,562).

	Suicide Ideation OR(se)	Suicide Attempt OR(se)	Depression b(se) [e]
Affiliation [a]			
Catholic	0.99(0.12)	0.93(0.18)	0.050(.03)
Other	0.99(0.14)	1.45(0.28)	0.01(0.04)
None	1.32(0.10) ***	1.20(0.14)	0.11(0.02) ***
Gender [b]			
Female	1.23(0.07) ***	1.33(0.15)*	0.18(0.01) ***
Transgender	2.76(0.86) ***	4.05(0.03) **	0.34(0.11) **
LGBQ [c]	1.88(0.10) ***	1.53(0.12) ***	0.27(0.02) ***
Race/Ethnicity [d]			
Hispanic	0.79(0.05) ***	1.13(0.10)	0.05(0.02) **
American Indian or Alaska Native	0.72(0.16)	1.17(0.33)	−0.07(0.06)
Asian	0.98(0.15)	0.89(0.22)	0.14(0.04) **
Black	0.94(0.19)	1.77(0.43)*	0.03(0.05)
Hawaiian	1.41(0.29)	2.58(0.60)***	0.23(0.06) ***
Multiracial	1.06(0.10)	1.16(0.18)	0.01(0.03)
Mother/Father home	0.99(0.05)	0.85(0.06)*	0.01(0.01)
Family conflict	1.61(0.05) ***	1.49(0.07) ***	0.22(0.01) ***
Adolescent drug use	1.34(0.02) ***	1.47(0.03) ***	0.11(0.01) ***
Family drug use	1.34(0.06) ***	1.34(0.09) ***	0.08(0.01) ***
Became sick w/COVID	1.12(0.05) *	−(0.07)	0.01(0.01)
COVID stressors	1.41(0.03) ***	1.24(0.03) ***	0.18(0.01) ***
Safe at school	0.64(0.02) ***	0.67(0.03) ***	−0.16(0.01) ***
Safe in neighborhood	0.88(0.02) ***	0.91(0.03) **	−0.07(0.01) ***
Bullied	1.30(0.03) ***	1.32(0.05) ***	0.15(0.01) ***
Controls			
Adolescent grade	1.04(0.04)	0.90(0.06)	0.06(0.02) ***
Honesty on survey	1.08(0.05)	0.90(0.05)	−0.02(0.01) **
Age	0.94(0.04)	0.93(0.06)	−0.02(0.02)
Parent education	1.07(0.02) **	1.04(0.03)	0.01(0.01) *
Constant	0.17(0.10) **	0.13(0.11) *	0.11(0.01) ***
Interaction			
Religion × Gender [f]	f(df) = 2.86(6) **	f(df) = 2.75(6) *	f(df) = 2.86(6) **
Pseudo/Adjusted R^2 [g]	0.24	0.24	0.42

Notes. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. a: Comparison: Latter-day Saint. b: Comparison: Male. c: Comparison: Heterosexual. d: Comparison: White. e: To report regression weights, depression and other continuous variables were standardized to obtain standardized results (Stata does not provide standardized results when using the survey command). f: Rather than reporting odd-ratios or betas for the interaction, the significance test of the two-way interaction is included. g: Pseudo R^2 for ideation and attempt were calculated in a regression without adjustments for survey design as Stata does not permit such calculations while accounting for survey design.

5. Discussion

Results closely mirror findings of analyses using the 2019 SHARP data (Dyer et al. 2022b) and fit well with previous meta-analytic work (Lefevor et al. 2021). In baseline models, Latter-day Saints and Catholics were lower in suicidality and depression than those of other faiths and no faith (though Catholics were no different from Nones in suicide attempts). Latter-day Saints were lower in suicidality than Catholics. Most differences were explained by drug use and family connections. Furthermore, similar to previous analyses, while LGBQ individuals reported greater mental health problems, there was no significant interaction between sexual orientation and religious affiliation. Thus, in the final model the null relationship between affiliation and mental health holds for LGBQ individuals. That is, religious affiliation was unrelated to suicidality and depression for LGBQ youths once other factors (e.g., family, drug use) were taken into account. This pattern largely held for

transgender individuals, though Other transgender were lower than None transgender. However, with large confidence intervals for transgender, differences may emerge using larger samples. Gender results followed predictable patterns with females reporting more mental health problems than males and transgender individuals reporting more problems than cisgender.

