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Global Beliefs in the Covid-19 Pandemic

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- In both trust groups, respondents were most likely to say that their life had changed
- 6 not too much or a fair amount as a result of COVID, rather than either extreme answer of
- 7 "not at all" or "a great deal." However, answers tended more toward the extreme of "a
- great deal" in the cannot-trust group than in the can-trust group.
- 9 ## Warning: Removed 1147 rows containing non-finite values (stat smooth).

Characteristic	**OR**	**95% CI**	**p-value**
covid_family	1.32	1.24, 1.40	<0.001
Country	0.93	0.92, 0.94	<0.001

11 Introduction:

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COVID-19 is an on-going international health crisis that continues to disrupt daily 12 life across the globe. Efforts to manage COVID span the gamut of various policies and 13 public health efforts, including mask mandates, social distancing, remote work/schooling, 14 contact tracing, and vaccine development and implementation. The extent to which people 15 have been affected by COVID-19 and subsequent interventions depends not only on the prevalence of infection, but also the substantive interventions to manage it. These, 17 naturally, are related to each other, and subject to various factors, including country, 18 population density, regionally empowered political party, and more. Because of the 19 interplay of factors, there are numerous ways in which COVID-19 could affect perceptions of daily living, relationships (ranging from the level of interpersonal to international), religious beliefs, and so on. Thus, our research questions relate to perceived changes as a result of COVID-19. They are, 1. How does the COVID-19 Pandemic relate to perceptions of changes in daily life?; 2. How has COVID-19 influenced beliefs about trust in others and religious beliefs?; and, 3. How has COVID-19 influenced beliefs about family closeness and

national unity? Past research using this dataset has investigated aspects of some of these questions previously — for example, respondents from the United States claim their faith 27 has been strengthened as a result of the COVID-19 pandemic more han respondents from 28 other countries ("More americans than people in other advanced economies say covid-19 29 has strengthened religious faith," 2021). Further, more people say the pandemic has strengthened their family bonds than weakened them ("More americans than people in 31 other advanced economies say covid-19 has strengthened religious faith," 2021). To our knowledge, change in faith has not been investigated in the context of trust in people, nor has family closeness been investigated in the context of national unity. These questions, as well as questions pertaining to perceptions of life change generally, have important implications for health and wellbeing depending on perceptions and beliefs (Holingue et al., 2020).

38 Methods:

Participants. These data were collected by Pew Research Center as part of their "Global Attitudes & Trends" Summer 2020 Questionnaire. FOurteen countries were included in the survey process. The recruitment procedure varied by country but generally employed a list-assisted Random Digit Dial (RDD) of both landlines and cell phones, stratified by region. Approximately 1000 responses per country were collected for a total N = 14,276. Participants were age 18 or older, and were not compensated for their data. A table of demographic data can be found in Table 1.

Measures. This questionnaire consisted of 40 items. Each item is a standalone question and is not a component of a validated measure. The number of items read to a respondent depended based on their home country and response to prior questions. Items of interest for this study included questions related to life change as a result of covid, changes in trust and personal religious faith, and beliefs about national unity and family closeness:

- As a result of the coronavirus1 outbreak, has your own life changed a great deal, a fair

amount, not too much, or not at all? - Now thinking about our economic situation, how
would you describe the current economic situation in (survey country) – is it very good,
somewhat good, somewhat bad or very bad? - In general, would you describe your political
views as ...? Very conservative, conservative, moderate, liberal, very liberal - As a result
of the coronavirus outbreak, has your own faith become stronger, weaker, or not changed
much? - Which of the following statements comes to closer to your view? In general, most
people can be trusted, OR In general, most people cannot be trusted - As a result of the
coronavirus outbreak, has your relationship with immediate family members become
stronger, weaker, or not changed much? - Thinking about [SURVEY COUNTRY] as a
whole, do you think this country is now more UNITED or more DIVIDED than before the
coronavirus outbreak?

