



Article Can Fear of COVID-19 Be Predicted by Religiosity and Trust in Institutions among Young Adults? A Prospective Cross-National Study

Dominika Ochnik ^{1,*}, Aleksandra M. Rogowska ², Ana Arzenšek ³ and Joy Benatov ⁴

- ¹ Faculty of Medicine, University of Technology, 40-555 Katowice, Poland
- ² Institute of Psychology, University of Opole, 45-052 Opole, Poland; arogowska@uni.opole.pl
- ³ Faculty of Management, University of Primorska, 6101 Koper, Slovenia; ana.arzensek@fm-kp.si
- ⁴ Department of Special Education, University of Haifa, Haifa 3498838, Israel; jbentov2@gmail.com
- Correspondence: dominika.ochnik@wst.pl

Abstract: The aim of this study was to reveal whether religiosity and trust in institutions are longitudinal predictors of change in fear of COVID-19 (FCV-19) across Poland, Germany, Slovenia, and Israel among young adults over a three-month period. The representative sample consisted of 1723 participants between the ages of 20 and 40 years (M = 30.74, SD = 5.74) across Poland (n = 446), Germany (n = 418), Slovenia (n = 431), and Israel (n = 428). The first measurement was carried out in February 2020 and the second was conducted in May/June 2020. A repeated-measures, two-way, mixed-factor ANOVA was performed to examine changes over time (T) and across countries (C) as well as the interaction of time and country (TxC) for FCV-19, religiosity, and trust in institutions. The results showed a significant decrease over time and differences between countries in all variables, as well as in TxC for FCV-19 and trust in institutions. Linear generalized estimating equations (GEEs) were used to assess the longitudinal change between T1 and T2 in FCV-19, including religiosity and trust in institutions as predictors, country as a factor, and gender and age as confounders. Female gender, religiosity, and trust in institutions were found to be significant longitudinal predictors of change in FCV-19. Country was a significant moderator of the relationship between trust in institutions and FCV-19, with the highest result achieved in Poland. Religiosity and trust in institutions were positive predictors of change in fear of COVID-19 among young adults across countries. Religious and governmental institutions should take this into consideration when communicating with believers and citizens during challenging situations.

Keywords: fear of COVID-19; religiosity; trust in institutions; young adults; a longitudinal study design

1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic disrupted everyday life globally due to restrictions regarding social distancing, cancellation of public events, and hardships in traveling and commuting [1,2]. The pandemic affected not only the physical health but also the mental health of the population worldwide [3]. To prevent the spread of the virus, government officials imposed unprecedented measures such as closing down public and private facilities and enforcing social distancing [2]. Insecurities about health and feelings of isolation led to increased levels of stress, depression, and anxiety [4–6]. Religious institutions were also affected by the lockdown, which led to a lack of social and emotional support in religious communities [7].

Religiosity can serve as an anchor for many people during times of crisis [8,9]. Religious beliefs provide a sense of security and reduce fear and anxiety [10]. There are associations between religiosity and mental health; however, the findings have been mixed. Some studies have reported positive relationships between religiosity and mental health



Citation: Ochnik, D.; Rogowska, A.M.; Arzenšek, A.; Benatov, J. Can Fear of COVID-19 Be Predicted by Religiosity and Trust in Institutions among Young Adults? A Prospective Cross-National Study. *Int. J. Environ. Res. Public Health* **2022**, *19*, 6766. https://doi.org/10.3390/ ijerph19116766

Academic Editor: Walter Schumm

Received: 6 April 2022 Accepted: 30 May 2022 Published: 1 June 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). and have concluded that religiosity can buffer the negative consequences of psychological distress [11–13]. For instance, religiosity is associated with increased psychological well-being and life satisfaction [14–16] and lower levels of depression, anxiety, and distress [15,17,18]. During the COVID-19 pandemic, several studies found that religiosity helped people to deal with stressful life events [18–22]. In contrast, other studies have not found significant associations between religiosity and mental health outcomes [23,24] or have found religiosity to be a small but significant predictor of higher stress levels during the COVID-19 pandemic [25,26]. Early meta-analyses reported small-to-moderate positive relationships between religiosity and mental health [27–30]. However, more recent meta-analyses, including longitudinal studies, have only found small associations [31,32].

Furthermore, trust in institutions could have been disrupted by the pandemic [33]. Trust in institutions is crucial during a crisis as it elevates the government's capacity to pursue redistributed polices [34] and encourages adherence to health policies [35]. Previous research has shown that trust in political authorities increased after outbreaks [36], and lockdown increased trust in the government in Europe [37]. However, panel data from the Netherlands did not confirm this association [38]. Other research [39] has shown that, in Spain, persons with direct exposure to COVID-19 expressed lower levels of trust. Furthermore, cross-national research has shown that risk perceptions regarding COVID-19 are lower when trust in the government is higher [40]. Trust in institutions can be affected by evaluations of how the pandemic is managed, as shown by the previous N1H1 pandemic [41]. Research conducted in 25 European countries has revealed that trust in institutions is also positively related to a lower mortality rate [42].

The relationships between religion and social trust as a wider notion, compared to trust in institutions, have been neglected thus far [43]. However, in previous research, the results have been mixed. Some research has found no significant relationship between religiosity and social trust [44]. Other research has shown that even though there is clear association between practicing religion and trust, an affiliation with Christianity is related to lower trust [45], while among Latin Americans, a Christian affiliation is positively related to trust [46]. Furthermore, religiosity has been shown to be negatively related to trust in institutions (politics and "good government") [47].

Fear of COVID-19 is a key mental health index related to the COVID-19 pandemic [48]. The prevalence of fear of COVID-19 ranges between 18.1% and 45.2% [49]. Younger adults, women, urban residents, divorcees, healthcare workers, people in quarantine, those with a higher risk of being infected, and those with mental health problems are at particularly high risk. The changes in fear of COVID-19 during the pandemic situation were large, while other metal health indices, such as perceived stress, anxiety, and depression, were small or insignificant [50,51]. Moreover, the fear of COVID-19 intensity fluctuated along with the mortality rate [51].

Despite the growing literature related to the COVID-19 pandemic, many aspects are still unclear. In this study, we investigated the role of religiosity and trust in institutions in the fear of COVID-19 from a cross-national and prospective perspective among representative samples of young adults from Poland, Germany, Slovenia, and Israel. These countries represent the cultural diversity of traditional vs. secular and survival vs. self-expression values based on the Inglehart–Welzel World Cultural Map [52]. The two dimensions of values aggregate countries into clusters. Poland and Slovenia represent Catholic Europe, while Germany represents Protestant Europe, and Israel—West&South Asia. Among those countries, the most traditional values were found in Poland, while the greatest self-expression values were found in Germany. Poland, Israel, and Slovenia share similar values of self-expression, while Germany and Slovenia share similar secular values (to a higher degree than Israel). Furthermore, the countries vary regarding levels of trust in institutions, with Germany and Israel representing higher trust, while Poland and Slovenia showed lower trust [53].

