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ORIGINAL PAPER

Belongingness is a Mediating Factor Between Religious Service Attendance and Reduced Psychological Distress During the COVID-19 Pandemic

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Abstract

This study aimed to test whether pre-pandemic religious service attendance relates to both lesser impact from the COVID-19 pandemic and lower levels of psychological distress among a sample of 645 American adults across nine US regions. A second aim was to test whether belongingness mediated these relationships. First, it was expected that more frequent pre-pandemic religious service attendance relates to belongingness, which mediates the religious service attendance and psychological distress association. Second, it was expected that people who felt greater belongingness also experienced less perceived impact from the pandemic. Results from a path model supported these hypotheses. This is among the first studies to provide empirical evidence for religion's association with psychological distress during the COVID-19 pandemic.

Keywords Religion · Belongingness · COVID-19 · Psychological distress · Well-being

Introduction

For many people, the first half of 2020 was accompanied by fear, stress, and anxiety as the novel coronavirus quickly emerged as a pandemic. This is evident in the USA, considering that 36.1% of Americans reported symptoms of anxiety or depression by early June, 2020, and that this percentage increased to 40.9% by mid-July (Centers for Disease Control, 2020). In the USA and in many other countries, these increased levels of psychological distress may relate to the widespread enactment of social distancing policies that closed social gathering places and encouraged, or

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in some cases mandated, that people remain at home unless traveling for essential reasons (e.g., Marroquín et al., 2020). Although social distancing helps to control pathogen transmission (e.g., Ahmed et al., 2018; Wilder-Smith & Freedman, 2020), it also detrimentally impacts people's social connectedness and contributes to a sense of isolation, loneliness, diminished coping capacity, and heightened risk of both minor and major psychiatric disorders (e.g., González-Sanguino et al., 2020; Huang & Zao, 2020; Li & Wang, 2020). In addition, social isolation is a known risk factor linked to numerous chronic illnesses even when controlling for other factors (for review see Cacioppo & Cacioppo, 2014). Moreover, people who feel socially isolated and lonely are more susceptible to infection (e.g., Miller, 2011) and have higher mortality risk (e.g., Holt-Lundstad et al., 2015).

Although social distancing can help a community avoid an escalating rate of infectious disease transmission, it is also a psychologically unpleasant experience that can contribute to psychological distress, thus impacting health and well-being. With social distancing being a necessity during the pandemic, it is vital that researchers and health practitioners better understand how different factors relate to worsened versus alleviated psychological distress related to social distancing.

From theory and empirical evidence, religion is one factor that might help buffer against psychological distress even when people are socially isolated. This idea follows from religion's capacity to enhance people's sense of belongingness (Crescioni & Baumeister, 2013; Graham & Haidt, 2010) that extends beyond immediate, direct religious community involvement. If religion helps people maintain a sense of belongingness, are people who are involved in religious communities better able to cope with the pandemic and avoid significant psychological distress during social distancing? This study aims to address this question by providing some of the first empirical information about whether, and how, religion has implications for psychological distress during the COVID-19 pandemic.

Religious Community Involvement

Direct Benefits

Foremost, many studies have established that religious community involvement relates to diminished distress including reduced rates of depression and better mental health (e.g., Balbuena et al., 2013; Brewer et al., 2014; Keyes & Reitzes, 2007). Abundant evidence further supports a link between religious involvement and well-being in general (e.g., Strawbridge et al., 2001; VanderWeele, 2017). The relationships between religious community involvement and both reduced psychological distress and enhanced well-being have been explained by objective and subjective social factors. Social support is a primary objective social factor known to play a role in health and well-being (House et al., 1988) and is enhanced when people have larger social networks that afford greater potential for others to provide instrumental assistance and meaningful social interaction (see George et al., 2002). Evidence supports that the social support people gain through religious community involvement contributes to decreased distress and increased well-being (Brewer et al., 2014;

Byrd et al., 2000; Ellison et al., 1989; Kim-Yeary et al., 2012). Yet, scholarship also reveals that subjective and indirect social factors that emerge from religious involvement also play a role in religion's relationship to distress reduction.

Indirect Benefits

By being involved in a religious community, people experience a variety of indirect social benefits that can contribute to better capacity to cope, reduced psychological distress, and general well-being (see Ellison, 1991). Some of these include greater cognitive coherence about important beliefs and values (e.g., Crescioni & Baumeister, 2013), enhanced clarity about one's identity (e.g., Keyes & Reitze, 2007; Krause & Wulff, 2005), and perception of subjective social as well as emotional support (e.g., Dunbar, 2020; George et al., 2002).