Analyses. Analyses consisted of descriptives and visualizations of variables broken down by country. Furthermore, logistic multivariate linear regressions were run to predict the likelihood of particular beliefs based on independent variables.

66 Results

COVID-19 and perceptions of change in daily life. Perceptions of changes
due to COVID by country were explored. A chi-square analysis was run of proportion of
responses to the item "How has COVID changed your life?" The analysis was significant
(chi square = 1710[39], p<2.2e-16). The countries carrying the highest residuals were
South Korea and Denmark. These results indicate differences in perception of changes due
to COVID by country. Visual inspection of the plot of response proportion by country
appears to corroborate this finding.

An exploratory factor analysis was conducted to elucidate the factor structure of this
survey. The items included were the first 19 attitudinal items. Additional items were added
but caused the function to not converge. This was likely due to the tetrachoric correlative
nature of these added data in conjunction with the high degree of missingness. This

analysis was conducted in order to generate an empirically valid composite score (factor score for extracted factor of interest), which would be later run as a predictor for variables of interest. Unfortunately, these data do not appear amenable to such analysis (KMO=0.79, 1 extracted factor with eigenvalue >1). Thus, a factor analytic solution was not pursued further.

COVID-19, trust in others, and religious beliefs. Some respondents to the 83 survey refused to answer or indicated that they did not know if they thought most people 84 could be trusted and/or if their faith changed as a result of the COVID-19 pandemic; those 85 responses were removed from analysis. More respondents said that people can generally be 86 trusted (9526, or 69.4%) than that people generally cannot be trusted (4209, or 30.6%). 87 Further, most respondents said their faith has not changed much (12021, or 87.5%) than said it had changed across both trust groups. A greater proportion of respondents who believe most people cannot be trusted said their faith had changed in some way than of those who said people can be trusted. Proportionally more of the participants in the 91 "cannot trust" group said their faith had decreased than in the "can trust" group, but not by a great deal (see Table). #### COVID-19, family closeness, and national unity 93 Results of the logistic linear regression show that the dependent categorical variable, 94 beliefs regarding change in national unity post-covid (i.e. stronger vs. weaker), is predicted 95 by perceptions of family closeness post-covid while holding differences due to national 96 origin constant (). For every one unit change in perceptions of closeness to family members (i.e. stronger), the log odds of viewing one's respective nation as "more united" due to Covid-19 increases by 0.067 compared to viewing one's nation as growing "less united".

Discussion

How does the COVID-19 Pandemic relate to perceptions of changes in
daily life? As previously described, an effect of country was found on perception of life
changes due to covid. This finding is intuitively obvious, as countries determined their own

protocols for managing the COVID-19 pandemic. These protocols varied widely in terms of 104 invasiveness and strictness. As well, COVID-19 prevalence also varied across countries and 105 likely affected these perceptions, although no data are included in this set to explore this. 106 As described above, the countries carrying the highest residuals were South Korea and 107 Denmark. South Korea had a notably high proportion of respondents indicating life 108 changes of "A great deal". Conversely, Denmark had the highest indicating no change. 100 This may be due to the strict contact tracing and lockdowns in South Korea, and that the 110 Danes are a very chill people. 111

How has COVID-19 influenced beliefs about trust in others and religious 112 In general, respondents felt that their life had changed somewhat, but not a 113 great deal, as a result of COVID-19. Participants were somewhat more likely to feel that 114 their life had changed a great deal as a result of the pandemic if they believe that most 115 people cannot be trusted, and/or if they felt their faith had changed to be either stronger 116 or weaker as a result of the pandemic. This is not surprising: a noticeable change in faith 117 could be either one of the factors contributing to an overall life change, or it could be the 118 result of overall life change, although the scope of this survey precludes the ability to make 119 any statements about causality or direction of faith and life change. Further, it is possible that some of the people who do not believe most people can be trusted believe that as a 121 result of behaviors they are witnessing during the pandemic, which might account for some 122 change in life as well — although, again, we cannot make claims beyond speculation about 123 the connection between these two response patterns. 124

How has COVID-19 influenced beliefs about family closeness and national unity? Results indicate that perceptions of family changes in closeness during the COVID-19 Pandemic is predictive of views regarding changes in national unity during the pandemic. In other words, the closer one believed one's family to grow, the more united the nation also seems to have become throughout the pandemic. While the regression is helpful in understanding global trends, it fails to recognize differences at the country-level.