Considering the relationship between religiosity and mental health issues [8–32] and trust in institutions [33–42] during the COVID-19 pandemic, we expected that these

variables would be predictors of change in fear of COVID-19 over a three-month period during the change in the pandemic situation. The number of total vaccinations visibly increased while the stringency of restrictions and mortality rate due to COVID-19 decreased over the three months in each country [50,54]. We expected that these changes would be particularly significant among young adults at high risk of mental health deterioration during the pandemic [49,50], but would differ between countries [52,53].

Therefore, the aim of this study was to reveal differences in fear of COVID-19, religiosity, and trust in institutions across four countries over a three-month period. Furthermore, we aimed to show the role of religiosity and trust in institutions as longitudinal predictors for change in fear of COVID-19 with regard to country. We proposed a prospective cross-national study design to explore the fear of COVID-19 during the pandemic.

2. Materials and Methods

2.1. Study Design

The present study adopted a longitudinal design among representative samples of young adults from Poland, Germany, Slovenia, and Israel. The data were collected by the ARIADNA panel over a three-month period. The first measurement (T1) was conducted between 19 and 26 February 2021, and the second measurement (T2) was taken between 26 May and 9 June 2021. The inclusion criteria were age between 20 and 40 years and country. To address potential sources of bias, the samples were representative in terms of gender, student status, and employment status. The participants were enrolled in a reward system (points exchanged for prizes, cash, or charity donations).

The survey was prepared in the native language of each country. The survey questions were translated from English by translation experts from the four countries according to the cross-cultural adaptation standards [55]. The study was conducted online. The participants answered all questions, as responses were required to continue the survey. There was no time limit. Furthermore, the participants could stop at any moment and return to finish the survey. The average time taken to complete the survey was 21.52 min (SD = 136.75).

There were 2951 participants in the first study measurement (T1). Nevertheless, during the second measurement (T2), 1227 respondents failed to participate. Therefore, the research group comprised 1724 respondents who participated in both T1 and T2. The response rate was 58.42% in T2. One observation was excluded from T2 due to anomaly detection. Hence, the final total sample consisted of 1723 participants from Poland, Germany, Slovenia, and Israel.

This paper forms part of the international project "Mental health of young adults during the COVID-19 pandemic in Poland, Germany, Slovenia, and Israel: A longitudinal study" [56].

2.2. Participants

A representative sample of 1723 adults from Poland (n = 446; 26%), Slovenia (n = 431; 25%), Israel (n = 428; 25%), and Germany (n = 418; 24%) participated in the study. The mean age of the participants was 31 years (ranging between 20 and 40 years; M = 30.74, SD = 5.74). Women constituted 54% (n = 935) of the total study sample. A total of 49% of the participants were younger adults (n = 840) aged between 20 and 30 years. The majority of participants were employed (77%; n = 1324), coupled (71%; n = 1218), child-free (58%; n = 1001), and living in a town or city (75%; n = 1297). Detailed sociodemographic characteristics are presented in Table 1.

2.3. Measurements

2.3.1. Fear of COVID-19

The Fear of COVID-19 Scale (FCV-19S) evaluates fear of COVID-19 [48]. The FCV-19S utilizes a five-point Likert-type scale (from 1 = strongly disagree to 5 = strongly agree) and consists of seven items. The total score ranges from 7 to 35; the higher the score, the greater the fear of COVID-19. Cronbach's α for FCV-19 was 0.91 at T1 and 0.92 at T2 in this study.

Domographic Verichles	Total		Poland		Germany		Slovenia		Israel	
Demographic variables	n	%	n	%	n	%	n	%	n	%
Gender										
Women	935	54.30	222	49.80	224	53.60	247	57.30	242	56.50
Men	782	45.40	221	49.60	193	46.20	183	42.50	185	43.20
Did not want to say	6	0.30	3	0.70	1	0.20	1	0.20	1	0.20
Age										
20–30 years	840	48.80	236	52.90	202	48.30	202	46.90	200	46.70
31–40 years	883	51.20	210	47.10	216	51.70	229	53.10	228	53.30
Place of residence										
Village	426	24.70	155	34.80	71	17.00	162	37.60	28	8.90
Town (under 20,000 inhabitants)	310	18.00	63	14.10	84	20.10	120	27.80	43	10.00
City (20,000–99,000 inhabitants)	368	21.40	82	18.40	98	23.40	62	14.40	126	29.40
City (100,000–500,000 inhabitants)	380	22.10	85	19.10	82	19.60	65	15.10	148	34.60
Agglomeration (over	220	10.00	61	12 70	02	10.00	22	E 10	72	1710
500,000 inhabitants)	239	19.90	61	15.70	05	19.90	22	5.10	75	17.10
Employment status										
Employed	1227	71.20	324	72.60	304	72.70	284	65.90	315	73.60
Unemployed	399	23.20	93	20.90	91	21.80	123	28.50	92	21.50
Self-employed	97	5.60	29	6.50	23	5.50	24	5.60	21	4.90
Religion										
No religion	523	30.40	97	21.70	185	44.30	209	48.50	32	7.50
Buddhist	27	1.60	4	0.90	15	3.60	4	0.90	4	0.90
Catholic	602	34.90	328	73.50	104	24.90	169	39.20	1	0.20
Hindu	2	0.10	0	0.00	2	0.50	0	0.00	0	0.00
Jehovah's Witness	11	0.60	5	1.10	3	0.70	1	0.20	2	0.50
Jewish	379	22.00	0	0.00	1	0.20	2	0.50	376	87.90
Methodist	1	0.10	1	0.20	0	0.00	0	0.00	0	0.00
Muslim	44	2.60	2	0.40	22	5.30	12	2.80	8	1.90
Orthodox (Eastern, Russian, Greek)	51	3.00	5	1.10	33	7.90	12	2.80	1	0.20
Protestant	46	2.70	1	0.20	39	9.30	5	1.20	1	0.20
Other	37	2.10	3	0.70	14	3.30	17	3.90	3	0.70
Total	1723	100	446	25.90	418	24.30	431	25.00	428	24.80

Table 1. Demographic characteristics of the study sample.

The Trust in Institution Scale is a part of social capital based on The European Social Survey [53]. It consists of three items relating to trust in parliament, trust in the legal system, and trust in politicians, evaluated on an 11-point scale, ranging from 0 = no trust at all to 10 = complete trust. The higher the score, the higher the trust in institutions. Cronbach's α for the trust in institutions scale was 0.88 at T1 and 0.87 at T2 in this study.