These indirect social benefits allow religious communities to fulfill fundamental human needs, including those related to belongingness and affiliation (Crescioni & Baumeister, 2013; Krause & Wulff, 2005) even when people are unable to physically attend religious services. For example, people who belong to a religious community have a mere perception that they are valued by a community of like-minded, caring others, and this enhances perceived support. This indirect sense of support gained through perceived belongingness is thought to be one reason religious community involvement relates to well-being and diminished psychological distress even outside of social contact (e.g., Hill et al., 2011; Keyes & Reitez, 2005). Thus, scholarship provides evidence that even with social distancing and not attending religious services physically, people who are involved in religious communities may still be psychologically equipped to better cope with the pandemic. Consequently, people who are religiously involved may experience less psychological distress through religion's unique capacity to fulfill belongingness needs (see Crescioni & Baumeister, 2013). This possibility is further supported by some studies that demonstrate that a variety of psychological factors mediate the link between religious service attendance and well-being (e.g., Ellison, 1991; Krause & Wulff, 2005; Steffen et al., 2017), showing that directly participating in a communal religious activity is not the lone factor contributing to the religion and reduced distress association.

Considering how religious community involvement relates to diminished distress and enhanced well-being, does religion and its contribution to perceived belongingness relate to diminished psychological distress during the COVID-19 pandemic? Leading scholars have speculated that this association should exist (e.g., Dein et al., 2020), with some drawing on the evidence to highlight the ways people can leverage both social and personal facets of religion to promote mental health and buffer against psychological distress during this event (e.g., Koenig, 2020; Peteet, 2020). Yet, with the pandemic being a recent event, there is a lack of empirical data regarding the religion-psychological distress link during the COVID-19 pandemic (see Dein et al., 2020). The present study responds to the lack of evidence by analyzing some of the first data about how religion relates to both belongingness and

psychological distress among a national sample of Americans who were social distancing in early June 2020.

Study Hypotheses

This study tests two hypotheses motivated by theory and evidence about the association between religion and psychological distress. First, it is expected that people who were involved in frequent religious service attendance prior to the pandemic experience a greater sense of belongingness, and this belongingness mediates the relationship between religious service attendance and diminished psychological distress (Hypothesis 1). Second, the enhanced belongingness people gain from previous religious service attendance relates to a lower perceived impact from the COVID-19 pandemic, which further contributes to well-being (Hypothesis 2).

Method

Participants

Data were collected online between June 3 and 11, 2020, using a Qualtrics panel sample of $N = 645$ American adults, all of whom indicated consent prior to participating. There were participants from all 50 states, although the largest samples were from California (14.4%), Florida (10.5%), New York (6.4%), and Texas (4.3%); see Table 1 for demographic information. There was near equal representation of women (50.7%) and men (49.1%) (one participant identified "other" for sex), and most participants were middle-aged or older adults (age $M = 64.43$, $SD = 11.39$; see Table 2). Most participants lived in suburban areas (52.1%) with fewer reporting an urban (18.6%) or rural (29.3%) area as their main place of residence. Among the participants, 60.3% reported never attending religious services; 39.7% reported attending at least once per year. This aligns well with the fact that 50.7% of the sample identified as nonreligious, while the remaining 49.3% reported following some form of religion. Of these people, most reported Christianity (43.9%) as their religion, with others reporting Judaism (2.8%), Buddhism (0.5%), or some other religion (2.2%). Data on specific Christian denomination were not obtained. Significantly, among those who reported attending religious services in the past year, a majority (95%) had not attended any in-person services during the past week, suggesting that most participants were engaged in some level of social distancing. This is further validated by considering that the vast majority of participants had not engaged in common social behaviors during the past week aside from visiting friends/family, which could include people that they lived with (see Table 3).