Utilizing Multilevel Modeling would be one solution to this challenge, but these methods 131 were beyond the scope of this project. However, visualizations of differences by the country 132 level help differentiate trends at face value. [Graph y] shows the variation in models by 133 country, where we can see robust variation between nations. [table x] depicts the 134 country-level differences of perceptions of changes in family closeness as related to 135 perceptions of national unity. Discrepancies between countries are evident, particularly 136 between individualistic countries like the United States compared to more collectivistic 137 cultures such as South Korea [table x]. This highlights the country-level differences worth 138 exploring – particularly surrounding what factors contribute to one country's view of 139 national division over another's perspective of unity. 140

Future directions. Further research is recommended to investigate some of the
connections we found between life change during COVID-19 in different countries, change
in faith, belief in others' trustworthiness, family bonds, and national unity. Whether life
change as a result of the pandemic was perceived to be positive or negative was not asked
in the dataset used for these analyses, but could have implications for the results related to
physical health (Pirutinsky, Cherniak, & Rosmarin, 2021) and emotional resilience
(Holingue et al., 2020).

REFERENCES

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- Holingue, C., Badillo-Goicoechea, E., Riehm, K. E., Veldhuis, C. B., Thrul, J.,

 Johnson, R. M., ... Kalb, L. G. (2020). Mental distress during the covid-19 pandemic

 among us adults without a pre-existing mental health condition: Findings from american

 trend panel survey. *Preventive Medicine*, 139, 106231.

 https://doi.org/https://doi.org/10.1016/j.ypmed.2020.106231
- More americans than people in other advanced economies say covid-19 has
 strengthened religious faith. (2021, January). Retrieved December 8, 2021, from
 https://www.pewforum.org/2021/01/27/more-americans-than-people-in-other-advancedeconomies-say-covid-19-has-strengthened-religious-faith/
- Pirutinsky, S., Cherniak, A. D., & Rosmarin, D. H. (2021). COVID-19, religious coping, and weight change in the orthodox jewish community. *Journal of Religion and Health*, 60(2), 646-653.

 $Change \ in \ Faith \ during \ COVID$

Has not changed much	Stronger	Weaker				
In general, most people can be trusted						
89.8%	8.2%	2.0%				
In general, most people cannot be trusted						
82.3%	12.7%	5.0%				

Faith Change during COVID-19 Pandemic by trust in people and amount of life change during the pandemic