2.3.2. Religiosity

Self-reported religiosity was measured as an answer to the question "How religious do you consider yourself to be?" on a four-point Likert-type scale (from 0 = not at all religious to 3 = very religious). The variable was based on the Baylor Religion Survey [57].

2.3.3. Religion

The question regarding religion was based on the Baylor Religion Survey [57]. The participants were asked to mark the one religious group, if any, that they most closely identified with. The possible answers were: No religion; Buddhist; Catholic/Roman Catholic; Hindu; Jehovah's Witness; Jewish; Methodist; Muslim; Orthodox (Eastern, Russian, Greek); Protestant; other. The sociodemographic data included gender, age (20–30 or 31–40 years), place of residence (village, town, or city), employment status (employed or unemployed), relationship status (single or otherwise), and having children (with children or child-free).

2.4. Statistical Analyses

The fear of COVID-19, religiosity, and trust in institutions showed good psychometric properties at both timepoints, T1 and T2, during the pandemic. The variables conformed to the fundamental premises of parametric tests regarding the homogeneity of variance. The Kolmogorov–Smirnov test with Lilliefors significance correction and the Shapiro–Wilk test were conducted with regard to normal distribution; even though the analysis did not prove a normal distribution of variables (p < 0.05), further analysis of the distribution based on skewness and kurtosis coefficients indicated good symmetry and similarity to the Gaussian curve, because the absolute values of skewness did not exceed 1, which indicates good psychometric properties [58]. However, kurtosis for religiosity slightly exceeded 1. Nevertheless, these values for kurtosis are also considered to acceptably represent a normal distribution [59]. Hence, parametric analyses were introduced.

Religiosity, trust in institutions, and fear of COVID-19 were continuous variables, while gender (women or men) and age (younger adults aged between 20 and 30 years or older adults aged between 31 and 40 years) were the categorical variables.

The first step tested between-group differences in the 2 (Time: T1 and T2) × 4 (country: Poland, Germany, Slovenia, or Israel) repeated-measures, two-way analysis of variance (ANOVA). Effect size was estimated using the η^2 coefficient (small effect if $\eta^2 > 0.01$, medium for $\eta^2 > 0.06$, and large when $\eta^2 > 0.14$) [60]. Tukey's honest significant difference (HSD) test was conducted to examine the post-hoc group's means comparison. The effect size for the post-hoc test was estimated with Cohen's *d* coefficient (small for *d* = 0.20, medium when *d* = 0.50, and large if *d* = 0.80) [60].

The second step was to examine the associations between variables. Pearson's correlation was performed as a preliminary analysis to find relationships in the total sample. Next, linear generalized estimating equations (GEEs)with robust standard error and an independent working correlation structure were used in the study to assess the longitudinal change between T1 and T2 in fear of COVID-19 (as a dependent variable), religiosity and trust in institutions as predictor variables, country (coded: Poland = 1, Germany = 2, Slovenia = 3, and Israel = 4) as a factor, and gender (men = 0 and women = 1) and age (older adults = 0 (aged between 30 and 40 years) and younger adults = 1 (aged between 20 and 29 years)) were included in the regression model as confounders. As the analysis requires a distinction between predictor and outcome variables, each model used the change in mental health as an outcome variable.

The statistical analyses were performed using JASP Team [61], except for the GEE analysis, which was performed in IBM SPSS Statistics 26 [62]. Figure 1 was created in Jamovi [63] and Figures 2–4 in JASP [60]. G*Power [64] was used to calculate the appropriate sample size. For the repeated-measures, two-way, mixed-factor ANOVA, the expected sample size was 158, assuming the two groups and two measurements, effect size $f^2 = 0.25$, repeated measures r = 0.50, p < 0.05, and 95% CI.

3. Results

3.1. Differences in Fear of COVID-19, Religiosity, and Trust in Institutions across Countries

Hypothesis 1 (H1). *There are significant differences in fear of COVID-19, religiosity, and trust in institutions across Poland, Germany, Slovenia, and Israel over a three-month period.*

Due to objective changes in the COVID-19 pandemic situation in Poland, Germany, Slovenia, and Israel [50,54], we assumed that fear of COVID-19, religiosity, and trust in institutions would differ in T2 compared to T1. Furthermore, we hypothesized that there



Figure 1. Distribution and mean scores of: (a) Fear of COVID-19 at T1; (b) religiosity at T1; (c) trust in institutions at T1; (d) fear of COVID-19 at T2; (e) religiosity at T2; (f) trust in institutions at T2 across Poland (PL), Germany (GER), Slovenia (SL), and Israel (ISR) among representative samples of young adults (N = 1723) shown by violin and box plots. Mean scores are represented by squares and outliers by dots. T1, the first measurement in February 2021; T2, the second measurement in May–June 2021.

The second step involved a repeated-measures, two-way, mixed-factor ANOVA for fear of COVID-19, religiosity, and trust in institutions across countries (country: Poland, Germany, Slovenia, and Israel) over a three-month period (T1 = February 2021 and T2 = May–June 2021). We showed within-subject effects for time (T) and the interaction between time and country (TxC). We also revealed a between-subjects effect for country (C).

H1 was confirmed. There was a significant difference in fear of COVID-19, religiosity, and trust in institutions between T1 and T2. Fear of COVID-19, religiosity, and trust in institutions significantly dropped over the three-month period. The effect size was medium for fear of COVID-19 and very small for religiosity and trust in institutions. The effects were significant across countries with a medium effect size for fear of COVID-19 and religiosity. The effect size for trust in institutions across countries was large. The interaction between time and country was significant for fear of COVID-19 and trust in institutions with a small effect size. However, the interaction was insignificant for religiosity, and trust in institutions across countries and time. The detailed statistics for fear of COVID-19, religiosity, and trust in institutions across countries are presented in Table 2.

	Fear of COVID-19				Religiosity				Trust in Institutions			
Effect	F	df	p	η^2_p	F	df	p	η^2_p	F	df	p	η^2_p
Time	3077.54	1, 1719	< 0.001	0.64	5.50	1, 1719	0.019	0.003	15.78	1, 1719	< 0.001	0.01
Country	40.90	3, 1719	< 0.001	0.07	44.61	3, 1719	< 0.001	0.07	97.87	3, 1719	< 0.001	0.15
Time \times Country	5.72	3, 1719	< 0.001	0.01	1.85	3, 1719	0.136	0.003	4.64	3, 1719	0.003	0.01

Table 2. Repeated-measures two-way ANOVA statistics for fear of COVID-19, religiosity, and trust in institutions over time and across countries among young adults from Germany, Israel, Poland, and Slovenia.

Note: ANOVA, analysis of variance; time 1, the first measurement in February 2021; time 2, the second measurement in May–June 2021.