Table 1 Demographic characteristics

Variable	*M*	*SD*	Frequencies
Sex	–	–	Men = 317 Women = 327 Other = 1
Age	64.43	11.39	(see Table 2)
Geographic Region*	–	–	New England = 30 Mid Atlantic = 97 South = 157 Midwest = 126 Great Plains = 16 Rocky Mountain = 24 Southwest = 63 Pacific Coast = 126 Alaska/Hawai'i = 6
Rural/Urban	–	–	Rural = 189 Suburban = 336 Urban = 120
Type of Religion**	–	–	Christianity = 283 Judaism = 18 Buddhism = 3 No Religion = 327 Other = 14
Frequency of Religious Service Attendance	2.39	2.02	Never = 389 Once per year = 37 A few times per year = 73 Once per month = 12 A few times per month = 18 Once per week = 93 More than once per week = 23

*All participants were from the USA; the frequency of participants residing in different geographic locations within this nation is noted

**Other religions were included in the survey (e.g., Islam), but no participants identified these other religions, thus they are omitted from this table. No additional demographic variables were obtained to maintain survey brevity and because other variables were not theoretically expected to relate to the key components of the model

Measures

In addition to the previously described demographic information, data included the following measures. First, participants indicated how frequently they attended religious services during the past year using a Likert scale coded 1 = "never" to 7 = "more than once per week."[1]

Belongingness was assessed using the General Belongingness Scale (Malone et al., 2012), which features 13 statements participants respond to using a Likert

[1] The religious service attendance measure was coded 1 = "never," 2 = "once per year," 3 = "a few times per year," 4 = "once per month," 5 = "a few times per month," 6 = "once per week," and 7 = "more than once per week.".

Table 2 Descriptive statistics for main study variables for the entire sample, religious versus nonreligious participants, and based on age group

Group	*N* (%)	Religious Service Attendance	Belongingness	COVID-19 Impact	Psychological Distress
		M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Full Sample	645 (100%)	2.39 (2.02)	61.40 (12.68)	2.88 (.82)	29.53 (9.25)
Descriptive statistics based on religious status					
Religious	318 (49.3%)	3.66 (2.17)	63.83 (12.16)	2.71 (.83)	29.08 (9.48)
Non-religious	327 (50.7%)	1.15 (.66)	59.04 (12.75)	2.94 (.81)	29.97 (9.01)
Descriptive statistics based on age group					
18 to 29	4 (.6%)	1.75 (1.50)	46.50 (10.08)	3.50 (.58)	41.25 (17.48)
30 to 39	24 (3.7%)	2.17 (1.79)	56.08 (12.13)	3.33 (.76)	36.58 (15.36)
40 to 49	46 (7.1%)	2.07 (1.79)	55.43 (14.30)	2.87 (.65)	35.67 (12.62)
50 to 59	96 (14.9%)	2.35 (1.96)	59.52 (14.11)	2.90 (.79)	29.21 (8.48)
60 to 69	249 (38.6%)	2.43 (2.09)	62.10 (12.10)	2.85 (.84)	28.81 (8.90)
70 or older	226 (35.0%)	2.45 (2.06)	63.47 (11.70)	2.85 (.84)	28.26 (7.02)

scale anchored by 1 = "strongly disagree" to 7 = "strongly agree." Some sample items from the scale include, "When I am with other people, I feel included," and "I feel isolated from the rest of the world" (reverse-coded). The General Belongingness Scale had excellent reliability ($\alpha = 0.95$).

Participants were also asked to indicate "overall, how significantly has COVID-19 impacted your daily life?" Responses ranged from 1 = "no impact at all" to 4 = "significant impacts." This provided a single-item measure of perceived COVID-19 impact.

Finally, psychological distress was assessed using the Depression Anxiety Stress Scale (DASS) 21-item short form version (see Antony et al., 1998). This scale measures anxiety, depression, and tension-related stress where higher scores indicate that a person is experiencing more distress in their life. Participants answered based on how they felt during the past week and responded to statements such as, "I felt that I had nothing to look forward to," and "I felt scared without any good reason." The DASS also exhibited excellent reliability ($\alpha = 0.94$). Variable descriptive statistics for the full sample, for religious versus nonreligious participants, and for different age groups are provided in Tables 1, 2. Measures and the study design were evaluated and approved by an institutional review board prior to data collection to ensure compliance with Belmont Report ethical standards.