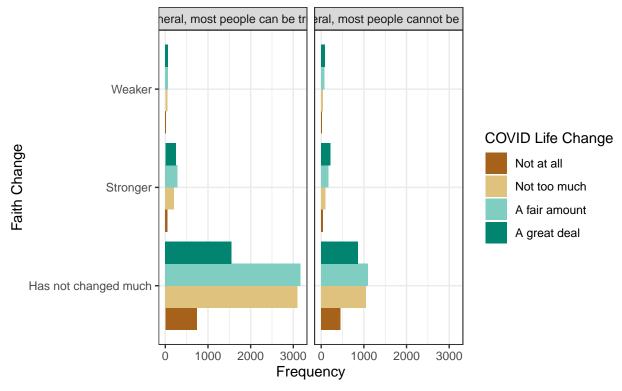


Figure 1. Figure 1: Trust in People and Changes in Faith due to COVID

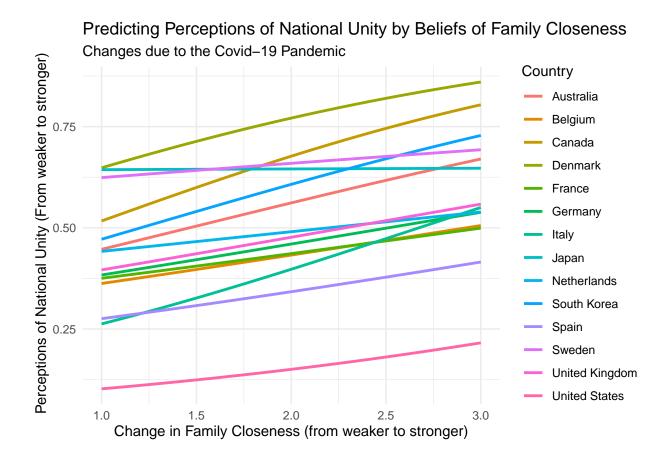


Figure 2. Regression Plot: Predicting Perceptions of National Unity by Change in Family Closeness during COVID

Global Beliefs about Changes in Family Closeness Due to Covid Differences According to Perceptions of National Unity

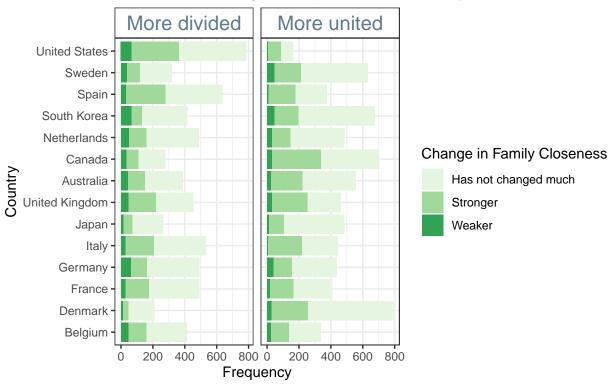
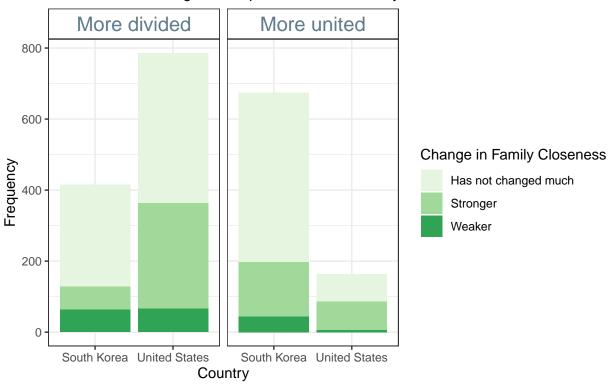


Figure 3. Global Beliefs of Unity and Family Closeness

Beliefs about Changes to Family Closeness due to COVID in the USA vs. S Differences According to Perceptions of National Unity



 $\it Figure~4$. Global Beliefs of Unity and Family Closeness: USA VS. S. Korea

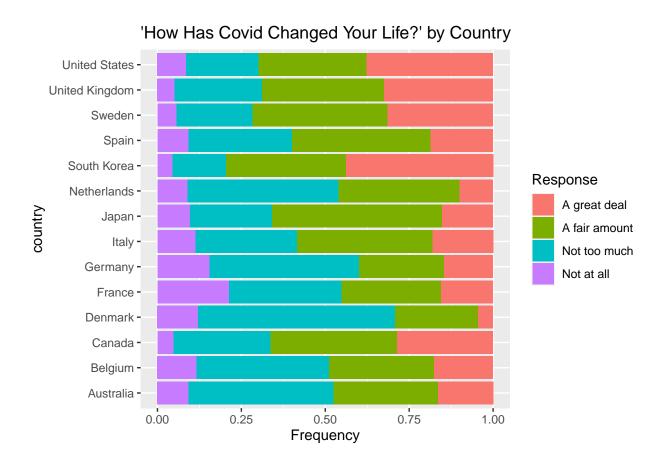


Figure 5. Perceptions of Changes in Life due to COVID by Country