Furthermore, post-hoc analysis with Tukey's HSD test showed significant mean differences for fear of COVID-19, with the highest score found in Poland and the lowest in Israel. FCV-19 in Poland was slightly higher compared to in Germany (d = 0.18, p = 0.015) and Slovenia (d = 0.19, p = 0.015). Young adults in Poland reported significantly higher scores compared to their peers in Israel, with a medium effect size (d = 0.65, p < 0.001). The scores in Germany and Slovenia were similar (p > 0.05). However, Slovenia scored higher compared to Germany, but the effect size was small (d = 0.46, p < 0.001).

Tukey's HSD test for religiosity showed that, in Poland, religiosity was significantly higher compared to in all other countries. A small effect size was observed in comparison to Germany (d = 0.45, p < 0.001) and Israel (d = 0.30, p < 0.001), while a large effect size was seen for Slovenia (d = 0.71, p < 0.001). In Germany, religiosity was slightly higher than in Slovenia (d = 0.26, p < 0.001), while in Slovenia, it was slightly lower than in Israel (d = 0.41, p < 0.001). There were no significant differences in mean between religiosity in Germany and Israel.

Trust in institutions was significantly higher in Germany compared to Poland (d = 0.93, p < 0.001), Slovenia (d = 0.93, p < 0.001), and Israel (d = 0.37, p < 0.001). The effect size for all countries was large. Trust in institutions was higher in Israel compared to Poland (d = 0.20, p = 0.006) and Slovenia (d = 0.20, p = 0.007), although the effect size was small. Similar mean scores were noted in Poland and Slovenia (p > 0.05). Therefore, the highest trust in institutions was reported in Germany and the lowest in Poland and Slovenia. The details for between-subjects comparison of fear of COVID-19, religiosity, and trust in institutions across countries (Poland, Germany, Slovenia, and Israel) are presented in Figure 2.



Figure 2. Fear of COVID-19, religiosity, and trust in institutions across Poland (PL), Germany (GER), Slovenia (SL), and Israel (ISR) among young adults (N = 1723) with error bars.

The post-hoc analysis with Tukey's HSD test showed a significant decrease in fear of COVID-19 over time, with a large effect size in each country: Poland (d = 1.22, p < 0.001), Germany (d = 1.08, p < 0.001), Slovenia (d = 1.01, p < 0.001), and Israel (d = 1.17, p < 0.001).

The significantly higher score in Poland compared to Germany (d = 1.26, p = 0.004) and Slovenia (d = 0.30, p < 0.001) at T1 was insignificant at T2 (p > 0.05). The participants in Israel scored significantly lower compared to all countries at T1: Poland (d = -0.70, p < 0.001), with a medium effect size, and Germany (d = -0.42, p < 0.001) and Slovenia (d = 0.38, p < 0.001), with a small effect size. Furthermore, the participants in Israel also scored significantly lower at T2 compared to all countries: Poland (d = -0.55, p < 0.001), Germany (d = -1.22, p < 0.001), and Slovenia (d = -0.63, p < 0.001), with a medium effect size. There were no significant differences between fear of COVID-19 in Germany and Slovenia at T1 or T2 (p > 0.05). Therefore, the differences between countries at T1, showing the highest fear of COVID-19 in Poland and the lowest in Israel, changed over time. During T2, there were no significantly lower in Israel compared to all other countries at T2.

There was no significant interaction between country and time in terms of religiosity, but the post-hoc analysis revealed a significant but very small decrease in religiosity in Germany (d = -0.11, p = 0.045).

Trust in institutions dropped significantly over time in Germany (d = -0.18, p < 0.001), although the effect size was very small. There were no other significant differences between T1 and T2 in Poland (p > 0.05), Slovenia (p > 0.05), and Israel (p > 0.05). The participants from Germany scored significantly higher compared to Poland (d = 1.01, p < 0.001), Slovenia (d = 0.97, p < 0.001), and Israel (d = 0.82, p < 0.001), with a large effect size at T1. Similarly, the scores were the highest in Germany at T2 compared to the other countries: Poland (d = 0.85, p < 0.001), Slovenia (d = 0.90, p < 0.001), and Israel (d = 0.64, p < 0.001). However, the difference between Germany and Israel was medium at T2, while it was large at T1. The effect size for the difference between Germany and Poland and Israel was large at both T1 and T2. The details of the interaction between time and country with regard to fear of COVID-19, religiosity, and trust in institutions are presented in Figure 3.



Figure 3. Changes in fear of COVID-19, religiosity, and trust in institutions over a three-month period across countries among young adults (N = 1723). T1, the first measurement in February 2021; T2, the second measurement in May–June 2021.

3.2. Longitudinal Predictors of Changes in Fear of COVID-19

Hypothesis 2 (H2). *Religiosity and trust in institutions with regard to country are predictors of change in fear of COVID-19 over a three-month period across Poland, Germany, Slovenia, and Israel.*

The initial step was the correlational analyses, with a Pearson's *r* coefficient between fear of COVID-19, religiosity, and trust in institutions at T1 and T2. The analysis showed significant but small positive correlations between fear of COVID-19, religiosity, and trust in institutions at T1 and T2. Large positive effects were revealed for fear of COVID-19 at T1 and T2, religiosity at T1 and T2, and trust in institutions between T1 and T2. The details are presented in Figure 4.



Figure 4. Heat map of the correlational matrix for fear of COVID-19 (FoC), religiosity, and trust in institutions (Trust) at T1 and T2 among young adults (N = 1723). T1, the first measurement in February 2021; T2, the second measurement in May–June 2021. Light violet indicates a small effect size; dark violet represents a large effect size. *** p < 0.001.

H2 was partially confirmed. The GEE analysis was performed for fear of COVID-19 as a dependent variable, country as a factor, and religiosity and trust in institutions as covariates, while the categorical demographic variables considered confounders such as age and gender. The results of the GEE analysis are presented in Table 3. Changes in fear of COVID-19 were significant between the T1 and T2 of the measurement, with a statistically significant decrease in fear of COVID-19 between T1 and T2. These changes were not dependent on the country or age of participants, but female gender, religiosity, and trust in institutions were found to be significant positive longitudinal predictors of fear of COVID-19. Fear of COVID-19 changed relative to changes in religiosity and trust in institutions. The interaction effect between country and religiosity, as well as between country and trust in institutions, was also examined. The findings indicate that no interaction existed between country and religiosity, but a moderating effect of country was observed for the association between trust in institutions and fear of COVID-19. Compared to the Polish participants, those from Israel, Germany, and Slovenia showed less of a regression slope. A significantly stronger association was found between trust in institutions and fear of COVID-19 in the Polish sample, as compared to adults from Germany, Slovenia, and, in particular, Israel (which showed a weaker association).