Results

Path analysis was applied to examine how frequency of attending religious services relates to people's sense of belongingness, how belongingness relates to perceived impact of COVID-19, and how religious service attendance, belongingness, and perceived COVID-19 impact relate to psychological distress. The analysis also controlled for gender and type of residence (measured in three categories: rural,

Table 3 Frequency of participants engaging in social activities

Activity	Percent "Yes"	Percent "No"
Went to a restaurant	25.1%	74.9%
Went to a movie theater	0.5%	99.5%
Visited friends or family	40.5%	59.5%
Went to a social event	3.1%	96.9%
Attended a religious service	5.0%	95.0%

Each question asked if the participant had done the activity during the prior week

Table 4 Bivariate correlations for main study variables

	1	2	3	4	5	6
1. DASS Score	–	–	–	–	–	–
2. Belongingness	− .51**	–	–	–	–	–
3. COVID-19 Impact	.29**	−.11	–	–	–	–
4. Religious Service Attendance	.03	.15**	–	–	–	–
5. Sex	.02	.09*	.12*	.00	–	–
6. Type of Residence	.05	−.11	.09	−.27**	−.04	–

Sex is coded as a dichotomous variable where 0 = male, 1 = female

*$p < .05$, **$p < .01$

suburban, and urban) since evidence supports people in rural regions and women tend to be more involved in religious communities (e.g., Trzebiatowska & Bruce, 2012). Age was explored in the model but reduced the model-fit statistics, so was omitted from the final analysis. Other demographic variables (e.g., racial/ethnic identity) were not included in the study since there was little reason to expect they would alter the associations between religion, perceived belongingness, and distress reduction. The main variables' bivariate correlations are presented in Table 4. The model diagram is displayed in Fig. 1, and the standardized coefficients are presented in Table 5. The model-fit statistics, reported at the bottom of Table 5 (RMSEA = 0.08 and CFI = 0.93), show good model fit (Acock, 2013). The model was appropriate considering all non-control variables used interval scales and scatterplots suggested linear relationships among study variables.

The analyses yield three primary findings. First, religious service attendance is significantly and positively related to belongingness. In other words, participants who more frequently attended religious services had a stronger sense of belonging ($\beta = 0.15$, $p < 0.001$). Second, belongingness had a significant and negative relationship with perceived COVID-19 impact. People who reported greater belongingness were less likely to report experiencing significant life impact from COVID-19 ($\beta = -0.11$, $p < 0.01$). Third, participants with a greater sense of belonging were less likely to feel depression, anxiety, and stress ($\beta = -0.49$, $p < 0.001$). Conversely, religious service attendance by itself ($\beta = 0.13$, $p < 0.001$) and heightened perceived impact from COVID-19 ($\beta = 0.24$, $p < 0.001$) were positively related with depression, anxiety, and stress. The impact from the two demographic control variables,

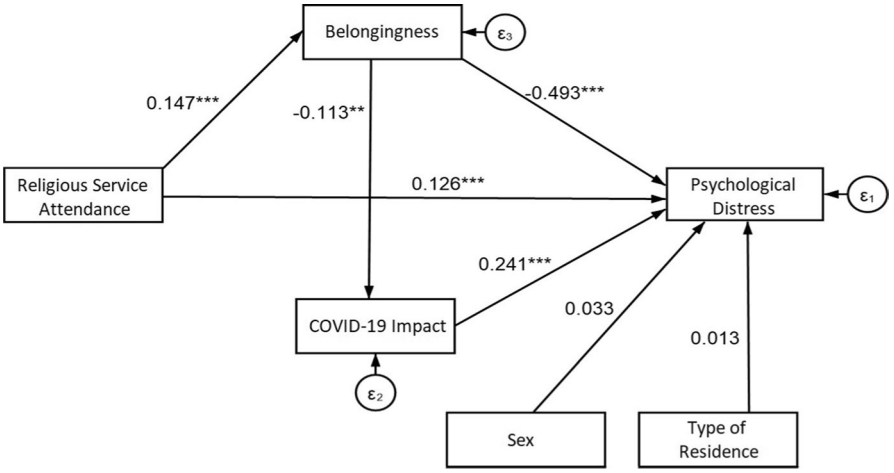

Fig. 1 Path analysis diagram. Based on theoretical rationale, the model predicts that people who report more frequent religious service attendance during the past year (before June 2020) experience greater belongingness, and this belongingness relates to diminished perceived impact from the COVID-19 pandemic and reduces symptoms of depression, anxiety, and stress. Note sex is coded 0 = male, 1 = female; urban/rural is coded 1 = rural, 2 = suburban, 3 = urban

Table 5 Standardized coefficients of path analysis

	Belongingness	COVID-19 Impact	Well-being
Standardized coefficients			
Attendance of Religious Services	0.147***	–	0.126***
Belongingness	–	−0.113**	−0.493***
COVID-19 Impact	–	–	0.241***
Female	–	–	0.033
Type of Residence	–	–	0.013
Model-Fit Statistics			
RMSEA	0.079		
CFI	0.930		

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

gender and place of residence, were insignificant (see Table 5).[2] Overall, the model variables together accounted for 32% of the observed variance in respondents' psychological distress ($R^2 = 0.32$).