5.1. Limitations

One limitation is that this study did not examine each predictor individually to determine how much it explained the relationship between affiliation and the outcome. Although beyond the scope of this project, future mediation analyses can provide more nuanced descriptions of the individual contributions of each predictor. Another limitation is the limited measures of both religiosity and sexual orientation. These are multifaceted constructs that single item measures cannot capture. For instance, it is possible Latter-day Saints are lower in suicidality partially because they are often highly involved in their religion (Smith 2005). Yet, without measures of religious participation, this cannot be determined. The study is also limited in the religious affiliations contained in the data. Future research should examine, for instance, differences between evangelical and mainstream protestants who may have differing views of sexuality. This study does not have measures of spirituality which may include experiences with the transcendent. More fine-grained measures of religiosity may very well find further protective and risk factors across sexual orientation and gender identity. This is an important area for future research.

It is also important to recognize the context of the sample. It is unknown whether these findings would replicate outside the suicide belt or in less religious states.

5.2. Conclusions

Results highlight several points. The first is that, on average, religiously affiliated individuals likely have fewer mental health problems than the non-affiliated and this difference can largely be explained by demographic, drug use, and family factors. Second, this holds for sexual minorities. Third, that affiliated individuals are lower in mental health problems may not hold for transgender individuals who, in general, did not initially differ in mental health problems across affiliation. There is likely utility in examining gender as a moderator. Indeed, the interactions between gender and affiliation provided useful nuance in the results. Fourth, although Lefevor et al.'s (2021) meta-analysis reported a small positive relationship between religiosity and mental health for LGBTQ individuals, the current study found that relationship largely became non-significant after adding controls and explanatory variables. That differences across affiliation were minimal or non-significant after controlling for various factors should not indicate that religion makes no difference. Rather, research should distinguish between variables in the model that *control* for various background characteristics more prevalent in affiliated individuals verses factors that *explain why* affiliation may have an effect. Future research should take into account these factors to determine why affiliation differences may exist at the correlation level. Fifth, the findings highlight the need for more mediation analyses. That is, to what extent do family and other factors mediate the relationship between religiosity and mental health? What are the most influential mediators? Mediation analyses will enable researchers to identify mechanisms of positive and negative effects that can be targeted for interventions. Unfortunately, there are few longitudinal studies in this area (Lefevor et al. 2021), making the most rigorous tests of mediation in this area uncommon. Future research should focus on longitudinal work to better identify potential risk and protective mechanisms to address how religious affiliation may relate to suicidality, particularly for LGBTQ individuals.

One implication of this research is that while adolescents appear to benefit from religious affiliation, these benefits primarily act through family relationships and drug prevention. Suicide prevention efforts may be most effective by targeting these areas for all adolescence. Further, contrary to some hypotheses, religious affiliation may benefit sexual

minorities and have no relationship with mental health for gender minorities. Rather than only emphasizing potential dissonance between aspects of sexual and gender minorities' identities and religion, research can be more nuanced to also emphasize how sexual and gender minorities may fit well within religions groups and derive benefits (perhaps even life-saving benefits) from them.

Author Contributions: Conceptualization, W.J.D. and M.A.G.; methodology, W.J.D.; formal analysis, W.J.D.; writing—original draft preparation, W.J.D. and M.A.G.; writing—review and editing, W.J.D. and M.A.G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Data Availability Statement: Information about the data and data acquisition can be found at: https://dsamh.utah.gov/sharp-survey. All files used in analyses can be obtained from the first author.

Conflicts of Interest: The authors declare no conflict of interest.

Note

[1] SHARP 2019 asked reasons for being bullied. Dyer et al. (2022b) included whether they were bullied for their sexual orientation and religion. In SHARP 2021, a single question was asked regarding how often they were bullied (0–6 days in the last year).

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