Parameter	В	SE B	95%	6 CI	Wald's Statistics	
			LL	UL	χ^2 (1)	p
Constant	12.80	0.83	11.16	14.43	235.72	< 0.001
Time T2 (vs. T1)	-7.86	0.14	-8.12	-7.59	3324.41	< 0.001
Country (vs. Poland)						
Israel	1.69	1.03	-0.33	3.70	2.70	0.100
Slovenia	-0.62	1.06	-2.70	1.45	0.35	0.556
Germany	-0.39	1.20	-2.74	1.97	0.10	0.747
Female gender (vs. male)		0.28	0.32	1.41	9.64	0.002
Younger adults (vs. older)		0.28	-1.01	0.07	2.93	0.087
Religiosity		0.31	0.11	1.34	5.38	0.020
Trust in institutions		0.04	0.20	0.36	50.72	< 0.001
Country (vs. Poland) $ imes$ religiosity						
Israel \times religiosity	-0.71	0.38	-1.46	0.03	3.54	0.060
Slovenia \times religiosity	0.21	0.46	-0.68	1.10	0.21	0.644
Germany \times religiosity	0.50	0.43	-0.34	1.34	1.35	0.246
Country (vs. Poland) \times trust in institutions						
Israel \times trust in institutions	-0.24	0.06	-0.35	-0.13	17.78	< 0.001
Slovenia \times trust in institutions	-0.15	0.06	-0.28	-0.03	6.11	0.013
Germany \times trust in institutions	-0.19	0.06	-0.30	-0.08	11.88	0.001

Table 3. Longitudinal predictors of change in fear of COVID-19 between T1 and T2 among young adults (N = 1723).

Note: CI, confidence interval; LL, lower level of the confidence interval; UL, upper level of the confidence interval; T1, the first measurement; T2, the second measurement; younger adults, aged 20–30 years; older adults, aged 31–40 years.

4. Discussion

In this study, we showed the role of religiosity and trust in institutions in fear of COVID-19 across a three-month period among young adults from Poland, Germany, Slovenia, and Israel. We revealed significant differences in religiosity, trust in institutions, and fear of COVID-19 across the countries. The study also showed religiosity and trust in institutions as positive longitudinal predictors for change in fear of COVID-19 across a three-month period and the moderating role of country.

Our study showed a significant decrease in fear of COVID-19 and a very small but significant decrease in religiosity and trust in institutions over time. The second measurement of our study was conducted in an improved pandemic situation, with an increase in vaccinated people and a decrease in the mortality rate in each country [50,54].

The cross-national comparison showed large differences in religiosity and trust in institutions and small differences in fear of COVID-19. Fear of COVID-19 was highest in Poland and the lowest in Israel. These differences were significant at T1 when the pandemic circumstances were more severe. In the second measurement, during the better pandemic situation (lower number of daily cases and deaths, with a higher number of vaccinations), the differences between Poland, Germany, and Slovenia diminished. However, fear of COVID-19 was the lowest in Israel at T2. Therefore, young adults in Israel scored significantly lower in terms of fear of COVID-19 compared to the other countries, regardless of the pandemic severity. In Israel, certain steps regarding the spread of information about COVID-19 and against vaccination barriers were directed toward specific groups, i.e., young adults and religious minorities [65]. Hence, these actions, at the national level, could have succeed in lowering fear of COVID-19 compared to the other countries. An explanation for the significantly higher fear of COVID-19 in Poland during T1 could be the higher mortality rate compared to the other countries at T1 [50]. Previous research has shown that change in fear of COVID-19 is related to change in mortality rate [51].

Religiosity was the highest in Poland compared to other countries, while trust in institutions was the lowest in Poland, similar to Slovenia. In turn, religiosity was the lowest in Slovenia. Israel was characterized by the lowest fear of COVID-19 and religiosity, similar to Germany. Even though Poland and Slovenia represent one cluster of similar values to Catholic Europe [52], the religiosity in our study definitely differed among the young adults. Indeed, even in the Inglehart–Welzel World Cultural Map [52], Poland shares traditional

values, while Slovenia, similar to Germany, shares more secular values. Both countries are also classified as post-Soviet countries, which is often a denominator for interpreting similarities and differences compared to Western countries. The common factor in our study turned out to be a lower trust in institutions in those two countries, which might be explained by their similarities in history. On the contrary, the highest trust in institutions was noted in Germany, which also partially carries a post-Soviet history. The analyzed variables in our study significantly differed due to country.

Religiosity was relatively stable over time in Poland, Slovenia, and Israel. However, we found a significant but small decrease in Germany. Previous research in European countries has shown that trust in institutions is related to a lower mortality rate [42]. However, our study showed that trust in institutions declined over time, even though the mortality rate decreased.

We found positive but small relationships between fear of COVID-19, religiosity, and trust in institutions in the total sample. At both study timepoints, religiosity was positively related to trust in institutions. Therefore, higher religiosity was related to higher trust in institutions. We assume that the small effect size could be due to the diversity of identification with religion in our study (11 categories), as a previous study showed that this relationship depends on a specific religion and cultural differences [44–47]. Nevertheless, unlike other research [44,45,47], we confirmed significant positive relationships in a crossnational study. We assume that religious people respect rules as much as those who trust in institutions. Furthermore, the stimulation of the social cohesion and cooperation attitude through collective rituals as a manifestation of religious life [66] may explain this positive relation as well.

Finally, we showed that changes in religiosity and trust in institutions are positive predictors of changes in fear of COVID. The changes in fear of COVID-19 were dependent on female gender but independent of country and age. Our results regarding the role of gender are in line with previous research on fear of COVID-19 [49–52]. Furthermore, we showed that country does not play a moderating role between religiosity and fear of COVID.

Our findings contrast with general negative relationships between religiosity and fear and anxiety [10], and have a positive relationship with mental health from a longitudinal perspective [31,32]. Our study showed that religiosity does not play a buffer role in the decline in fear of COVID-19, as was revealed in previous papers regarding mental health problems [11–13]. It could be argued that higher religiosity is related to an increase in fear of COVID-19 due to the negative attitude of the Catholic church toward vaccinations for COVID-19 [67]. The lack of an ethically accepted remedy for the disease could increase the fear of the disease in religious people. This relationship was noted in the total sample, which was composed of highly secularized countries, such as Slovenia and Germany, and highly religious nations such as Poland. Therefore, religiosity is a longitudinal predictor of fear of COVID-19 regardless of country.

Furthermore, we showed that trust in institutions is a positive longitudinal predictor of fear of COVID-19 and revealed the moderating role of country in the positive relationship between trust in institutions and fear of COVID-19. The strongest relationship was observed in Poland compared to all other countries. The metanalysis on the global prevalence of mental health during the pandemic showed that the prevalence of mental health issues differs across countries and depends on countries' preparedness to respond, health policies, and economic vulnerabilities [3]. It was revealed that the institutions in all countries, but particularly in Poland, failed to comfort their citizens during the COVID-19 pandemic, as trust in institutions elevated the change in fear of COVID-19 over time.