[2] We initially tested a model that also controlled for age, but it resulted in a model with poorer fit and was thus omitted from the final analysis.

Discussion

The present study presents some of the first empirical results about how religion relates to psychological distress during the COVID-19 pandemic and offers new evidence of both theoretical and practical significance. Using data from an American sample, results supported two theoretically driven hypotheses. First, people reporting more frequent religious service attendance experience a heightened sense of belongingness, and heightened belongingness was associated with reduced psychological distress (Hypothesis 1). Second, people who felt greater belongingness tended to perceive that the pandemic had a less significant impact on their life (Hypothesis 2). Importantly, there was an opposite relationship between religious service attendance and psychological distress when not factoring-in belongingness. Frequent religious service attendance by itself was associated with greater psychological distress among participants. This reveals that religion's capability to buffer against psychological distress does not appear to be a mere result of direct physical contact and social support, but rather results from a more subjective sense of belongingness that is enhanced by religious community involvement. Furthermore, people who have greater sense of belongingness reported less perceived impact from the pandemic. These findings align well with key theoretical ideas about the relationship between religious involvement, coping, and psychological distress reduction.

Considerable empirical evidence supports that religious involvement relates to well-being (e.g., Balbuena et al., 2013; Keyes & Reitzes, 2007; Koenig et al., 2012; Strawbridge et al., 2001; VanderWeele, 2017), but whether this relationship is primarily driven by direct social interactions or indirect perceived social benefits is less clear (see Ellison, 1991; Graham & Haidt, 2010; Hill et al., 2011). Recent theoretical perspectives suggest that the religion–well-being association emerges from a combination of direct and indirect social factors (Aldwin et al., 2014), which the present study supports by showing that through belongingness religion relates to a reduction in psychological distress.

The Role of Indirect Social Support

Some previous research has also identified that religious service attendance does not relate to diminished psychological distress because of direct social support alone. For example, Steffen et al. (2017) found that intrinsic religiosity—a desire to live one's religion—was a primary mediator in the association between religious service attendance and reduction of anxiety and depressive symptoms. More recently Campos et al. (2020) identified that meaning in life is an additional mediator in the relationship between intrinsic religiosity and well-being. What these studies demonstrate is that religion relates to distress reduction and well-being enhancement due to multiple interacting factors including those that are objective and those that are subjective.

Belongingness and Distress Reduction

There are many objective factors that may at least partly explain why religious service attendance and enhanced belongingness may relate to diminished distress. People who participate in religious services may have greater opportunity to receive instrumental social support, a more expansive social network, and enhanced identity as a member of a close-knit community (see Graham & Haidt, 2010; Hill et al., 2011; Taylor et al., 2017). Together, these could promote a sense of belongingness and support, which would benefit well-being.

Some subjective factors that may explain the religious community involvement and distress reduction association include a greater subjective sense of belongingness, enhanced self-regulatory resources, and heightened perception of meaning in life (see Crescioni & Baumeister, 2013; McCullough & Willoughby, 2009; Park, 2013, 2017; VanTongeren et al., 2018). Indeed, there is increasing evidence that the meaning conferred by religious involvement may be a core mechanism explaining why religion can so potently help people cope and reduce their psychological distress during stressful events (Park, 2007). Some recent work has identified that during the COVID-19 pandemic, people who relied on positive religious coping tended to better maintain a sense of meaning in life and experienced less loneliness (Pirutinsky et al., 2020; Yıldırım et al., 2021).

The current study's results fit with these ideas considering that belongingness is known to relate to meaning in life (e.g., Crescioni & Baumeister, 2013) and that when people have an enhanced sense of meaning they are better able to cope with stress and restore perceived meaning when it is disrupted by distressing external events such as the COVID-19 pandemic (e.g., Michaels et al., 2013; Park, 2013; Park & Baumeister, 2017). This interpretation is at least partly supported by the present results that demonstrate a heightened sense of belongingness related to less perceived impact from COVID-19 and reduced psychological distress. These relationships suggest that religious involvement, when it enhances perceived belongingness, may promote stress-buffering.

The finding that belongingness mediates the relationship between religious service attendance and diminished symptoms of anxiety, depression, and stress experienced by people enduring the COVID-19 pandemic also has some practical implications. Considering that 95% of those who reported attending religious services prior to the pandemic reported not doing so in the week prior to completing the survey, it is likely that most of the religious participants in the sample were following social distancing guidelines—a supposition supported by data in Table 3.