Limitations

A strong point of the study is the cross-national longitudinal design among representative samples. However, there are several limitations to this research. The first is that all the introduced measurements were based on self-assessment. Furthermore, even though the measurement of religiosity is widely used, this is a one-item measurement. Moreover, the study design included change across a short three-month period. Therefore, more measurement timepoints would allow for the evaluation of a trend.

5. Conclusions

Our study filled the gap regarding the role of religiosity and trust in institutions across Poland, Germany, Slovenia, and Israel in fear of COVID-19 among young adults.

We showed that religiosity and trust in institutions not only fail to buffer the fear of COVID-19, but actually enhance it. The main conclusion is that both governmental and religious institutions should place greater emphasis on health policy communication during unexpected and difficult situations, so as not to enhance mental health problems.

Furthermore, a cross-cultural perspective showed that the results differed across countries. Particularly, Polish governmental institutions should draw conclusions for further activity to increase believers' and citizens' trust in their judgment.

Author Contributions: Conceptualization, D.O.; methodology, D.O. and A.M.R.; software, D.O., A.M.R., A.A. and J.B.; validation, D.O.; formal analysis, D.O. and A.M.R.; investigation, D.O.; resources, D.O.; data curation, D.O.; writing—original draft preparation, D.O.; writing—review and editing, D.O., A.M.R., A.A. and J.B.; visualization, D.O.; supervision, D.O.; project administration, D.O.; funding acquisition, D.O. All authors have read and agreed to the published version of the manuscript.

Funding: This study forms part of the international research project "Mental health of young adults during the COVID-19 pandemic in Poland, Germany, Slovenia, and Israel: A longitudinal study" [56]. The project was co-financed by the Polish National Agency for Academic Exchange within the Urgency Grants program. The grant was awarded to the University of Technology in Katowice, Poland; decision number: PPN/GIN/2020/1/00023/DEC/01.

Institutional Review Board Statement: This study was carried out following relevant guidelines and regulations, including the organizational Ethics Board and the 1975 Declaration of Helsinki. Ethical approvals were obtained from the Institutional Review Boards in each country of the study. Poland: The University Research Committee at the Katowice Business University, decision No. 1/2021; Israel: The Ethics Committee of the Faculty of Education at the University of Haifa, certificate No. 146/21; Germany: The Ethics Committee of the University of Bamberg, decision No. 2021-01/01; and Slovenia: The Research Ethics Commission of the UP Famnit Department of Psychology, No. 2021-01. Informed consent was obtained from all study participants before study participation. The participants voluntarily took part in the study. The collected data were anonymous and confidential, so that the study did not involve any risk for the participants.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: This study forms part of the international research project "Mental health of young adults during the COVID-19 pandemic in Poland, Germany, Slovenia, and Israel: A longitudinal study" [56], registered at the Center for Open Science (OSF). The datasets used and analyzed during the current study are available from the corresponding author upon reasonable request.

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

References

- Levkovich, I. The Impact of Age on Negative Emotional Reactions, Compliance with Health Guidelines, and Knowledge About the Virus During the COVID-19 Epidemic: A Longitudinal Study from Israel. J. Prim. Care Community Health 2020, 11, 1–10. [CrossRef]
- Hale, T.; Angrist, N.; Goldszmidt, R.; Kira, B.; Petherick, A.; Phillips, T.; Webster, S.; Cameron-Blake, E.; Hallas, L.; Majumdar, S.; et al. A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). *Nat. Hum. Behav.* 2021,

5, 529–538. [CrossRef]

 Nochaiwong, S.; Ruengorn, C.; Thavorn, K.; Hutton, B.; Awiphan, R.; Phosuya, C.; Ruanta, Y.; Wongpakaran, N.; Wongpakaran, T. Global prevalence of mental health issues among the general population during the coronavirus disease-2019 pandemic: A systematic review and meta-analysis. *Sci. Rep.* 2021, *11*, 10173. [CrossRef]

- 4. Vindegaard, N.; Benros, M.E. COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain Behav. Immun.* 2020, *89*, 531–542. [CrossRef]
- Daly, M.; Sutin, A.R.; Robinson, E. Longitudinal changes in mental health and the COVID-19 pandemic: Evidence from the UK Household Longitudinal Study. *Psychol. Med.* 2020, 1–10. [CrossRef]
- 6. Gamonal-Limcaoco, S.; Montero-Mateos, E.; Lozano-López, M.T.; Maciá-Casas, A.; Matías-Fernández, J.; Roncero, C. Perceived stress in different countries at the beginning of the coronavirus pandemic. *Int. J. Psychiatry Med.* **2021**, 1–14. [CrossRef]
- Coppola, I.; Rania, N.; Parisi, R.; Lagomarsino, F. Spiritual well-being and mental health during the COVID-19 pandemic in Italy. *Front. Psychiatry* 2021, 12, 626944. [CrossRef]
- 8. Milner, K.; Crawford, P.; Edgley, A.; Hare-Duke, L.; Slade, M. The experiences of spirituality among adults with mental health difficulties: A qualitative systematic review. *Epidemiol. Psychiatr. Sci.* **2019**, *29*, e34. [CrossRef]
- Walsh, F. Spirituality, healing, and resilience. In *Re-Visioning Family Therapy: Race, Culture, and Gender in Clinical Practice;* McGoldrick, M., Hardy, K.V., Eds.; The Guilford Press: New York, NY, USA, 2019; pp. 61–75.
- 10. Exline, J.J.; Pargament, K.I.; Grubbs, J.B.; Yali, A.M. The religious and spiritual struggles scale: Development and initial validation. *Psycholog. Relig. Spiritual.* **2014**, *6*, 208–222. [CrossRef]
- 11. Pargament, K.I.; Raiya, H.A. A decade of research on the psychology of religion and coping: Things we assumed and lessons we learned. *Psyke Logos* **2007**, *28*, 25.
- 12. Leman, J.; Hunter, I.I.I.; Fergus, T.; Rowatt, W. Secure attachment to God uniquely linked to psychological health in a national, random sample of American adults. *Int. J. Psychol. Relig.* **2018**, *28*, 162–173. [CrossRef]
- Stulp, H.P.; Koelen, J.; Schep-Akkerman, A.; Glas, G.G.; Eurelings-Bontekoe, L. God representations and aspects of psychological functioning: A meta-analysis. *Cogent Psychol.* 2019, *6*, 1647926. [CrossRef]
- 14. Huber, S. Are religious beliefs relevant in daily life? In *Religion Inside and Outside Traditional Institutions*; Streib, H., Ed.; Brill Academic Publishers: Leiden, The Netherlands, 2007; pp. 211–230.
- 15. Koenig, H.G. Religion, spirituality, and health: The research and clinical implications. ISRN Psychiatry 2012, 8, 278730. [CrossRef]
- 16. Unterrainer, H.F.; Lewis, A.J.; Fink, A. Religious/spiritual well-being, personality and mental health: A review of results and conceptual issues. *J. Relig. Health* **2014**, *53*, 382–392. [CrossRef]
- 17. Chirico, F.; Nucera, G. An Italian experience of spirituality from the Coronavirus pandemic. J. Relig. Health 2020, 59, 2193–2195. [CrossRef]
- 18. Pirutinsky, S.; Cherniak, A.D.; Rosmarin, D.H. COVID-19, mental health, and religious coping among American Orthodox Jews. *J. Relig. Health* **2020**, *59*, 2288–2301. [CrossRef]
- 19. Galea, S.; Merchant, R.M.; Lurie, N. The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Intern. Med.* 2020, *180*, 817–818. [CrossRef]
- Lucchetti, G.; Góes, L.G.; Amaral, S.G.; Ganadjian, G.T.; Andrade, I.; de Araújo Almeida, P.O.; Mendes do Carmo, V.; Gonzalez Manso, M.E. Spirituality, religiosity and the mental health consequences of social isolation during COVID-19 pandemic. *Int. J. Soc. Psychiatry* 2020, 2, 20764020970996. [CrossRef]
- 21. Modell, M.S.; Kardia, S.L.R. Religion as a health promoter during the 2019/2020 COVID outbreak: View from Detroit. *J. Relig. Health* 2020, *59*, 2243–2255. [CrossRef]
- Weinberger-Litman, S.L.; Litman, L.; Rosen, Z.; Rosmarin, D.H.; Rosenzweig, C. A look at the first quarantined community in the USA: Response of religious communal organizations and implications for public health during the COVID-19 pandemic. *J. Relig. Health* 2020, 59, 2269–2282. [CrossRef]
- 23. Fekih-Romdhane, F.; Ghrissi, F.; Abbassi, B.; Cherif, W.; Cheour, M. Prevalence and predictors of PTSD during the COVID-19 pandemic: Findings from a Tunisian community sample. *Psychiatry Res.* **2020**, 290, 113131. [CrossRef]
- 24. Prazeres, F.; Passos, L.; Simoes, J.A.; Simoes, P.; Martins, C.; Teixeira, A. COVID-19-related fear and anxiety: Spiritual-religious coping in healthcare workers in Portugal. *Int. J. Environ. Res. Public Health.* **2020**, *18*, 220. [CrossRef]
- 25. Schwaiger, E.; Zehra, S.S.; Suneel, I. Attachment, religiosity, and perceived stress among religious minorities during the COVID-19 pandemic: The impact of cultural context. *J. Psychol. Theol.* **2021**, 1–15. [CrossRef]
- Khoo, S.S.; Toh, W.X.; Yang, H. Seeking control during uncontrollable times: Control abilities and religiosity predict stress during COVID-19. Pers. Indivic. Dif. 2021, 175, 110675. [CrossRef]
- Hackney, C.H.; Sanders, G.S. Religiosity and mental health: A meta-analysis of recent studies. J. Sci. Study Relig. 2003, 42, 43–55. [CrossRef]
- Ano, G.G.; Vasconcelles, E.B. Religious coping and psychological adjustment to stress: A meta-analysis. J. Clin. Psychol. 2005, 61, 461–480. [CrossRef]
- 29. Yonker, J.E.; Schnabelrauch, C.A.; Dehaan, L.G. The relationship between spirituality and religiosity on psychological outcomes in adolescents and emerging adults: A meta-analytic review. *J. Adolesc.* **2012**, *35*, 299–314. [CrossRef]
- Salsman, J.M.; Pustejovsky, J.E.; Jim, H.S.L.; Munoz, A.R.; Merluzzi, T.V.; George, L.; Park, C.L.; Danhauer, S.C.; Sherman, A.C.; Snyder, M.A.; et al. A meta-analytic approach to examining the correlation between religion/spirituality and mental health in cancer. *Cancer* 2015, 121, 3769–3778. [CrossRef]
- 31. Hodapp, B.; Zwingmann, C. Religiosity/spirituality and mental health: A meta-analysis of studies from the German-speaking area. *J. Relig. Health* **2019**, *58*, 1970–1998. [CrossRef]