Thus, the findings allude to belongingness being a potential critical factor in helping people successfully cope with stress from the pandemic and social distancing. From the broader literature about how religious communities bind people into a meaningful collective (e.g., Graham & Haidt, 2010), these results emphasize how it is important to find ways for people to retain a sense of community and connectedness even when isolating from others during pandemics. One way to promote sense of community would be to encourage online interaction with like-minded others or social groups. It is not clear from the present study if participants who were religious and social distancing were participating in virtual religious services, though. Some studies

have demonstrated that online religious community involvement benefits well-being in ways similar to in-person religious community involvement (e.g., Okun & Nimrod, 2020). Scholarship continues to emerge about how online communities fulfill people's religious needs during the pandemic (e.g., Frei-Landau, 2020; Parish, 2020). Presumably, other virtual community groups could be formed such as groups around common interests including hobbies, professional development networks, or informal virtual workgroups. Although such virtual interactions cannot fully replace face-to-face socialization, they may be able to at least provide some of the human interaction that is fundamental to human needs.

Study Limitations

This study is limited by its use of subjective measures and a cross-sectional design. As is often the case with social science research, subjective measures may be impacted by social desirability bias. In the current study, this may have led to participants over-reporting how often they attend religious services or not honestly disclosing the extent of their anxiety, depressive, or stress-related symptoms. Furthermore, the cross-sectional design renders it impossible to identify causal relationships among the study variables. Also, some of the identified associations are somewhat small (see Table 5 and Fig. 1). This is not uncommon in social science research, though, as various behaviors and outcomes such as psychological distress are dependent on a substantial number of interacting variables. It should also be noted that this study relied on an American sample, which raises two additional limitations. First, the USA did not enact a unified national response to the pandemic. Social distancing guidelines varied between different states to include some states allowing social gatherings for religious services. Accordingly, the results may not be applicable to specific communities. Second, the pandemic impacts varied across countries, so the impacts may have been more or less severe in other nations. Thus, the present results may not generalize to other countries.

Finally, this study has some limitations related to measurement. Data did not include measurement of race/ethnicity or socioeconomic status to ensure survey brevity and because there was not a theoretical reason to assume such variables altered the relationship between religion, belongingness, and psychological distress. However, the pandemic's impacts were generally more substantial for vulnerable populations, such as those who are less affluent and are of minority status (e.g., Khatana & Groeneveld, 2020). It is important for future studies to more closely examine whether and how these factors intersect the association between religious community involvement and psychological distress.

Future Directions

The present results suggest valuable directions for future research. Replicating this work in places where the pandemic was poorly controlled or testing these findings using archival data obtained during periods of significant distress with similar measures would be worthwhile. Additional studies could use longitudinal designs to track how the variables evolve over time. Such research could identify how experiences of

psychological distress evolved during the COVID-19 pandemic for those who have previous involvement in religious communities versus those who did not. Qualitative research would also be beneficial to better understand how participation in religious services confers a heightened sense of subjective belongingness and how this relates to reduced risk of psychological distress.

Conclusion

In sum, the COVID-19 pandemic has had global consequences for people's psychological distress, and at least some of this relates to social distancing. The feelings of isolation and loneliness coupled with disruptions to perceived sense of control and life meaning can exacerbate feelings of anxiety, depression, and stress. Theoretically, religion's capacity to enhance coping through numerous pathways including via enhancing people's sense of belongingness can mitigate some of these deleterious effects, and some scholars have speculated on this (e.g., Koenig, 2020). However, empirical evidence for religion's role in helping people minimize psychological distress during COVID-19 remains lacking (Dein et al., 2020). This study addresses this critical gap in the literature and may be the first empirical study to provide evidence that people who more frequently attended religious services before the pandemic had greater perceived belongingness, and this belongingness related to both diminished perception of COVID-19 impact and diminished psychological distress. Together these findings validate the idea that the belongingness people gain by attending religious services, even in the past, helps minimize the psychological distress that so often accompanies stressful, uncontrollable life events.

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Declarations

Conflict of interest The authors declare no conflicts of interest.

Human and Animal Rights All research described in this manuscript was approved as meeting ethical standards for human subjects research (USF Protocol #000903).

Informed Consent All participants provided informed consent before taking part in this study and were free to withdraw at any time.

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