- 32. Garssen, B.; Visser, A.; Pool, G. Does spirituality or religion positively affect mental health? Meta-analysis of longitudinal studies. *Int. J. Psychol. Relig.* **2021**, *31*, 4–20. [CrossRef]
- 33. Devine, D.; Gaskell, J.; Jennings, W.; Stoker, G. Trust and the Coronavirus Pandemic: What are the Consequences of and for Trust? An Early Review of the Literature. *Political Stud. Rev.* 2021, 19, 274–285. [CrossRef]
- 34. Hetherington, M.J. Declining Political Trust and the Demise of American Liberalism; Princeton University Press: Princeton, NJ, USA, 2005.
- Van Bavel, J.J.; Baicker, K.; Boggio, P.S.; Capraro, V.; Cichocka, A.; Cikara, M.; Crockett, M.J.; Crum, A.J.; Douglas, K.M.; Druckman, J.N.; et al. Using Social and Behavioural Science to Support COVID-19 Pandemic Response. *Nat. Hum. Behav.* 2020, 4, 460–471. [CrossRef]
- 36. Jennings, W. COVID-19 and the 'Rally-Round-the Flag' Effect, UK in a Changing Europe. Available online: https://ukandeu.ac. uk/\protect\unhbox\voidb@x\hbox{COVID-19}-and-the-rally-round-the-flag-effect/ (accessed on 6 April 2022).
- 37. Bol, D.; Giani, M.; Blais, A.; Loewen, P.J. The effect of COVID-19 lockdowns on political support: Some good news for democracy? *Eur. J. Political Res.* **2021**, *60*, 497–505. [CrossRef]
- Schraff, D. Political Trust During the COVID-19 Pandemic: Rally Around the Flag or Lockdown Effects? *Eur. J. Political Res.* 2020, 60, 1007–1017. [CrossRef]
- Amat, F.; Arenas, A.; Falcó-Gimeno, A.; Muñoz, J. Pandemics Meet Democracy. Experimental Evidence from the COVID-19 Crisis in Spain. SocArXiv 2020. [CrossRef]
- 40. Dryhurst, S.; Schneider, C.R.; Kerr, J.; Freeman, A.L.; Recchia, G.; Van Der Bles, A.M.; Spiegelhalter, D.; Van Der Linden, S. Risk Perceptions of COVID-19 Around the World. *J. Risk Res.* **2020**, *23*, 994–1006. [CrossRef]
- 41. Bangerter, A.; Krings, F.; Mouton, A.; Gilles, I.; Green, E.G.T.; Clémence, A. Longitudinal Investigation of Public Trust in Institutions Relative to the 2009 H1N1 Pandemic in Switzerland. *PLoS ONE* **2012**, *7*, e49806. [CrossRef]
- 42. Oksanen, A.; Kaakinen, M.; Latikka, R.; Savolainen, I.; Savela, N.; Koivula, A. Regulation and Trust: 3-Month Follow-up Study on COVID-19 Mortality in 25 European Countries. *JMIR Public Health Surveill.* **2020**, *6*, e19218. [CrossRef]
- 43. Berggren, N.; Bjørnskov, C. Does religiosity promote or discourage social trust? Evidence from cross-country and cross-state comparisons. Evidence from Cross-Country and Cross-State Comparisons. *SSRN Electron. J.* **2009**. [CrossRef]
- 44. Alesina, A.; La Ferrara, E. Who Trusts Others? J. Public Econ. 2002, 85, 207–234. [CrossRef]
- 45. Welch, M.R.; Sikkink, D.; Sartain, E.; Bond, C. Trust in God and Trust in Man: The Ambivalent Role of Religion in Shaping Dimensions of Social Trust. *J. Sci. Study Relig.* **2004**, *43*, 317–343. [CrossRef]
- 46. Brañas-Garza, P.; Rossi, M.; Zacliclever, D. Individual's Religiosity Enhances Trust: Latin American Evidence for the Puzzle. J. Money Credit. Bank. 2009, 41, 555–566. [CrossRef]
- 47. Nannestad, P. New Work on Trust: What Have We Learnt, if Anything? Annu. Rev. Polit. Sci. 2008, 11, 413–436. [CrossRef]
- 48. Ahorsu, D.K.; Lin, C.Y.; Imani, V.; Saffari, M.; Griffiths, M.D.; Pakpour, A.H. The Fear of COVID-19 Scale: Development and Initial Validation. *Int. J. Ment. Health Addict.* **2020**, 1–9. [CrossRef]
- 49. Quadros, S.; Garg, S.; Ranjan, R.; Vijayasarathi, G.; Mamun, M.A. Fear of COVID-19 Infection Across Different Cohorts: A Scoping Review. *Front. Psychiatry* **2021**, *12*, 708430. [CrossRef]
- Benatov, J.; Ochnik, D.; Rogowska, A.M.; Arzenšek, A.; Mars Bitenc, U. Prevalence and Sociodemographic Predictors of Mental Health in a Representative Sample of Young Adults from Germany, Israel, Poland, and Slovenia: A Longitudinal Study during the COVID-19 Pandemic. *Int. J. Environ. Res. Public Health* 2022, 19, 1334. [CrossRef]
- 51. Kok, A.; Pan, K.Y.; Ottenheim, N.R.; Jörg, F.; Eikelenboom, M.; Horsfall, M.; Luteijn, R.; van Oppen, P.; Rhebergen, D.; Schoevers, R.A.; et al. Mental health and perceived impact during the first COVID-19 pandemic year: A longitudinal study in Dutch case-control cohorts of persons with and without depressive, anxiety, and obsessive-compulsive disorders. *J. Affect. Disord.* 2022, 305, 85–93. [CrossRef]
- 52. World Values Survey. The Inglehart-Welzel World Cultural Map. World Values Survey 7. Available online: https://www.worldvaluessurvey.org/WVSNewsShow.jsp?ID=428 (accessed on 6 April 2022).
- ESS Round 8: European Social Survey Round 8 Data (2016). Data File Edition 2.1. NSD-Norwegian Centre for Research Data, Norway–Data Archive and Distributor of ESS Data for ESS ERIC. Available online: https://ess-search.nsd.no/en/study/f8e11f5 5-0c14-4ab3-abde-96d3f14d3c76 (accessed on 1 July 2021).
- Ochnik, D.; Arzenšek, A.; Rogowska, A.M.; Mars Bitenc, U.; Benatov, J. Changes in Mental Health during the COVID-19 Pandemic among Representative Sample of Young Adults from Germany, Israel, Poland, and Slovenia: A Longitudinal Study. Int. J. Environ. Res. Public Health 2022, 19, 5794. [CrossRef]
- 55. Beaton, D.E.; Bombardier, C.; Guillemin, F.; Ferraz, M.B. Guidelines for the Process of Cross-Cultural Adaptation of Self-Report Measures. *Spine* **2000**, *25*, 3186–3191. [CrossRef]
- Ochnik, D.; Rogowska, A.M.; Schütz, A.; Held, M.J.; Benatov, J.; Arzenšek, A. Mental Health of Young Adults during COVID-19 Pandemic in Poland, Germany, Slovenia, and Israel: A Longitudinal Study. Available online: https://osf.io/4nh5m/ (accessed on 1 July 2021).
- 57. Froese, P. Baylor Religion Survey, Wave V (2017)-Instructional Dataset; Baylor Religion Survey: Waco, TX, USA, 2020.
- 58. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), 2nd ed.; Sage: Thousand Oaks, CA, USA, 2017.
- 59. George, D.; Mallery, M. SPSS for Windows Step by Step: A Simple Guide and Reference, 10th ed.; 17.0 update; Pearson: Boston, MA, USA, 2010.

- 60. Fritz, C.O.; Morris, P.E.; Richler, J.J. Effect size estimates: Current use, calculations, and interpretation. *J. Exp. Psychol. Gen.* **2012**, 141, 2–18. [CrossRef]
- 61. JASP Team. JASP (Version 0.14. 1) [Computer Software]. 2020. Available online: https://jasp-stats.org (accessed on 1 July 2021).
- 62. IBM Corp. Released 2020. IBM SPSS Statistics for Windows, Version 27.0.; Computer software; IBM Corp: Armonk, NY, USA, 2020.
- 63. The Jamovi Project. Jamovi. (Version 1.6) [Computer Software]. Available online: https://www.jamovi.org (accessed on 1 July 2021).
- 64. Faul, F.; Erdfelder, E.; Lang, A.G.; Buchner, A. G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behav. Res. Methods* **2007**, *39*, 175–191. [CrossRef]
- 65. Rosen, B.; Waitzberg, R.; Israeli, A.; Hartal, M.; Davidovitch, N. Addressing vaccine hesitancy and access barriers to achieve persistent progress in Israel's COVID-19 vaccination program. *Isr. J. Health Policy Res.* **2021**, *10*, 43. [CrossRef]
- 66. Ruffle, B.J.; Sosis, R. Does it pay to pray? Costly ritual and cooperation. BE J. Econ. Anal. Policy 2007, 7, 1–35. [CrossRef]
- 67. Szczodry, M. The position of the catholic church on COVID-19 vaccines. Colloq. Theol. Ottoniana 2020, 36, 307–323. [CrossRef]